



# SIGNAL



de NINC

August 2013 Volume 22 Number 08

## This Month's Meeting

The Cookout was August 10 at 1300 at K1LGQ.

## Last Month's Meeting

There was no July meeting. Next meeting Sept 19<sup>th</sup>.

## From The Editor Important!

I appreciate it when people collect and send me pictures from NVARC events to use in the newsletter. However it is important and appropriate that the proper credit for the source of the pictures be identified so that if used in the newsletter I can give the correct credit. For example after Field Day I received the **same** picture from three people but only one person actually took it.

Another issue has come up with the publishing of the Yearbook update. Members are not keeping their phone, email, address info current with the Treasurer. When I go to update the members information I take it from the latest version of the Members Database. Please keep your information up to date.

Stan KD1LE

## Yearbook Update Available

The 2013 NVARC Yearbook update is now available. The update is for members currently holding a Yearbook. Because of the many updates and additions it was easier to print the entire Yearbook though I only had a B&W option. The Yearbook is now 171 pages. Moving your color pages from sections one and two of your current Yearbook to the new set of pages will restore most of the pictures. Because of the size of the update I am not going to print or hold extra copies. If you use your Yearbook and would like the update please contact me by August 20th. Future updates will be based on this distribution.

Stan KD1LE

## The President's Corner

### President's Corner

De Skip, K1NKR

*The Learning Hobby.* Did you ever consider the difference between "operators" and "subscribers?" Ask anyone on the street whether they carry a radio around with them and the answer will most probably be "No, I don't need one. I have a cellphone." Aha! There's the difference. An operator makes a service available by knowing something about it and turning that knowledge into action, while the subscriber demands the service having merely "paid good money" for it.

By the way, the third player in this model is the owner. Owners trade risking their money for a return on investment. They might not even care what the service or product is as long as the ROI is high enough to merit the risk. We Radio Amateurs are a curious lot: we're owners, operators, and subscribers all rolled into one. In fact, with no significant exceptions, we Amateurs are the only people in the world entrusted to own, build, maintain, and operate radio-communications stations. All other licensees are organizations or businesses.

Let's take a look at some of the way we turn understanding into action.

- Assembling a station. Homebrewer or appliance operator, who doesn't know how to set things up and get on the air? Did someone say Field Day, vacation ops, hilltopping, or coming up with that competitive QRO station?
- Operating. Ragchewer or contesteer, county hunter or traffic handler, who doesn't know how to select the right band, spot an open frequency, and conduct effective communications?

- Experimenting. To one extent or another each of us has tried building and operating equipment on challenging frequency band allocations, discovered the utility of new or non-standard emissions modes, and been awed by propagation anomalies. Each of these broaden our horizons—literally and figuratively.

Can your neighbors do all that? No? How about any of that?

Emergency communications, EMCOM, may be the only thing politicians can grasp about our activities, but the more important thing is that we represent a dwindling class of citizens who actually know how to do something. We've turned understanding into action. Commercial and institutional radio's fundamental model is "what do I have to invest to deliver xx-percent reliability?" Ours is, "How much more can I do with what I've got." Pushing the envelope is a daily activity for us.

What a hobby! We're entrusted more than anyone else with a precious international natural resource because we've learned to be (and proven to be) worthy of that trust. And we've proven to be worthy of that trust because learning and doing, as inquisitive and responsible citizens, is our avocation.

**Other Stuff (Otherwise known as Strays)**

From the Eastern Massachusetts Section News e-mail: "ICOM has assembled several resources that should be of interest to all amateurs: 1) USA Amateur Band Plan; 2) US Amateur Grid Square Map; 3) Ham Radio Terms; 4) CQ DX Zones of the World; and 5) New Rules for the 60 Meter Band. These documents can be downloaded at <<http://tinyurl.com/ml92ulv>>. -Thanks Boston ARC's The SPARC"

Don't forget International Lighthouse-Lightship Weekend the third weekend in August. Whether you're participating in the club's third annual mini-DXpedition or not, this can be a weekend of great fun. ILLW is an operating event, not a contest. Get on; talk to other hams at lighthouses around the world; collect lighthouse numbers only if you wish. (See <http://www.illw.net/>. Don't be fooled by <http://www.illw.org/>.) By the way, this year a number of our members will also be carrying equipment along to participate in the ARRL 10GHz contest.

