





de N1NC

April 2006 Volume 15 Number 4

# **This Month's Meeting**

This month we have club Elections. Anyone interested in helping to participate in the operation of the club should consider a club leadership role.

Bob W1XP will give a presentation Coax Connector Installations. Bob will talk on preparing RF connectors.

## **SKYWARN** Training

Walpole May 4 Concord May 20

## Last Month's Meeting

Last months meeting presentation was by Steve Cloutier WA1QIX. Steve gave a nice talk on Class E Amplifiers. Steve and three associates brought in three of these high power high efficiency amplifiers. See his Web page at <u>www.classeradio.com</u> for more information.







In the show and tell part of the meeting Earl WR1Y (R) showed a new straight key he built. I think he had to fight Phil KB1JKL (L) to keep possession.





Ralph KD1SM presented the Treasurers report and the latest information on the Groton Road Race.

Stan listed a number of upcoming events.

In attendance were the following members and guests. Stan KD1LE, Ralph KD1SM, John KK1X, Peter N1ZRG, Bob W1XP, Joel W1JMM, Phil KB1JKL, Paul W1GHZ, Earl WR1Y, Erik W1ZBT, Peter KB1LZH, Jim W1TRC, Rod WA1TAC, Les N1SV, Richard KB1MBR, Nancy KB1KEF, Gary K1YTS, W1IA Brent w/Steve, Wayne WA1SSJ Salsbury NH, Steve WA1QIX, Bill KE1GF

# ARRL EmComm Honor Roll

Pages 42-43 of the March issue of QST contained an Emergency Communication Honor Roll. It lists individuals who have completed all three levels of the ARRL Emergency Communications Course. Congratulations to the following members who are listed there.

Karen KA1JVU Stan KD1LE Ralph KD1SM Wolf KA1VOU Bob W1XP Jim N8VIM Den KD2S

These NVARC members have taken the time and effort so they will be prepared in an emergency.

# **Board Meeting**

Groton Selectmen's letter for Adopt-A-Highway

Club Patches need to be ordered

Treasurers Report

Groton Road Race discussion

A suggestion was made to offer transportation to people who need a ride. If you know someone who would like a ride please contact a board member and we will try to get them a ride.

Larry and Peter announced Field Day will be at the Heald Street Orchard in Pepperell. We will be running 2A and the operation will include the digital mode shared with the SSB station.

# **Boy Scout Radio Merit Badge**

Dan Rasmussen, the Troop 3 Scout Master from Groton contacted Stan KD1LE asking for help with the Radio Merit Badge. The 24<sup>th</sup> of March NVARC members helped Groton Troop 3 Scouts fulfill requirements for the Radio Merit Badge in Amateur Radio at Stan's QTH.

Joel W1JMM and Stan KD1LE first put the Scouts on the air to satisfy one of the requirements. In various combinations the Scouts talked to Larry KB1ESR and Dave N1MNX/M on the six meter repeater. Some spoke with Ralph KD1SM in Cambridge on the Boston two meter repeater. Several spoke with Bob W1XP/4 at his North Carolina QTH.

After the on the air part Joel and Stan covered the other requirements with a presentation explaining repeater operation, the various aspects of Amateur Radio, how to get licensed, QSL cards, the many operating aspects of Amateur Radio, emergency communications, public service and quite a few other requirements. After a question and answer session we went back to the "shack" to point out various pieces of equipment and its function.

Thanks to everyone who helped out.

Stan KD1LE

## **Groton Road Race**

Groton Road Race depends on Amateur Radio

This year's Groton Road Race day is coming up quickly; it's the end of the month, April 30. As in past years, the Groton Police Department is looking to us to provide the critical tactical communication network for all the out-of-town public safety officers that come in to help with this event. We are in need of 40 Hams to fill all the positions that have been requested of us. I hope that you will consider being part of the crew this year. We can reward you with a fine hot dog lunch and a sure-to-be-coveted 2006 Groton Road Race T-shirt. (The runners have to pay \$18 and actually \_run\_ to get one of these!)

New this year is ... well, many things. We have a new set of race officials and a different 10k course. In order to alleviate issues with major road closings that have become more problematic for the Town over time, the 10k course has been moved to the north side of town. This will greatly simplify some of our logistics though it also presents some new radio challenges.

This year's 10k course will start down Main Street as in previous years but will turn north at Route 40, loop around Gibbet Hill (there's our communication challenge!) and the last 2 miles will follow the 5k course. So, most of the stations along the 5k course will be able to remain in the same positions for the 10k course.

