



# SIGNAL



de NINC

August 2010 Volume 19 Number 8

## This Month's Meeting

No Monthly meeting in August.

Road Cleanup Saturday August 21 at 9:15 after breakfast

## From The President

I hope everyone has been enjoying the summer. It has been a great one if you like hot sunny weather for beach or lake type activities.

We had a superb Field Day with a lot of participation and visitors. We even had a video made by David Pease from the Pepperell Cable TV Advisory Committee for the local access channel. Even though everyone had been working for many hours and it was unannounced and unrehearsed everyone did a fine job of answering questions and explaining what we were doing. The video was aired on the Pepperell access channel and may be used on other area town access channels.

Stan KD1LE

## Last Month's Meeting

There was no July meeting.

## NVARC Cookout

Thanks to Karen KA1JVU and Bob W1XP for hosting the NVARC cookout. The cookout took place July 31<sup>st</sup> at the W1XP/KA1JVU QTH. The weather was great and we had a good turnout. There was plenty of food and good conversation. The time flew by and all too quickly it was time to go.



L-R Peggy, Roland NR1G, John KK1X, Les N1SV (foreground), Bruce K1BG, Karen KA1JVU, Jim N8VIM, Peter N1ZRG, Gary K1YTS, Cindy, Larry KB1ESR



L-R foreground Cindy, Gary K1YTS, Peter N1ZRG, Lynda N1PBL, L-R background Jim N8VIM, Bob W1XP, Bruce K1BG, John KK1X, Karen KA1JVU, Peggy

## NVARC Field Day 2010



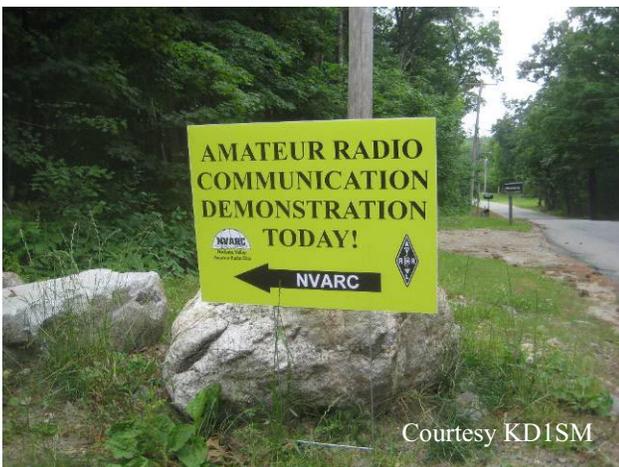
Courtesy KDISM

David Pease from the Pepperell cable access committee took a lot of video which he turned into a video that aired on the local cable. Here he is interviewing Roland NR1G the Field Day Chairman.



Courtesy KDISM

George KB1HFT operating the digital station was the ironman on the digital station logging all the contacts.



Courtesy KDISM

Roland had nice signs to help visitors find the Field Day site. If the number of visitors is any measure they were a great success.



Courtesy KDISM

Larry KB1ESR cooking sunrise breakfast for the overnight crew and the Sunday morning incoming operators.



Courtesy KDISM

The VHF and satellite stations. The VHF station ran the entire event on solar charged batteries and a solar panel.



Wolf KA1VOU and Bob W1XP set up the “Black Box” which provides the connection points for the station cables and houses the antenna switches, antenna matches and band pass filters. This package allows everything to be set up in advance and deployed quickly.

**NVARC Lantern Battery Challenge**

**The Second Annual NVARC Lantern Battery Challenge Club HF operating event using one 15 volt battery made up of lantern battery cells**

The second NVARC Lantern Battery Challenge will kick off in October. The rules will be basically the same as last year. The operating event will begin at the end of the October meeting and run till the first of March 2011. The idea is to work as many stations as you can using a pack of lantern batteries as the sole power source. Sign up is in September either at the meeting or by contacting W1XP or any club officer. The entry fee (covers the cost of the batteries)

will be due at the October meeting. Complete rules and an entry blank will be available at the September meeting. It is primarily a QRP event but the actual power is not specified. There are many classes of entry including CW, SSB, digital, and mixed modes. There is an antenna restriction of wire antennas (or verticals) at no more than 50 feet height. But there is an unlimited category that you can compete in with your big antenna farm if you desire. Even a crystal controlled mode and a transmit only mode if you don't have a low current drain receiver.



So now is the time to think about how you want to enter this year. The main purpose of this event is to have fun. And everyone that entered last year said they did.

To go over more of the Lantern Battery Challenge here is an excerpt from last year's introduction article with some updates.

