

SIGNAL



de NINC

October 2013 Volume 22 Number 10

This Month's Meeting

This month's meeting is October 17th at the Pepperell Community Center at 7:30 PM. The program will be the annual QSL Card Sort.

Last Month's Meeting

Eric Williams, KV1J presented on how the incoming and outgoing ARRL QSL Bureau's operate.



Photo Courtesy of KD1SM

Above Eric receives the coveted NVARC mug.

Our QSL presort handles about one month's worth of incoming QSL cards for the W1 QSL Bureau. NVARC sort's the largest number of cards of any of the club presorts.

Attendees:

Bruce K1BG, Dennis K1LGQ, Leo K1LK, Skip K1NKR, Bill K1NS, Gary K1YTS, Wolf KA1VOU, Phil KB1JKL, Ken KB1UVP, Stan KD1LE, Ralph KD1SM, John KK1X, Eric KV1J, Dan KW2T, Ed N1YFK, Peter N1ZRG, Jim N8VIM, Roland NR1G, Larry W1ESR,

Dick W1LTN, Dennis W1UE, Bob W1XP, Rod WA1TAC, Russ WR1Y

President's Corner

President's Corner

de Skip, K1NKR

Of Symphonies, Systems, and Stories

I had the chance recently to attend a rehearsal of the Boston Symphony Orchestra. Interesting. All the members were there in their casual dress—mostly sneakers, jeans and baseball caps. Even Yo Yo Ma practiced with his sleeves rolled up. Just a bunch of working stiffs getting the job done like everyone else. Well, not so. This was excellence in action. And excellence pervades our entire region. The arts, education, medicine, science and engineering, finance. We are exceptionally blessed to live here, in and around the Hub of the Universe.

(If you think I'm going high-brow on you, sit back for a couple of hundred years. Somebody then is sure to view your acid rock, rap, and hip-hop as classical music. It's got staying power, right?)

But that's not my point. It's design. As I was sitting there I realized that creating and playing a symphony is really a design effort. It all fits together exquisitely, from the first inspiration to the direction to the last clap of the cymbals. Everybody involved does what he or she does out of love for the activity: *amateur*.

The more I talk with members as individuals the more I realize that the same excellence pervades our entire club. The breadth of talent, achievement, and interest is astounding.

We're all designers at one level or another. Design at the circuit level, at the equipment level, and at the system level. Even at the operational level. We usually think of design as so many transistors, ICs,

resistors, capacitors, and inductors. But it's more than that. There are interconnects so that equipment functions—keys, mics, antenna tuners, SWR bridges, and the like. There are hardware and software that can be integrated to add a new mode or do logging or control your rotor and antenna. There's even the "design" of how you operate—skills and procedures that make you a more effective DXer, or EMCOM participant, or contester, or moonbouncer (or ragchewer).

OK. The days are getting shorter and that means we can devote more time to things around the shack. Now start planning that project. How's your station set up? We've got a bit over two months until NVARC's Homebrew Night and another month before Short Subjects Night. We're a creative and inventive lot. I bet your NVARC colleagues would like to hear what you've been doing.

This Month's Program

It's time for NVARC's annual October QSL Sort and pizza bash. Not much to say: come, sort, socialize, eat.

And look forward as well to next month. The Boston Marathon is one of the best known events in the world and local hams are an integral part of it. Steve Schwarm, W3EVE, is "Mr Communicator" for the Marathon and he'll be with us for what promises to be a fascinating and newsworthy talk. No secondary presentation in November; Steve's got the whole evening.

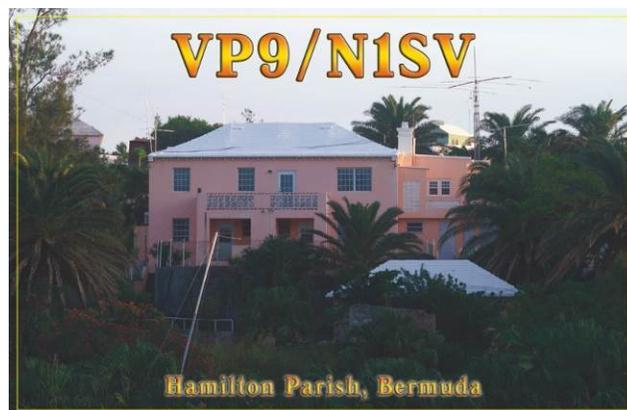
Other Stuff (Otherwise known as Strays)

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.