With the new course, \*everyone\* will be dealing with expected and unexpected challenges. Our role as communications between the race officials, the course marshals, the public safety officials, and law enforcement is more important this year than perhaps it has ever been before other than the first year of the Race.

There are other details that are also changing this year; I'll send these along as necessary. You can also find general race information on the Groton Road Race home page.

http://www.grotonroadrace.com/

I hope you will consider joining the ham radio crew on April 30. This is an important opportunity for the visibility of Amateur Radio in the community. All Hams benefit from the positive press that we get.

Please let me know whether or not you are available. If you are not yet sure, please contact me anyway and let me know you're thinking about it and when you might know your schedule.

73, -Ralph KD1SM ralph@kd1sm.net

## **Advertisements**

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



## **Treasurers Report**

Income for March was \$45 in membership dues and \$1.46 from bank interest. Expenses were \$15.60 for newsletter postage, \$19.78 for clock batteries for the Field Day computers, and \$100.80 for the first two years of n1nc.org hosting, leaving a net expense of \$89.72 for the month.

Current balances:

General fund	\$4422.56
Community fund	\$2071.83

As of 13 April we have 51 members who are current with their dues and 13 renewals outstanding. Many membership anniversaries are 1 April. 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. As a Special Service Club, the ARRL expects a minimum percentage of our members to also support the ARRL. If you are not yet an ARRL member, please consider joining. The ARRL creates many programs that are critical to the long-term health of Amateur Radio. And we \_are\_ the ARRL.

Your support of ARRL gives you access to special members-only material on the ARRL Web site and helps ARRL in its efforts to show how Amateur Radio benefits the public.

Ralph KD1SM

## **PSLIST April 11**

Date Location Event Contact Tel/Email

April

30 Groton Groton Road Race Ralph KD1SM 978-582-7351 kd1sm@arrl.net

#### May

7 Boston Walk for Hunger Bruce KC1US 781-275-3740 wfh06@amateur-radio.net

13 Grafton Grafton Road Race Bob KA1OTQ 508-865-6957 Robert.Beausoleil@verizon.net

13 Westford Apple Blossom Parade Terry KA8SCP 978-692-2069 ka8scp@arrl.net

21 Devens Parker Classic Road Race Stan KD1LE 978-433-5090

21 Wellesley Veterans Parade Tom N1CPE 508-478-4230 http://www.wellesleyparade.com/index.htm n1cpe@amsat.org

#### Jun

4 Boston MA AIDS Walk Boston Bruce KC1US 781-275-3740 wfh06@amateur-radio.net

#### Jul

1 Princeton Fitchburg Longsjo Classic Ralph KD1SM 978-582-7351 kd1sm@arrl.net

2 Fitchburg Fitchburg Longsjo Classic Ralph KD1SM 978-582-7351 kd1sm@arrl.net

4 Chelmsford MA 4th of July Parade Darrel K1EJ 978-251-4805 <u>k1ej@arrl.net</u>

## **NVARC Club Net**

The club net meets on the 442.900 repeater. Recent participants include Dave N1MNX, Bob W1XP, Bob AB1CV, Joel W1JMM, John KK1X, Larry KB1ESR, Skip K1NKR, Gary K1YTS, Ralph KD1SM, Stan KD1LE, Don AB1DS, Les N1SV, Richard KB1MBR, Ken K1JKR Dan N1LLG and Peter KB1LZH. Recent discussions were on Field Day preparations, repeater work, meeting information, tools needed, possible field trip destination.

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.

## Adopt-A-Highway

The next road cleanup is Sunday April 23nd 2006. This will be our first cleanup of the 2006 season. This is usually our toughest cleanup since we are making up for the winter layoff. We need a good turn out to make this as easy as possible.

We meet at the Nashua River common at 9:00 AM. Our clean up day is Sunday after breakfast.

## ARRL Letter

#### ARRL "HELLO" CAMPAIGN VIDEO NOW AVAILABLE

A 30-second video public service announcement (PSA) to promote the ARRL's "Hello" campaign--"Celebrating 100 Years of Voice over Radio Worldwide"—has been released. A radio spot has been available since March. Hello's architect, ARRL Media and Public Relations Manager Allen Pitts, W1AGP, says the spot is available on disk in either DVD format--which plays on standard players--or in two larger broadcast-quality DV formats.

