



SIGNAL



de NINC

November 2008 Volume 17 Number 11

This Month's Meeting

Next club meeting is Thursday November 20th. The speaker was not yet identified as of the newsletter publication deadline.

The road cleanup is Sunday November 23rd.

Meeting site info and maps on the back page and the NVARC Website.

Wear your badge to the meeting so new members can tell your name and you can introduce yourself to them. It may be worth your while.

Homebrew and Short Subject Meetings

As we kick off the fall meeting schedule think about how you might contribute to one of the above meetings. These two meetings are less formal and their success depends on member participation. What homebrew projects have you finished or are working on that you can show us? We also need three or four short subjects for the January meeting.

Last Months Meeting

Last month's meeting program was our annual QSL Card Sort for the W1QSL Bureau. We sorted 18-20K QSL cards at the meeting in less than two hours. We have been keeping to that schedule for several years and it seems to be working fine.



Behind the sorting box is John KK1X. Two anonymous sorters are in the foreground. Four people can sort on each box comfortably and chat as they go.



Courtesy KD1SM

Above one row of sorting boxes with two people sorting on each side. By the end of the night with all 20K cards sorted the sorting boxes still had plenty of room for cards so the need to empty them continuously during the sort has been eliminated.



Courtesy KD1S

After the cards were sorted and collected from the sorting boxes (now removed) everyone got a chance to look through all the cards in the appropriate letter for their own incoming cards, saving wear and tear on the letter sorters. Many participants found cards on the way to them.

The oldest cards reported in the shipment were brown with age as well as the labels and were dated 1987. Most cards were from 2007 and 2008. The latest cards I saw were from April or May 2008.



Courtesy KD1SM

After the sort the club provided pizza and drinks for everyone to enjoy.

The cards were rescanned and packaged for the letter sorters by Stan KD1LE and Lynda N1PBL. In reviewing the sort the most common problem cards were those with the letters "I"

Present at the meeting were:

Dennis K1LGQ, Leo K1LK, Gary K1YTS, Nancy KB1KEF, Wolf KA1VOU, Larry KB1ESR, Phil KB1JKL, Stan KD1LE, Ralph KD1SM, Peter N1PQ, Les N1SV, Peter N1ZRG, Joel W1JMM, Dick W1LTN, Rod WA1TAC, Ray KB1LRL, Gordon N1MGO, Charlie KT1I, Bruce K1BG, Bob KB1JZU, Alan W1AHM, Bill N1UZ, Skip K1NKR, Darryl WA1GON, Jim W1TRC, Peter W1LLB, Norm W1BYH, Barry W1HFN.

I apologize if I missed someone since we didn't take meeting attendance

2008 Field Day

Field Day results have been published. NVARC turned in a good showing again. We finished 59th of the 439 2A 100 watt class entries.

East Mass 2A Entrants

Club(s)	Points	QSO's
Falmouth ARA	11,532	3,449
Billerica/MITRE	8,998	2,308
PARC/PRA	6,098	1,489
N1NC	5,280	1,469
Waltham/Clay Ctr	4,956	1,375

You will notice that two of the three entries ahead of NVARC and the one after are dual club entries. So for single club entries NVARC finished second. in East Mass.

Speaking of Field Day our orchard is undergoing some changes that I have mentioned at the last meeting. This is the view from the south end of the knoll looking northwest. The few trees are around the little pond.



The above picture is looking from the knoll down the open area where we normally set up. This entire area will be de-stumped and mowed once every two or three years to keep it a field. This shouldn't change the availability for us to use but there will be more "field" in Field Day if we continue to use it. The cutting is supposed to be done this month. I'd encourage anyone interested in Field Day planning to take a look and see if we should do things differently or even somewhere else.

Stan KD1LE

Head of the Charles Regatta

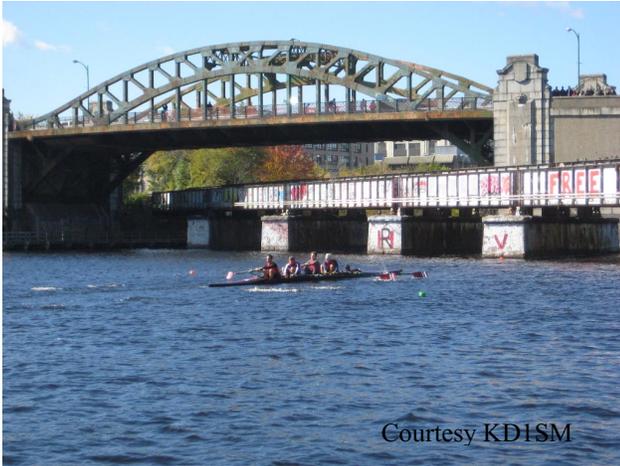
Imagine hundreds of boats with thousands of rowers on the Charles River in Cambridge. It's quite a sight and it's been taking place for 44 years.

