



# SIGNAL



de NINC

May 2007 Volume 16 Number 5

## This Month's Meeting

The month's presentation will be on Field Day.

Road Cleanup Saturday May 19.

Please note that as usual the May meeting will be held at the Pepperell Library due to the annual Library Book Sale which takes place at the Community Center.

We have updated the member information, club activity, and article index sections in the club yearbook. The update will be available at club meetings. Please see Stan or Ralph at the meeting to get your update.

## Last Month's Meeting



Last month's presentation was by Ray Lajoie KB1LRL on How Comcast Works.



Ray covered how programming was received by Comcast and distributed to the customer. Stan presented Ray with an NVARC mug after his presentation.

Elections were held at the beginning of the April meeting. A full slate of candidates was offered to the membership which was approved by a voice vote.

NVARC Officers for the coming year.

President	Stan KD1LE
Vice President	Peter N1ZRG
Secretary	John KK1X
Treasurer	Ralph KD1SM
Board 2005-2008	Les N1SV
Board 2006-2009	Joel W1JMM
Board 2007-2010	Bob W1XP

Attendees at the January meeting: Dale AB1GA, Ken K1JKR, Leo K1LK, Skip K1NKR, Tom K1NNJ, Gary K1YTS, Larry KB1ESR, Phil KB1JKL, Hank KB1JLA, Nancy KB1KEF, Ray KB1LRL our speaker, Peter KB1LZH, Stan KD1LE, Ralph KD1SM, John KK1X, Don N1HVA, Dave N1MNX, Les N1SV, Peter N1ZRG, Joel W1JMM, Jim W1TRC, Bob W1XP,

WA1SMI, Erik W1ZBT, Earl WR1Y, and guest Jim Antonellis.

### Field Day

Field Day is approaching. Dale and Larry have been working to put the pieces in place for us. Contact them if you want to volunteer to organize some part of the event. lwswezey@verizon.net



### Board Meeting

This month's board meeting topics.

We have updated the Club Brochure and we have a supply on hand. If you know of a location that would be suitable to leave a few see Stan or Ralph. Some ideas are local businesses that have public bulletin boards, restaurants, electronics stores.

Meeting presentations and future meeting presentations. Some short presentations to add to otherwise short meetings. We are looking for member input to find suitable speakers or subjects.

For our support of the QSL Bureau NVARC will get free incoming Bureau service for the club callsign.

We received a certificate of appreciation from the town of Groton at the April Selectmen's Meeting.

Treasurer's report.

Larry reported on activities of the North Middlesex Regional Emergency Planning Committee.

In attendance Bob W1XP, John KK1X, Larry KB1ESR, Joel W1JMM, Dale AB1GA and Stan KD1LE.

### Adopt A Highway

At the April 17 Groton Selectmen's meeting Stan KD1LE accepted a certificate of appreciation on behalf of NVARC for our participation in the Adopt A Road program for 2007.

The Chairman of the Board of Selectman also noted that we had been participating for ten years.



Also in attendance at the presentation were Bob W1XP and Larry KB1ESR.



Our first road cleanup was April 21<sup>st</sup>. We had a great turnout which helped since the first cleanup of the year is always more challenging. We picked up 38 bags of trash on our stretch of Route 119. There seemed to be even more than normal for the first time possibly due to the flooding along route 119 the week before.

Several members picked up cold cash which was generously donated to the club.

Thanks to the following members for supporting our road cleanup; John KK1X, Peter N1ZRG, Jim AA1PO, Earl WR1Y, Calie K1ZAK, Leo K1LK, Bob W1XP, Stan KD1LE, Ralph KD1SM, Gary K1YTS, Nancy KB1KEF and Dave N1MNX.

### Member Gets Published, Again

In the May issue of QST Jim W1TRC has an article titled Adapting a Three Element Tape Measure Beam for Power Line Noise Hunting. Congratulations to Jim for being a regular contributing author.

### Townsend Lions Canoe Race



Above the team gets assignments and gets ready to deploy. Sitting L-R are John KK1X, Nancy KB1KEF, Calie K1ZAK, and Stan KD1LE. Standing L-R are Bob W1XP, Larry KB1ESR, Gary K1YTS, Bob Ab1CV, Charlie KT1I, and Tom K1JHC.



