



SIGNAL

A club since 1992



Since 1993



Since 1996

de N1NC

July 2017

Volume 26 Number 7

This Month's Meeting

It's July. No meeting this month—or next month. There's still a lot going on, though. The picnic's coming up. And are you geared up for the Solar Eclipse QSO Party?

Last Month's Meeting



KK1X photo

June, the final meeting of the program year, highlighted Field Day preparations and a HamSCI presentation from Stan, KD1LE. Additionally, Tom Walsh, K1TW, the ARRL Eastern Massachusetts Section Manager visited and shared his thoughts on what's going on in the section. He brought three proclamations from the State of Massachusetts honoring Amateur Radio. (Due to the timing of their release, NVARC was the first club in the section to see the proclamations.)

The President's Corner

It has been a busy month with Field Day prep, FD itself, and FD recovery in the last few weeks. In fact, the manpower at the July Board meeting got double duty helping to put coax reels, stands, and the Black Box back into storage. With that done, I have just a few more smaller things to organize in the tower trailer to have things the way I like them.

I've been on the road to a couple of clubs with the Eclipse/HamSCI presentation. AND I gave it at the New England Division Cabinet Meeting out in Springfield last week. It was well received and I was asked to make the presentation available, so Ralph has put it up on our Website in both PPTX and PDF formats. If anyone hasn't seen it, the links are on the front page in the text just under the aerial picture of the Haystack site. I presented at the Billerica club and they got Jesse, W1DEA, to coordinate within their club for setting up WSPR stations. From the interest at the meeting, they may activate five or more stations during the eclipse. I expect fifteen or more from NVARC so I'm getting close to my goal of 21 locals. Next week I am scheduled to speak at Contoocook (Henniker NH) and Granite State (Bedford NH). The following week it will be at PART in Westford. Phil W1PJE and the HamSCI folks have been interested in promotional activities so there has been some regular communication there.

We ran the Ham Radio 101 session at the Pepperell Library in June and had a small

attendance. However, the talk was video recorded by Dave Pease from Pepperell Public Access and will eventually be available on their Video on Demand site. Dave also spent a lot of time with us on both days of Field Day this year. So out of curiosity I went to the site to see if the presentation was there yet. It was not, but under the category of Local Events there are two radio related videos. One is our Field Day of 2010 (80+ min) and the other is a video of the WRTC training session—which features some faces you will recognize. I don't know when the other events might be edited and available but I'll check back and let you know. The URL is www.pepperellchannel.org Look under Local Events.

We discussed at the July Board meeting whether or not Tech Night will continue. We are still looking for someone to “coordinate” it. What that entails is to be the focal point for members wanting to present (or run an activity) and to close the building at the end of the night. *The coordinator isn't solely responsible to supply the activities himself.*

We have begun planning next “seasons” meetings and with the exception of November we are set for the year. Anyone hear of a good presentation we might get?

I hope to see many (all! Ed.) of you at the picnic August 13th at the “Barn”. It starts at 2 PM. Bring your grub.

73, Stan KD1LE

News and Happenings

Field Day

NVARC's Field Day is now in the books! Much like last year, we had two magnificent days in a row out in the orchard, June 24-25: sunny and in the low 80s, with t-shirts, transceivers, cables, and antennas laid out in every direction. And while Pamplona may have the running of the bulls, the Heald Orchard has the running of the hams. We are blessed with volunteers for the “heavy lifting,” but surprisingly few of us actually operate. These infrastructure volunteers are always outstanding and well appreciated, but our goal for the year was to get as many

people actually on the air as possible. We succeeded.



KD1SM photos

Phil Erickson, W1PJE, was new to FD. Despite being a professional ionosphere observer, Phil had never experienced E-skip. After a quick introduction to FD exchanges he took off and made the best of the 6m action. Together with Stan, KD1LE, who provided some CW chops, they participated in a HamSCI experiment which used an orbiting spacecraft's RF receiver to look for terrestrial Field Day CW call signs penetrating the ionosphere.