And the annual NVARC picnic will be held 10 August, at the QTH of Dennis, K1LGQ. (Stan,

*you might just re-print the announcement. It's got the full detail.)*

A concluding paragraph in the President's Corner by-line of the June Signal commented on the formulation of Maxwell's equations. Ever wonder if there's a personal interest "story behind the story" in the history of these fundamental principles of radio propagation? Take a look at <http://theinstitute.ieee.org/technology-focus/technology-history/did-you-know-someone-else-wrote-maxwells-equations>.

**July Treasurers Report**

Income for July was \$15 in membership renewals and \$30 from PowerPole connector distribution. Expenses were \$18.40 for newsletter postage and \$24.37 for Field Day (generator fuel; additional receipts are expected), leaving a net income for July of \$2.23.

Current balances:

General fund	\$2,546.78
Community fund	\$4,636.41

As of 1 August we have 42 members who are current with their dues and 28 renewals outstanding. Please check your renewal status on the roster circulated at the monthly meeting or ask Ralph.

If you are joining ARRL or renewing your membership please consider letting Ralph send in the paperwork for you. The Club will buy the stamp and will get a commission from ARRL. ARRL membership checks should be made payable to NVARC; Ralph deducts the Club commission before forwarding your paperwork to Newington. As an Special Service Club, the ARRL expects a majority of Club members to also be ARRL members.

Please welcome new NVARC member Gregory Cote KB1WAQ of Groton.

Ralph KD1SM

**NVARC Fifth Annual Lantern Battery Challenge**

August 2013

The Fifth Annual NVARC Lantern Battery Challenge will be held starting in October of this year. This year we are going to do it a bit different than in past

years. We have always tried to vary the event to make it interesting year after year. This year we are going to raise the bar if you will. In past years the event was based solely on the number of QSO that were made. This year will be different. And here is how.

It was in November, 90 years ago this year that amateurs first spanned the ocean between the US and Europe. On November 27<sup>th</sup>, 1923, CW signals on about 100 meters were exchanged between two amateur stations in CT (John Reinartz (U)1QP, (U)1XAM and Fred Schnell (U)1MO) both contacted a station in Nice, France, Leon Deloy (F)8AB. This was only the first of many contacts, and by spring of the next year, the books on radio propagation had been rewritten. See the series "Beginning Amateur Radio History" by this author in volume 12, November 2003 of the NVARC "Signal" for more details on this event. These are available on the web site. Note a copy of this article may be reprinted in this copy of the Signal. To celebrate the 90th anniversary of this historic event this year the Lantern Battery Challenge will encourage contacts with stations "across the pond". More specifically outside of North America. Simply we will award five (5) points each for all North American contacts, and nine (9) points each for all contacts out side of North America. The final LBC score being the total number of points. The 9 of course is with reference to the 90<sup>th</sup> anniversary. Roughly this means DX contacts will be worth about twice the non-DX contacts. Note DX here refers to contacts with stations that are outside of North America. The ARRL DXCC countries list will determine what is in or outside of North America. More detailed rules will follow but for now basically everything will be as last year. We will be going back to the large Lantern sized batteries. The exact entry fee will be announced before the September meeting when entries are due. As in past years, the batteries will be distributed at the October meeting and the event will start at the end of that meeting.

With the low sun spot numbers that we have been having so far in cycle 24, it may be that conditions will not be particularly good this season. But we will all have the same conditions. And North American stations will still count. I expect we will see some impressive scores with the multipliers in either category.