Clearly you can see above what a difficult task it is providing safety communications for the Townsend Lions Club Canoe Race. Bob W1XP strategically positioned under the shade of the riverside trees logging canoes as they pass. This way we can tell where to look for any missing canoes.

### Groton Road Race



Starting before 7:00 AM the NVARC crew starts preparing the communications equipment and net control station. By 9:00 AM operators are starting to arrive for duties such as shadowing race officials and managing the parking areas. By the time the first race kicks off at 11:50 some 45 hams have checked in. The 2 K race operators are on station and the 10 K race operators are headed to their stations.



At net control we operate or monitor five frequencies. Two for the course, parking, finish line, and organizational.



It takes 45 hams to support this event. Thanks to everyone's it was a great success.

### Treasurers Report

Income for April was \$110 from member dues, \$5.19 from sharp-eyed road cleanup volunteers, \$59 from the March meeting book raffle, \$43.34 from bank interest. Expenses were \$16.40 for newsletter postage leaving a net income of \$201.13 for the month.

Current balances:

General fund	\$4,459.71
Community fund	\$2,136.83

As of 10 May we have 55 members who are current with their dues and 9 renewals outstanding. Please check the member roster that is circulated at the monthly meeting if you do not remember your renewal date. Your membership date also appears on your newsletter mailing label.

If you have not been receiving the monthly notices when the Signal is posted in the Web then we do not have your current email address. These notices are usually sent the weekend after the Board meeting.

Don't forget that the Club receives a portion of your ARRL dues if you renew your ARRL membership through me.

Ralph KD1SM

## Ham Radio 102

### An Introduction to HF Radio Part III

#### Introduction

This month I would like to discuss operating an HF Radio. Now first of all in this short article I cannot begin to tell you all you need to know to be a first class operator. But if you have been operating on VHF and above for some time you will find things on HF different. So in this article I will try to point you in the right direction.

#### Many other Sources

As I mentioned above a really exhaustive article on HF operating would fill a large book. In fact somebody has already written one. The ARRL publishes the Operating Manual. In about 500 pages it covers the whole range of amateur radio operating. In addition to articles on operating the various modes there are maps, charts and tables of all kinds. For these reasons alone I think it belongs at the operating position of every active amateur. There are other books some of a general nature and some that are written for a more specific area of operating. I'll only mention a few. One very good book on DX operating is "The Complete DX'er" by Bob Locher, W9KNI. The second edition is dated 1989 and although dated in some respects it is still in print and I recommend it to anyone interested in chasing DX. A third book I will suggest is also by the ARRL. It is "Getting Started with Ham Radio". I have not had a chance to review this book yet but I suspect that it probably is very good. It has a listing of topics that is much like the outline of what I hope to cover in this series of articles.

There are also many articles appearing in the radio magazines that are covering the exact same topic, and I encourage you to read all you can. Although you may have upgraded to a license with HF privileges your learning is just beginning. To be a proficient operator on any mode takes skills. Some

you already have and some you probably have yet to develop. But that's ok because we all have things we can learn to do or to do better. Anyone can sit down in front of a radio and make a contact, but there are some contacts that only the operator with the highest operating skills will be able to make not with standing high power and big antennas. So my message here is read, study and observe. And most of all listen. Your trip down the road of amateur radio may be just beginning or maybe just taking a new direction but to be successful it needs to be one of learning.

### The Importance of Listening.

Now if there is one important thing, there are three. Just like in real estate, where it is Location, Location, Location, in HF operating it is Listening, Listening, Listening. In "The Complete DX'er" mentioned above the author devotes Chapter Two to the art of listening. Learning to be a good listener can be one of the most important skills you can develop. There is the old saying "If you can't hear them, you can't work them". Well the only way to hear is to listen. There are at least three aspects to listening. First of all, we know that you listen before transmitting on any frequency. But usually on the local repeater if the squelch isn't broken you know that the channel is clear. But on HF it can be more complicated. You may listen for several minutes on a frequency and hear nothing but the background noise. Sounds clear to me! So you start transmitting and after a long CQ when you stand by you find some one calling you stupid, inconsiderate, and probably lots of other things I won't print here. And your first reaction may be "What did I do?" Well it is what you didn't do that is the heart of the problem. On HF it is not uncommon for a frequency to be in use by two or more stations but you may not be able to hear all of them. One or more may be skipping over your location, or the signal buried in your noise or out of your antenna pattern. So what you do after listening to a frequency and thinking it may be clear, you make a short transmission asking if the frequency is in use. "Is this frequency in use?" Then listen for a response. If you get any response, move on. A polite operator will respond with "yes it is" and some will thank you for asking. But any response is a sign to move on. On CW the same is accomplished with "QRL?" Usually sent several times with listening pauses in between. QRL is the Q signal for "this frequency is in use" and followed by the question mark asks the question if it is in use. The usual response is the letter "C" which means yes. So again move on to a different frequency. That's why the engineer put the big knob on the radio.