A special visitor this year was distinguished ham, famous contest CW operator and all-around nice guy Ken Wolff, K1EA, of Cherry Valley, MA. After catching up with Bruce Blain for a bit, Ken spent some quality time with the code key in the CW tent and gave a serious boost to NVARC's FD point total.



Paula Terrasi, Pepperell's Conservation Commission Administrator, was our VIP visitor. The Commission issues the permit for us to use the town's Heald Orchard for our FD site, and provides the all-important mowing services that render the site usable! In gratitude for the Conservation Commission's longtime support of our FD activities, club President Stan Pozerski presented Paula with a gift from NVARC of several new programmable combination locks to secure various gates to town conservation lands. Paula returns her gratitude to the whole club. Dave Pease of Pepperell Community Media (and our local cable channels) spent much of his weekend with us, learning about what we do and capturing it on video for future promotional efforts.



*All non-KD1SM photos de K1NKR
de Jim AB1WQ*

Tech Night

Notwithstanding that we haven't advertised it a lot, TN participation is at a low ebb. Plus, the room reservation wasn't renewed. For this reason (per a note to the NVARC Board) our monthly TN activity has "officially ended" (or at least been put in abeyance *Ed*).

NE Division Cabinet Meeting

Twice a year Tom Frenaye, K1KI, ARRL New England Division Director, calls together the presidents of all ARRL affiliated clubs



in New England and all the New England Section Managers to meet with him. Tom refers to this group as his "cabinet".

The purpose of the meeting is for Tom to hear comments, concerns, and priorities of the ARRL membership in preparation for his participation in the ARRL Board of Directors meeting, where ARRL policy is set. Accordingly, Tom schedules these cabinet meetings two or three weeks before his Board meetings; in early January and early July.

The July cabinet meeting was in Springfield on the 1st. Clubs from CT, MA, NH, VT were in attendance. Stan Pozerski, KD1LE, represented NVARC and Ralph Swick, KD1SM, was present as one of the Western Mass Assistant Section Managers.

Given that this meeting was one week after Field Day, it started with a brief recap from the Section Managers on what they observed as they journeyed around various Field Day sites. A particular point rising from those observations is that the public signage can deter as well as invite the public to enter the site. In particular, signage that highlights Emergency Management might dissuade the public from visiting. Those site who had "greeters" to welcome the public—and visiting officials!—and explain the activity at the site were particularly applauded.

Tom Gallagher, NY2RF, ARRL CEO, was



also present for the first part of the meeting. Tom has experience in non-profit organization leadership and one of his big projects is a major redesign of the ARRL annual report to be more than just a financial report. Tom noted that the annual

report "has not been a big draw". He wants it to be an attention-grabber; the new design will be "snazzy" and intended to be publicity piece to explain the successes of Amateur Radio to our partner organizations and to the community.

The Toms Frenaye and Gallagher shared updates on FCC activity. Amateur allocations in two new Very Low Frequency bands have been approved at 2200 and 600 meters. There are additional FCC registration requirements at some of these frequencies to provide 30 day notice to power utilities so as to avoid potential interference with power line control systems. More generally, Tom Gallagher is very optimistic about the new FCC chairman. Tom reports that he is very talented and is acting more quickly than previous FCC chairs.

On the subject of the future of Amateur Radio from the perspective of our partner organizations, Tom Gallagher shared that "the Public Safety community needs Amateur Radio to invest in digital technology. If we want to [continue to] participate in emergency communications, we must evolve in the directions our served agencies want."

One constant topic at these cabinet meetings is the number of licensees. The number of new licensees is larger than the number of silent keys and non-renewals. However, Tom Gallagher reports that of 30,000 new licensees each year only half get on the air. As one of the goals of Amateur Radio is to advance the state of the art, Tom has been working on a proposal for a "lifelong learning program" to keep people interested in participating and maintaining their licenses. While there is continued discussion of the youth programs, one point that was raised by a club president at this meeting was that we should be "targeting" those in the 25 to 40 age bracket;. This segment has established their careers and families and are the ones who are beginning to have more time available for "hobbies."