The Head of the Charles Regatta is the world's largest two-day rowing event. It was first held in 1965 and is modeled on rowing races held in England. The rowers compete in events by age group and size of boat (singles, doubles, fours, and eights) along a 3-mile course. There are a total of 55 different races drawing athletes from around the world.

This year's races were held over the weekend of October 18 and 19. NVARC members John KK1X and Ralph KD1SM were among the 40 or so Amateur Radio operators who provided health and safety communications during the events. John's assignment was to walk the finish line area keeping watch for competitors and spectators who were in need of assistance. Ralph accompanied two lifeguards and a motorboat skipper on the water at the starting line.



above: eights stage downriver of the starting line



Courtesy KD1SM

above: a fours crew plus coxswain head under the BU bridge at the start of a race.



Courtesy KD1SM

above: the BU boathouse is the starting line.

More information about the Regatta may be found in <http://hocr.org/about/history.asp>. If you are interested in volunteering next year, let John or Ralph know and they'll make sure the Ham organizer knows of your interest.

Meeting Coffee Suspended

We have suspended the meeting refreshments program. For months the refreshment fund has run in the red. The refreshments fund was set up as a self sustaining fund and receipts have not maintained sufficient funds to continue operation.

Need a Ride?

Do you need a ride to the club meetings? Do you know someone who does? If you do please contact

Bob W1XP 978-448-6559 and leave a message. We'll see that you get to the meeting.

PSLIST

Every event needs communications volunteers

Date	Location	Event	Contact	Tel/Email
Oct	12 Boston	BAA Half Marathon	WA1IDA	

Board Meeting

Discussion about an awards program to be discussed at the November meeting.

Ralph gave the Treasurers report.

October meeting QSL sort Bureau set. We have the cards. Need help loading sorting boxes over the weekend

November meeting program open

December Homebrew

Road Cleanup needs better turn outs

Adopt A Highway

The October road clean up was held on the 17th.

Thanks to the following people for helping out at the cleanup. Leo K1LK, Rod WA1TAC, Bob AB1CV, and Stan KD1LE

The road cleanup is Sunday November 23rd.

We need a minimum of six people by MassHighways rules and we need eight to cover our 2 miles in an hour. The rules say we need to work in pairs. With four pairs each group walks one quarter mile out and back. With that plan we are easily done in a hour. We only have one cleanup left this year so take an hour and help us out. Stan

Treasurers Report

Income for October was \$60 in membership dues, \$6.34 in bank interest, and \$5 in PowerPole distributions. Expenses were \$16.80 for newsletter postage, \$14.76 for the August picnic, and \$80.34 for the October meeting refreshments leaving a net expense of \$40.56 for the month.

Current balances:

General fund \$3,919.57
Community fund \$2,449.41

As of 11 November we have 57 members who are current with their dues and 10 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. You can always ask Ralph if you are in doubt.

Remember; the Club gets a commission on any new ARRL memberships or membership renewals that you submit through Ralph. Checks should be made payable to NVARC so that our commission can be deducted before we forward your membership to Newington.

Ralph KD1SM

ARRL Letter

RICHARD GARRIOTT, W5KWQ, BACK ON TERRA FIRMA

After 10 days on the International Space Station (ISS), Richard Garriott, W5KWQ, returned to Earth October 23 on Soyuz TMA-12. Garriott is the son of Owen Garriott, W5LFL, who in 1983 was the first ham to make QSOs from space. While Richard was on board the ISS, he too made QSOs, furthering what has now become a family tradition. "This mission to the ISS fulfilled a lifelong dream to experience spaceflight, just as my father first did 25 years ago [on STS-9]," Richard said. "It's an honor to be the first American to follow a parent into space." Richard took off from Star City in Kazakhstan on October 12.