A second aspect to listening is to find out what is happening on the band(s). Determining things like is the band open and to where. Maybe trying another band is the thing to do. If fifteen meters is really good, maybe you should check 12 or 10 meters. Or if fifteen is dead, then maybe you should move down to 17 or 20 meters. But some times tuning slowly through a dead sounding band can turn up an interesting contact. Turning through the band to determine if the band is open and what part of the country or world the band may be open too is probably the first order of business when starting an operating session. Spending an hour talking to a local later to find the band was open to North Korea for the hour could be disappointing. So listening can be very important to successful HF operating.

A third aspect of listening is to learn how to get the most out of your equipment. And that includes your ears. Some times the make or break to a really rare contact is the operator's ability to dig the signal out of the noise. This is a skill that is developed only by lots of listening. Besides training your ears (it's probably more in the brain) to dig deep into the noise and copy the signal, you need to learn how to use your radio and the various adjuncts it has to help in the detection of marginal signals. Just what does that Band Pass Tuning do and how do you use it to reject the interference from the big signal next to that new country you would like to work? Well the time to learn how to use it is not when you are trying to work the new country. The skill to use your radio what ever it is, from the latest and greatest to the more elementary models, is only gained by experience listening and experimenting with the controls with the operating manual in your other hand. If you are not going to invest the time to learn to use these features on your radio then you might as well save your money with a cheaper radio.

So listen, listen, listen. It may seem that you spend all the effort obtaining a license to talk on the radio and yet the most important part is to listen. Knowing when to call CQ is only learned by lots of listening.

### Calling

OK you can't listen all the time, but knowing how and when to call can be important also. In general short and well-timed calls will be more productive than long or poorly timed calls. It seems obvious, but if you do a lot of listening you may begin to question that everyone understands that the only time to call is when the station you want to talk to is listening. Years ago split frequency operation was more common. By this I am referring to the fact that many

stations operated on fixed frequencies. Many times because they were using crystal control. So it was common to call the other station giving his call many times followed by your call. Today the only time split frequency operation is used is when a DX station will listen on a different frequency to move the calling stations off his frequency. This reduces the interference on the DX stations frequency so he can be heard better by the calling stations. So today it isn't necessary to give the call of the station you are calling. But the practice continues. It isn't a bad thing as long as it is not done to extremes. But in general if you are answering a CQ or QRZ just giving your call is all that is required. Now again it seems obvious but I've heard it more than you will imagine. You hear a station answering a CQ call from another station by giving the CQing stations call over and over and then signing with his call once. Now the CQing station knows who he is, but what he doesn't know is who is calling him. And he's been put to sleep by the monotonous calling and misses the calling stations call. Of course the opposite is just as bad. The station that will not quit giving his call is just as inconsiderate. In general twice may be better than once but three times probably too much. Here is where the experience learned by all the listening comes into play. Most times once is enough. If you get his attention he will ask for a repeat. Twice on SSB with phonetics may be in order and probably never more than three times. The called station will ask for a repeat if necessary but let him drive the show by requesting more repeats. The single well-timed call given at a moderate pace and distinctly can be very effective. On CW it is best to match the speed of the station you are calling if possible. Certainly not faster than he is sending. You are probably better sending slower and well than trying to send faster than you can and sending poorly. Most CW operators will tolerate slow code sent well over poorly sent code at any speed. Good sending stands out just as much as poor sending. And you want your signal to stand out. But guess who will get the call first.

