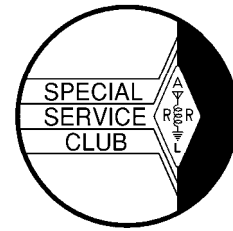




SIGNAL



de NINC

May 2005 Volume 14 Number 5

This Month's Meeting

MEETING LOCATION NOTICE

The May meeting will be held at the Pepperell Library due to the Library book sale which will be set up at the Community Center. We will be in the downstairs meeting room.

This month's presentation will be a Software Medley. By that we mean a brief overview of a number of pieces of software that may be of interest and useful to members. There will be five to ten minutes on each piece and an opportunity to see it up close after the presentations.

After the meeting there will probably be some Field Day planning special interest group discussions.

Last Month's Meeting

Last month we had elections. With the results of the elections plus the continuing Board Members the NVARC Officers for next year are as follows.

President	Stan KD1LE
Vice President	Peter N1ZRG
Secretary	John KB1HDO
Treasurer	Ralph KD1SM
Board Member to 06	Bob W1XP
Board Member to 07	Dave N1MNX
Board Member to 08	Les N1SV

Thanks to the above individuals for volunteering their time and talent to advance NVARC through the next year.

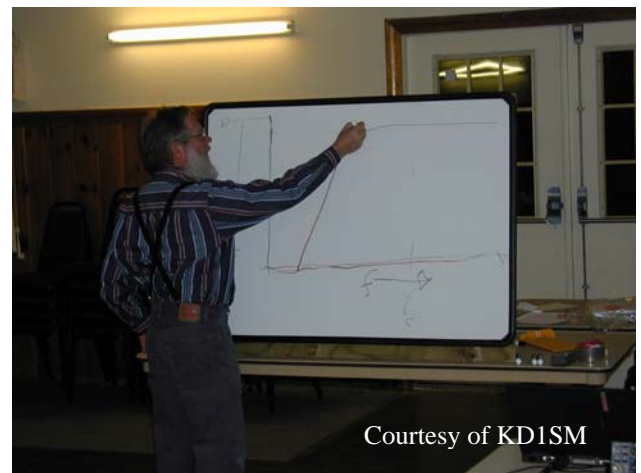
Ralph gave the Treasurers report which was in the newsletter. He also brought up for member approval

the intention to make another order of PowerPole connectors since the supply is low. Ralph stated that when the current supply was exhausted we would have distributed 1100 connectors to members since the start of the program in 2002.

Brief updates on Field Day, Soundcard interface, and bandpass filter projects.

It was announced that there would be SKYWARN training in Westford May 18th from 7-10 PM.

The meeting program was Filters by Bob W1XP. Bob I talk about the general classes of filters, terms used to describe them, their waveforms and the benefits or tradeoffs of one over another.



Courtesy of KD1SM

Professor Bob at the "chalk" board.

During the presentation he touched on how they are used in various pieces of equipment to address different problems. He also touched on some of the design considerations and tradeoffs when designing the filters we were building for Field Day.



Courtesy of KD1SM

A table of free “goodies” was set up with items such as power supplies, cables, software, torroids, video camera and monitor and various electronic gadgets. The items were brought in by Dave N1MNX, Phil KB1JKL, and Stan KD1LE.

In attendance were Bob W1XP, Ralph KD1SM, John KB1HDO, Ben KB1FJ, Wolfgang KA1VOU, Larry KB1ESR, Skip K1NKR, Dick KB1MBR, Hank KB1JLA, Russ WR1Y, Dennis K1LGQ, Jan N1LBA, Les N1SV, Dave N1MNX, Joel W1JMM, Gary K1YTS, Nancy KB1KEF, Rod WA1TAC, Stan KD1LE, Leo WA1ULK, Dennis K1LGQ, Phil KB1JKL., Ken K1KEY.