"We want to celebrate 100 years of people talking over the radio but not just look backward," he said. "In just 30 seconds, this video takes us on a rollercoaster through time and electronics, into today, when we find friendly people still ready to say 'Hello' all over the world."

Richard Lubash, N1VXW, of 2K-Plus in Atlanta, produced the new PSA. He had musical help from Emory Gordy, W4WRO, and voicing by New York City radio personality Johnny Donovan. The video includes clips from all over, shot especially for the PSA, plus video of radio amateurs from IARU member-societies in Italy and Japan. Among the radio amateurs appearing in the video spot are Associazione Radioamatori Italiani (ARI) President Luigi Belvederi, I4AWX/AB1FJ, and Japan Amateur Radio League International Affairs Manager Jay Oka, JA1TRC/KH2J. Others include: Jack Parker, W8ISH; Kevin O'Dell, N0IRW, and his son Chris, N5CMO; Gary Pearce, KN4AQ, and wife Cyndy, KD4ACW; Nick Esposito, KC2ONP; Halley Orshan, KC2LYJ; and Emily Shaffer, KF4SUV.

A low-resolution version is viewable on the ARRL Public Relations Web page <http://www.arrl.org/pio/#pubserviceannouncements > (scroll down to "Video Files"). A special highdefinition television (HDTV) version is available if needed.

Because copies are individually duplicated depending on the needs of the station and because of the costs of the disks, Pitts asks that "at least initially" requests be voluntarily limited to those who have contacts with a cable, TV or similar broadcast outlet and can get them shown to the public.

To request a disk, e-mail the Hello campaign <hello@arrl.org> your name, mailing address, the station or location in which you will be placing the video and the video format you need (DVD, DV or uncompressed-DV).

Hello campaign brochures, bumper stickers pins and other paraphernalia also are available. There's more campaign information on the "Hello" Web site <http://www.hello-radio.org/>.

Pitts will be on the road this month to show off (and market) the new audio and video PSAs at the annual conventions of the National Association of Broad-casters (NAB) and the Radio and Television News Directors Association (RTNDA) April 22-27 in Las Vegas, and at a regional RTNDA convention April 8-9 in Boston.

## BREAD AND SALT: TWO-HAM EXPEDITION 13 CREW ARRIVES SAFELY ON ISS

The International Space Station Expedition 13 crew of Commander Pavel Vinogradov, RV3BS, and Flight Engineer Jeff Williams, KD5TVQ, arrived safely aboard the International Space Station early on April 1. Once airlocks were opened, the new crew-accompanied by Brazil's first astronaut Marcos Pontes, PY0AEB--greeted the Expedition 12 crew of Commander Bill McArthur, KC5ACR, and Valery Tokarev with handshakes and hugs. In accordance with a traditional Russian ceremony of welcome and hospitality, the Expedition 12 crew presented the newcomers with bread and salt. Williams told reporters this week that he and Vinogradov were ready to take the ISS reins.

"Handover's gone very well," he said, adding that and McArthur and Tokarev did a good job of showing him and Vinogradov the ropes. "So I feel we will be very prepared to take over the space station."

The two crews spent much of the week transferring cargo to the ISS and carrying out crew handover activities that included a safety briefing, training with the Canadarm2 robotic arm and detailed briefings on scientific experiments. Besides conducting his own research over the past week, Pontes spoke via Amateur Radio with a school in Brazil and was attempting to reschedule a contact with a school in Portugal. Williams says the crew handover has been a bit like moving into a new house that's still occupied by the former owners.

"It never occurred to me how difficult that would be to move into somebody's house with all their stuff in it and then pick up without a pause in the normal dayto-day operations," he said. "But overall, it's gone very well and we feel very prepared."

A formal change-of-command ceremony was set for April 8, just before McArthur, Tokarev and Pontes board a Soyuz transporter for the return trip to Earth. Seeing off the retiring crew will be a "bittersweet experience," Williams said this week.

"We've really enjoyed our time on board together," he said. "We've had a lot of fun, we've enjoyed accomplishing the work together. At the same time, I know these guys are ready to go home and rejoin their families."

NASA ground controllers cut short an ISS experiment April 3 after some alarms sounded in error. The so-called "campout" in the slightly depressurized ISS Quest airlock by McArthur and Williams was intended to test a new procedure to reduce spacewalk preparation time. The experiment hoped to show that having spacewalkers spend the night in the airlock at a lower air pressure would help to purge nitrogen from their bloodstreams, preventing decompression sickness--commonly called "the bends."

