NVARC
Nashoba Valley
Amateur Radio Club

SIGNAL

SPECIAL SERVICE CLUB
ARRL

de N1NC

October 2004 Volume 13 Number 10

This Month's Meeting

This month's meeting will be October 21st and will be QSL Card Sort and we have lots of cards to sort for the QSL Bureau. At the Boxboro Convention we received a certificate for our efforts. You also get first crack at your own incoming cards. There will be Pizza and drinks served after the cards are sorted.

Last Month's Meeting

Last month's meeting was the first of the fall season. Several new members, Chris KB1KUZ and Leo WA1ULK were in attendance. There was some discussion on the subject of a club donation to various ham radio related programs such as the ARRL Spectrum Defense Fund or the ARRL Education Fund.

The meeting presentation was "How Radio Works" by Bob W1XP. It was an interesting and different approach to the challenges and advantages of wireless.

Courtesy KD1SM

From the President

The past few weeks have been very busy for us with Groton's Septemberfest, The Groton Mass Casualty Exercise, Rotary Charity Walk, and Pepperell Soccer Tournament. It was great to see a lot of participation supporting these activities. It is good press and practice for us. At Septemberfest a woman came up to our display and said "you're the guys that clean up 119". At the soccer tournament a number of parents thanked various members for our support. Participants in the mass casualty exercise received thank you letters from the Groton Emergency Management Director. So I guess people do notice.

Keep up the good work.

Stan KD1LE

Adopt A Highway

Participating in the September cleanup were Pat N1VAW, Bob W1XP, Ralph KD1SM, Erik W1ZRG, Jim AA1PO, Stan KD1LE, and John KB1HDO. Thanks to everyone who participated. It would be beneficial to have at least on more participant for a total of eight. That allows us to work in pairs and have each pair cover one quarter of the distance.

The next cleanup is Sunday October 24th. We meet at the traffic island on the east side of the Nashua River at 9:00 AM.

Board Meeting Notes

The October Board Meeting was held the 14th of October at the KD1LE QTH. In attendance were Ralph

KD1SM, Dave N1MNX, Peter N1ZRG, John KB1HDO and Stan KD1LE.

We discussed the following Items;

Discussed giving of grants or donations and how the proposals should be made and money replaced.

Grotonfest wrap up

The condition of the "wall" (repair and storage).

Wrap up on Pepperell Soccer Tournament by John KB1HDO.

Rail Trail Walk wrap up by Stan KD1LE.

Approved pizza and drink expenses for QSL card sort.

John KB1HDO to run road clean up October 24th because Stan will not be available.

Remember to give your outgoing QSL cards to Bob W1XP to be sent out.

Groton Septemberfest

Groton Septemberfest was September 19th due to the residue from hurricane Francis. Ron W1PLW organized the event. Supporting him were Bob W1XP, Ralph KD1SM, Larry KB1ESR, Stan KD1LE, John KB1ESR and Earl WR1Y.

Ron W1PLW, Bob W1XP and Stan KD1LE man the NVARC tables.

Always an attraction, Earl WR1Y helps a scout learn to send his name in Morse code.

Rotary Rail Trail Charity Walk

October 4th NVARC provided communications for the Groton-Pepperell Rotary Charity Walk on the Rail Trail between Groton and Pepperell. Seven members provided end-to-end communications as well as four bicycle sweeps to monitor the walkers and sweep the last walkers. The support was organized by Stan KD1LE. The following members participated Larry KB1ESR, Ralph KD1SM, Earl WR1Y, John KB1HDO, Ken K1KEY, Dave N1MNX, and Stan KD1LE. It was a nice fall day and all walkers returned safely.

Dave N1MNX and Marcia Zanaboni @@ at the Pepperell end of the course.

John KB1HDO after cruising down to Sand Hill Rd from the center of Groton.

Larry KB1ESR and KEN K1KEY as bicycle mobiles

Earl WR1Y at the Groton end of the course.

Don Maines with Larry KB1ESR and Stan KD1LE taking a break from their patrols.

NVARC Club Net

The net on September 20th was called by Ken N1MNX. Participating were Ken K1KEY, Larry KB1ESR, Bob W1XP and Stan KD1LE, Ralph KD1SM.

