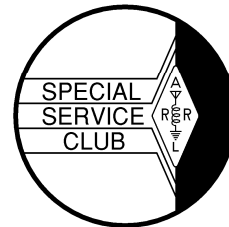




# SIGNAL



de NINC

September 2013 Volume 22 Number 09

## This Month's Meeting

Next meeting Sept 19<sup>th</sup> at the Pepperell Community Center at 7:30 PM

Eric Williams, KV1J will give us some background on the ARRL QSL Bureau.

## Last Month's Meeting

There was no August meeting.

## President's Corner

De Skip, K1NKR

Well, the summer months have come and gone and September's upon us. The NVARC "program year" has begun.

It was a good summer. Field Day and our support of the World Radiosport Team Championship preparations went well. Dennis K1LGQ, ably assisted by Jean K1AVM, hosted a successful summer picnic. And a record group (thanks to the presence of four licensees from the KW2T family) participated in International Lighthouse-Lightship Weekend.

The year is shaping up pretty well, too. We've already got most of the schedule of monthly program topics fleshed out through January, with some to-be-scheduled-later ones already semi-committed.

As always, we're trying to provide as balanced and wide-ranging a group of topics as we can. NVARC isn't a "public service only" club, not is it a "QRP only" club, nor "VHF," nor "DX," nor "contest." We're a local club with as broad a range of member interests as there is a broad range of operating, technical, and service opportunities in Amateur Radio. So, if you've got a passion don't grouse if someone else's passion is the topic for some month's program—tell us all about it and be part of

another month's program. We try to have one feature length and one short-subject presentation a month. And if you're shy about presenting you've got two options. There are plenty of PowerPoint mentors in the club and you can always suggest a subject and get a Board member to go scouting for a speaker resource.

Before I get off that last subject of speaker resources let me note that one of the best ways for a club to support its own best interests is to support the best interests of other clubs. When Dale AF1T came down from the Contoocook (NH) Valley Radio Club a while back, he did so suggesting/demanding that we provide a talk to his club. Since then, NVARC members have exchanged multiple programs with Contoocook, the Granite State Amateur Radio Association, and the Nashua Area Radio Club. (Actually, NARC owes us one. Hint. Hint.) So... If you have a subject you want to hear about you might not have to "listen to an NVARC member one more time." Just ask.

Oh yeah, don't forget that December's Homebrew Night and January's Short Subjects Night are yours. You are working up a few minutes' discussion of your own favorite subject, aren't you?

## This Month's Program

Eric Williams, KV1J, will join us and give us some background on the ARRL QSL Bureau. Eric is the W1 QSL Bureau chief. We've always enjoyed NVARC's annual October QSL Sort and pizza bash but did you ever wonder where those thousands of cards come from? And what happens to them next? (No, they don't all go to N1SV.)

## Other Stuff (Otherwise known as Strays)

While you're assembling your calendar don't forget NEARFest XIV, which will be held 11-12 October at the Deerfield (NH) Fairgrounds. Note, 11 October is a Friday.

And another calendar opportunity. The New England Antique Radio Club (NEARC) Fall Antique Radio Flea Market will be held September 28, 2013 7:30am-12pm, Rain or Shine, at the Brookline Event Center-32 Proctor Hill Road, Brookline NH 03033. Take Exit 6 (Rte 130) off Rte 3 in Nashua and go 9 miles west. See [www.nearc.net](http://www.nearc.net).

WMUR TV (Channel 9 in Manchester, NH) will do one of their Chronicle TV shows on Old Radios, The New England Antique Radio Club, and Radioorphanage in the near future. A firm air-date is not set yet, but it is currently expected to be the last week of September or first week of October. Coincidentally, the two local ABC affiliates air their separate Chronicle shows in series after the evening news. You can watch New Hampshire Chronicle on channel 9 from 7:00 to 7:30 and then switch to channel 5 for Boston's Chronicle from 7:30 to 8:00.

**International Lighthouse and Lightship Weekend (ILLW)**

For the third year in a row, NVARC members used the third weekend in August to participate in International Lighthouse Lightship Weekend (ILLW). N1NC was on the air from historic Cape Cod Highland Lighthouse (<http://www.capecodlight.org>) in North Truro on Cape Cod. 2013 had a record 526 lighthouses registered, but operating conditions were poor for the entire weekend.



Photo Courtesy Jim N8VIM. The blue tarp covers the operating tent. R-L are Skip, Dan, Stan and some visitors at Skips 10 GHz rig and liaison 2 meter rig.



