



de NINC

June 2004 Volume 13 Number 6

This Month's Meeting

This month's program will be a presentation on Marconi by Ray Minichiello. Ray is one of the founders of the Marconi Museum in Bedford NH.

Ray may be looking for some volunteers to do some painting at the museum as we discussed before.

We need to go over Field Day and approve the Field Day budget, find a host for the cookout, and volunteers for road cleanup.

Last Month's Meeting

At the last meeting Phil Temples K9HI ARRL Eastern Mass Section Manager discussed League activities and issues. There was considerable discussion on the BPL problem.

Les N1SV brought us up to date on Field Day planning.

Welcome to New Members

Welcome to Chris Kelley KB1KUZ from Groton and Ray Capes K1JKN from Frankestown NH who joined NVARC in the last month.

From the President

There has been a lot of planning and work put into Field Day for this year by Les N1SV, John KB1HDO and others. I encourage every member to participate in some way whether by helping at setup, takedown or by putting in some operating time. I've always had a great time but it is a lot of work to put it all together

so having a good level of participation makes it more enjoyable for all. Stan KD1LE

Adopt A Highway

The May cleanup took place on the 23rd. Participating in the cleanup were Rod WA1TAC, Stan KD1LE, Peter N1ZRG, and Les N1SV. We covered better than half the section in under one hour. We need eight people for the next cleanup June 20.

On May 24th the Groton Board of Selectmen awarded NVARC a certificate of appreciation for our continued support of the Adopt-A Highway program in Groton. In attendance were Rod WA1TAC, Earl WR1Y, Dan N1LLG, Larry KB1ESR, Stan KD1LE, Bob AB1CV. Bob also put a good word in for us for support of the Groton Memorial Day Parade. One of the Selectmen read a short piece from an extract of the club yearbook listing the events and activities we supported in 2003. Another Selectman pointed out Amateur support during emergencies.





In attendance were (l-r standing) Ian NZ1B, Dan N1LLG Bob AB1CV and Stan KD1LE. In front Earl WR1Y and Rod WA1TAC. Larry KB1ESR is behind the camera.

Stan KD1LE

Area Emergency Exercises

The Worcester Airport Exercise took place May 22nd as scheduled. The exercise was part of the triennial qualification for the airport by the FAA. Many agencies took part including; FAA, FEMA, MEMA, Worcester AREA (WECT), Worcester Police and Fire, fire departments from surrounding communities, CAP, to name a few.

The Amateur response was organized by Mark WB1ARZ who also helped out at the Groton Road Race. Mark had a total of 35 hams for the event. The exercise started at 7:00 AM and was completed at 1:00 PM. The airport was closed for part of the exercise when a simulated plane crash (two tour buses) on the runway took place. Airport fire apparatus was dispatched and supporting engines from area communities responded for support.

CAP personnel were the 'victims' and were scattered over the runway and surrounding grass areas.

Attending from NVARC was Stan KD1LE who shadowed the Safety Officer who ran the exercise.

My learning from the exercise was not to mix tactical and logistical or message type nets. A problem on one of the repeaters caused this to happen and the result was the immediacy required in a tactical situation was lost.



In the foreground the airport engine puts out the "fire". The bus in the background is one of two simulating the aircraft fuselage.

There was a Red Cross exercise in Lowell the same day. If anyone has first hand knowledge of the exercise I would be interested in the knowing what they did and how it went

Stan

Board Meeting Notes

We went over Field Day plans and will bring the budget to the meeting for approval.

Dave showed some magnetic Amateur Radio Emergency Communications signs he recently purchased from the League.

Ralph reported on the finances which are later in the newsletter.

Stan noted that this is our last regular meeting till fall and we need people for the cookout, Grotonfest, and the fall soccer tournament. John volunteered to coordinate the soccer tournament.

NVARC Club Net

The NVARC Information Net has been running since the April club meeting. The net on June 7th was called by Stan KD1LE. as net control and had five check ins. Participating were Les N1SV, Dave N1MNX, Larry KB1ESR, Ralph KD1SM, and Stan KD1LE.