The September 27th net was called by Stan KD1LE. Participating were Skip K1NKR, Ken K1KEY, Bob W1XP, Larry KB1ESR, and Ralph KD1SM. The net program was a quiz on hurricane facts and history.

Nets continue to be called and are 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.

Public Service But Different

Sunday September 19th Larry KB1ESR and Stan KD1LE provided the town of Groton a different kind of public service. The just completed Lost Lake Fire Station has no communications equipment installed yet. A proposal for a radio tower will be put to the planning board. In order to answer the question of visual impact the portable tower was set up at 80 feet with a 7 foot antenna mounted on the top.

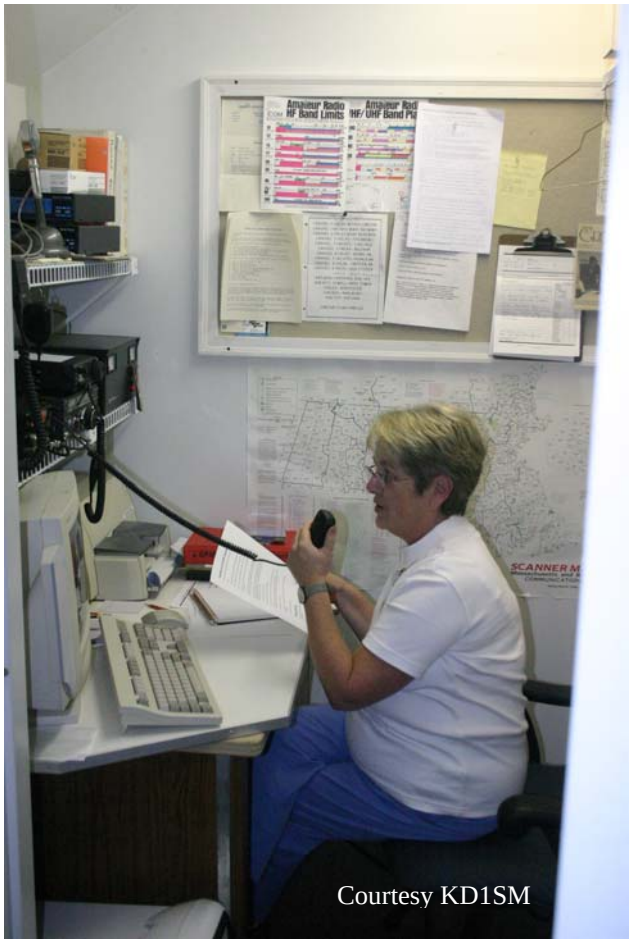
A representative for Groton Emergency Management (since this will also be an EOC) and several from Groton Fire stopped by to view the tower. Pictures were taken from various vantage points to share with the Planning Board.

The tower is behind the garage to the right of the power pole.

Groton Mass Casualty Exercise

On September 25th the Groton Fire Department ran a mass casualty exercise. Larry KB1ESR organized the support team for the exercise. Rather than being participants on the response side of the exercise their task was to support the Fire Chief with communications and information to help him run the exercise. They also provided logs and pictures to document and help in the assessment of the exercise

The crew ready to roll, Ken K1KEY, John KB1HDO, Larry KB1ESR, and Karen KA1JVU.

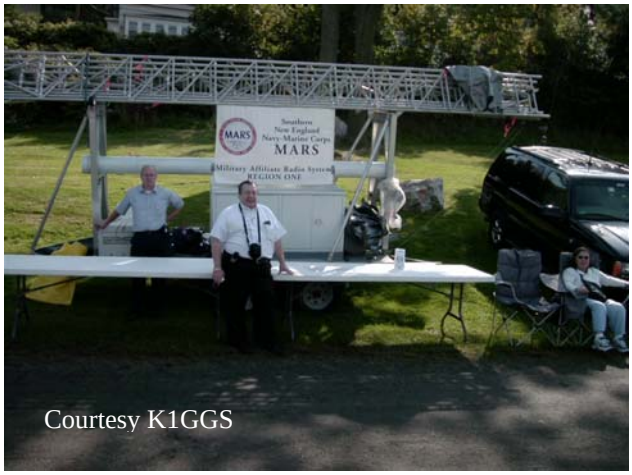


Karen KA1JVU operating the RACES equipment at the Groton Communications Center

Ayer decontamination system and equipment set up at Nashoba Deaconess Hospital.