Photo Courtesy Bruce K1BG

We had members arrive by car and by plane. We had day trippers, weekenders, and three day weekenders. In all, N1NC may have only made 62 QSOs, but everybody participating had a great time. Our station consisted of an ICOM IC-746Pro driving a sloping dipole that was hung from the lighthouse railing. Skip, K1NKR made a number of contacts outside of 20 meters on 10 GHz (during the ARRL 10 GHz contest), and George W1JHR who was a 10 GHz "rover" just happened to drop in! A great time was had by all.

Participating this year – George W1JHR, Jim N8VIM, Bruce K1BG, Dan KW2T, Ben KB3RWM, Cathy KB3SHA, Thomas KB1ZNI, Skip K1NKR, Bob W1XP, and Stan KD1LE. For more info on ILLW, please go to the website at <http://www.illw.net>. Let's hope that operating conditions are better next year!



Skip K1NKR explains to some visitors what he is trying to do with his 10 GHZ rig set up on the observation platform near the cliff at the lighthouse. Photo Courtesy Jim N8VIM



Jim N8VIM, Skip K1NKR, Dan KW2T and family toured the Chatham Marconi Maritime Center. Photo Courtesy Jim N8VIM.



Jim N8VIM, Skip K1NKR, Dan KW2T and family also visited another site on the Cape where several other Hams were logging 10 GHZ contacts. Photo Courtesy Jim N8VIM.

## HRO Manufacturers Day

On Saturday August 24<sup>th</sup> HRO held Manufacturers Day. A number of the manufacturers had tables in some additional space adjacent to HRO in Salem NH. A number of companies who are WRTC sponsors also had displays.

NVARC members seen there included Bruce K1BG, Stan KD1LE, Ralph KD1SM, Gary K1YTS, Bob , Dennis K1LGQ, Jean K1AVM, and Ken KB1UVP.

There were also two meetings held in the afternoon.

There was a WRTC meeting/presentation by Doug K1DG Chairman of WRTC 2014 that discussed the changes and improvements that took place this year based on the problems and suggestions from the 2012 event. He also went over some changes and improvements for next year's actual event though they are minimal. One of the largest challenges is getting more volunteers. Doug will be speaking at clubs over the next year (really only 10 month's now) to try to stimulate more interest. He hopes that by interesting clubs they will be able to pull together enough volunteers to take on a station or an entire site.

Doug showed the schedule of events for next year which starts with participants arriving starting on the Wednesday before the event and going through the ARRL National Convention the next week which some participants will be staying for. The schedule is available on the WRTC2014 Website.

There was also a presentation on the Boston Marathon by Steve W3EVE. Steve talked about how the organization and communications had changed over the years based on events like extreme weather, hot or cold, and changes in the number of runners and various support organizations like Red Cross and DMAT teams. Ultimately he spoke about how all these changes and improvements saved lives this year.

## WRTC 2014

Separate from the Notes on the meeting that took place at HRO I wanted to point out that for 2014 the WRTC event needs additional volunteers. After this year's test run I have heard people saying "by now they must have everyone they need". That is not the case. While more than 100 people supported this year's event setting up 25 stations there will be 65 stations set up next year for the actual event. That is more than twice as many as this year. So other

than the same people doing twice as much work it will take twice as many people. In addition next year there will be additional requirements. Many if not most of the participants will be coming from outside the US. They will need hosts, drivers to shuttle them to events and the contest station sites. One of the particular skills they are looking for is Foreign Language skills. You can volunteer on the WRTC Web site at [www.wrtc2014.org](http://www.wrtc2014.org). You might also contact one of the Site Captains from NVARC if you want to ask questions or work on their teams. Bruce K1BG is the Site Captain for the Heald St Orchard stations. They set up two stations this year and may be asked to set up four next year though they may be at a different site also. Les N1SV is the Site Captain for the Twin Valley Farm site also in Pepperell. They could answer any questions you might have and I'm sure could use more help.

Stan KD1LE

### NVARC Cookout

The Hosts for this year's NVARC Cookout were Dennis K1LGQ and Jean K1AVM at Dennis' house in Brookline NH.

Dennis (Mr QRP) showed us his shack, which included a big QRO amplifier.