Again we will be inviting PART and MARA to be joining us in the event. PART has been dominating the event the last few years. Come on you NVARC guys! Hi

Hoping to work you all in this year's event. 73 Bob W1XP LBC chairman

## First Contact

### 90<sup>th</sup> Anniversary of "Across the Pond Contact" Article Reprint follows

In view of the historical contact that occurred 90 years ago this November, we are dedicating the Lantern Battery Challenge to this event. For that reason we are reprinting the following article that appeared in the November 2003 issue of the Signal. I hope you enjoy it and are motivated to join the Lantern Battery Challenge. Bob W1XP

## Ham Radio History 101

Beginning Amateur Radio History  
By Bob Reif P4/W1XP

Well this month is the 80th anniversary of the first amateur radio contact across the Atlantic. We have made reference to this in earlier articles. The record setting QSO took place on Nov. 27th 1923. This is the story of that contact and the individual that was the European end of the record breaking contact.

Leon Deloy (F)8AB

Leon Deloy was probably the most advanced radio amateur in France in 1923. Certainly he was the most driven. He was determined to be the first amateur to work across the Atlantic. He had built a large high powered station in his home of Nice, France and in January of 1923 was one of three European stations to be heard with good and consistent signals in the United States. But a two way contact had not been possible. In order to improve his station and operating techniques he traveled to the states in the summer of 1923 and attended the ARRL national amateur radio convention in Chicago. He was determined to learn all he could from the US amateurs. Their operating practices, their transmitting and receiving techniques, and their latest equipment both commercial and amateur built. He visited many of the better equipped amateur stations on the east coast. All with the one goal in mind. To be the first to make a two way contact between the U.S. and Europe.

He visited with John Reinartz (U)1QP, (U)1XAM and studied the design of a 100 meter high power CW transmitter using four tubes. Returning to France he built his own 100 meter transmitter using the same design. It isn't clear where the idea to switch from 200 meters to 100 meters for the transatlantic test came from or when, but by Oct. of 1923 Leon Deloy was on 100 meter and testing with a British amateur, (G)2OD. Encouraged by the results he cabled the ARRL in late November saying that he would begin test transmissions on 100 meters at 9 PM (Hartford time) on November 25th. At 9 PM on that evening ARRL traffic manager Schnell (U)1MO and Reinartz (U)1QP and others alerted to the tests were listening. Deloy's rough CW signals were heard from the start by both (U)1MO and (U)1QP. (F)8AB was sending a test cipher of "GSJTP" and this was copied from the first. Deloy was cabled by the ARRL advising him that he was getting across. The next night, Nov. 26th. Deloy sent two messages. The first a greeting to all American amateurs from the French amateurs, and a second message setting up a schedule for a two way attempt the next evening.

The evening of Nov. 27th, both Reinartz (U)1XAM (the call he used on 100 meters) and Schnell (U)1MO were ready. At 9:30 PM Hartford time, Deloy came on and was copied from the start. (F)8AB sent two messages and called for about an hour then stood by for long calls. He was called by both Schnell and Reinartz and when they stood by Deloy came back. He acknowledged both calls, asked Reinartz to stand-by and proceeded to work Schnell. He told (U)1MO that he was coping one foot from the head phones. In 1923 the S meter was still not thought of, and reports of how far the signal could be copied from the headphones was the substitute for the RST report. One foot from the headphones was not a bad signal. After completing with (U)1MO, Deloy stood-by for (U)1XAM. They also completed a two way contact with out any trouble. The three stations stayed in contact for over two hours, chewing the rag like the old friends that they were after Deloy's trip. At one point Reinartz reported that Deloy's signal was solid copy 25 feet from the speaker. This has to be "S9 Plus". Truly amazing that these first contacts could be so solid. Conditions had been excellent for the last three nights as further tests would indicate, but even under poorer conditions contacts were possible. Other stations joined in on both sides of the Atlantic in the future and helped open up the Short-waves, but that is another story, The first transatlantic two way contact was history, and Loen Deloy had pulled it off. It was as much his determination as anything that had brought it all together in Nov. of 1923. It in all likeli-

hood would have happened later that winter, but this accomplishment on 100 meters was the key to opening the Short-wave door.