From the President

We already have several events under our belts this year; Townsend Lions Club Canoe Race, Groton Road Race, and some have the Boston Marathon and the Walk For Hunger. Now things cool off for a bit. We do have the Parker Classic May 15th.

Bruce is looking for support for various aspects of Field Day from station set up to taking on one bonus point task. With everyone thinking about a smaller part of the puzzle we are less likely to miss some critical item.

In the ARRL Newsletter section under the title “Second Times the Charm.....” Jim Heedles WW1Y is mentioned as the control operator for an ARISS contact from a school in Goffstown NH. Some may know Jim as one of the principles of the Nashua Area Radio Club (NARC) VE program which also provides the VE Session at Hosstraders. Jim is also the callsign Trustee of the Nashua Repeater.

Recently a member complimented me on the great content in the newsletter. The comment rolled

around in my head for a few days till the nugget of truth fell out. I spend a lot of time on each issue of the newsletter and an editor can add formatting, seek out information, and in some cases write most of what appears there. But it seems to me the real quality of a newsletter in terms of being interesting to the readers is the content and the editor cannot create the content. The editor can seek it out, format it, dress it up with pictures. The members create the event or activity that is the source or inspiration for the content by being active. There’s not much I can do to make inactivity exciting. I’m sure there are many hard working editors of boring newsletters. It’s not their fault, its just their members don’t do anything. Not the problem here since the members of NVARC are very active. Thanks for making a great newsletter.

Stan KD1LE

Adopt A Highway

The next cleanup will be Sunday May 22nd.

We meet at the traffic island on the east side of the Nashua River at 9:00 AM. The normal clean up day is the Sunday after the club meeting.

Bandpass Filter Project

Now that the first two instances of the 80 meter filter have been tested to verify the design the four production copies have been kitted and distributed.



Courtesy of KD1LE

The 80 meter filter is a five coil design which takes a double box as shown above.

The 10 meter design has been built and tested and the second instance was built and tested to verify

the design. The kits have been put together and distributed.



The 10 meter filter is a five coil design also but the coils are smaller and it takes fewer capacitors to make up the necessary values than the 80 meter monster so it fits in a single box.

That completes the development of the five bands 10, 15, 20, 40, and 80 meters that we planned build. Four people have expressed a desire to build a 160 meter filter which is a separate project. The first instance of this filter has been built and is being fine tuned.

The use of these filters at Field Day or other events should keep out of band interference between stations to a minimum. Since they work on both transmit and receive they reduce the out of band output of a transmitter and the out of band input on a receiver so they can have better results than a receive only filter.

Public Service

Recent events which NVARC members participated are the Boston Marathon, Townsend Lions Club Canoe Race, and the Walk for Hunger.

Boston Marathon: Stan KD1LE, Ralph KD1SM, John KB1HDO, Ken K1KEY, Larry KB1ESR, Ken K1JKR.

Townsend Lions Canoe Race

Gary K1YTS coordinated the volunteers and Nancy KB1KEF, Stan KD1LE, John KB1HDO, Bob AB1CV, Ralph KD1SM, Tom K1JHC, Tom K1KAY, Thomas KB1JSG, Charlie KT1I, staffed the checkpoints.



Shown above is the crew getting briefed prior to the canoe race.

Handouts were prepared by Stan KD1LE and Ralph KD1SM. The handouts, which were developed over the past few years, include a description of the race and requirements, maps, locations of all the check-points, and a tally sheet to record information about the canoes such as color, number of passengers, the time when they passed your location, etc. This allows us to track each canoes progress and narrow the area needed to search should one get lost.



Groton Road Race see separate article.

Walk for Hunger was supported by several NVARC members; Ralph KD1SM, Stan KD1LE, Ken K1JKR.

Parker Classic

The Parker Classic (on Devens) is coming up Sunday the 15th of May.

This is the ninth year we will support the Parker Classic Road Race. Much has changed on Devens in those years and as a result the courses have changed almost yearly.