Host Dennis K1LGQ. Photo Courtesy Ralph KD1SM



Tom KB1ZNI, Stan KD1LE, Gary K1YTS, Peter N1ZRG, Bob W1XP, Skip K1NKR, Jim N8VIM, and Jean KB1VDP. Photo Courtesy Ralph KD1SM



Bob W1XP looks over Dennis' homebrew 80m receiver. Photo Courtesy Ralph KD1SM



The front panel of Dennis' homebrew 80m receiver.  
Photo Courtesy Ralph KD1SM



Dennis K1LGQ in his shack Photo Courtesy KD1SM



Skip K1NKR provides an antenna for Dennis' homebrew 80m receiver. Photo Courtesy Ralph KD1SM



Dennis K1LGQ has a large parts inventory.  
Photo Courtesy Ralph KD1SM



Old and New: Bob W1XP holds the 80m transistor receiver with Dennis watching while Skip K1NKR and Dan KW2T try to get a software-defined receiver to work. Photo Courtesy Ralph KD1SM



L-R Stan KD1LE, Gary K1YTS, Peter N1ZRG, Bob W1XP. Photo Courtesy Dennis K1LGQ

Attendees: Dennis K1LGQ, Jean K1AVM, Dan KW2T (and family Ben KB3RWM, Cathy KB3SHA, Thomas KB1ZNI), Skip K1NKR, Ralph KD1SM, Stan KD1LE, Peter N1ZRG, Gary K1YTS.

## Lantern Battery Challenge Operating Parameters September 2013

### Call them rules

The fifth NVARC Lantern Battery Challenge will start in October. This year we are making some major changes to the event. So read on. We hope to make the event more interesting and get more people to take part. This year in recognition of the first amateur radio contact across the pond on November 27<sup>th</sup> of 1923 we are adding an incentive to try and duplicate that event by encouraging contacts outside North America. See the write up in the August 2013 Signal for background details. In this earlier write up I proposed scoring contacts outside North America at 9 points each and North America QSOs at 5 points. At the time I considered using the DXCC countries list to determine what was North America and what was not. But after reviewing the list and some discussion among others I think that there are many DX QSOs that should qualify for the bonus. But rather than draw a circle on the map I've decided that a simple solution is to consider North America as the 49 states, that includes Alaska, Canada and Mexico as QSOs that count five (5) points. All other QSOs count 9 points. The 9 is in reference to the 90<sup>th</sup> anniversary of the first amateur radio contact between North America and Europe. The final score for this years Lantern Battery Challenge will be the North American QSOs as described above, times five (5) plus the number of all other QSOs times nine (9). See "Scoring" later. This scoring change is really the big change in the event from previous years. But I hope this will encourage more entries in this year's event.

We will be going back to the lantern batteries this year. The batteries will be made up of nine (9) cells as in past years. The entry fee will go back to \$15 to cover the cost of the batteries and provide a little extra for the prizes. The sign up period will close shortly after the September meeting. If you can't make the September meeting please see me or a board member to register for this year's event. Now they say the devil is in the details. So here are the revised Operating Parameters for the 2013/2014 NVARC Lantern Battery Challenge.

### Activity Period

The 2013/2014 Lantern Battery Challenge will run from the end of the October meeting, on October 17<sup>th</sup>, till 0001 UTC March 1st, 2014.

### Bands

All contacts must be made on the normal contest bands of 160, 80, 40, 20, 15, 10, and 6 meters.

### Modes of Operation

There are three modes of operation, CW, SSB (including AM), and Digital (This mode lumps all digital modes such as RTTY, PSK, JT-65, JT-9 and any of the other so called "sound card" modes together).

### Classes of Entry

There are really twelve.

1. Mixed mode is operating more than one of the three primary modes, CW, SSB, and Digital.
2. CW
3. SSB includes AM
4. Digital, note the computer and display do not need to run on the battery for this mode. Only the radio.
5. Transmit only mode. This mode allows the use of a line powered receiver. Only the transmitter is required to be battery powered.
6. Crystal controlled transmitter. This is the same as 5 above except the transmitter is crystal controlled. This is for radios like the Tuna Tin and Rock Mite transmitters. Pulling the frequency of the crystal is permitted. You can use as many crystals as you have.

Now in addition to these six operating modes there are two antenna classes as explained next. The modes of operation and the two antenna classes combine to provide 12 entry categories.

### Antennas

There are two classes of Antennas

General class. Any and all types of antennas with no part of any antenna used for operating in the Lantern Battery Challenge higher than 55 feet above average ground.

Unlimited class. The Unlimited class consists of all other antennas. The purpose of this is to try and level the field between competing stations.

## Location

Contacts may be made from anywhere in the United States. Fixed, portable, or mobile, just as long as the same battery must be used for all contacts.

## Logs

Logs must be submitted with a contact summary sheet (form to be supplied later) at the end of the event. Logs can be readable paper, original or a copy. Electronic logs must be readable with available software in an easy and convenient form. If we can't read it, the entry will be set aside. Logs must contain date and time of contact, station call, mode, frequency or band and contact information. If the contact is made in a contest the contest exchanges is required in the log. For just general QSOs the signal report, name, and state, or province are required. For DX QSOs only name and report are required. Logs are due at the end of the March club meeting. We will try and make arrangements for those that cannot attend the March club meeting to submit their log on line or via US mail.