Congratulations to Dan, KW2T. Dan resurrected his milliwatt microwave gear and participated in both weekends of the ARRL 10GHz Contest, racking up an impressive 35 QSOs while operating from the Cape in August and numerous hilltops in Vermont in September. His typical QSOs were in the hundred mile range. Yes, that was milliwatt microwave.

Jim, N8VIM, who is our ultra-reliable source of power for Field Day has branched out. Jim just permanently installed four solar panels on his roof and put the necessary DC-to-AC inverters in his basement. Jim is now converting photons to electrons and generating close to a kilowatt. Running an extension cord to our Heald Street Field Day site may be a challenge, though.

Operating From Bermuda as VP9/N1SV & VP9I (2010-2012)



As I prepare for my fourth and most likely last trip to Bermuda, I thought I would reflect on my experiences operating from there in the hopes that someone else might decide to give it a try.

I've been a member of the Yankee Clipper Contest Club for a long time and each year a number of our members travel outside the US to operate one or more of the major international contests. This seemed like fun to me but I had no idea of how to get started. So I contacted my friend Kurt W6PH, a retired commercial airline pilot. Kurt does a lot of travelling and has been operating from Bermuda every spring in the ARRL DX CW & SSB contests for as long as I can remember. Kurt introduced me to Ed VP9GE (www.vp9ge.com) who runs a DX rental business in Hamilton. DX rentals are a cottage business where hams rent out an apartment or house complete with antennas and other equipment. This is a good way to experience operating outside the US without the logistics of having to bring your own antennas. And while some DX rentals may provide a radio I would rather bring my own that I am more familiar with.

Bermuda is a short 90 minute flight from Boston and serviced by most major airlines. Obtaining a license to operate in Bermuda was easy, I just e-mailed Ed a copy of my US license and he secured my operating permit before arrival. Ed VP9GE has two apartments underneath his house with one hooked into his antenna system. VP9GE is located atop a ridge less than 200 yards from the Atlantic Ocean facing the Northwest with a modest antenna system. He uses a Cushcraft A4S Tribander on a 40-foot tower with dipoles for 40 and 80m, and an inverted-L for 160m.



View from my front door

Kurt W6PH was indispensable in answering questions and pointing me in the right direction. One of the pointers he gave me was that if I was planning on bringing my own transceiver that I should pack it in my carryon bag so that it would have the best chance of arriving in one piece (I kept thinking of that old American Tourister commercial with the gorilla)! Packing was a little bit of challenge since I was travelling alone. I had to make sure I had everything I needed to operate and still have everything fit in a carry-on bag and a backpack. I brought my Kenwood TS2000 (which took up 75% of my carry-on) and a laptop in addition to my personal items.



I hope the airline doesn't weigh this stuff!

Since my favorite contest has always been the CQWW Phone contest it made sense that if I was

going to plan a trip that I do it around that contest. DX rentals become very popular around major contest weekends so I had to make reservations more than a year in advance. I made my first trip to Bermuda in October 2010. About 20 minutes after arriving at my apartment I was QRV as VP9/N1SV. It was a strange feeling to be the hunted DX instead of the DX hunter. I had a lot of fun running stations and made 377 contacts prior to the contest. While I have been successful operating the CQWW Phone contest from home, operating it from Bermuda was a very humbling experience! I think I made about every mistake in the book. Saturday morning was a disaster trying to run Europeans on 20m. Sunday I finally got the hang of things but by then the damage had already been done and I finished the contest with a very disappointing 1.5M points. So Monday morning I packed everything up and headed to the airport to catch my flight home.



The VP9/N1SV operating position

I returned to Bermuda in 2011 adding an extra day onto the beginning of my trip. The extra day allowed me more time to check propagation and get myself better acclimated to the bands. It also allowed me some time to actually see the island! Bermuda has a nice public transit system that includes buses and ferries that are all pink. It costs about \$4 USD to take the bus into either St. George or Hamilton from in front of my apartment. For the same price you can also take a ferry from Hamilton to the Dockyard or to St. George. The Dockyard is an old Royal Navy base built after the American revolutionary war and used up until the cold war.