Groton Road Race APRIL 24th



Courtesy of KD1SM

Above the net control station set up in the RV near the credit union on Main St. The tower supported the three antennas we used. Two were mounted on the cross arm at the top of the first section and the other on the top.



Courtesy of KD1SM

Above is net control while everything still looks neat.

The weather for this year's Groton Road Race cut it very close to the margin. The forecast was for

showers early in the morning then clearing. The rain did in fact stop a few minutes before the start of the 5k race and the skies started to clear by the start of the 10k. But none of this appeared to dampen the spirits of the 1400+ people who came to Groton to run in the 14th annual race on Sunday, April 24. With this being Groton's 350th anniversary year the Race organizers were concerned about larger than normal crowds of spectators. The weather may have served to keep the crowds down to average.



Courtesy of KD1SM

Near the start of the 10K race hundreds of runners heading east on Main St.

NVARC members Ken K1KEY, Gary K1YTS, Karen KA1JVU, Wolfgang KA1VOU, Larry KB1ESR, John KB1HDO, Nancy KB1KEF, Jason KB1KEG, Stan KD1LE, Ralph KD1SM, Den KD2S, Dave N1MNX, Don N1NWE, Jim N8VIM, Joel W1JJM, Bob W1XP, Earl WR1Y, and Herm WW1HR were joined by 26 other Hams, including 10 from Billerica Amateur Radio Society to provide the critical safety, medical, and logistics communications for this event. This was the largest crew we have been able to field in the history of the event. Other groups that were represented include Montachusett Amateur Radio Association, Worcester Emergency Communications Team, and Crocker Public Service Group.

We were able to provide shadows for the two Race Directors and the Course Crew Chief, plus our usual Parking crew, the Police crew (OIC, Chief, and Dispatch center), and the 17 checkpoints of the 5k and the 27 checkpoints of the 10k races. Our "Finish Line Family" of Mark and Joel Rubin from Worcester helped provide advance runner numbers to the finish line announcer so names could be read as the runners crossed the finish. The family was complete this year with Brenda Rubin at the newly requested position at the race information booth.

Hopefully this year's weather won't deter these volunteers from participating next year. It certainly did not deter Ken WO1N of BARS from once again running in the 5k then exchanging his running clothes for warmer clothes and a safety vest and radio and manning one of the 10k checkpoints.

Groton Police Lieutenant John Rooney expressed his deep appreciation for the vital communications provided by the Hams. Over a half-dozen agencies provide uniformed personnel to close roads in Groton for this event. Hams provide the essential inter-agency radio communication; the agencies represented by these uniformed personnel have no shared radio communications between themselves. Here is where we Hams prove our worth to the public for the frequencies that the FCC preserves for our use.

Stan and Ralph would appreciate any after-action reports or comments from those who participated. We expect NVARC to be asked to help again next year -- yes, it seems the Race will continue, having found a volunteer for next year's Race Director. We are always looking for feedback that will help us improve future public service events. The Race Committee debrief and wrap meeting is scheduled for the week after the May NVARC meeting. Ralph will have an opportunity then to pass along any comments appropriate to the race committee.

Once again, thanks to all NVARC members who volunteered.

The great crew helping out at the road race were: AA2T Jerry, K1EJ, Darrel, K1GCM Gerry, K1KEY Ken, K1SON Jerome, K1SUB Pete, K1TWF Mike, K1WD William, K1YTS Gary, KA1JVU Karen, KB1EET Cathy, KB1ESR Larry, KB1HDO John, KB1ILP Joel, KB1KEE Brenda, KB1KEF Nancy, KB1KEG Jason, KB1LRL Ray, KC1US Bruce, KD1LE Stan, KD1SM Ralph, KD1TE Gary, KD2S Den, N1BDA Steve, N1HTS Jim, N1IW Michael, N1LDL Chuck, N1MNX Dave, N1MOR Phil, N1NWE Don, N1RXV Bob, N8VIM Jim, NF1A Art, NX1Z John, W1JJM Joel, W1OJP Bob, W1XP Bob, WA1RHP Tom, WB1ARZ Mark, WO1N Ken, WR1Y Earl, WW1HR Herm.