## Scoring

This is the large change in the event this year. As mentioned above this year contacts with stations located in "North America" (as defined below) will be worth five (5) points. Contacts outside "North America" will count nine (9) points. The final score will be the sum of the two products. In short, contacts outside of North America (as defined) will be worth about twice those within North America. "North America" is defined as the 48 states, Alaska, Canada, and Mexico. All other contacts are outside "North America" as defined for the LBC. For this event Puerto Rico, US Virgin Island, and KG4 are outside NA, while 4U is considered inside NA. Any and all questions regarding the disposition of points or multipliers or other event "rules" will be resolved by the NVARC board and their decision will be considered final.

Sample calculation. If KD1LE makes 10 QSO's with W and VE stations, that would be  $10 \times 5 = 50$  points. If he also works 10 stations outside NA that would be  $10 \times 9 = 90$  points. His total score for the event is  $50 + 90 = 140$  points. Note that points and multipliers are the same across the different modes, CW, SSB or digital.

## Awards

Awards will be decided by the board upon review of the entries. We guarantee all the fame you can car-

ry home. But we may come up with something like cups, CDs or books. Certainly certificates will be awarded. The idea that everybody that enters is a winner comes to mind. Awards will be made at the April 2014 or later club meeting.

## Entrance Fee

The entrance fee is to cover the cost of the battery provided by the club. It is \$15.00. This is just to cover the cost of the batteries and maybe have a little left over for awards. The fee along with a completed application form is payable at the September meeting and must be paid before the October meeting to receive a battery. Members that cannot make the September meeting should contact me or a board member to try and make arrangement to pay your fee and submit your entry form. We will hold the entrance fee payment period open for a limited period (a few days) after the Sept meeting to give members that can't make the meeting an opportunity to pay their fee.

## Event Spirit

The spirit of the operating event (we are reluctant to call it a contest) is to work as many contacts as possible on the limited amount of energy in the battery. This year we have added the DX multiplier. 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.

## Equipment

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 drain radio. There are of course many of this type of radios available. The FT 817 and KX3 are examples. But radios that in general have complicated modern receivers with displays require a lot of current in the receive mode. Even transceivers like the K2 that have a low current drain mode draw 120 to 150 mills of current and will eat up the energy in the battery in short order. With the small battery it is best to have a plan. Use headphones and keep the transmit power down. Turn off the receiver when you are not actively listening to save battery capacity. I suggest disconnecting the battery when not in use. The battery will probably start to fail in the transmit mode where the current required is higher. Giving the battery a rest to recover can stretch the capacity. Low power rigs with simple low drain receivers will probably 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 I am not going to plunk down the Big Bucks for some fancy low power radio kit or radio. Well that is one reason for the Transmit only mode. Low power, low drain, simple CW transmitters are little more than a week end project, and they will get you in on the fun. A one watt crystal controlled transmitter only takes two transistors and can be built in an evening. I have a few boards and we can scrape up the parts for those that may be interested in building their own little transmitter to get in on the fun. (If you are interested, get in touch with me).

Operation with different equipment is encouraged. The only requirement is that any equipment must be powered by the battery supplied. So you are free to try as many different rigs as you like during the event. The same is true of antennas as long as they are in the same class. So it is a good time to experiment with antennas.

#### Changes

The board may modify or issue new event rules at any time it feels necessary to the conduct of the operating event.

Main Objective of the Lantern Battery Challenge.

Have Fun!

Issued Sept. 17<sup>th</sup> 2009, revised Sept 2<sup>nd</sup> 2011 and Sept 7<sup>th</sup> 2012 and Sept 10<sup>th</sup> 2013.

73 Bob W1XP

### Didja Know?

PowerPole™ connectors are the Club standard for power cables.

HRO: 10 sets for \$10.95 (\$1.11 each)

West Mountain Radio: 12 sets for \$13 (\$1.08 each) or 100 sets for \$80 (80¢ each)

Powerwerx: 10 sets for \$10 (\$1 each), 25 sets for \$20 (80¢ each), 100 sets for \$70 (70¢ each)

Grumpyshop: 10 sets for \$8.95 (90¢ each) or 25 sets for \$18.95 (76¢ each)

NVARC: 10 sets for \$5 (50¢ each)

See Ralph. And please make sure you assemble them following the ARES standard.