In the CQWW Phone contest I decided to use Ed's contest call VP9I which was much easier for me and I'm sure less confusing for others to copy than VP9/N1SV. Most of the improvements I made from the previous year worked well however I still strug-

gled to effectively work split (transmit on one frequency and listen on another) on 40m and still made some bad band change decisions. I finished the contest with a much more respectable score of 2.8M points and placed #9 in the World.

I decided to return to Bermuda in 2012 partly because I anticipated that we would be close to the top of the solar cycle but also because I felt that I could put in a better effort than the previous year. Conditions on the high bands were very good when I arrived and I hoped it would continue into the contest. This trip I decided to take some time to explore the city of St. George. St. George was settled in 1612 and became the country's capital until 1815 when it was replaced by the more modern Hamilton. Much of St. George remains as it was hundreds of years ago, narrow cobblestone streets with pastel colored buildings. A short walk from St. George is Fort St. Catherine, an old Fort they turned into a Museum.



Fort St. Catherine

Conditions during the contest were better on Saturday than Sunday. Sunday morning signals on 10m to Europe were down and I couldn't get a run started to save my butt! I finally gave up midmorning and moved to 15m and had a huge European run working almost 400 stations in 90 minutes. In the end I finished with 3.795M points, a new personal high score, #5 in the World, and a new Bermuda record (old record was 3.2M by VP9ID in to 1997).



New Bermuda Record

After the contest ended I realized Hurricane Sandy had hit the NY/NJ coastline and my flight out on Monday morning through JFK was cancelled. So I stayed an extra two days until I could arrange a flight home and made the best of it operating a little more and visiting more of the island.

Operating from outside the US has been a wonderful learning experience and has allowed me the opportunity to see the other side of the DX pileup, one that many callers rarely see. By the time you read this it should almost be time for me to leave on this year's trip. I expect to be QRV as VP9/N1SV the evening of October 23rd (local) and then again as VP9I during the contest which begins 0000z on the 26th and continues until 2359z on the 27th. I look forward to working as many NVARC members as possible both as VP9/N1SV and VP9I! Remember if you work VP9I the QSL manager is WW3S.

Summer Study Report

Just over a year ago, Skip asked the three board members to conduct a review of the club Constitution and By-Laws. I am pleased to report that this has been completed and a draft reflecting the Study results has been submitted to the board for consideration. In general we found little to bring to the attention of the club. There were minor spelling and grammatical corrections. In addition there are minor changes that may be considered to the Constitution and By-Laws. These corrections and changes will be submitted to the membership at a later date for review and consideration for approval.

I would like to thank both Rod WA1TAC and Roland, NR1G, for their support in this effort. Especially Ro-

land who did the lion's share of the heavy lifting in this effort. 73 Bob W1XP

NVARC Forth Annual Lantern Battery Challenge Conclusion

Ed—note: This article was scheduled to be in the May newsletter but was missed. That omission was not discovered until recently so it is included now.

May 2013

The Fourth Annual NVARC Lantern Battery Challenge has ended. We had the award ceremony at the April meeting and there were six of the seven award winners present to receive their awards. This year we had seven logs submitted in four categories. Before we get to the awards a bit of review. This year the battery consisted of 9 AA alkaline batteries. This represented a considerable reduction in the energy available. But it seems that many of the operators rose to the challenge and after making numerous contacts had energy left in the batteries when the event ended. Others pretty well reduced the battery to mud. Take heart, I think next years event will be back to a version of the "real" lantern battery.