A major topic at this upcoming July Board of Directors meeting will be discussion of the report of the Entry Level License Committee. This committee was created by the board a year ago

"to examine the current license exam requirements for the Technician Class license and make recommendations for change, including consideration of a new entry license class, to the Board for possible changes that might be recommended to create a more targeted examination with a more limited set of privileges that would attract a new generation of amateurs."

NVARC member Bruce Blain, K1BG, is one of the eight committee members. The

committee submitted a preliminary report to the ARRL Board in January, which can be read at <http://www.arrl.org/files/file/About%20ARRL/Committee%20Reports/2017/January/1701-ELL.pdf>. The committee's final report is to be presented and discussed by the Board this month.

Stan presented the plans for HamSci and the upcoming (August 21) eclipse. He encouraged the other clubs to participate and encourage their members to contribute to the data collection activities. Stan described what he, Skip, K1NKR, and Phil, W1PJE, have been coordinating for NVARC.

If you are interested in the more detailed minutes of the meeting produced by Mike Raisbeck, K1TWF, New England Division Vice Director, you can ask Stan or Ralph.

(Photo credits: WRTC-2014 and ARRL)

de Ralph KD1SM

Editor's Note

In assembling the newsletter, I occasionally get inspiration from the bi-monthly Yankee magazine. Having lived all over the US, I can say that we are truly fortunate to live here. The Maine coast, the Berkshires, both Massachusetts capes; the ARRL, our sister clubs, multiple radio museums and historical sites; and NVARC.

And Yankee. I say that because it isn't just a regional travel magazine. It's full of curiosities, history, and the labors of multi-talented literati. (Them's the folks who refer to other people as "who" instead of "that.") It's a microcosm of the best of New England. So is NVARC in its own way.

As you know, there is a cyclic nature to our club activities and events. TDOTA-came and went in February and, good publicity as it was, we were probably tired of hearing about it by April. Public Service season peaked in April and pretty much closed at the end of May with our support of the Memorial Day parade. Next comes the summer and the club picnic. And in the fall, we'll embark on QSL sorts, contests, and technology. Well, the cycle does make putting the newsletter together easier. Did you notice an "al-

ways enough reason to get out and operate” theme over the past few months?

And it all goes to show that we are indeed an all-interest, all-service local club. I’ve watched the Board for a number of years and a couple of administrations. They honestly try to ensure a balance of topics for meetings presentations and activities. Technical, public service, operating, homebrew, contesting, DXing, analog and digital, QRP and QRO, HF as well as VHF and up—you name it.

Now July is upon us, leading into August. This is the time when, with the rising heat and humidity, my get-up-and-go usually gets up and goes—elsewhere. All this is preface to—or warning about—a continued push this summer in the HamSCI (Amateur Radio Science Citizen Investigation) arena. The details are elsewhere in this issue. So (here it comes), get on and operate.



“The Earth may not be at the center of the universe but Boston is at its hub.” And Pepperell isn’t far away, with NVARC at the center of that.

73, Skip K1NKR

On the Air

Considering the Amateur Spectrum as a National Treasure

The US National Park Service manages the almost 400 sites in the National Park system covering 84.6 million acres, or 3.4 percent of U.S. land. Seventy-nine million acres of this is NPS stewardship land, and the remaining lands are not federally owned, but managed by NPS.



Source: Google Images

Overall, the protected areas of the United States are managed by an array of different federal, state, tribal and local level authorities and receive widely varying levels of protection. Some areas are managed as wilderness, while others are operated with acceptable commercial exploitation. As of 2015, the 25,800 protected areas covered 14 percent of the land area of the United States. This is also one-tenth of the protected land area of the world.