The theme of the net was Field Day preparations.

Nets continue to be called and are a good place to bring information for the club and questions or discussions.

In advance of that net let me point out that when the Net Control Station (NCS) calls for comments and a call for additional stations the proper way to get on the list to make your comment is to say ("This is" **your callsign** with a pause to check for doubling and say "additional comments" or "Query" if you have a question. As long as the net is running as a Directed Net each transmission is directed by the NCS and after each transmission by a participant, which may be a comment or question, control passes back to the NCS.

The net meets at 8:00 PM Monday evenings on the 442.900 N1MNX repeater.

Parker Classic Road Race

May 16 we provided communications and organizational support to the Parker Classic Road Race at Devens.

Supporting the event were Larry KB1ESR, Nancy KB1KEF, Gary K1YTS, Stan KD1LE, Ben KB1FJ, Ken K1KEY, Tom K1JHC, Bob AB1CV, Dave N1MNX.

They eliminated the one mile race/walk which saved time. There was a two mile and a five mile race. The five mile race changed from a double loop to a single loop so the coverage area was much larger this year. We covered it without difficulty with a

Field Day Preparations



The tower trailer is loaded with all the antennas and cabling for the CW station. It also has the slings and other attachment equipment to protect trees or other objects that can be used as temporary anchor points.



Above is the case containing the temporary guy wires and screw anchors that are part of the kit which makes setting up anywhere a possibility.

I encourage everyone to take pictures of Field Day preparations and Field Day itself so we can have a comprehensive collection to use in the next newsletter.

Stan KD1LE

ARRL Letter

NTIA TIPS HAND ON ITS ADDITIONAL BPL FINDINGS

National Telecommunications and Information Administration (NTIA) Acting Administrator Michael Gallagher says his agency's complete Phase 2 broadband over power line (BPL) study is targeted for release later this year. In remarks May 17 at the United Telecom Council's "Telecom 2004," Gallagher hinted at some findings in the Phase 2 study, which NTIA says will provide "additional guidance" on contending with BPL interference. The NTIA advised against putting the present FCC rule making proceeding on hold until release of its full Phase 2 report, however.

"Key Phase 2 technical analyses have been completed," Gallagher told the UTC gathering, "and the findings are appended to NTIA's comments on proposed rules." The NTIA has posted its Phase 1 BPL study on the proceeding, ET Docket 04-37, and has indicated to the FCC that it will file its comments on or about May 28.

Responsible for developing telecommunications policy for a White House that's promoting BPL, as well as for administering federal government radio spectrum that could be affected by the technology, the NTIA finds itself with a stake in both sides of the BPL controversy.

The principal concern, Gallagher acknowledged, is that BPL systems might interfere with federal government and other radio services. The NTIA's Phase 1 study showed that interference risks already are high under existing Part 15 rules. Among its recommendations for reducing interference were frequency shifting and notching as well as "refined compliance measurement procedures."

Gallagher says the NTIA's Phase 2 study has determined that BPL aggregation (ie, total emissions from multiple BPL systems) and ionospheric propagation "is not a potential near-term problem." The agency predicts that millions of BPL devices can be deployed under the rules the FCC is expected to adopt--probably later this year--before ionospheric propagation and aggregate BPL emissions become an interference issue.

ARRL CEO David Sumner, K1ZZ, says he's curious to hear the NTIA rationalize its "near-term" assertion. "Does this mean it's okay to go ahead with a bad idea if the problems it causes are sufficiently far in the future?" he asked.

The Phase 2 study also will evaluate the effectiveness of proposed Part 15 measurement techniques and recommend a "height-correction factor" of 5 dB to BPL measurements made at a height of 1 meter, Gallagher said. The NTIA acknowledges that peak field strength is as much as 20 dB higher--a factor of 100--than the peak measured at a height of 1 meter under current Part 15 rules. Because the peak does not occur consistently at a particular distance from a BPL device along the power line, the NTIA will advise requiring a peak field strength measurement search along the entire power line at a distance of 10 meters and at a height of 1 meter.