"There was never a problem with the atmosphere," McArthur assured an Associated Press reporter.

Vinogradov and Williams will spend six months on the space complex, returning home in September.

Vinogradov is a veteran of a nearly 200-day mission aboard the Russian Mir space station, where he did five spacewalks. Williams, an Army colonel, flew on NASA space shuttle mission STS-101 to the ISS in 2000 and did one spacewalk.

Scheduled to join the Expedition 13 crew later this year is European Space Agency astronaut Thomas Reiter, DF4TR, of Germany. His arrival, no sooner than July, depends on whether NASA declares the shuttle Discovery flight-ready. Reiter would remain on the orbiting laboratory through Expedition 13 and into the first part of Expedition 14.--some information from NASA and ARISS

## ARRL SPONSORING FIVE FREE EDUCATION AND TECHNOLOGY TEACHERS INSTITUTES

Gifts from generous donors will help the ARRL Education and Technology Program (ETP--also known as "The Big Project") to expand the number of Teachers Institutes (TIs) it's offering this year. Now in their third year, the free, weeklong workshops provide educators with hands-on experience in electronics and wireless technology. ETP Coordinator Mark Spencer, WA8SME, says the five Teachers Institutes will expand upon what he learned during the 2004 and 2005 sessions.

"I was hands-on before," Spencer says. "I'm just going to make it even more hands-on." Those participating in this year's TIs will get to use various pieces of test equipment and electronic devices early in the class session. In past years, students first built the project boards from kits, then used them in experiments.

"They still will leave the institute with the boards in kit form," Spencer explained. "I think it's important for the teachers to smell rosin smoke in their faces. They need to build the boards." That do-it-yourself aspect, he said, "is a basic part of learning about electronics, but they already will have used the completed boards in the classroom."

The 2006 classes also will place a greater emphasis on space-related technology including Amateur Radio satellites. "My slant on that is you don't need to have thousands of dollars of sophisticated equipment to operate the satellites today," Spencer said. "You can use the current generation of satellites with some very simple equipment." The curriculum also includes material on weather satellites.

Two of the 2006 Teachers Institutes will be held at ARRL Headquarters. The other three will take place in New Jersey and California (see schedule below).

The program hopes to serve 60 educators this year, about twice as many as in 2005.

The 12 seats available for each institute are filled on a first come, first served basis. The ETP TI scholarship grant includes travel, room and board, and a modest per diem stipend to help out with incidentals. Attendees also leave with instructional resources for the electronics, microcontroller and robotics segments and a resource library of relevant ARRL publications.

ARRL Chief Development Officer Mary Hobart, K1MMH, says the Teachers Institutes have been beneficiaries of the Brandenburg Life Foundation established by David Brandenburg, K5RQ, and his wife Diana. Other donor partners wish to remain anonymous. For 2006, appeals went out to additional donors to fund the added course sessions.

"The TI program has become a keystone of ARRL's invigorated commitment to education," said Hobart. "These have been universally well-received, and there's been a lot of positive feedback from the teachers who attended."

Hobart and Spencer point out that the impact of the sessions on each teacher ultimately will touch thousands of their students. "It's an ooze," Spencer described the process. He says his experience has shown that teachers who attend the TIs don't necessarily start applying what they learned until well after the institutes have adjourned.

"Because there's a lot of material, it takes them a good nine months to see where it fits and start feeding it into the curriculum," he said, "but it's happening."

The deadline to apply for an Education and Technology Program Teachers Institute grant is May 15, 2006. Contact ETP Coordinator Mark Spencer, WA8SME, 530-495-9150 (Pacific Time zone) or via e-mail mspencer@arrl.org for more information.

Teachers Institutes 2006 schedule: June 19-23, Parallax Inc, Roseville, California; July 24-28, ARRL Headquarters, Newington, Connecticut; July 31-Aug 4, ARRL Headquarters, Newington, Connecticut; August 7-11, Liberty Science Center, Jersey City, New Jersey; August 14-18, Moorpark High School, Moorpark, California,

#### ISS COMMANDER ON A ROLL, COMPLETES ANOTHER SET OF BACK-TO-BACK SCHOOL QSOS

With Expedition 12 drawing to a close in April, ISS Commander Bill McArthur, KC5ACR, has been working hard to speak via Amateur Radio with students at as many schools as possible. This week, he took time to thank the worldwide Amateur Radio community for its help in achieving several ham radio milestones from space. McArthur has been more active from NA1SS than any other astronaut or cosmonaut who's lived aboard the ISS since the first crew arrived in 2000. Among other accomplishments, he completed DXCC and WAS from space (the awards will be honorary). In addition, he holds the record for handling the most Amateur Radio on the International Space Station (ARISS) school contacts of any ISS crew member--34 as of March 23.