CERT Fair

On September 25th Stan KD1LE trucked down to Marlboro to a Community Emergency Response Teams (CERT) Fair. The purpose of the fair was to introduce people to the CERT program which is organized under FEMA/MEMA. Numerous groups had displays such as the Navy-Marine Corps MARS display below.



Above Stan KD1LE and Bob WA1VIE with a Navy-Marine Corps MARS display.

Above is the Command Center for the Massachusetts State Police. It is a huge trailer with a monopole mast on the rear (left end). The tractor would be on the right end but is disconnected.

Other groups and displays were safety equipment vendors, the State Fire Command Vehicle, Sheriffs Department Swat Vehicle and Command Post Vehicle, Massachusetts Emergency Management Command Center, Salvation Army Communications Van and Canteen Truck,

PSLIST August 15

Public Service Volunteer Opportunities in the New England Division.

**** Every event listed is looking for communications volunteers ****
Date Location Event
Contact Tel/Email

Oct 9-11 Pepperell MA Fall Classic Soccer
John KB1HDO 978-772-5406 kb1dho@verizon.net

Oct 22-24 Cambridge Head of the Charles Regatta
Jeff N1FWV 978-536-2842 N1FWV@comcast.com

Listing public events at which Amateur Radio communications is providing a public service and for which additional volunteers from the Amateur Community are needed and welcome. Please contact the person listed to identify how you may serve and what equipment you may need to bring.

The most up-to-date copy of this list is maintained as http://purl.org/hamradio/publicservice/nediv

Pepperell Soccer Tournament

John KB1HDO organized communications support for the soccer tournament October 9-11. An article and more pictures will be in next months Signal.

ARRL Letter

NTIA'S BPL POSITION STILL A MOVING TARGET

The position of the National Telecommunications and Information Administration (NTIA) with respect to BPL appears to be a moving target. From expressing "broad concerns" about BPL in August 2003 to claiming BPL could help alleviate power line noise this past June, the NTIA now has aligned its position even more closely with that of the FCC--already an unapologetic BPL proponent. At the same time, the agency's recently amended recommendations recognize the reality of BPL's interference potential and suggest a "not-in-my-backyard" attitude toward BPL deployment near government radio systems.

In a cover letter to one of two separate filings last month, NTIA Office of Spectrum Management Associate Administrator Fredrick R. Wentland says the agency believes its "less burdensome proposals" will "adequately protect federal radio communication systems from locally generated BPL emissions while minimizing restrictions on BPL."

An agency of the US Department of Commerce, the NTIA now says it "fully supports" the FCC's proposed method to extrapolate the level of BPL emissions from power lines. It's also dropped its call for a "height correction" for measurements below 30 MHz. Based on the NTIA's own earlier studies, the method the agency now supports could result in measurements that fail to accurately reflect actual emission levels by as much as 20 dB.

Additionally, the NTIA says it now prefers the FCC's proposal to measure BPL field strength "at various specific locations along a power line" instead of along the length of the line. "NTIA's extensive further analysis shows that the overall peak field strength that would be found in an exhaustive search along the power line would not significantly exceed the peak level measured using the streamlined approach proposed in the NPRM [Notice of Proposed Rule Making]," the agency said. In its earlier comments, however, the NTIA had advised determining field strength by tracking the entire line because its modeling demonstrated that interval measurements "may not consistently reveal the peak level of radiated emissions."

The NTIA also has reconsidered its earlier proposals to exclude certain frequency bands and geographical zones and to provide for voluntary coordination to prevent BPL interference to critical government radio systems. Since filing its comments on the BPL Notice of Proposed Rule Making (NPRM) last June, Wentland said, the NTIA has narrowed the scope of specific bands and areas where "special protection mechanisms" regarding BPL should apply.

"Federal radio communications not specifically addressed in the proposed restrictions should be, for the most part, adequately protected in the near term by the baseline interference prevention mechanisms specified in the NPRM (eg, field strength limits, compliance measurement guidelines, and the prohibition of harmful interference)," Wentland concluded in a cover letter.