The agency has determined that a moderate-to-high probability of interference exists to a fixed station from BPL power lines at a distance of 450 meters--approximately 1480 feet--and to a mobile station at a distance of 55 meters--approximately 180 feet.

To "fulfill special protection requirements," Gallagher said, the NTIA will suggest "minimal" coordination areas--where a specified authority would coordinate all planned BPL deployment--plus excluded bands

and exclusion zones. The NTIA recommends "voluntary coordination" with respect to other radio operations plus "mandatory Access BPL power control, frequency agility and shut-off capabilities" to reduce interference risks and to expedite interference mitigation.

The NTIA further proposes that BPL rules provide for "prompt response to complaints of suspected interference," recasting the FCC's Part 15 shutdown requirement as "a last resort."

"Our BPL study of more than 10 million signal samples shows that solutions exist to all identified BPL technical issues," Gallagher concluded.

That's true, Sumner said, "but only if you include shutting a BPL system off and keeping it off as a 'solution.'"

During a White House meeting May 20, ARRL officials asked the Bush administration to heed its own NTIA experts and back away from its support of BPL. The League also has called on the FCC to put its BPL proceeding on hold to allow more thorough research of its interference potential.

For additional information, visit the "Broadband Over Power Line (BPL) and Amateur Radio" <<http://www.arrl.org/bpl>> page on the ARRL Web site.

AMATEURS AID AS TORNADOS DEVASTATE NEBRASKA COMMUNITIES

>From storm spotting through recovery support, Amateur Radio operators were on duty this week, aiding tornado-stricken communities in Nebraska and elsewhere in the Midwest. A May 22 tornado virtually destroyed most structures and was blamed for one death in Hallam, a town of approximately 300 some 20 miles south of Lincoln. ARRL Nebraska Section Emergency Coordinator Reynolds Davis, K0GND, said Lancaster County ARES/SKYWARN spotters activated the evening of May 22 in response to a report of an approaching front. Within a half-hour, W0NWS at the National Weather Service office in Valley already was receiving tornado damage reports via the Lincoln Amateur Radio Club K0KKV repeater.

"When the system moved into Lancaster County shortly after 8:30 PM, it destroyed almost every structure in the town of Hallam," Davis said, leaving the residents homeless. The NWS rated the tornado that struck Hallam as an F-4 on the five-point Fujita Scale--207 to 260 MPH.

The storm also severely damaged the high school in Norris and plucked the tower supporting the KORPT repeater's south receiver from the ground. The tower remains missing. The tornado went on to destroy additional homes to the northeast, and its path of destruction finally ended south of Bennet, he said.

More than 50 amateurs participated in the SKYWARN net, said Davis, who also serves as Lancaster County Emergency Coordinator. The National Weather Service Omaha office logged dozens of weather and storm-damage reports from radio amateurs in several Nebraska counties on May 22.

Once the SKYWARN Nets closed, the KORPT VHF repeater was put into service to support Red Cross communications among the tornado scene, the chapter house and a shelter set up in a Lincoln high school for residents displaced by the storm. Two ARES nets activated May 23 to coordinate damage survey and assessment, and reports logged via K0EOC at the Lancaster County Emergency Operations Center.

Davis said that by the time both damage survey nets shut down, 41 operators had driven nearly 2200 miles and surveyed 100 square miles. Gov Mike Johanns declared a state of emergency after more than a dozen tornados swept several southern Nebraska counties.

In Missouri, Grundy County EC Glen Briggs, KB0RPJ, reports that Amateur Radio groups in the northern part of the state relayed severe weather reports to the National Weather Service and to local emergency management and law enforcement officials May 22. Hardest hit areas were near Chillicothe and Brookfield. After one repeater was knocked off the air, amateurs switched to backup repeaters and simplex. Some 18 operators in nine Missouri counties participated, he said.