### The QSO

OK he came back to me, now what do I do? Well if you have been listening to the station for some time you should know what he/or she is doing. Are they rag chewing with stations for several transmissions or are they just exchanging signal reports and moving on. Or something in between. If you know how the station is operating then just follow along. That is what the considerate operator will do. The station calling the CQ gets to call the shots as to how he wants to have a QSO. Of course this is a

two way street, but try to follow his lead. Coming across a station calling CQ you may not have any idea what he is interested in. What part of the band he (or she) is operating in may provide a clue. But you have figured that all out from all the listening you have done. Anyway respond in kind. Give an "Honest" signal report if it is not a contest or Dxpedition type QSO were the station doesn't care what the report is as long as it is 59(9). Follow this with your name and maybe QTH and then turn it back to him. If he want to continue that is fine. If you don't that is fine also. You can always use the "wife is calling" excuse and politely bow out of the QSO. On the other hand rag chew type QSOs are good for building skills and confidence in your abilities. And you can have some interesting conversations and make new friends. Some you may have for life.

### Calling CQ

I once heard the expression, "When all else fails, call CQ". Well you can put lots of different meanings into that, but there are times to call CQ. But only after you have done the required listening. (There it is again) You can make a good argument that if everyone is calling CQ there is no one to answer. But a well-placed CQ can be rewarding. But again keep it short and do a good job of listening in between the calls. You don't want to miss the rare one that is in the noise or slightly off freq. But a three by two or three by three call is what I've found to work well for me. That three CQs followed by my call twice or three times and then a good listen. I've heard stations that never seem to end calling CQ. I've given up and moved on when stations showed no sign of ending the call. I really didn't want to reward what I think is poor practice. So remember short calls and lots of good listening in between.

### Consideration

The golden rule of ham radio may be as simple as operating your station in such a manner as to not reduce the enjoyment of any other ham or person. (Someone else said it but I don't recall who it was.) That may be a tall order but one that we should all be trying to achieve. With so many varied interests that are competing for a share of a fixed frequency resource sometimes we can be our own worst enemy. But remember that with the exception of emergency communications no one has any more rights to do what they want to do over anyone else. If we accept this fact and respect the other fellow's rights we can all enjoy this hobby together. Consideration is the watchword. It may be difficult to have consideration when you have just been stepped on

by some ham that isn't behaving as we think he should. But it is a hobby with lots of competition and we all know that can get out of hand. It can bring out the worst in all of us. A big yelling match on the air does not serve any good and the world is listening (one of the few times it can be bad) so the harm can be real. In the end we are no better than our reputation. So try to learn what is expected. Follow the band plans and learn from criticism even if it isn't given in the most constructive manner. And be considerate of the new (or even the old) hams that are trying to learn the skills that it takes to be a good operator. Good operators are not born. It takes time and work, but the enjoyment and satisfaction you receive when you put it all together can be very great. Just remember, be considerate and listen.

#### Mentoring

And lastly before I close, there are plenty of hams ready and willing to be a mentor to another ham. If you need help please don't fail to ask. Ask myself or any of the other club officers and we will try and get you the help you need. This goes for any member, new ham or old. After all that is the true ham spirit.

Till next month 73 Bob W1XP

### PSLIST

#### May

20 Parker Road Race on Devens  
Stan KD1LE. 978-433-5090  
20 Hadley MA Hadley Mem. Day Road Race Richard KD1XP kd1xp@kd1xp.org

#### Jun

16-17 Mt Washngtn NH Mt Washington Road Race  
Cliff N1RCQ n1rcq@amsat.org or Dave KA1VJU  
[ka1vju@cnharc.org](mailto:ka1vju@cnharc.org)

#### Jul

7 Mt Washngtn NH Newton's Revenge cycle race  
Cliff N1RCQ n1rcq@amsat.org or Dave KA1VJU  
[ka1vju@cnharc.org](mailto:ka1vju@cnharc.org)

#### Aug

18 Mt Washngtn NH Mt. Wash. Bicycle Hill Climb  
Cliff N1RCQ n1rcq@amsat.org or Dave KA1VJU  
[ka1vju@cnharc.org](mailto:ka1vju@cnharc.org)

19 Mt Washngtn NH Mt. Washington Century Ride  
Cliff N1RCQ n1rcq@amsat.org or Dave KA1VJU  
[ka1vju@cnharc.org](mailto:ka1vju@cnharc.org)

#### Sep

29 Bristol NH NH Marathon Cliff N1RCQ  
n1rcq@amsat.org or Dave KA1VJU  
ka1vju@cnharc.org

### NVARC Club Net

The club net meets on the 442.900 repeater. Subjects discussed recently; upcoming events Groton Road Race wrapup, upcoming Parker Road Race, road cleanup.