While on board the ISS, Richard conducted scientific experiments and environmental research -- he also had a chance to do quite a bit of Amateur Radio, including sending slow-scan TV (SSTV) images <<http://www.arrl.org/tis/info/sstv.html>>. Calling the chance to make QSOs from space a "great opportunity," he described speaking directly with hams and trading call signs to be an "unexpected joy" and said in his blog that he was pleased "to find so many enthusiastic hams who were so well informed and interested in my activities in orbit. When I began my transmissions with preplanned SSTV images, including 'pirate messages,' test patterns and family images, I did not know how they would be received. But it seemed that fellow hams really enjoyed seeing this

beginning to my time on the International Space Station."

Through the Amateur Radio on the International Space Station program (ARISS) <<http://www.rac.ca/ariss/oindex.htm>>, Richard made numerous contacts via Amateur Radio with school-children. He said he found speaking to students "most rewarding...Growing up in an astronaut family, I firmly believed that every person could go to space, and now I have. I took this opportunity to inspire [the students] with my adventure and let them know they can achieve their wildest dreams as well with hard work and perseverance." To date, there have been 379 ARISS ISS-to-Earth QSOs.

Richard Glueck, N1MDZ, a teacher at Orono Middle School in Orono, Maine, said students in his classes were excited about making contact via Amateur Radio with Richard on the ISS. "Richard recorded our contact and wished us well," Glueck told the ARRL. "We returned the greeting. It made the afternoon for my Social Studies class. We made the contact using straight FM voice. Our contact was heavy on the static, and we were hearing Garriott respond to various hams in Iowa and Michigan, as well. We heard the data transmission of the SSTV during the early morning passes."

Saying he "clearly remembers" Sputnik in 1957, Glueck said the "growth of space technology and human inhabitation impacts my life in a huge way. I firmly believe that while modern kids take space flight and satellites for granted, that this is a good thing, Amateur Radio is the most significant manner in which teachers can get kids to interact with spaceflight in a personal manner."

The Liberal Arts and Science Academy at LBJ High School in his hometown of Austin, Texas was one of the many schools that Richard made contact with. "It takes a lot to excite kids these days with the Internet and cell phones, but when you tell kids you're going to talk directly to the space station from our high school, with our own equipment, they're very excited," teacher Ronny Risinger, KC5EES, told an Austin television station. Student Jason Pan agreed: "Just come here and talk to an astronaut...it's just unbelievable. Like you can't even really think about it. It's just like something you can experience. I don't know, I don't really have any words for it."

ARISS International Chairman Frank Bauer, KA3HDO, had nothing but praise for Richard and his trip to the ISS. "We have all made history, starting with Richard, W5KWQ, and his father Owen, W5LFL, and continuing with all [who have] participated and/or volunteered in his ISS journey," Bauer

told the amateur community. "Along the way, we have sparked the imaginations of thousands of students, and I understand [that Richard's journey has] excited some youths to the point where they are now licensed."

Calling Richard "prolific on the ARISS ham radio system," Bauer said Richard made "hundreds of voice contacts, operating the packet system during the crew sleep times and transmitting hundreds of SSTV images throughout the day. He put the newest ARISS hardware, the Kenwood VC-H1, to good use, performing the vast majority of contacts with this hardware system coupled with the Kenwood D700 transceiver. The remaining SSTV downlinks were performed with the software-based SSTV system."

Bauer said that given the limited availability of ISS computer systems, "the ARISS team will continue to utilize the VC-H1 well after Richard's flight. So don't be surprised if you see some VC-H1 SSTV operations from Mike Fincke, KE5AIT, during his stay as the commander of Expedition 18." Fincke is expected to return to Earth in late March 2009. Gregory Chamitoff, KD5PKZ, and Yury Lonchakov RA3DT, are currently on board the ISS, as well.

Richard said that after his first QSOs with Earth, he understood how "well-networked" the global ham community really is: "I received specific reports back through Mission Control-Moscow about the technical aspects of my work and how the [amateur] community was enjoying the transmissions. This redoubled my enthusiasm to do quality work for the Amateur Radio legions around the world, as I realized how much it meant to those with whom I had the chance to talk. By late in my flight, I had contacted many hundreds of hams by voice and I have good records of these contacts."