"I would like to express my deep gratitude to the worldwide amateur radio community for your participation in this great adventure," McArthur said. "Clearly, one of the benefits for Amateur Radio is bridging the distances between us. Through your participation, you helped realize the potential for the human exploration of space to do exactly that. Thanks to you, over the past six months, the International Space Station has been more international than ever before."

On St Patrick's Day, March 17, McArthur chatted with students at high schools in Maryland and Ohio on successive orbits. Something a bit out of the ordinary occurred during the contact with Bowie High School in Maryland, when one student asked in Russian, "How do the northern lights look from out in space?" Because all ISS crew members are bilingual, McArthur was able to respond in kind: "It's a beautiful sight."

Commenting for an article <http://www.gazette.net/stories/032306/bowinew185 511\_31939.shtml> about the contact that appeared in The Gazette newspaper, Bowie High School Principal John Birckhead said, "This type of event creates all kinds of opportunities for the students." He credited coordinating teacher and Earth station operator Art Colton, KB3KAR, with doing "an excellent job" in making the contact happen. Members of the Goddard Amateur Radio Club (WA3NAN) provided and set up the equipment and antennas for the ARISS QSO.

McArthur answered 20 questions during the approximately 10-minute contact. The station for the direct VHF ARISS contact was located in the Bowie High School library. AMSAT President Rick Hambly, W2GPS, was on hand for the Bowie contact.

ARISS Mentor Jim Gass, N3CJN, said the event received coverage from TV and print media, including

the Washington Post. "The kids were ecstatic, their parents were proud, and the principal, his staff and administrators were highly impressed and very pleased," he said.

On the next orbit, McArthur took 22 questions from students at Cleveland Heights High School in Ohio during a direct contact between NA8SA and NA1SS. In response to one, he indicated he doesn't put much stock in astrology and discounted any notion of a connection between astrology and space.

"That's a pretty interesting question," McArthur allowed. "Of course, astrology involves looking at the stars and the constellations and seeing if it can help predict our fates." Then, after some hesitation, he added, "I don't really pay much attention to astrology, to be quite honest with you."

McArthur told the students that the major difference between daily life on Earth and daily life in space is that his work day is longer on orbit.

"We really have a longer work day here," he responded. "Almost everything we do to some degree or another is work, so we have a little less time to 'hang around' if you will, although I'm hanging around on the ceiling right now."

The NA8SA Earth station call sign belongs to the NASA Lewis Research Center Amateur Radio Club in Cleveland, whose members helped set up for the event.

Coincidentally, both Bowie and Cleveland Heights boast current NASA astronauts among their graduates. Ricky Arnold, KE5DAU, of the astronaut class of 2004 is a Bowie alumnus, while Don Thomas, KC5FVF, attended Cleveland Heights.

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

## VOLUNTEER RADIO AMATEURS "PART OF THE SOLUTION," FCC KATRINA PANEL TOLD

Addressing the FCC independent panel reviewing Hurricane Katrina's impact on communication networks, ARRL Alabama Section Manager Greg Sarratt, W4OZK, praised Amateur Radio's ability to get the job done. Speaking before the panel March 7 in Jackson, Mississippi, Sarratt said Amateur Radio volunteers were tremendously effective in their ability to re-establish communication links using their own gear or by building systems from scratch. "Amateur Radio operators themselves were part of the solution, providing experienced communications operators to replace and supplement local public service communications personnel in the devastated area," Sarratt said. The volunteer radio amateurs and their equipment proved "very effective" in supporting emergency management, the Red Cross, the Southern Baptist Convention, The Salvation Army and many other organizations, he told the panel.

For 37 days following Hurricane Katrina, Sarratt-working at an American Red Cross disaster relief staging area in Montgomery, Alabama--headed the volunteer effort to process Amateur Radio volunteers headed to the Gulf Coast to assist recovery operations. Sarratt told the FCC panel that his operation processed and deployed more than 200 ham radio volunteers from 35 states and Canada to devastated communities in Mississippi. Volunteers set up communication facilities at kitchens, shelters, emergency operations centers, distribution centers, warehouses and various command and control centers, he said.