This year, the anniversary of this historic contact falls on Thanksgiving Day. So the idea struck me to suggest that at least those reading this that have the amateur radio capability, struggle into the ham shack after filling up on turkey, dressing, and all the other great things to eat on Thanksgiving Day and try to make at least one contact across the pond in the footsteps of Deloy, Schnell, and Reinartz. Maybe some one will even be lucky enough to have a QSO with some amateur in Nice, France. And I suggest that you mention the anniversary and see if anyone else is aware of the historic events that took place just eighty years ago on that date. I'll be interested in hearing your results. 73 and Happy Thanksgiving,

Bob P4/W1XP (for the moment).

## August Board Meeting

8/1/2013

QSL cards are too expensive overall to get a club break. Proposal had been to buy bulk for the club, then customize.

More talk on Lab Night - seems like a go-ahead. A second monthly, unofficial club meeting where members could meet, discuss problems, build issues, etc.

Financing for ILLW? Has been done in past for QSL cards. It's a semi-official club activity.

Treasurer's report

Programs:

Something is lined up for September

QSL sort October

W1EVE for November

Homebrew for December

Short subjects for January

Please think of other fun topics for future meetings.

Respectfully submitted,

John KK1X

## WRTC 2013

WRTC2014 Testing Wrap-Up

On weekend on July 12, 13, and 14, members of the NVARC participated in the station testing activities

for the 2014 World Radiosport Team Championships (WRTC2014). Two teams made up predominately with club members set up a total of four stations. The Heald St Beam Team, headed up by K1BG, set up two stations in the Heald Street orchard, and the Twin Valley Beam Team, headed up by N1SV, set up two stations at Twin Valley Farm, both located in Pepperell.



One station was just south of the Field Day site.

The Heald St Beam Team picked up the towers and beams on Thursday night, and got off to a 7 AM start on Friday. The first tower took approximately 3 hours to put up, and the second about 2½ hours. It seems that our times get faster each time we set the towers up, but safety (and not times) is our main priority.



Both K1BG and N1SV operated stations during the testing. Complete scores for the stations participating can be found at <http://www.wrtc2014.org/2013-station-test-results>.

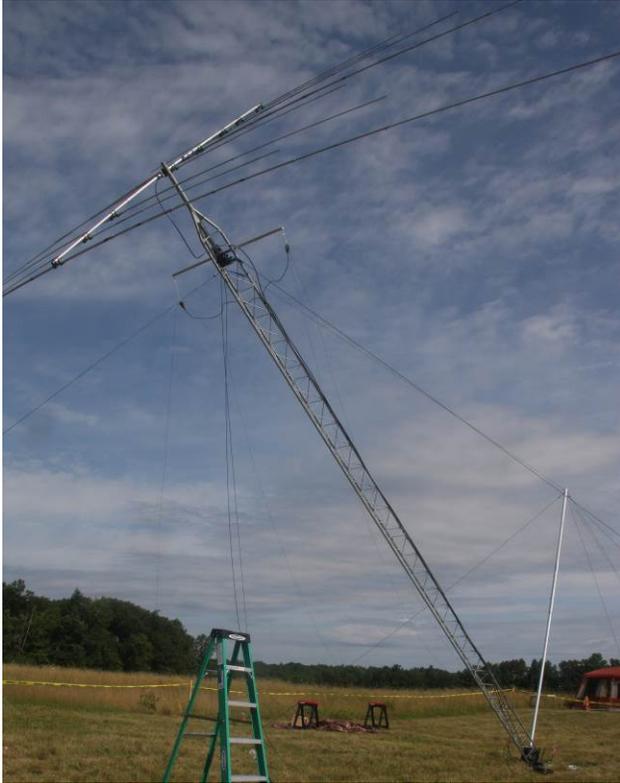
In total, 25 identical stations on 12 different properties in southern New Hampshire and Eastern Massachusetts were built on Friday, July 12. All the stations were on the air for the IARU HF Championships and made over 33,000 QSOs despite the relatively poor conditions. All the systems came down on Sunday, July 14 in the morning without incident, and everything was safely stored away.



The second site was at the east end of the orchard near the repeater site.