EXPERIENCED HAMS MUST NURTURE NEWCOMERS, HAYNIE TELLS FORUM

It's up to today's Amateur Radio veterans to cultivate the younger generation, ARRL President Jim Haynie, W5JBP, told the ARRL Forum at Dayton Hamvention 2004 May 15. Calling the statistic "shocking," Haynie cited ARRL survey data showing that more than one-fifth of new amateur licensees never get on the air. He suggested that too few experienced amateurs take new licensees under their wing to help them get started.

"One of the things that we need to do is open up our hearts and open up our minds a little bit about the

new generation coming along," he said. The addition of another half-dozen ARRL Education and Technology Program (ETP) pilot schools has raised the total to 81, Haynie pointed out. While its primary goal is using Amateur Radio to educate youngsters about wireless technology, the ETP has resulted in thousands of new hams--teenagers and younger.

"What makes these programs successful, of course, is the local hams, the local clubs getting behind the program and teaching these kids the kinds of things we all know," Haynie said, adding that nothing is too basic or simple. "I didn't know how to put on a PL-259 when I got my General," Haynie admitted, recalling that he'd more than once forgotten to slip the connector's shell over the end of the cable before soldering the plug.

Haynie suggested that today's older hams also need to consider that technology is changing, and the questions appearing on the ham radio examinations of tomorrow will be ones "that haven't been thought of yet." In 1972 when he took his General, he said, his test included questions on Hartley and Colpitts oscillators. In contrast, today's examinations cover topics such as phase-locked loops, satellite operation and digital technology.

The ARRL president asserted that many Amateur Extra class licensees couldn't pass today's Element 4 examination if they had to do. Haynie said that if and when the FCC changes Amateur Radio license requirements in response to various petitions for rule making--including one from the League--it will not be a matter of "dumbing down" Amateur Radio. "It's not that Amateur Radio is dumbed down," he said. "People like me have failed to keep up, and if you look in your heart, you're going to say the same thing."

"Amateur Radio is what you make of it once you get your license," Haynie continued. Getting a ham ticket doesn't make anyone more intelligent, and learning the ropes usually begins after someone already has a license in hand.

"You learn by doing," he said.

Haynie said the ARRL Board did not take lightly its latest restructuring proposal, and he acknowledged that the League's petition has not won universal praise. "It was not an overnight decision," he said, adding that the Board wanted to take a fair and evenhanded approach to restructuring.

How the FCC will act on the Morse code requirement and restructuring "is anyone's guess," Haynie said, but he predicted that the Commission will never reinstate higher code speed requirements as some have requested. "The FCC is not going to go back to 13 and 20 words per minute, and you can take that to the bank," he predicted. "It's not going to happen."

"Whatever you enjoy about Amateur Radio, it's not going to change" as a result of any restructuring Haynie said. While the FCC might take "the path of least resistance," he believes it's more likely to take bits and pieces of the various petitions to come up with something that's would be workable and "give Amateur Radio a shot in the arm."

"We need that," Haynie concluded.

FCC CHAIRMAN RESPONDS TO REQUEST TO SUPPORT ARRL RESTRUCTURING PLAN

FCC Chairman Michael K. Powell has assured US representatives Greg Walden, W7EQI (R-OR), and Mike Ross, WD5DVR (D-AR), that the Commission will act "as expeditiously as possible" on Amateur Radio restructuring. Walden and Ross wrote Powell a month ago to urge adoption of the ARRL's restructuring Petition for Rule Making (RM-10867) "in its entirety" along with rules changes needed to put it into place. Powell said the League's petition was one of many.

"At this time, the Commission staff is reviewing and analyzing carefully all of the petitions, comments and proposed rule changes in this area," Powell responded May 21. "Because this matter is of great importance to you and the almost 700,000 amateur radio operators nationwide, the staff is working diligently to create a comprehensive solution to address the proposals the petitioners have submitted." The next step in the process, he said, will be to prepare a notice of proposed rule making for the Commission's consideration.

In addition to the League's filing, Powell pointed out, the Commission received 17 other petitions for rule making that address examination requirements and operating privileges for Amateur Service licensees. The various proposals attracted more than 5000 comments, he noted--more than 800 of them on the ARRL's petition alone.