While in space, Richard performed a series of experiments for NASA that examined the physical impact of spaceflight on astronauts. He observed the reaction of the eyes to low and high pressure in a microgravity environment, the effects of spaceflight on the human immune system, and astronauts' sleep/wake patterns and sleep characteristics. He also photographed a number of ecologically significant places on Earth on behalf of The Nature Conservancy. The photographs will be compared to shots taken 25 years ago by Owen Garriott while he was in space and will be used to document how the Earth has changed in one generation. He also worked in cooperation with the European Space Agency to perform a series of experiments that observed early detection of osteoporosis, vestibular (inner ear) adaptation to G-force transitions and the occurrence of lower back pain.

On his last day in space, Richard sent SSTV "good-bye" images down to Earth. "I also contacted many hams that had listened to or contacted my father from space 25 years ago," he said. "Some hams I contacted 2 to 4 times on my flight. On those last days, I was very moved, when [I was sent] sent many 'soft landing' messages from individuals and classrooms full of children as I passed by. The ham community has added greatly to my personal feelings of success on my flight. I can only hope that you enjoyed it as much as I did."

ARRL's 500 kHz Station, WD2XSH, Wants to Hear from You:

Fritz Raab, W1FR, coordinator for ARRL's 500 kHz Experimental Station, WD2XSH <<http://www.500kc.com/>>, reports that fall has brought lower static and good propagation, making excellent conditions for the 500 kHz experimenters. The experimental license, issued in September 2006 <<http://www.arrl.org/news/stories/2006/09/15/104/>>, has more than 20 active stations. Raab said that last year, a second US experimental license -- WE2XGR, with five participants -- joined the project, as well as experimenters in the UK, Germany, Sweden and the Czech Republic. These stations' operating modes include CW, QRSS, PSK-31 and others. Contacts have been achieved at distances up to 1234 miles, with signals received from all over North America, Alaska and Hawaii; trans-Atlantic reports are not uncommon. "The 500 kHz experimenters are experiencing excellent propagation conditions," Raab said. "The best time to listen is between sunset and sunrise." The operating frequencies are: WD2XSH -- 505.2-510 kHz; WE2XGR -- 505-515 kHz; UK -- 501-504 kHz, and SM, DL, OK -- 505.0-505.2 kHz. Raab requests that listeners file reception reports at the experiment's Web site so that they become part of the station's data base <<http://www.500kc.com/>>. Additional information can be found at the experiment's Web site and also in the July/August 2007 issue of QEX <<http://www.arrl.org/qex/2007/07/raab.pdf>>.

* TAPR Announces HPSDR Mercury Receiver Board: High Performance Software Defined Radio (HPSDR) is an open-source hardware and software project designed and developed by a group of enthusiasts with representation from interested experimenters worldwide. TAPR <<http://www.tapr.org/>> is looking for a "show of interest" to determine the production run for the new HPSDR Mercury receiver board. The assembled Mercury receiver board uses SMT parts and is manufactured in quantity by machine. If interested, please check out the HAMS DR Web site and log in <<http://www.hamsdr.com/>>. You

will find the interest page under the <Projects><TAPR-HAMS DR> tab. Once interest has been determined, Mercury boards may be purchased from TAPR. Mercury board specifications can be found [here](http://hpsdr.org/wiki/index.php?title=MERCURY) <<http://hpsdr.org/wiki/index.php?title=MERCURY>>.

RICHARD GARRIOTT, W5KWQ, GETS BUSY FROM SPACE

Richard Garriott, W5KWQ, took off for the International Space Station (ISS) on Sunday, October 12, becoming the sixth private citizen to fly with the Russian Federal Space Agency (RKA) for a short-term mission on the ISS. Not two hours after he arrived on the ISS on October 14, Garriott was making ham radio contacts, just as his father, Owen Garriott, W5LFL -- the first ham to make QSOs from space -- did in 1983. Richard is scheduled to return to Earth on Thursday, October 23.

Amateur Radio on the International Space Station (ARISS) International Chairman Frank Bauer, KA3HDO, said that not only did Richard start making QSOs almost immediately after docking to the ISS, he also started SSTV operations. "We have had a number of image uploads on the [ARISS Web] site by hams from all around the world. A volunteer ARISS team is working 24/7 during Richard's flight to review these images, to understand how the SSTV operations are progressing and to include some of these images on the Gallery pages [on the ARISS Web site] <http://www.amsat.com/ARISS_SSTV/>. All uploaded images have been archived and are being reviewed." Bauer asked hams to continue to upload these images, as they help the ARISS team analyze and redirect the SSTV operations. He also said that a blog providing the latest ARISS information for Richard's expedition is available <<http://www.ariss-sstv.blogspot.com/>>.