Recent participants include Dave N1MNX, Bob W1XP, Bob AB1CV, Joel W1JMM, Larry KB1ESR, Skip K1NKR, Gary K1YTS, Ralph KD1SM, Stan KD1LE, Les N1SV, Richard KB1MBR, Ken K1JKR, Den KD2S and Peter KB1LZH.

The net is a good place to bring information for the club and questions or discussions. The net meets at 8:00 PM Monday evenings on the 442.900 N1MNX repeater.

### Flea Markets

#### June

1 Hamden County Radio Assoc, Feeding Hills MA  
3 Newington ARL Hamfest, Newington CT  
16 Southern Berkshire ARC, Goshen CT  
17 MIT

#### July

15 MIT

#### August

19 MIT

#### September

16 Western CT Hamfest Newtown CT  
16 MIT

### Advertisements



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Tell them you saw it in the Signal. Advertisers should contact the NVARC Treasurer for information.

**Contest, DXpeditions and Special Events**

The information for a DXpedition can be quite detailed and may include bands, dates, number of stations, and times of day they plan to work certain continents so I can not list it all here. But if a country or prefix is of interest you can get more information at [www.425dxn.org](http://www.425dxn.org).

**Contests 2007**

May  
CQWW WPX CW last full weekend

June  
9-11 ARRL June VHF QSO Party  
23-24 ARRL Field Day

July  
CQWW VHF 3<sup>rd</sup> full weekend  
September

CQWW RTTY DX 4<sup>th</sup> full weekend

**DXpeditions**

Call	Location	Until
OX3PG	Greenland	June 07
TU2/F5LDY	Ivory Coast	31 August 07
ST2R	Sudan	April 2007
J20SA	Djibouti	From 1 April
V73NS	Kwajalein	From 1 May
OX3PG	Greenland	Jun 2007
9V1CW	Singapore	2008
8Q7IM	Maldives	Nov 2007

See [www.425dxn.org](http://www.425dxn.org) for more listings

**NVARC Swap Shop**

21 inch monitor available free for the asking. Contact Bob W1XP.

**ARRL Letter**

**NORTHEAST AMATEUR RADIO VOLUNTEERS AID MASSIVE STORM RESPONSE, RECOVERY**

Amateur Radio volunteers have been helping the US Northeast to recover from the effects of a huge and punishing nor'easter that generated high winds and caused extensive flooding in many communities -- rural, urban and coastal. While sunny weather has returned to the region, some ARES volunteers remain active.

"This was a long-duration event that impacted the region for several days," said ARRL Eastern Massachusetts Section Emergency Coordinator Rob Macedo, KD1CY, who's also ARES SKYWARN coordinator for the Taunton National Weather Service office.

New Hampshire Amateur Radio Emergency Service (ARES) and Eastern Rockingham County ARES have been backing up landline telephone service, including 911, between Nottingham and the New Hampshire Bureau of Emergency Management. Service was knocked out by flooding at a switching station. Operations could last for several days. Even cell service is affected.

The mountains of northern New England received snow, some of which melted, while most of the rest of the region saw heavy rainfall -- three to six inches on the average with isolated higher amounts in southern and central New England. The result was significant flooding of rivers, streams and urban areas, coupled with mudslides and bridge and road washouts.

Amateur Radio ARES, RACES, SKYWARN and Military Affiliate Radio System (MARS) volunteers monitored river levels for authorities. The Nashua, Farmington, Connecticut, Blackstone, Pawtuxet, Piscataquog, Shawsheen, Souhegan and Merrimack rivers were among those overflowing their banks. Homes and businesses had to be evacuated in some communities. Flooding of smaller rivers and streams added to the problem. Along the coast, Amateur Radio volunteers reported widespread minor to moderate flooding across coastal eastern Massachusetts Sunday through Wednesday.

In Nantucket, the ocean claimed one home during high tide, while numerous cars got stuck in coastal flooding, and motorists had to be rescued. A few families had to evacuate during high water.

Winds gusting between 60 and 75 MPH brought down trees and power lines, leaving some 45,000 customers without power in Massachusetts alone. Trees and tree limbs also fell on cars and houses, in some instances causing significant damage.