Now to go on to the rewards. First of all, Bruce K1BG entered in the Unlimited CW mode with a Rock Mite, crystal controlled 20 meter transceiver. This little rig only ran about 500 mw. And is crystal controlled on just one frequency. Bruce managed Six QSO's with Greece his best DX. All of his QSO's with one exception were with DX stations. I was pleased to come across Bruce one Saturday morning and worked him for a LBC QSO. His little rig sounded very good over here and it was especially fun for me to work another LBC station. Bruce received the first place award in the unlimited category. Well-done Bruce

Next in the SSB category, we had one entry this year from Skip, K1NKR. Skip took advantage of the addition of Six meters to the eligible bands this year and chose to operate with his FT817 in the ARRL January VHF Sweep Stakes contest. Skip reports that he has never heard less activity in the contest after years of operating it, than in the contest this January. This did not help him make contacts with the FT817 which draws a lot of current in the receive mode. But he did manage 4 QSOs. The FT817 draws enough current in receive to drop the fresh battery voltage down to 11.8 and to 10.5 in transmit at 2 watts. But using his trusty 50-year-old Cushcraft five-element beam at just over 30 feet he did

manage to work four stations in two grids. Well-done Skip. You'll be pleased when we go back to a bigger battery I am sure.

George, KB1HFT entered in the Digital mode using a Small Wonder Labs kit (PSK-20) that provided PSK-31 operation on 20 meters. This kit runs 3 to 4 watts, and connects to a computer sound card. George made eighteen QSOs in 11 states and three DXCC countries. But to make this even more of an accomplishment George did it all with indoor dipole antennas mounted in his attic. George managed to drain the batteries down to 8.4 volts which represents a pretty exhausted battery pack. George is enthusiastic to do it all again. George received the first place certificate at the awards last month. Well-done George.

And now for the last entry category. This is the CW mode. In this mode, there are four entries. First place goes to W1IS, Bob, with a total of 96 QSOs on 80 meters. Bob was using a 4-transistor transceiver, of a much-modified design. It tunes 3505 to 3575 and puts out 100 mw to a dipole antenna at 45 ft. This is a direct conversion radio and there is about 250 uwatts of LO leakage power in the receive mode. Bob reports that this very low power signals was copied in VT by another ham using a very simple receiver. Bob managed to QSO 16 states and provinces in the US and Canada. Judging by the battery voltage he reported at the end, he had more QSO's in the battery. But still very well done Bob.

Peter, KB1PBA made 60 QSOs on 40 meters with a SW40 kit at 1.5 watts out and a 67 ft dipole only 28 ft high. He reports that he averaged 8 minutes per QSO. That is 8 hours of transmitting time plus receiving time which is probably more. So Peter managed to get over 16 hours of service out of his battery pack and judging from the reported final voltage of 12.64 volts he had a lot more life left in the battery. Well-done Peter. He received the second place CW award.

Coming in third, was I, Bob, W1XP. I used several different rigs. Most of my 51 contacts were made using a K1 kit from Elecraft. I operated in the CQWW CW contest and was operating portable from NC. 15 meters was open for part of this time and I had a lot of fun working stations in the Pacific with just 3 watts. I also made some DX contacts on 20 meters in the contest. I used a KX3 on 10 meters (the K1 does not cover 10 meters) to make a few contacts on that band. After the contest I made more contacts using the K1 and I used a home brew 80-meter crystal controlled rig and DC receiver to make a contact in the SKN on New Years Eve. I

also had some life left in my battery with the end voltage measuring 11.0 volts. But it was a great time. I managed 34 DX countries in the contest. To reduce the strain on the battery I let it rest for about an hour after every 10 QSOs. This means I lost a lot of potential operating time. I'm not sure this was the wisest operating choice, but I had a great time.

The last log submitted was from John, KK1X. John captured forth place in the CW mode with one contact with his K1 transceiver. John had fun, he just regrets letting the operating period slip by.

All in all most of the answers to the comments on the summary forms "Did you have fun? were a very enthusiastic YES! (There was one I don't know how in interpret. It was "...more than a sharp stick in the eye...") Hi Anyway Fun is what this is supposed to be all about. Although the results varied a good deal as did the efforts, the fact that many expressed a desire to do it again is quite encouraging. So what about next time? Well I think we will be going back to the larger battery pack. But maybe we will have two battery divisions. A high and low energy division makes some sense. We have never been afraid of adding entry categories before. Hi. Your thoughts and comments are welcome. But since this year is the 90th anniversary of the first two way contact between amateurs across the pond it seems we should do something to celebrate the importance of this event. More to follow.

Again I want to thank all that took part in this year's event, and to also thank those that have helped bring off this event. The support of the NVARC board has been most helpful and appreciated. Till next time, 73 Bob W1XP

Board Meeting Notes

PS

The Board also voted to appropriate \$75 for pizza and soft drinks for the QSL sort.