"Richard is really not supporting SSTV uplinks during his short duration mission," Bauer said. "The downlink is on the normal ARISS VHF downlink, 145.80 kHz." For general voice contacts, Bauer recommends the regular general voice frequencies: 145.80 for the downlink and 144.49 in Region 2 (Americas) and 145.20 for Region 1 (Europe, Africa, Middle East) and Region 3 (Australia, Asia) for the uplink. "Richard and Mike Fincke, KE5AIT, have been on the air on voice since shortly after docking [on Tuesday]," Bauer said.

"Richard is great!" said ARRL ARISS Program Manager Rosalie White, K1STO. "First he wanted to do a QSO with the mayor of his hometown -- Austin, Texas -- then he asked us to sponsor an Austin school QSO. He got the mayor to bring kids into the

mayor's office for the QSO! Last I heard, several busloads of kids were being brought to the mayor's digs. And right after that QSO, he thrills hams with more QSOs. We've gotten several notes from hams who talked to Richard saying they had talked to his dad years ago, too. Pretty cool!"

Richard also chose the Budbrooke Primary School in Warwick is England to make QSOs with. "The QSO will enhance their technology and ham radio studies. ARISS Vice Chairman Gaston Bertels, ON4WF, in Belgium is mentoring this school," White said.

Richard has also scheduled a QSO with two groups who are in the ARISS queue: Pinehurst Elementary School in Ashland, Oregon, and the National Planetarium in Kuala Lumpur, Malaysia. The teacher at the Oregon school is leading the ham radio presentations and space-related lessons; John Spasojevich, AG9D, of Indiana is mentoring this school. The planetarium QSO will be coordinated by ARISS volunteer Sangat Singh, 9M2SS, using the planetarium's club call sign 9M2SS. Part of the planetarium's Space Challenge educational activities, the QSO is scheduled on the day Richard is required to pack his belongings for his return to Earth. If he becomes too occupied with packing and other required duties, Mike Fincke, KE5AIT, the commander of Expedition 18, could assist with the QSO.

Because Jamboree on the Air (JOTA) takes place on while Richard is on the ISS, he hopes to hook up on the air with Scouts. "Past experience shows that scouts love talking to hams in space," White said. "The ARISS Team feels the most important aspect of Richard's mission is to pique students' interest in science and technology through the ARISS QSOs."

Bauer explained that Richard Garriott's flight on the ISS is "a part of history. Some of you have asked why Richard is using his call sign for some QSOs and SSTV contacts, instead of the ISS station call signs. There is a long and proud history that is attached to the Garriotts. This includes ham radio in space and their personal call signs. Twenty-five years ago, Richard's father, Owen Garriott, W5LFL, initiated the first ham radio contacts from space on the STS-9 SAREX mission. Richard, W5KWQ, is following in his father's footsteps, using the ARISS ham radio system extensively on his first flight. Richard's call sign is actually his grandfather's original call sign. So you can see that this mission touches three generations of ham radio and two generations of ham radio in space!"

NVARC Club Net

Topics discussed on the Club net recently; emergency communications preparedness and activities at NMAEPC. Alzheimer's Memory Ride, Road Cleanup, Field Day wrap up and suggestions, WL2K setup problems.

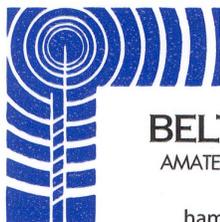
Recent participants include Leo K1LK, Bob W1XP, Larry KB1ESR, Skip K1NKR, Stan KD1LE, Richard W1LTN.

The net is a good place to bring information for the club and get questions answered. The net meets at 8:00 PM Monday evenings on the 442.900 N1MNX repeater. Any participant is welcome to try his/her hand at being Net Control. The net preamble may be found on the Club Web site under <http://www.n1nc.org/Nets/>

2008 Flea Markets

November
8 Falmouth ARA Bourne MA

Advertisements



DICK WILBORG W1ZC
JOHN ROSE WW1Z

BELTRONICS, INC.