In their letter to Powell, Walden and Ross expressed their belief that the ARRL's plan "will encourage the development, refinement and use of new technologies; increase the number of young people involved in Amateur Radio; and provide incentives for Ama-

teur Radio licensees to pursue technical self-training and opportunities for volunteerism in the best traditions of our country."

Other restructuring plans were filed by the Radio Amateur Foundation, RM-10868, and by the National Conference of Volunteer Examiner Coordinators, RM-10870.

Fifteen other petitions for rule making came down on one side or the other of retaining the Amateur Radio Morse code examination requirement to operate on HF. Judging from Powell's letter to Walden and Ross, the FCC plans to address all 18 petitions within the framework of a single rule making proceeding.

SPECTRUM PROTECTION ACT COSPONSOR LIST TOPS 100

The number of US House members from both sides of the aisle signed on as cosponsors of the Amateur Radio Spectrum Protection Act of 2003—HR 713--has topped the century mark. The recent addition of three Republicans and three Democrats pushed the count to 103. Identical House and Senate versions of the measure, an ARRL initiative, are on their third try in Congress. Since January 1, the number of HR 713 cosponsors has grown by 26. The Senate version, S 537, has eight cosponsors.

The Spectrum Protection Act bills would require the FCC to provide "equivalent replacement spectrum" to Amateur Radio if the Commission were to reallocate primary amateur frequencies, reduce any secondary amateur allocations, or make additional allocations within such bands that would substantially reduce their utility to amateurs.

Signing aboard HR 713 so far this month were representatives Jo Ann Davis (R-VA), Johnny Isakson (R-GA), Elijah Cummings (D-MD), C. A. "Dutch" Ruppersberger (D-MD), Jim Gerlach (R-PA), and Mike Thompson (D-CA). Florida Republican Michael Bilirakis sponsored the House bill, while Idaho Republican Michael Crapo introduced S 537.

Ruppersberger this month also became the 35th cosponsor of HR 1478, the Amateur Radio Emergency Communications Consistency Act of 2003—the so-called CC&R bill. Sponsored by New York Democrat Steve Israel, the CC&R bill would require private land-use regulators such as homeowners' associations to "reasonably accommodate" Amateur Radio antennas consistent with the PRB-1 limited federal preemption.

HR 713 and HR 1478 have been referred to the House Subcommittee on Telecommunications and the Internet. S 537 has been referred to the Senate Committee on Commerce, Science, and Transportation.

ARRL President Jim Haynie, W5JBP, reiterated that the key to passage of the measures is letters from constituents. He called upon League members to take the effort to write, call or e-mail their representatives and senators to explain the bills' importance and encourage them to consider cosponsoring the measures. "Letters from ARRL members--who also are voters--are crucial to getting the spectrum bills through Congress, and that won't happen without support from our members," he said.

Sample letters and additional information--including the bills' texts and information on how to write members of Congress--is on the ARRL's "The Amateur Radio Spectrum Protection Act of 2003" Web page <<http://www.arrl.org/govrelations/arspa.html>> and on the "HR 1478, The Amateur Radio Emergency Communications Consistency Act of 2003" Web page <<http://www.arrl.org/govrelations/hr1478/>>.

Those writing their lawmakers on behalf of the Spectrum Protection Act are asked to copy their correspondence to the League via e-mail <specbill03@arrl.org>. Those writing on behalf of the Amateur Radio Emergency Communications Consistency Act, HR 1478, are asked to copy their correspondence to <ccr-bill@arrl.org>.

HAM RADIO-CARRYING ROCKET MAKES IT TO MARGIN OF SPACE

Following its May 17 launch from Nevada's Black Rock Desert, a solid-fuel amateur rocket carrying a ham radio avionics package easily exceeded its primary goal of attaining an altitude of 100 km--62 miles--considered the boundary between Earth's atmosphere and space, its sponsors say. An Amateur Radio direction finding team later recovered the rocket's avionics package intact. Avionics Team Leader Eric Knight, KB1EHE, told ARRL that the 21-foot, 10-inch diameter Civilian Space Xploration Team (CSXT) <<http://www.civilianspace.com/>> Go-Fast vehicle reached an altitude of 77 miles according to its onboard instruments, making it the first civilian rocket to do so.