Board Meeting 10/3/2013

Summer Project: Study closed; no fatal flaws in the Constitution. Some changes recommended. To publish the constitution and proposed constitution markup on website, and an article outlining changes in the newsletter, looking for initial discussion in December.

Skip met with Phil Eriksen. We as a club might assist Haystack with a Kids Day, looking to arrange

a club tour. Open House at Haystack TBD in October.

Revisited concept of open tech sessions and/or license upgrade classes.

Closed issue of Pledge of Allegiance due to lack of response.

Ed (call?) volunteered air pots for coffee. Ed to bring pots to October meeting in anticipation of November meeting (pizza and pop in October)

9 signed up for Lantern Battery Challenge.

Skip picking up 5 boxes of QSL cards for October sort.

September Treasurers Report

Income for September was \$140 in membership renewals, \$2 in ARRL membership renewals, \$2.21 in bank interest, \$15 from PowerPole connector distribution, and \$135 in Lantern Battery Challenge fees.

Expenses were \$18.40 for newsletter postage, and \$78.17 for Field Day food, and \$20 for August cookout, leaving a net income for August of \$177.64. We also made a contribution of \$50 from the Community Fund to Friends of Cape Cod Highland Light.

Current balances:

General fund	\$2,631.02
Community fund	\$4,586.41

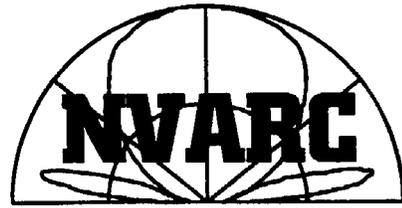
As of 3 October we have 41 members who are current with their dues and 30 renewals outstanding. Please check your renewal status on the roster circulated at the monthly meeting or ask Ralph.

If 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

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**Nashoba Valley
Amateur Radio Club**

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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

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Dan Pedtke 2011-2014

Rod Hersh WA1TAC 2012-2015

Bob Reif: W1XP 2013-2016

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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

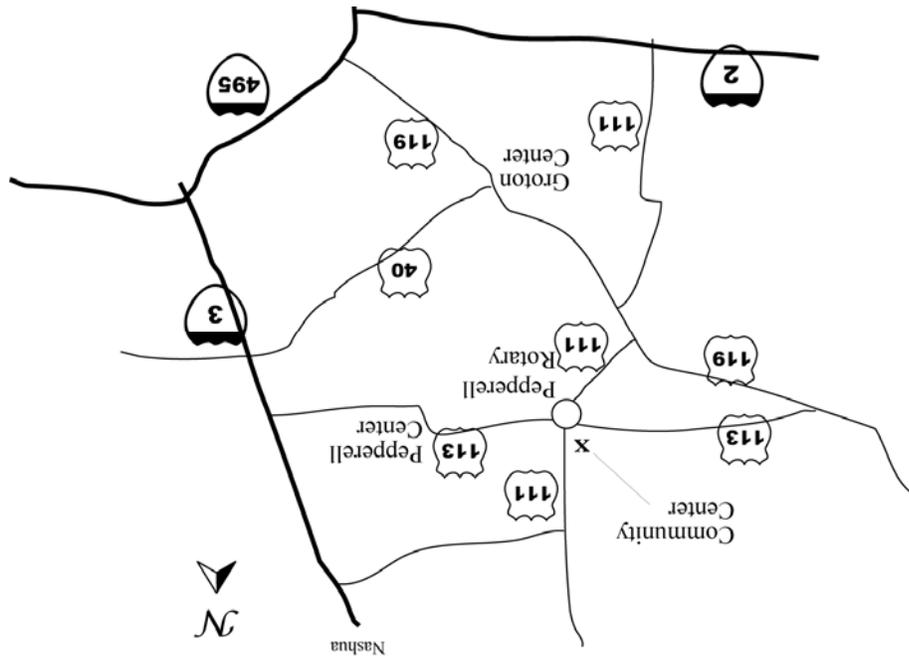
147.345 + 100 Hz Repeater

53.890 – 100Hz Repeater battery power

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