The NTIA says its revised recommendations would exclude Access BPL operation nationwide from some 2.2 percent of the HF and low-VHF spectrum and from a minuscule portion--0.0007 percent--of the HF spectrum "in limited geographic areas." That's less than half the spectrum the NTIA initially suggested protecting from BPL interference.

The NTIA says excluded bands primarily should be those used for safety communications "in situations where co-channel emissions from numerous BPL devices may be received via line of sight and ionospheric interfering signal paths." Exclusion zones would include "sensitive radio astronomy sites," generally located in remote, sparsely populated areas where there would be "little or no actual constraint on Access BPL market penetration," NTIA said.

Coordination areas, the NTIA says, should apply to receivers "at known locations that must operate with very weak desired signals and where harmful inter-

ference must be prevented" beforehand with a high degree of certainty rather than "after discovery."

Prior coordination of BPL deployment using certain frequencies, the NTIA now says, should apply "in limited geographic areas wherein BPL deployment will not necessarily be constrained, depending on details of the planned BPL deployment." The NTIA also said it could no longer support a requirement for BPL systems to transmit identification codes.

The agency does not appear to have backed away from its recommendation that the FCC apply its more stringent certification, rather than verification, procedures, to authorize BPL systems that, NTIA's comments said, "pose relatively high interference risks."

The ARRL also supports certification, which would require independent testing or review of test results, as opposed to having a BPL operator merely attest that its system complies with FCC rules. The League asserts that certification offers a higher degree of confidence that deployed BPL systems will not continue to exceed Part 15 limits.

The FCC is expected to consider a Report and Order in the BPL Proceeding, ET Docket 04-37, when it meets Thursday, October 14.

For additional information, visit the "Broadband Over Power Line (BPL) and Amateur Radio" page on the ARRL Web site <http://www.arrl.org/bpl/>. To support the League's efforts in this area, visit the ARRL's secure BPL Web site <https://www.arrl.org/forms/development/donations/bpl/>.

SPUTNIK I ANNIVERSARY NOTED

The world changed this week 47 years ago when the Soviet Union successfully launched Sputnik I on October 4, 1957. The world's first artificial satellite was about the size of a basketball and weighed just over 180 pounds. Sputnik I took about 98 minutes to orbit Earth on its elliptical path, and radio amateurs around the world enthusiastically tuned in to monitor its 20 and 40 MHz beacons. The satellite's 1 W transmitter fed four antennas deployed at 35º angles, and three silver-zinc batteries powered it for three weeks. In addition to ushering in a new era of political, military, technological and scientific development, Sputnik's launch marked the start of space exploration and gave rise to the birth of NASA.--NASA

STORM-WEARY AMATEUR RADIO VOLUNTEERS CONFRONT HURRICANE'S AFTERMATH

Amateur Radio this past week once again was part of a storm relief and recovery effort in the wake of Hurricane Jeanne--the fourth storm in six weeks to hit Florida. Jeanne made landfall September 25 some 5 miles southeast of Stuart--not far from where Hurricane Frances struck September 5. Authorities blamed the storm--a Category 3 hurricane with 120 MPH winds--for at least six deaths, and the state was declared a major disaster area. The Hurricane Watch Net (HWN) <http://www.hwn.org>--whose members tracked the storm up through the Caribbean--wrapped up three full days of communication support September 26.

"Since the wind field was much larger than Frances', Jeanne knocked out recently restored power to much of east and central Florida quite early and easily," said HWN Assistant Manager Bobby Graves, KB5HAV. He noted that since debris cleaned up after Hurricane Frances had not yet been picked up, Hurricane Jeanne had an "abundance of projectiles" at her disposal.

Other reports indicated that after Frances denuded much of the region's vegetation, Jeanne came along and tore off roofs, then dumped heavy rain into the vulnerable houses and buildings. The storm disrupted conventional telecommunications and left some 2.5 million homes without electrical power.

Over the storm's course, HWN members received reports throughout the northwestern Bahamas and eastern and central Florida. Many areas of the Bahamas also were still recovering from Hurricane Frances. As Marti Brown, KF4TRG/C6A, reported to the HWN: "Let me tell you that this storm was virtual hell."