Board Meeting Notes

The Board meeting was held May 12th at the Presidents QTH. Items on the agenda were:

Final Field Day planning including site preparation, road access, site status, possible antenna locations, filter project update,

Field Day budget proposal \$360 including food, ARRL Field Day pins, fuel, dumping charges.

Cookout planning and host to ask meeting for host.

Ralph presented the Monthly Treasurers report and the Annual Report. To be brought to the meeting.

Dave N1MNX has expanded the Field Day Station Signs from the original he created for the UHF/VHF station. Stan to print and laminate the signs.

Ralph will try to schedule a tour of Oak Ridge Observatory in Harvard which is closing in the next few months.

Peter confirmed the availability of power distribution equipment and backup generator for Field Day.

Den KD2S relayed that at a recent meeting the East Mass EC commended NVARC for running the Emergency Communications Course and would we consider running another. Discussion around when might a be good time to run another class, Maybe in the Fall since some who inquired about the last one preferred not to do it during the summer.

Den mentioned the upcoming Hurricane exercise in June, local participation in the "envelope" exercise if we are interested.

NVARC patch supply getting low. Based on usage rate deferred ordering until fall.

Fresh chocolate chip cookies with nuts.

Flea Markets and Such

- May 28 Hartford Hamfest
- June 3 Tailgate Party Wilbraham
- June 4 Bangor Hamfest Hermon Me
- June 11-12 Newington ARL Hamfest, Newington CT
- June 19 MIT
- July 17 MIT

PSLIST

Date	Location	Event
Contact	Tel/Email	
May 14	Westford MA	Apple Blossom Parade
Bo	WA1QYM	wa1qym@arrl.net 978-692-6084

May 15 Devens MA Parker Classic Road Race
Stan KD1LE 978-433-5090

July 2 Princeton MA Longsjo Bicycle Race
Ralph KD1SM kd1sm@arrl.net 978-582-7351

July 3 Fitchburg MA Longsjo Bicycle Race
Ralph KD1SM kd1sm@arrl.net 978-582-7351

Advertisements

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

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HOLLIS, NH 03049

FAX 603-465-3320

\$May Treasurers Report\$

Approved to order 10 more Now You're Talking

2005 Field Day budget proposal:

- \$150 food
- \$10 fuel
- \$60 RV fuel & dump fee
- \$120 Field Day pins
- \$20 coffee & donuts
- \$360 total

Income for April was \$30 in membership dues, \$5.70 from the road cleanup, \$2 from ARRL membership renewals, \$15.25 in bank interest, and \$5 for Power-Pole connectors. Expenses were \$14.80 for newsletter postage, and \$182.25 for PowerPole connector stock leaving a net expense of \$139.10 for the month.

Current balances:

General fund \$4469.33

Community fund \$1907.95

As of 12 May we have 50 current members and twelve renewals outstanding. Please check your newsletter mailing label for your expiration date or look for the email reminder I send you if you are overdue.

The road cleanup netted an additional \$5.70 for the treasury, thanks to Gary K1YTS who took some scrap heavy gauge copper cable to the metal recycling plant.



The ARRL rebates a portion of your new or renewal ARRL membership fees to affiliated clubs when I handle the mailing. When you need to renew your ARRL membership, you can save yourself the cost of a stamp and add to the Club treasury by handing me a check in the amount of your ARRL dues. If you are not yet an ARRL member, please consider joining. Numbers matter when the ARRL talks to legislators about matters that impact us, such as BPL.

NVARC Club Net

The April 18th net was run by N1MNX with info on Groton Road Race, Filter Project, Soundcard Interface Project, WAMC Award.

Checkins included Joel W1JMM, Dave N1MNX, Larry KB1ESR and Stan KD1LE.