"We well shattered any definition of space, and everybody's jubilant here," Knight told ARRL from Nevada. "Within two seconds into the flight we were already supersonic." An ARRL member, Knight said 75 to 100 people--many of them radio amateurs--

witnessed the launch, and some asked how they could become licensed. The launch itself, Knight reported, "went like clockwork."

During the vehicle's descent to Earth, a ballistic parachute deployed to keep it from tumbling, slow its velocity and make it hit the ground nose first. "The avionics package looks pristine," Knight said. "It could fly again." That's not likely however, since the CSXT team is hoping the avionics will end up in the Smithsonian Air and Space Museum.

A volunteer aerospace tracking and recovery team of Silicon Valley Amateur Radio operators calling itself Stratofox <<http://www.stratofox.org>> zeroed in on signals from the fallen rocket, which came down in rugged, mountainous terrain some 25 miles from the launch site. Tiny bird-tracking transmitters operating in the 224-MHz range were embedded into the parachute shroud lines solely for tracking purposes.

The avionics team's homebuilt patch-type antennas served the 33-cm telemetry downlink and 2.4 GHz Amateur TV transmitters as well as the onboard GPS units. The color ATV system was able to provide some photos during the first several seconds of the flight, but Knight said the rocket's spin--about nine cycles per second--caused the video to blur after that.

The avionics team includes eight Amateur Radio licensees, most of whom also were involved in an unsuccessful 2002 CSXT launch attempt. The entire 18-member CSXT team is headed by CSXT founder and Program Director Ky Michaelson, a retired Hollywood stunt man.

The United Kingdom Rocketry Association this week conveyed congratulations to the US team. "It's certainly a major achievement," said John Bonsor, a UKRA founder.

ARRL SUPPORTS FCC'S COGNITIVE RADIO TECHNOLOGY PROPOSALS WITH RESERVATIONS

The ARRL says it generally supports the proposals contained in an FCC Notice of Proposed Rule Making and Order (NPRM&O), ET Docket 03-108 relating to so-called cognitive radio (CR) technology. But the League urged the FCC to avoid large-scale deployment of CR technology--and especially of unlicensed devices in spectrum regularly used by licensed services--"until further experience with the technology is obtained." The ARRL also strenuously objected to a proposal to allow cognitive radio technology devices

to operate under Part 15 in "rural areas" at up to a sixfold increase in the currently permitted power level in several UHF bands that include amateur allocations.

"ARRL opposes increases of power levels for undefined and indefinable 'rural areas,'" the League's comments said, "because the practical radio horizon at higher Part 15 power levels makes interference with the Amateur and Amateur-Satellite service operations in many frequency bands inevitable." The FCC seeks to allow a transmitter power increase of up to six times (approximately 8 dB) higher than current Part 15 limits in the 902-928, 2400-2483.5 and 5725-5825 MHz bands and in the 24 GHz band.

The League said the Commission should not view cognitive radio as an opportunity to increase permissible Part 15 power levels and questioned why the FCC was willing to put forth such proposals "without the slightest real-world test deployment" of the systems it wants to authorize.

A "cognitive radio" is one that "can change its transmitter parameters based on interaction with the environment in which it operates," the FCC's NPRM&O says. "This interaction may involve active negotiation or communications with other spectrum users and/or passive sensing and decision making within the radio." Most cognitive radios will be software defined radios (SDRs), the League predicted.

"There is no need for separate rules regarding cognitive and software defined radios," the ARRL said, calling both "an excellent opportunity" to drive technological advancement within Amateur Radio. "They should and can be regulated within the existing rules." The ARRL also urged the FCC to avoid creating regulatory obstacles that would hamper "experimentation and flexibility in conducting amateur operations."

"These technologies will allow ever-greater participation by amateurs in restoration of communications systems following a wide-area emergency or disaster and in conducting disaster relief efforts on site in coordination with served agencies," the League predicted.