The basic idea is that a club member operates for the event duration, October to March the next year, or until his lantern battery is exhausted. He or she can run as much or little power he or she likes but all sending and receiving must be powered by the battery. The battery is made up of 10 lantern battery cells. Lantern batteries are typically six (6) or twelve (12) volts using four (4) or eight (8) cells. The thought of adding extra cells to the battery is an attempt to provide longer life. Many radios, even low power radios are designed to work at a voltage of 13.8 volts. A twelve (12) volt battery is starting well down in the operating range of the radio when it is new. So the idea of putting two additional cells in the “NVARC Lantern Battery” is to start off at closer to 15 volts so we can expect much longer operation in the range of the radio. Most radios are specified to work in the range. If there is any concern about an individual radio, a diode or two can be added in se-

ries with the battery to provide a small drop in the battery voltage till the battery voltage starts to decline.

The club will provide the batteries so everyone will get a battery that is the same. At least as close as the manufacture make them. The club will buy the necessary batteries based on the number of persons signing up and assemble the batteries probably with some high tech method such as duck tape. Each battery will have an Anderson power pole connector. The entrants will pick up their battery at the October meeting. The event will begin at the close of the meeting and run till the first of March. Logs will be due at the March meeting. Awards will be made at the April meeting. Spread sheet, computer logs or even paper logs on ARRL log book format are acceptable. A summery sheet is required and the exact form will be provided. QSL's are not required but verification by the judging committee is possible.

The idea is to have the period of operation cover the usually good HF conditions of fall and winter. All contacts must be made on the normal "contest" bands of 160, 80, 40, 20, 15, and 10 meters.

Work any station only once per band, per mode. For example I can work Stan, KD1LE on CW, SSB, and Digital on 80 meters for three "mixed mode" contacts. Then I can do it again on 40 meters, etc. You can work stations in other contests and whatever the contest exchange is for that contest is valid for the Lantern Battery Challenge. For general operating contacts RS(T) and name and state are required. For DX contacts just report and name. The country can be obtained from the prefix

There are six entry classes:

1. Mixed modes (CW, SSB, and Digital)
2. CW
3. SSB
4. Digital, Note computer and display do not need to run on the battery for this mode. Only the radio.
5. Transmit only.
6. Crystal control.

Only wire antennas and a maximum height limit of 50 feet. Verticals or multi band vertical antennas such as the R7 or other antennas are included as long as they meet the 50 foot max height limit. There is an "Un-limited or Extra-Super" mode for those that want to see what they can do with their large antenna systems. The purpose of the rules is not to limit the number of participants, but to encourage more participation.

Awards, all the fame you can carry home. But we may come up with something like cups, books, CDs. Certainly certificates will be awarded. The idea that everybody that enters is a winner comes to my mind.

The entrance fee is to cover the cost of the battery provided by the club. I expect it will be \$15. This just covers the cost of two and a half lantern batteries.

The spirit of the operating event (I am reluctant to call it a contest) is to work as may contacts as possible on the limited amount of energy in the lantern battery. Working stations with another rig and asking them to stand by and work you with your "QRP" rig is not in the spirit of the event.

It should be obvious that trying to run any of the modern transceivers on the battery will be short indeed. It will require a low power drain radio. There are of course many of these types of radios available. But the radios that have complicated receivers and fancy displays will require a lot of current in the receive mode. Even a radio like the K2 which was designed for low drain and has a low current mode with slightly degraded performance draws 120 to 150 mills in receive. That is about 50 to 100 hours of intermittent operation in receive. A radio that draws less current will have more operating time. Going to transmit where the battery current will increase several times at least will probably be where the battery will fail as it is exhausted of chemical energy. Lower power rigs with simpler receivers may have an advantage. But that remains to be seen. A big part of this is experimental.

There are those that will say, Well I don't have a radio and am not going to plunk down the Big Bucks for some fancy low power radio kit or otherwise. Well that is one reason for the transmit only mode. Low power, low drain, simple transmitters are little more than a weekend project and will get you in on the fun. There are kits available that could be used also.

Other suggestions?

I hope that this has sparked your interest and if you have any ideas or suggestions on how to improve the event please send them to me or make comments when you see me. Written down comments are best but all are welcome. The goal is to demonstrate what can be done and have some fun while we are at it. I would like to involve as many club members as possible. That is the real goal of the activity in this kind of project if you are interested in the Lantern Battery Challenge or not.

Till next time, Bob W1XP

## NVARC Net

The NVARC net meets on 442.900 N1MNX repeater Mondays at 8:00 PM. The net is for sharing information and asking questions. Recent topics software defined radios, upcoming events

Recent check ins Jim N8VIM, Stan KD1LE, Gary K1YTS, Skip K1NKR, Dick W1LTN, Bob W1XP and Roland NR1G.

## PSLIST

Every event needs communications volunteers

See [www.n1nc.org/Events](http://www.n1nc.org/Events) for the latest information

## Board Meeting

Badge materials ready for new member badges.

Need to print club yearbooks for new members.