The May 2nd net was also run by Dave N1MNX. Checkins included Joel W1JMM, Larry KB1ESR, Bob W1XP/M, Stan KD1LE, Ralph KD1SM, Ken K1KEY, Richard KB1MBR.

Discussions included Groton Road Race, Walk For Hunger, Field Day Planning, Status of the Filter Project.

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.

ARRL Letter

NEW AMATEUR RADIO SATELLITE IN ORBIT

HAMSAT is the latest Amateur Radio satellite in orbit. Launched this week, it is India's first. Although it doesn't yet have an OSCAR designation, several stations—including W1AW--already have completed contacts through its SSB/CW transponder.

"We congratulate all who have worked for the HAMSAT and its successful launch," said AMSAT-India Treasurer Sandip Shah, VU3SXE, who was among more than a dozen radio amateurs at the control center in Bangalore, India, for the May 5 launch. With several dignitaries—including India's president—on hand to watch, the satellite went aloft from the Satish Dhawan Space Centre (SDSC) SHAR in Sriharikota.

Going into space along with the 42.5 kg HAMSAT was the primary payload—the 1560 kg Indian remote sensing satellite, CARTOSAT-1, intended for mapping applications. The spacecraft were placed into polar sun synchronous orbit at an altitude of 632 x 621 km with an equatorial inclination of 97.8 degrees.

The microsat will provide two new linear mode U/V transponders for SSB and CW use only. Only one transponder will be active at any given time. The uplink passband is 435.225-435.275 MHz (LSB), and the downlink is 145.875-145.925 MHz (USB). An unmodulated carrier has been reported on 145.936 MHz, and a CW telemetry beacon on 145.860 MHz.

Dutch graduate student William Leijenaar, PE1RAH, who designed one of HAMSAT's transponders, saw the PSLV-C6 vehicle carry the satellite skyward from SDSC SHAR. "It was very interesting to see how my radio finally went into space," he said afterward. "It is the best ham radio experience in my life."

There's more information on the AMSAT-India Web site <<http://www.amsatindia.com/hamsat.htm>>.

RADIO AMATEURS, ARES GROUP AMONG NOAA'S 2005 "ENVIRONMENTAL HEROES"

The National Oceanic and Atmospheric Administration (NOAA) has recognized four Amateur Radio operators and an Amateur Radio Emergency Service (ARES) group among its list of 2005 Environmental Heroes. Given in conjunction with Earth Day celebrations, Environmental Hero awards honor NOAA volunteers for their tireless efforts to preserve and protect the nation's environment.

"NOAA and the nation are fortunate to have such dedicated people volunteer so much of their time,"

said retired Navy Vice Admiral Conrad C. Lautenbacher Jr, undersecretary of Commerce for oceans and atmosphere and NOAA administrator. "They set a perfect example for others to follow in their communities. America needs more environmental heroes like them." Established in 1996, the Environmental Hero award is presented to individuals and organizations that volunteer their time and energy to help NOAA carry out its mission.

Among this year's honorees are ARRL member Charles T. Byars, W5GPO, and the Wichita County Amateur Radio Emergency Service of Wichita Falls, Texas. Byars is an ARES District Emergency Coordinator in the ARRL North Texas Section. For more 30 years, he and Wichita County ARES members have volunteered their time, expertise and resources to help the National Weather Service (NWS) detect and track dangerous storms.

"Their tireless efforts, long hours and dedication to helping to protect the citizens of Wichita Falls and the surrounding area have led to more accurate and detailed weather information being disseminated, more timely warnings and quite possibly lives being saved," NOAA said in recognizing Byars and his ARES team.

Wichita County Emergency Coordinator Dave Gaines, N5DHG, says the City of Wichita Falls will host an awards presentation on May 10.