Amateurs have an average of 7.3% of the total spectrum. Just so you don’t think all those multi-hundred Megahertz microwave bands skew things, that actually breaks down to 7.8% of MF (0.3-3 MHz), 11.9% of HF, 4.4% of VHF, 6.9% of UHF, 4.5% of SHF, and 8.1% of EHF. So it’s pretty even overall.



Photo: Google images (edited). Information sources: Wikipedia and personal frequency allocation database analysis.

What's it "cost" to enter our Amateur Radio National Parks? Merely proving that you have an appreciation of the technology and responsibility entrusted to you. You do this by passing your license exam and operating in the role of both a spectrum user and a spectrum environmentalist. Remember, with only petty exceptions, Radio Amateurs are the only people in the world who are licensed to use the airwaves; all other licenses are granted to governments, companies, and organizations. The RF is a protected treasure for us. It's just business for them.

de Skip K1NKR

Hints and Kinks

An excellent explanation of time zones can be found at www.youtube.com/watch?v=9GBBD_si0QQ

Strays

Want a surprise certificate for a contest you entered? Look at the July QST. KE6GFI took the Southeastern Division "Single Operator, FM Only" category of the January 2017 VHF Contest with ONE point! All you need to do is send in a log. Hey, you never know.



Is it true that Heinrich Hertz' brother was named O. Howard?



On the list of most-wanted DXCC entities, where does Banana Republic lie? Does a DXpedition there require the support of Old Navy?

Treasurer's Report

Income for June was \$75 from membership fees and \$20 from PowerPole connector sales. Expenses were \$25 for the May speaker mileage honorarium, \$73 for the outgoing QSL Bureau and \$121.37 for Field Day, leaving a net expense of \$124.37 for the month. We also disbursed \$84.89 from the Community Fund for the padlock donation to the Pepperell Conservation Commission.

Current balances:

General fund \$2,855.95

Community fund \$5,051.52

As of 6 July we have 42 members who are current with their dues and 20 renewals outstanding. Thank you to those of you who hand in your dues before I come to you. Please check your renewal status on the roster circulated at the monthly meeting or ask me.

de Ralph KD1SM

Board Meeting Notes

Board meeting 7/6/2017

Attending: Stan KD1LE, John KK1X, Ralph KD1SM, Rod WA1TAC, Jim AB1WQ, Ed N1YFK.

- Stan visited Dave Peabody N1MNX at the nursing home in Westford, and delivered card from club members, which was appreciated.
- No stamp expense this month - Ralph used leftovers from prior mailings.
- Field Day report still being generated.
- Andy Wallace speaking on Vibroplex bugs. KA1GTT in September.
- Stan to touch base with Eric regarding card sort in October.
- Still need a presentation for November.

- Looks like Tech Night is waning. Stan will write an article for the newsletter, but if no bellwether comes along, Tech Night will go away.
- Jim AB1WQ to send a challenge email to the club - he's done a few - who wants to step up to the plate?
- Bill for Portalet received and given to Ralph.
- Stan did the "HamSCI and Solar Eclipse" presentation for Billerica ARS.
- Lighthouses on the Air coming up in August. Third Weekend of August. JOTA in October - do we know anybody who needs help with this? VT State Parks on the air from our friends in Northern VT. June 1 - May 30, 2018.
- Stan did Ham 101 at the Lawrence Library and had one "civilian" attend. <http://pepperellchannel.org/VOD.html> is where we can (*i.e., where the video will be posted Ed.*) find the Ham101 video.

Respectfully submitted,
de John KK1X

Club Services

Summer Picnic. Don't forget. We'll get together on 6 August at WW4EN's QTH.