John still working on the ARRL to have NVARC show up on their Website.

Field Day expenses that were approved submitted were Ralph will pay based on the receipts he receives. The fuel bill is still outstanding. Approved payment for the signs Roland purchased.

Approved the list of Field Day participants and the purchase of Field Day Pins.

In attendance were Stan KD1LE, Larry KB1ESR, John KK1X, Bruce K1BG, Ralph KD1SM and Bob W1XP.

The next road Clean up will be Saturday Aug 21 at 9:15.

## Adopt A Highway

The July road clean up took place on July 17th. We moved to Saturday because some members had a public service event on Sunday.

The following members helped make the clean up a success.

Roland NR1G, Larry (Roland's brother) John KK1X, Stan KD1LE, Bob W1XP, and Peter N1ZRG

The next road clean up will be Saturday August 21st at 9:15 AM or shortly after since we will be coming from breakfast.

## Treasurers Report

Income for July was \$0.26 in road cleanup findings and \$4.63 in bank interest. Expenses were \$17.60 for newsletter postage leaving a net expense of \$12.71 for the month. Please get any remaining Field Day receipts to me right away.

Current balances:

General fund	\$4,102.30
Community fund	\$4,336.41

As of 4 August we have 40 members who are current with their dues and 30 renewals outstanding. Please check your renewal status on the roster circulated at the monthly meeting or ask Ralph.

If your ARRL membership is ready for renewal, you can let Ralph mail it in for you and the Club will get a commission. If you're interested in joining the ARRL and do so through Ralph the Club will get a bigger commission. ARRL membership 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

### Amateur Radio and Scouting: K2BSA -- Amateur Radio Fun in the Warm Virginia Sun

Thousands of Scouts and Scouters got to experience the thrill of Amateur Radio firsthand at the BSA National Jamboree -- including a QSO with the International Space Station.

The 2010 National Scout Jamboree -- celebrating the 100th anniversary of the Boy Scouts of America - was held July 26-August 4 at Fort AP Hill in Virginia. According to ARRL Rocky Mountain Division Director and K2BSA Station Coordinator/Manager Brian Milesosky, N5ZGT, ham radio was a big part of the event that attracted more than 43,000 participants from across the nation and around the world.

### FCC: ARRL Comments on FCC 5 MHz Proposals

On July 13, the ARRL filed its comments in response to the FCC's Notice of Proposed Rulemaking (NPRM) in ET Docket No. 10-98. The NPRM was issued in response to an ARRL Petition for Rule Making -- RM-11353 -- filed in October 2006. In its

2006 Petition, the ARRL had sought modest improvements in operating privileges in the so-called "60 meter" band, which presently consists of five channels on which General, Advanced and Amateur Extra class licensees may use upper sideband (USB) emission and no more than 50 W effective radiated power (ERP) relative to a dipole antenna. Amateur use of these five channels is on a secondary basis and must not cause harmful interference to authorized stations in the mobile and fixed services. US amateurs were first authorized to operate on 60 meters in 2003-- thanks to agreement by the Interdepartment Radio Advisory Committee of the National Telecommunications and Information Administration -- that with such limits, amateur use would be compatible with federal government requirements.

### **ARDF Update: Radio Foxhunters Find Their Champions in Ohio**

By ARRL ARDF Coordinator Joe Moell, K0OV

Organizers of the USA ARDF Championships tested their equipment on the campus of Miami University, next to a preschool. Event co-chair Dick Arnett, WB4SUV, took time to teach the kids about hidden transmitter hunting and let them try it for themselves.

They came from 15 states and four foreign countries. In their suitcases were radio sets, antennas, sun block and running shoes, but they left some room in hopes of taking home a medal or two. They were the hams and future hams -- ranging from age 12 to older than 70 -- who went to Southwest Ohio in the third week of May for the 10th Annual USA Championships of Amateur Radio Direction Finding (ARDF). ARDF is done on 80 meter CW and 2 meter AM in separate events, each with five "fox" transmitters. A course is typically three miles from start to each of the five transmitters (in optimum order) and then to the finish. Your mission is to find your assigned three, four or all five foxes, depending on which of the 11 age/gender categories you are in. Each transmitter is on for one minute at a time in a five-fox cycle that repeats. You must find your way on foot with just your direction-finding gear, the map you're given and your compass. GPS help is not allowed.

### **2010 Flea Markets/Conventions**

August  
22 Northern Berkshire Hamfest Adams MA  
27-29 ARRL NE Convention, Boxborough

September

12 Western CT Hamfest Newtown CT  
18 Annual 76 Auction and Flea Market  
19 MIT

October  
10 Connecticut State Convention Wallingford CT  
17 MIT

November  
6 Interstate Repeater Society Londonderry NH  
13 FARAfest Bourne MA

### **Advertisements**

Your advertisement could be here.