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 (MAY-JUNE)

June 26-27 Field Day

July 10-11 IARU HF World Championships

DXpeditions

5H	Tanzania	1 year
5V	Togo	current
8Q7WP	Maldives	till 09/05
YI9GS	Iraq	till July
VK0DX	Antartica	till December
VQ9LA	Diego Garcia	till December
5H3HK	Tanzania	till March 2006
ZD8I	Ascension Is	till March 2006
HS0ZCW	Thailand	till August 25

PSLIST JUNE

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>.

**** Every event listed is looking for communications volunteers ****

Date Location Event
Contact Tel/Email

Jun 26 Boston to Bourne MA MS GMG Bike Tour
Jun 27 Bourne to Boston MA MS GMG Bike Tour
John N1PYN 508-588-3250

Jul 4-5 Longsjo Classic
Ralph KD1SM 978-582-7351 kd1sm@arrl.net

See <http://purl.org/hamradio/publicservice/nediv>

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

\$June Treasurers Report\$

Income for May was \$45 in membership dues and \$10 from PowerPole connector distribution. Expenses were \$15.80 for postage, leaving a net income of \$39.20 for the month. We received \$30 from Now You're Talking distribution which we put back into the Community Fund.

Current balances:

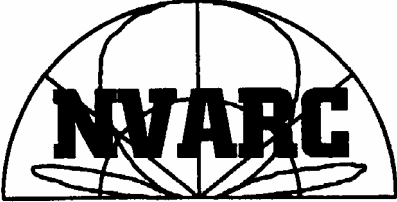
General fund	\$4824.52
Community fund	\$1722.95

Welcome to new members Chris Kelley KB1KUZ of Groton and Ray Capes K1JKN of Frankestown NH. Chris was Chief of the Groton Fire Department from 1995 to 2000. Ray was previously a resident of Pepperell.



We have 54 current members, with several renewals outstanding. I have notified all Members whose renewals are currently due.

73,
Ralph KD1SM



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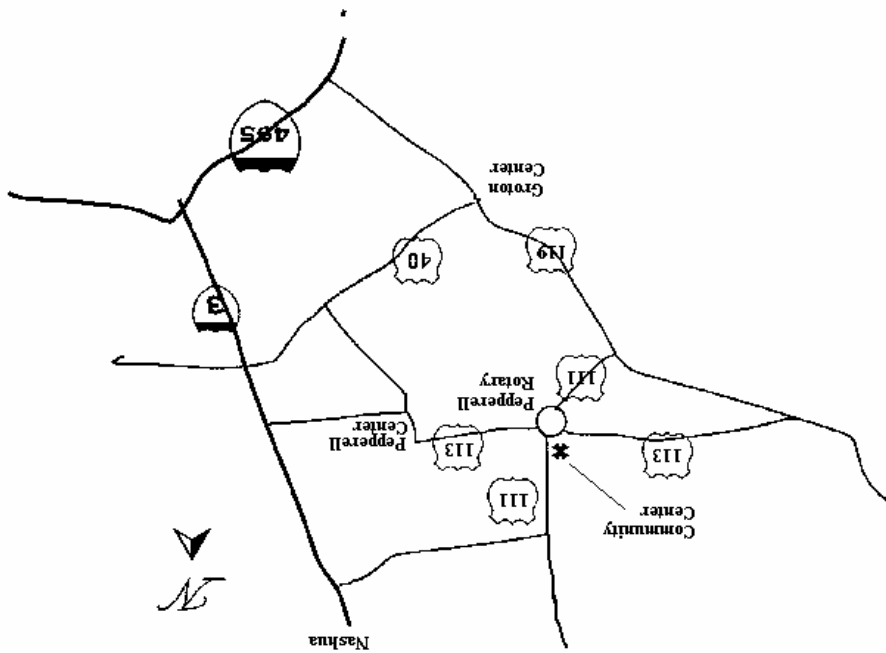
<http://www.n1nc.org/>

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Property Master: John Griswold KB1HDO
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

442.90 + 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 pozerski@net1plus.com
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