Next year, the actual WRTC2014 will take place. Fifty-nine operating teams from around the world will compete under identical conditions in order to claim gold, silver, or platinum medals. There is a great video on YouTube that explains what WRTC2014 is all about. You can find it here: <http://youtu.be/yNyMAMjRNuA>. NVARC beam teams will again be asked to help with next year's setup, and I am sure we will be looking for additional volunteers if you would like to participate.





The tower at the first site going up. [KD1SM Photo]

And what makes it go up you ask?



KD1SM photo

Skip K1NKR [KD1SM Photo]

And finally, NVARC scored a publicity coup for WRTC2014 by getting us a real nice write-up in the Lowell Sun. The article can be found here: [http://www.lowellsun.com/news/ci\\_23654616/ham-radio-operators-testing-](http://www.lowellsun.com/news/ci_23654616/ham-radio-operators-testing-). Photos of the Heald Street setup can be found at this "Dropbox" location: <https://www.dropbox.com/sh/rv34bfys1pgxb6a/7mYkI3CwWb?n=43123916>

Bruce K1BG

### The Ride to End Alzheimer's

Nineteen Amateur Radio Operators including eight NVARC members provided radio support for the 2013 Ride to End Alzheimers on Saturday July 13. The operators did communication for event logistics, and the health and safety of the bicycle riders who participated in the event.

This is the fifth year that NVARC has coordinated an Amateur Radio support team. Many of the operators have participated in the event every year. The 2013 volunteers were NVARC members Bob AB1CV, Gary K1YTS, Ken KB1UVP, Stan KD1LE, Ralph KD1SM, Dan KW2T and his sons, Jim N8VIM, Larry W1ESR, MARA members Tom AB1GF, Rick AB1PM, Ray KB1LRL, Charlie KT1I, and Brett AB1RL, Carsten KB1KTP, Chris KB1WKI, Jeff KB3EQH, Tim W0TJP. Two Amateur Radio operators were also part of the motorcycle support team: Justin KJ1H and Joseph N1QDZ.

The Ride to End Alzheimer's consists of four groups of bicyclists riding distances of 30, 62, or 100 miles plus a 2-mile "family ride". All riders start and finish at Museum Field in Devens. The 100 mile course goes south through Harvard, Littleton, Bolton, Lancaster, Clinton, West Boylston, around the south end of Wachusett Reservoir, then north through Sterling, Lancaster, Shirley, Groton, Townsend, Pepperell, Hollis NH, then back to Devens through Groton, Pepperell, and Ayer. The 62 and 30 mile courses follow portions of the 100 mile course.

The Amateur Radio support team provides fixed communication at the 6 aid stations (pit stops) along the courses and ride-along operators for the Support and Gear drivers who report rider status and provide assistance to riders who encounter problems along the course.

Event Coordinator Angela Floro from the Massachusetts/New Hampshire chapter of the Alzheimer's Association extends her deep appreciation to all of

the volunteers for making this year's event a success.

Thanks to Central Massachusetts Amateur Radio Association, Paul Andrews WB1EWS, Dave Peabody N1MNX, and Bernie Peabody N1IMO for the use of their repeaters for this event.

The Ride to End Alzheimer's was previously known as the Memory Ride. The participating bicyclists raise sponsorships for their participation. The Noonan family, whose story was featured in a PBS series "The Forgetting", founded the Memory Ride. Over the 15 years the Ride has raised over \$3 million to fund Alzheimer's disease research.

Further information about the ride itself can be found on <http://www.alzmass.org/ride/>

Details of the Amateur Radio operation are posted on <http://n1nc.org/Events/2013/Alz/>

The organizer of the Moto Support crew posted her experiences at <http://www.thegrotonline.com/2013/07/16/kate-motor-murphy-organizes-rider-support-for-ride-to-end-alzheimers/>

-Ralph KD1SM



Stan KD1LE and Joseph N1QDZ at the Net Control station on Museum Field. [KD1SM photo]



Event Coordinator Angela Floro looks over NCS operated by Stan KD1LE. [KD1SM photo]



Pit Stop 5 in at Alpine Grove in Hollis NH. This is the final pit stop for the 100 mile riders before they return to Devens. [N8VIM photo]



11.55.01 - Pit Stop 5 became known as "Margari-taville". [N8VIM photo]

## Field Day Part 2+

### Field Day 2013 Redux

As if my report last month wasn't sufficiently dry in content, my further summary of Field Day activity in tabular format should do the trick and let you sleep until next April, at which point the festivities all start up once again.