During severe storms, the HWN works hand-in-hand with WX4NHC <http://www.wx4nhc.org> at the National Hurricane Center in Miami to gather ground-level weather data and damage reports from Amateur Radio volunteers in a storm's path. The net relays these to forecasters via WX4NHC, which regularly checks into the net and also disseminates weather updates.

Amateur Radio Emergency Service (ARES) volunteers were at the ready before Hurricane Jeanne arrived, supplementing communication at emergency operations centers and shelters set up for evacuees. ARRL Southern Florida Section Emer-

gency Coordinator Jim Goldsberry, KD4GR, said Indian River County appeared to be the hardest hit. ARES teams in Palm Beach, Martin, St Lucie, Brevard and Indian River counties also assisted American Red Cross and Salvation Army relief and damage assessment efforts.

Northern Florida SEC Nils Millergren, WA4NDA, reported that operators handled shelter duty in Flagler, Orange, Seminole, Lake and Volusia counties.

The Salvation Army Team Emergency Radio Network (SATERN) on 14.265 MHz handled health-and-welfare traffic in the aftermath of the storm on the air and via its Web site. Special sessions of the Southern Florida ARES Net were called up on 7242 kHz.

August and September have seen unprecedented activity, said the HWN's Graves, who thanked all stations that participated in the recent activation. Noting that four major tropical storms have not struck the same state in the same year since 1886, Grave said, "Let us hope and pray that record is not broken this year."

ARRL ANNOUNCES NEW RADIO FREQUENCY PROPAGATION COURSE

A new course, "Radio Frequency Propagation" (EC-011), is the latest in the League's catalog of Certification and Continuing Education (CCE) courses. Registration for the propagation course will remain open through Sunday, September 26, and the first class will begin Friday, October 15.

The course curriculum was written by Ian Poole, G3YWX, and edited by Carl Luetzelschwab, K9LA, and Terry Dettmann, WX7S. A noted DXer, Luetzelschwab writes the "Propagation" column for WorldRadio magazine and occasionally fills in for Tad Cook, K7RA, to write the weekly ARRL propagation report. Dettmann is the CCE program's mentor coordinator and also a propagation expert.

The signing up for EC-011 will study the science of RF propagation, including the properties of electromagnetic waves, the atmosphere and the ionosphere, the sun and sunspots, ground waves and sky waves, and various propagation modes--including aurora and meteor scatter.

Over the course of 15 learning units they'll also engage in various listening and logging activities and visit several Web sites that deal with solar phenomena related to radio wave propagation. The course runs 12 weeks and students can earn 2 Continuing Education Units.

Tuition for the course is $65 for ARRL members and $95 for nonmembers.

RF Propagation students will need to have an HF receiver to complete the various course-related activities. All on-line CCE courses also require access to a computer with an Internet connection as well as e-mail and Web navigational skills.

Poole's text, Radio Propagation--Principles & Practice, is the optional reference manual for the course. Published by the Radio Society of Great Britain, the 112-page book offers a practical understanding of radio propagation and serves as a guide to choosing the right band at the right time for the desired communication path.

To learn more, visit the ARRL Certification and Continuing Education Web page <http://www.arrl.org/cce> or contact the ARRL Certification and Continuing Education Program Department <cce@arrl.org>.

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.

DXpeditions

5H	Tanzania	1 year
5V	Togo	current
8Q7WP	Maldives	till 09/05
VK0DX	Antartica	till December
VQ9LA	Diego Garcia	till December
5H3HK	Tanzania	till March 2006
ZD8I	Ascension Is	till March 2006

Advertisements

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

$September Treasurers Report$

Income for September was $95 in membership dues, $45.00 from the book raffle, and $24 from patches. Expenses were $14.80 for newsletter postage, leaving a net income of $149.20 for the month.

Current balances:

General fund	$4826.55
Community fund	$1722.95

As of 14 October we have 56 current members and seven renewals outstanding.

73,
Ralph KD1SM

NVARC

Nashoba Valley

Amateur Radio Club

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http://www.n1nc.org/

President: Stan Pozerski KD1LE
Vice President: Peter Nordberg N1ZRG
Secretary: John Griswold KB1HDO
Treasurer: Ralph Swick KD1SM
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Dave Peabody 2003-2006
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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
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. You can send items to
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NVARC

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