Three Florida radio amateurs, all ARRL members, also were recognized for their efforts as Amateur Radio net control operators for the NWS office in Ruskin, Florida, during hurricanes Charley and Frances. NOAA says Paul Toth, NA4AR, of Seminole, Robert M. Stanhope, W3RMS, of Valrico and Sean C. Fleeman, N4SCF, of New Port Richey volunteered a total of 125 hours during the two storms last year.

"They gave up time with their families to gather real-time reports during the hurricanes to enhance NWS warnings and also provided up-to-the-minute weather information for recovery operations in west central and southwest Florida," NOAA said in commending the trio.

NOAA recognized 34 individuals and three organizations across the US as Environmental Heroes. The complete list of 2005 award recipients is on the NOAA Web site <<http://www.noaa.gov/earthday/>>.

SECOND TIME'S THE CHARM FOR NEW HAMPSHIRE SCHOOL SPACE CONTACT

Youngsters at Maple Avenue Elementary School in Goffstown, New Hampshire, had to wait an extra week, but on April 13, they were able to talk directly via Amateur Radio with Leroy Chiao, KE5BRW, at the controls of NA1SS on the International Space Station. Technical problems cropped up on the originally scheduled date of April 5. The Amateur Radio on the International Space Station (ARISS) program was able to reschedule the contact for April 13. Chiao told one youngster that while there's no weather per se in space, the ISS can view Earth's weather. The external environment of space does come into play, however, in developing suits for spacewalks, he said.

"We really don't run into any kind of environmental weather or anything like that," Chiao explained. "Of course, outside in space it's a vacuum and it's very cold or very hot depending on whether you're in the sun or in the shade. And so those are factors that we consider when we design the spacesuits."

During the approximately 10-minute direct VHF contact, the 20 Maple Avenue kids ran smoothly through a list of 20 questions, and Chiao was almost through answering the last when the ISS got out of range of ground station W1SSC, the call sign of Spaceflight Systems Corporation Amateur Radio Club in Nashua.

Students taking part in the ARISS contact were in Georgia Paris' fourth grade class, who spoke with NA1SS using Amateur Radio equipment set up at the school specifically for the contact with NA1SS.

Responding to another question, Chiao elaborated on experiments that have been under way during his Expedition 10 duty tour. Chiao said the space station's goal is to be a worldwide laboratory.

"We've done some interesting experiments on board," Chiao said. "We've done one experiment in particular--something called 'Telemed'--and we use an ultrasound machine to image each other's internal organs and bones and teeth and things like that, taking directions from a doctor on the ground."

Chiao has explained in past ARISS school contacts that the Telemed experiment is aimed in part at coming up with ways to monitor the health of space travelers and diagnose problems that might arise during long-term space ventures. The two-man crew, which includes Russian cosmonaut Salizhan Sharipov, also has been growing some pea pods, Chiao said.

The Maple Avenue Elementary QSO marked the first Amateur Radio school group contact with a New Hampshire school. An audience of 200 students, teachers, parents, local dignitaries and news media was on hand for the event. Jim Heedles, WW1Y, who served as the Earth station control operator for the contact, thanked all who were involved in helping to make "lifelong memories" for the fourth graders.

ARISS <<http://www.rac.ca/ariss/>> is an educational outreach with US participation by ARRL, AMSAT and NASA.

ARRL REPRESENTS AMATEUR RADIO AT SCIENCE TEACHERS' CONVENTION

ARRL Education and Technology Program (ETP) Coordinator Mark Spencer, WA8SME, represented Amateur Radio during the recent National Science Teachers Association (NSTA) convention in Dallas, Texas. Some 14,000 teachers from across the US attended the gathering March 31-April 4. Staffing a booth within the NASA area, Spencer did presentations on the ETP--"the Big Project"--as well as on the Amateur Radio on the International Space Station (ARISS) program in which ARRL, NASA and AMSAT are US partners. Spencer says the underlying theme and concern among the teachers he spoke with was educational standards.