Macedo reports SKYWARN operations at the Taunton NWS office's WX1BOX, were active for 40 hours straight -- from 8 AM Sunday through midnight Tuesday. SKYWARN provided some 500 to 600 reports of snowfall, rainfall, flooding, wind damage and wind-speed measurements. More than a dozen repeaters served formal and informal SKYWARN gatherings.

At the Massachusetts State EOC, RACES' WC1MA was active from 6 PM Sunday through 7 PM Monday, monitoring not only the storm but the Boston Marathon. The race went on despite the rough weather. Conditions improved by afternoon. More than 200 Amateur Radio volunteers deployed for the Boston Marathon while operations for the nor'easter were under way. Eastern Massachusetts ARES went on standby to support storm operations.

"This was a test of our ability to have a large amount of resources deployed for the large storm as well as for a large event, and things went very well." Macedo said.

Western Massachusetts SEC John Ruggiero, N2YHK, reported some localized ARES activity as a result of the nor'easter. Mutual-aid ARES teams in Western Mass were on alert but not activated.

Shelters opened in Greenfield and Leominster to house flood victims, and ham radio volunteers were on hand to support communication. The Greenfield EOC was open for a time. In Northampton flooding caused some apartment dwellers to evacuate. Some roadways throughout the region were washed out or flooded over.

Connecticut SEC Brian Fernandez, K1BRF, said ARES volunteers staffed emergency management facilities in two of the state's five regions, "largely along the shoreline where there has been flooding in low-lying areas." Some evacuations occurred. ARES volunteers also staffed selected EOCs and, briefly, shelters in affected areas. The Connecticut River reportedly crested on Wednesday.

More than eight inches of rain caused scattered flooding in New York City, but predicted 50 MPH winds never materialized. The danger was over by the next day, and New York City District ARES was able to stand down and secure. ARES teams on Long Island also were prepared in advance on April 14. Most of Long Island was spared the brunt of the storm, however.



**Nashoba Valley  
Amateur Radio Club**

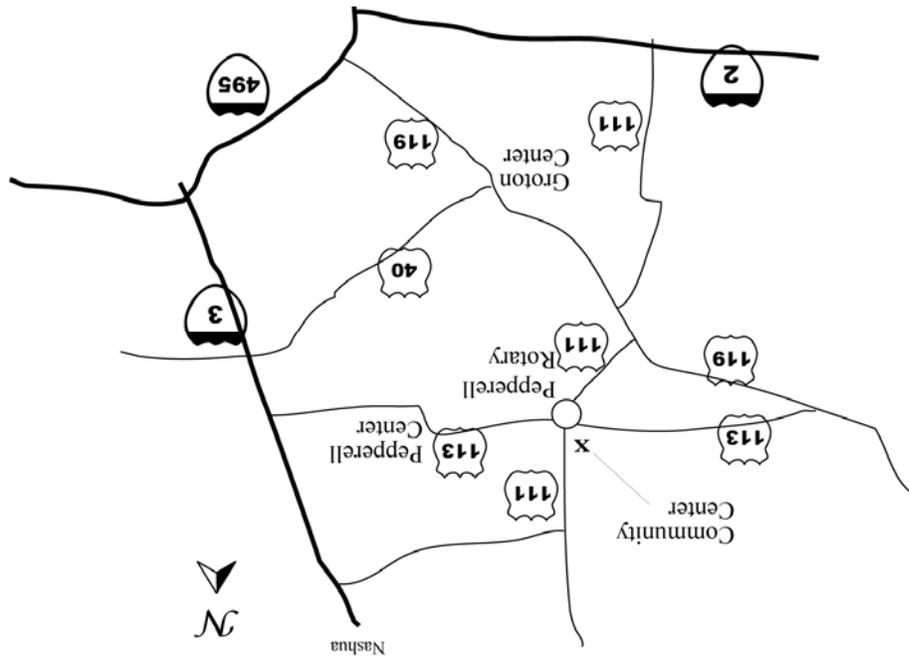
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Meetings are held on the 3rd Thursday of the month  
7:30 p.m. - Pepperell Community Ctr.  
Talk-in 146.490 simplex  
442.900 + 100Hz Repeater  
147.345 + 100 Hz Repeater  
53.890 - 100Hz Repeater

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