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

### **Upcoming Operating Events**

August  
21-22  
SARTG WW RTTY Contest  
ARRL 10 GHZ and up Contest  
North American QSO Party SSB  
New Jersey QSO Party  
28-29  
Hawaii QSO Party  
YO DX HF Contest  
SCC RTTY Championship  
Kansas QSO Party  
Ohio QSO Party  
SARL HP CW Contest

September  
4  
Russian RTTY WW Contest  
All Asian DX Contest SSB  
Colorado QSO Party  
Brazil Independence Day BPSK31 CDX Contest  
IARU Region 1 Field day SSB  
5  
DARC 10 Meter Digital Contest  
Tennessee QSO Party  
6  
MI QRP Labor Day CW Sprint  
11  
WAE DX Contest SSB  
Arkansas QSO Party  
Ohio State Parks on the Air  
ARRL September VHF QSO Party  
ARCI VHF Contest  
12  
North American Sprint CW  
18

Connecticut QSO Party  
South Carolina QSO Party  
19  
North American Sprint SSB  
25  
CQ Worldwide DX Contest RTTY

Texas QSO Party  
UBA ON Contest 6M

October  
2  
EPC Russia DX Contest  
Oceania DX Contest SSB  
F9AA Cup CW  
California QSO Party  
3  
Germany Telegraphy Contest  
RSGB 21/28 MHZ Contest  
9-10  
Makrothen RTTY Contest  
Oceania DX Contest CW  
Scandinavian Activity Contest SSB  
EU Autumn Sprint CW  
Pennsylvania QSO Party  
Arizona QSO Party  
FISTS Fall Sprint  
North American Sprint RTTY  
16  
JARTS WW RTTY Contest  
Iowa QSO Party  
New York QSO Party  
Worked All Germany Contest  
17  
Illinois QSO Party  
23  
Stew Perry Topband Challenge  
W/VE Islands QSO Party  
30  
CQ Worldwide DX Contest SSB

For further info on these and other contests refer to;  
<http://www.hornucopia.com/contestcal/index.html>.



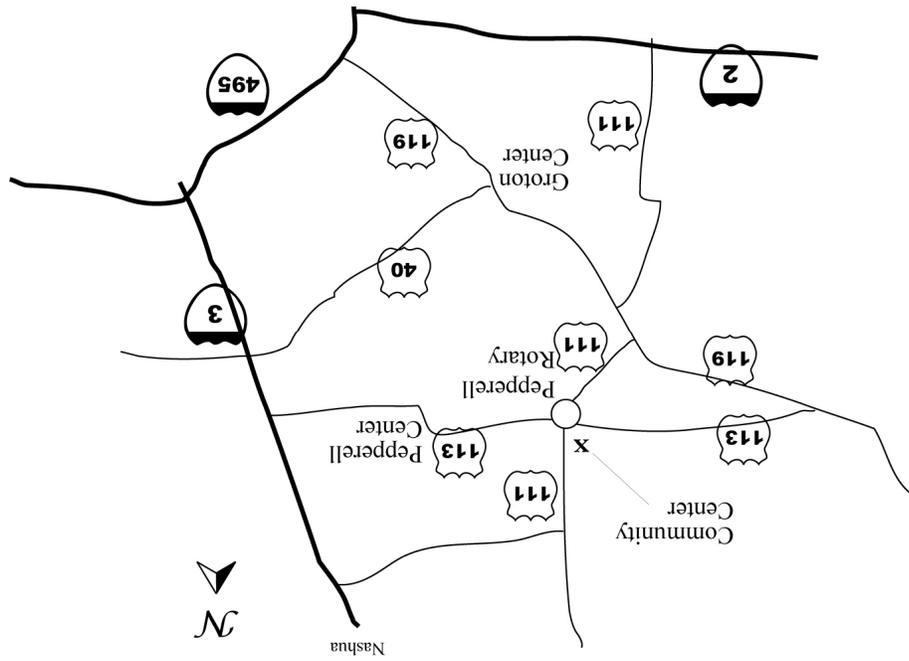
**Nashoba Valley  
Amateur Radio Club**

PO Box # 900  
Pepperell Mass 01463-0900

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

President: Stan Pozerski KD1LE  
Vice President: Bruce Blain K1BG  
Secretary: John Griswold KK1X  
Treasurer: Ralph Swick KD1SM  
Board Members:  
Skip Youngberg K1NKR 2008-2011  
Joel Magid W1JMM 2009-2012  
Bob Reif: W1XP 2010-2013

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  
Annual membership dues are \$15; \$20 for a family  
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 battery power  
147.345 + 100 Hz Repeater  
53.890 – 100Hz Repeater battery power  
This newsletter is published monthly. Submissions,  
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**Nashoba Valley Amateur Radio Club**

*PO Box 900*

*Pepperell, MA 01463-0900*