#### Submission Summary:

Our basic score was actually pretty good, considering we fielded only one HF stations (compared to four last year):

Field Day Call Used:	N1NC
Participants:	35
Operating Class:	1A
Section:	EMA
Total CW QSOs:	768=1536 points
Total Phone QSOs:	469= 469 points
Power Multiplier:	2x
Claimed QSO Score:	4010 points

We slacked off a little on the bonus points. By "we", of course I mean me, the Field Day Chairperson. I was trying to generate a little fun at the expense of points. I think we managed to achieve that, and by "we", I mean all of us, so I claim success!

#### Bonus Points Summary:

100% Emergency Power:	100
Media Publicity:	100
Setup in Public place:	100
Information Booth:	100
W1AW Field Day Message:	100
Visit by Elected Official:	100
Youth Element:	40
Submitted electronically:	50
Claimed Bonus score	690
Total Claimed Score:	4700

Comparison with last year's score of 5242 is not horribly out of line. We could have added a couple hundred bonus points without a lot of effort, but I don't think anybody missed the educational bonus, solar power, or biodiesel fuel for the generator. Did we really need the Field Day site to smell like French Fries? I sent inviting emails to the Police and Fire Chiefs of Pepperell, Groton, Townsend, Lunenburg, and Ayer. Not a one of them showed up. I even alluded to food being available. No, I didn't stoop to donut promotion. And I honestly thought that guy with the satellite rig who wandered through during setup was going to stay! I really did. Ah, well.

#### Station QSO Summary:

Stn	Total	CW	LSB	USB
HF	1186	762	118	306
VHF	51	6	0	45
Total	1237	768	118	351

As expected, the VHF station didn't add a lot to the score. 6m is the Magic Band for a reason. Some day, this station is really going to sing for us. This year, there was little Magic.

We had a wide variety of operators this year, including guest operators KB1SWV (Skip's daughter Jill), N1BA (Lee, from Hollis), and WW1Z (John, from Amherst, who provided most of the VHF station). W1JHR (George, from Harvard) who supplied a really cool antenna support system for the VHF station, also operated, but never logged in. (See Footnote [1])

#### Operator QSO Summary[1]:

Operator	Total	CW	LSB	USB
K1BG	673	573	74	26
K1NKR	6	0	0	6
KB1SWV	4	0	0	4
KD1LE	123	123	0	0
KK1X	66	0	44	22
N1BA	260	0	0	260
N1ZRG	14	3	0	11
N8VIM	3	0	0	3
W1XP	69	67	0	2
WW1Z	19	2	0	17
Total	1237	768	118	351

[1] This is not entirely accurate, as some operators didn't log in and out properly, and N1BA was logged in while Annika, Skip's granddaughter, made a couple of contacts (and fended off a dupe!)

The HF tent kept hopping for the whole event, with a low point of 10 contacts during the 1000 hour, which was kind of a slump for everybody.

#### Hourly Station Summary:

Date	Hour	Total	1	3	Running Total
2013-06-22	1400	61	57	4	61
2013-06-22	1500	75	71	4	136
2013-06-22	1600	96	94	2	232
2013-06-22	1700	100	95	5	332
2013-06-22	1800	64	62	2	396
2013-06-22	1900	80	78	2	476
2013-06-22	2000	112	99	13	588
2013-06-22	2100	67	67	0	655
2013-06-22	2200	80	80	0	735
2013-06-22	2300	62	62	0	797
2013-06-23	0000	25	25	0	822
2013-06-23	0100	22	22	0	844