### Board Meeting Notes

Skip, Dan, Jim, Rod, John, Ralph in attendance

Treasurer's report

QSLs OK on standard photo stock

Upcoming activities - LBC, QSL sort, Near Fest Oct 11-12

John to write thank you to Conservation Committee

Field Day pins in - distribute at September's meeting

Yearbook - should we have part on web? Photo directory on web?

Constitution study - still ongoing

September meeting - what did you do on your summer vacation?

Board votes to donate to Friends of Highland Light for ILLW activation.

Thanks  
John KK1X

### August Treasurers Report

Income for August was \$30 in membership renewals. Expenses were \$18.40 for newsletter postage and \$105 for Field Day pins, leaving a net expense for August of \$93.40.

Current balances:

General fund	\$2,453.38
Community fund	\$4,636.41

As of 1 August we have 39 members who are current with their dues and 32 renewals outstanding. Please check your renewal status on the roster circulated at the monthly meeting or ask Ralph.

If you are joining ARRL or renewing your membership please consider letting Ralph send in the paperwork for you. The Club will buy the stamp and will get a commission from ARRL. ARRL membership checks should be made payable to NVARC; Ralph deducts the Club commission before forwarding your paperwork to Newington. As an Special Service Club, the ARRL expects a majority of Club members to also be ARRL members.

Ralph KD1SM



## Yearbook Update Reminder

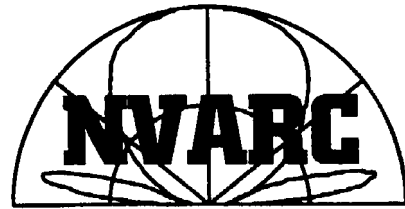
Update pages and full Yearbooks for new members will be available at the September meeting.

Members noting errors in the members info pages such as phone numbers, addresses, email addresses need to see Ralph KD1SM with corrected info. The Treasurers database is the last word when it comes to updating this information.

Stan KD1LE Yearbook Editor

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Your article could have been here.



## Nashoba Valley Amateur Radio Club

PO Box # 900  
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<http://www.n1nc.org/>

President: Skip Youngberg K1NKR

Vice President: Jim Hein N8VIM

Secretary: John Griswold KK1X

Treasurer: Ralph Swick KD1SM

Board Members:

Dan Pedtke 2011-2014

Rod Hersh WA1TAC 2012-2015

Bob Reif: W1XP 2013-2016

Editor: Stan Pozerski KD1LE

Emergency Coordinator: Larry Swezey KB1ESR

Photographer: Ralph Swick KD1SM

PIO: Roland Guilmette

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

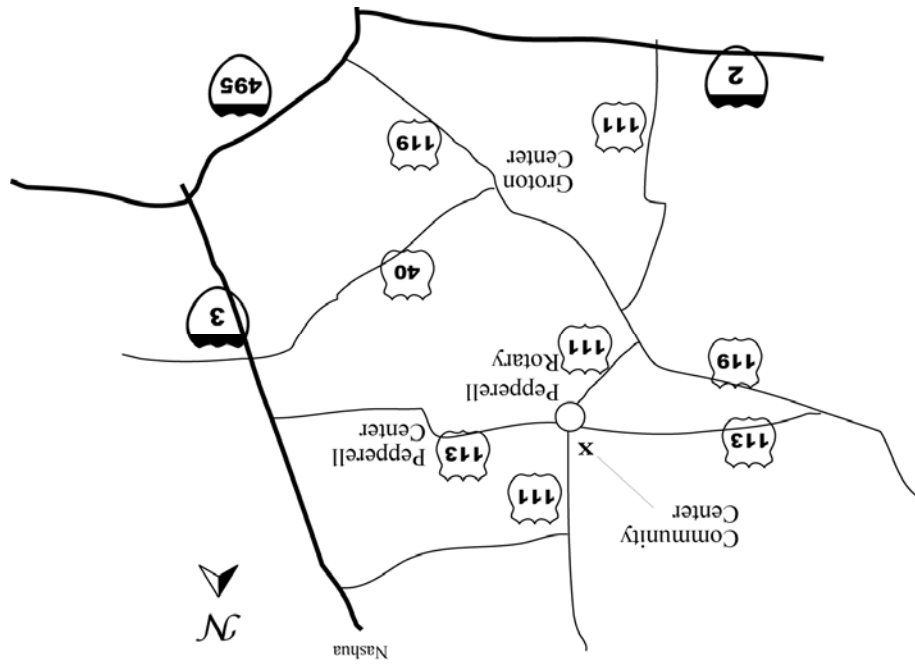
442.900 + 100Hz Repeater battery power

147.345 + 100 Hz Repeater

53.890 – 100Hz Repeater battery power

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

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