"In each town we set up a high frequency (HF) Amateur Radio station to communicate out of the area to Montgomery and the outside world," Sarratt explained. "We also set up a communications network connecting every Red Cross facility in a town on a local short-range radio frequency. Our network included fixed and mobile disaster vehicle stations."

Sarratt told the FCC panel that interoperability is the most important thing Amateur Radio can bring to the table in emergency and disaster communications. "Amateurs demonstrated their adaptability by communicating successfully with a multitude of amateur, commercial, public service, EMA, Salvation Army and Red Cross radio systems and personnel," he said.

"Radio amateurs bring a wealth of resources to the public service and emergency communications table," Sarratt summed up. "The ARRL and Amateur Radio will continue to prepare, train, practice and test ourselves for the next event," he told the FCC panel. "Public service is a large component of the charter of the Amateur Radio Service." He suggested installing permanent Amateur Radio stations in federal, state and local emergency operations centers as well as at selected public service, Red Cross chapters and other served agencies.

Sarratt offered some recommendations for the FCC panel to consider, suggesting that the Commission and the ARRL:

\* collaborate to issue FCC credentials to the ARRL for Amateur Radio responders.

\* be key partners in an Amateur Radio awareness program for multiple government agencies and the first-responder community.

\* continue working together on critical frequency spectrum protection and interference-avoidance issues.

"The disasters of 2005 have proven the worth of Amateur Radio Service and its selfless cadre of operators; we were tested as never before," Sarratt concluded, adding "we must assume the next 'big one' is just around the corner."

ARRL provided a written report to the independent FCC review panel. ARRL President Joel Harrison, W5ZN, recently named Sarratt to serve on the ARRL National Emergency Response Planning Committee.

Dave Vincent, the station manager of WLOX-TV in Biloxi, Mississippi, also praised ham radio in his remarks before the FCC panel. He said WLOX was lucky to have a ham operator at its studio. Without the help of Amateur Radio, Vincent said, "it probably would have been a couple of days before we would have known whether the persons in our two bureaus had survived the storm."

He said ham radio also enabled the station to contact EOCs in the three hardest-hit coastal counties. "Without this link we would not have had any way to communicate with officials along the coast," he said.

## **Flea Markets**

April

8 IRS Hamfest Londonderry NH 16 MIT Flea Market 22 NE Antique Radio Club 23 Southington ARA, CT

May

5-6 Hosstraders, Hopkinton NH6 Southern Berkshire ARC, Goshen CT21 MIT27 Hartford Hamfest, Vernon CT

June 11 Newington ARL, Newington CT 18 MIT

July MIT

## **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.

April

22-23 SP DX RTTY Contest

Special Event Station April 9-15 94<sup>th</sup> anniversary RMS Titanic

May

6-7 New England QSO Party 13-14 Volta RTTY Contest CQ WW WPX CW

## **DXpeditions**

CallLocationUntil9V1CWSingapore2008T68GAfghanistanMarch 2007

Special Event Station Titanic Special Event Station W1MGY April 9-15

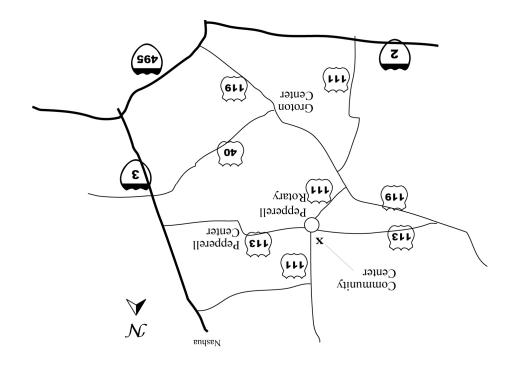


# Nashoba Valley Amateur Radio Club

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:** Dave Peabody: N1MNX 2003-2006 Bob Reif: W1XP 2004-2007 Les Peters: N1SV 2005-2008 Editor: Stan Pozerski KD1LE Emergency Coordinator: Den Connors KD2S Photographer: Ralph Swick KD1SM PIO: Dave Peabody N1MNX Librarian: Peter Nordberg N1ZRG Property Master: John Griswold KK1X Webmaster: Les Peters N1SV 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 2006 NVARC





Nashoba Valley Amateur Radio Club PO Box 900 Pepperell, MA 01463-0900