2013-06-23	0200	20	20	0	864
2013-06-23	0300	30	30	0	894
2013-06-23	0400	25	25	0	919
2013-06-23	0500	36	36	0	955
2013-06-23	0600	34	34	0	989
2013-06-23	0700	28	28	0	1017
2013-06-23	0800	29	28	1	1046
2013-06-23	0900	28	24	4	1074
2013-06-23	1000	15	10	5	1089
2013-06-23	1100	32	28	4	1121
2013-06-23	1200	64	63	1	1185
2013-06-23	1300	51	47	4	1236
2013-06-23	1400	1	1	0	1237
Total	All Hours	1237	1186	51	0

As usual, 20 and 40 were the work-horse bands, providing 68% of the contacts.

Mode by Band Summary:

Mode	Total	3.5	7	14	21	28	50	144
CW	768	107	229	270	150	6	6	0
LSB	118	52	66	0	0	0	0	0
USB	351	0	0	286	7	13	43	2
Total	1237	159	295	556	157	19	49	2

In all, I think we achieved another successful Field Day. There were no injuries (save for a bit of poison ivy), we had fun, and we got out of there in a reasonable time.

I wish to thank all of the folks who chipped in - in any way - to make this a success.

Only 10 months until Field Day 2014!

John KK1X



**Nashoba Valley  
Amateur Radio Club**

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<http://www.n1nc.org/>

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Vice President: Jim Hein N8VIM

Secretary: John Griswold KK1X

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Rod Hersh WA1TAC 2012-2015

Bob Reif: W1XP 2013-2016

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PIO: Roland Guilmette

Librarian: Peter Nordberg N1ZRG

Property Master: John Griswold KK1X

N1NC Trustee: Bruce Blain K1BG

Annual membership dues are \$15; \$20 for a family

Meetings are held on the 3rd Thursday of the month

7:30 p.m. - Pepperell Community Ctr.

Talk-in 146.490 simplex

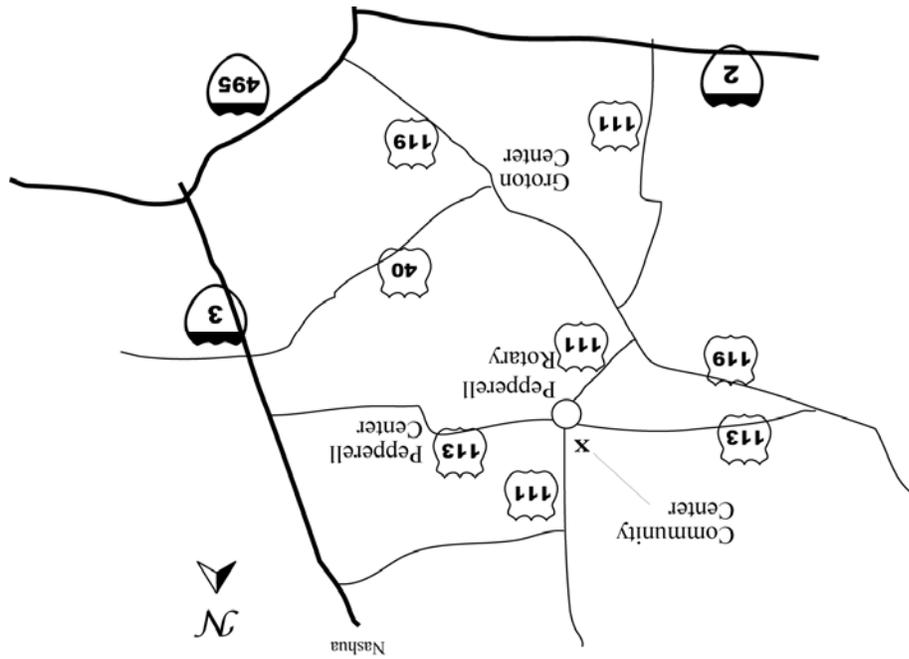
442.900 + 100Hz Repeater battery power

147.345 + 100 Hz Repeater

53.890 - 100Hz Repeater battery power

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