"Even more so than in the past, teachers are overwhelmingly concerned about teaching to the standards, and if material isn't specifically addressed in the standards--word-for-word, concept-for-concept--they were not particularly interested," he said. "This is an issue that we, as well as NASA, will have to aggressively address if the wireless technology literacy and space literacy curricular suggestions are going to have any hope of gaining a foothold." Spencer said many teachers told him that all routine instruction at their schools comes to a halt at this point in the school year so students can focus on prepping for standardized tests.

The annual NSTA convention presents a valuable opportunity to encourage teachers to attend one of the Big Project teachers institutes the League sponsors, Spencer said. The League this summer will offer two weeklong teachers institutes, which teach educators the basics of wireless technology and electronics, at virtually no cost to attendees beyond their time and effort.

Spencer took advantage of his stay in Texas to visit with an ETP school--Lyndon Baines Johnson High School (LBJ) in Austin--to see a Big Project program in action. Lead teacher Ronny Risinger, KC5EES,

and his students at LBJ have developed a model program, Spencer reports.

Spencer said LBJ students he met talked of pursuing technical careers and said participation in the Big Project had helped them to formulate their goals. "Good things are happening at LBJ," he concluded, "because of the teacher, the students, the local ham community and the resources provided by the ETP grants." Gary K1YTS coordinated the volunteers and Nancy KB1KEF, Stan KD1LE, John KB1HDO, Bob AB1CV, Ralph KD1SM, Tom K1JHC, Tom K1KAY, Thomas KB1JSG, Charlie KT1I, staffed the checkpoints.

Contest Calendar and DXpeditions

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.

Contests June

11-13 VHF QSO Party
18-19 West Virginia QSO Party
25-26 Field Day
28-29 CQ WW WPX

DXpeditions

Call	Location	Until
9V1CW	Singapore	till 2008
8Q7WP	Maldives	09/05
5H3HK	Tanzania	till March 2006
ZD8I	Ascension Is	till March 2006

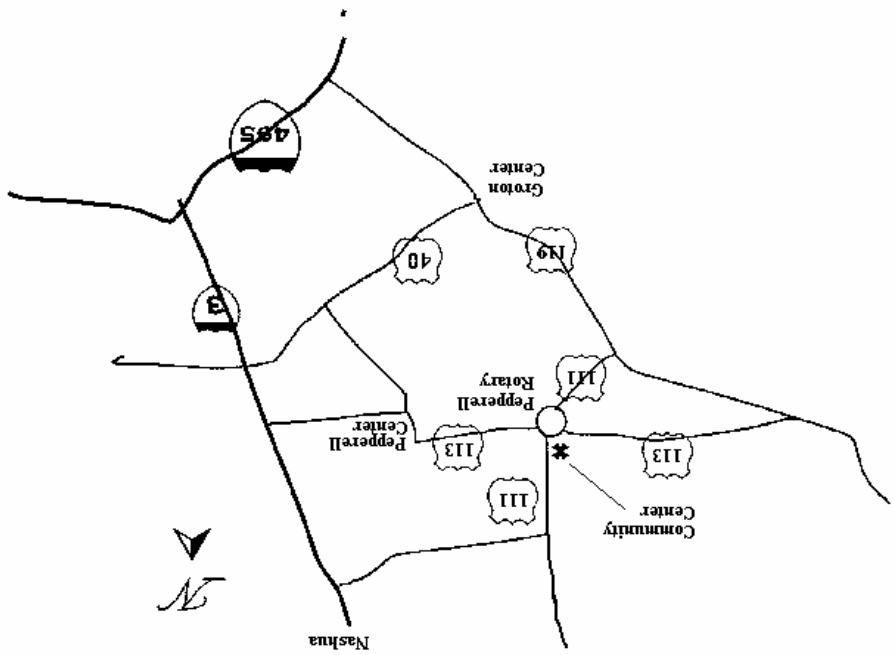


Nashoba Valley Amateur Radio Club

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

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Property Master: John Griswold KB1HDO
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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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