Calendar

Upcoming Events

- July**
16 Flea at MIT
- August**
6 NVARC Picnic at WW4EN!!!!
20 Flea at MIT
27 NoBARC Hamfest, Adams MA
- September**
8-10 N E Division Convention, Boxboro MA
17 Flea at MIT
21 First NVARC meeting of the new "program year"
- October**
13/14 NEARfest, Deerfield NH
15 Flea at MIT, Cambridge

21 NEARC Antiques, Brookline NH

Upcoming Operating Activities

July

8/9 IARU World Championship

August

5/6 August UHF Contest

19/20 10 GHz & Up (Round 1)

20 Rookie Roundup RTTY

21 Solar Eclipse QSO Party!!!!

September

9/10 EME 2.3 GHz & Up

9-11 September VHF Contest

16/17 10 GHz & Up (Round 2)

October

7/8 EME 50-1296

16-20 School Club Roundup

November

4/5 EME 50-1296

4-6 CW Sweepstakes

18-20 Phone Sweepstakes

December

1-3 160 Meter Contest

9/10 10 Meter Contest

17 Rookie Roundup CW

Are you a "contest nut?" See <http://www.arrrl.org/contest-calendar> (Contest Corral) for month-by-month listings of both ARRL and non-ARRL contests.

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HEY!!!!

**The NVARC PICNIC is at WW4EN
on 6 August.**



K1NKR photo

STILL MORE HEY!!!!

We missed you!

Your article could have been here.

There's a whole page and a half more space available.

It's your club and your newsletter.

What are you waiting for?



**Nashoba Valley
Amateur Radio Club**

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

President: Stan Pozerski KD1LE

Vice President: Jim Hein N8VIM

Secretary: John Griswold KK1X

Treasurer: Ralph Swick KD1SM

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Jim Wilber AB1WQ, 2016-2019

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N1NC Trustee: Bruce Blain K1BG

Join NVARC! Annual membership dues are \$15;
\$20 for a family.

Meetings are held on the 3rd Thursday of the
month at 7:30 p.m. in the Pepperell Community
Center.

Contact us on the N1MNX repeater.

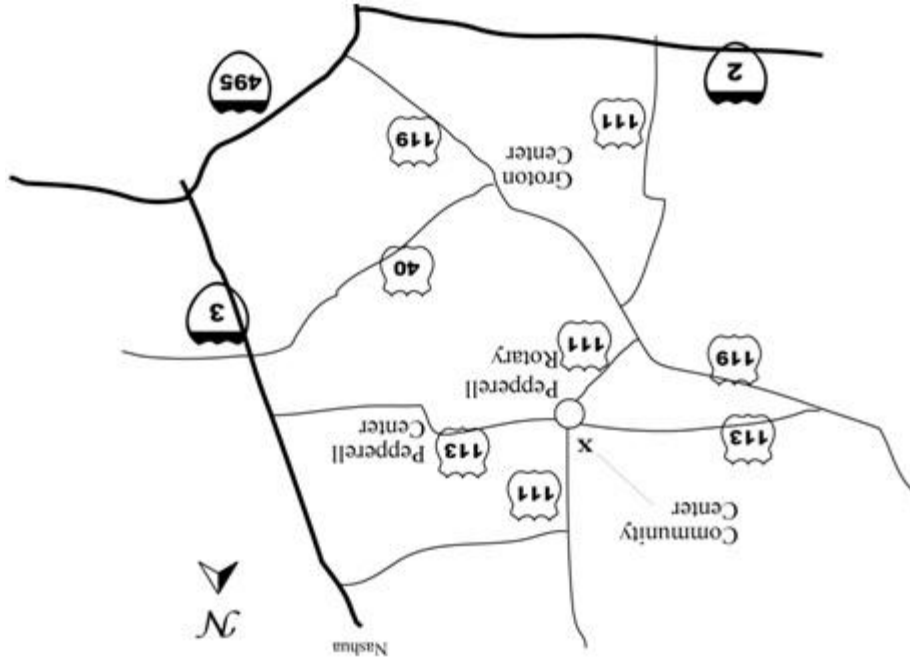
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