AMATEUR RADIO SERVICE DIVISION

www.beltronics.net

hamrepairs@beltronics.net

603-465-2422
800-323-5876

FAX 603-465-3320

P.O. BOX 330
19 PROCTOR HILL RD.
HOLLIS, NH 03049

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.

Contests 2008

November
15-16 ARRL EME
15-17 ARRL November Sweepstakes

December
5-7 ARRL 160 Meter Contest
13-14 ARRL 10 Meter Contest
15 Lighthouse Christmas Lights

January
1 Happy New 21st Century
1 ARRL Straight Key Night
5-6 ARRL RTTY Roundup
12-13 North American QSO Party CW
19 CQ UT Contest
19-20 UK RTTY DX Contest
19-20 North American QSO Party SSB
CQ World-Wide 160 Meter DX Contest CW

February
2-3 Vermont QSO Party
2-3 10-10 International Winter QSO Party
2-3 Delaware QSO Party
Mexico International RTTY Contest
9-10 Louisiana QSO Party
9-10 RSGB 1.8 MHz Contest CW
16-17 ARRL International DX Contest CW
23-24 CQ WW 160 Meter Contest SSB

March
1-2 International DX Contest SSB
15 North American Sprint Contest RTTY
28-29 CQ WW WPX Contest SSB



**Nashoba Valley
Amateur Radio Club**

PO Box # 900
Pepperell Mass 01463-0900

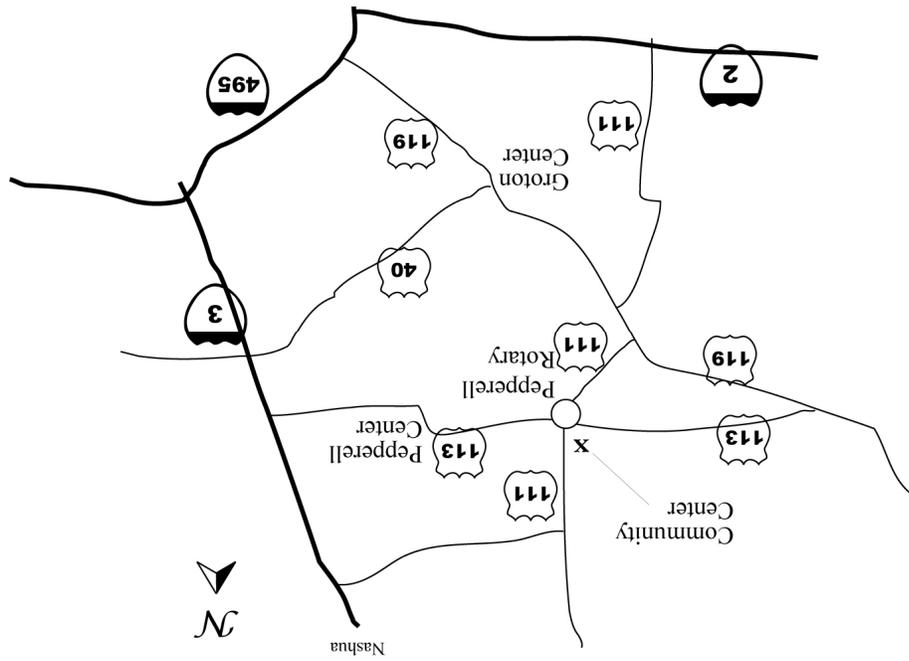
<http://www.n1nc.org/>

President: Stan Pozerski KD1LE
Vice President: Peter Nordberg N1ZRG
Secretary: John Griswold KK1X
Treasurer: Ralph Swick KD1SM
Board Members:
Joel Magid W1JMM 2006-2009
Bob Reif: W1XP 2007-2010
Skip Youngberg K1NKR 2008-2011

Editor: Stan Pozerski KD1LE
Emergency Coordinator: Larry Swezey KB1ESR
Photographer: Ralph Swick KD1SM
PIO: Dave Peabody N1MNX
Librarian: Peter Nordberg N1ZRG
Property Master: John Griswold KK1X
N1NC Trustee: Bruce Blain K1BG
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

This newsletter is published monthly. Submissions,
corrections and inquiries should be directed to the
newsletter editor. Articles and graphics in most IBM-
PC formats are OK.

Copyright 2008 NVARC



Nashoba Valley Amateur Radio Club

PO Box 900

Pepperell, MA 01463-0900

