



# SIGNAL

A club since 1992



Since 1993



Since 1996

de N1NC

November 2021

Volume 30 Number 11

## In this Issue

- A cool ¼ wave counterpoise for a 2m mag-mount antenna. *de* John, K1JEB .....2
- A History of Entry Level Licensing: Part 2. *de* Bruce, K1BG.....2
- Boston Amateur Radio Club’s Technician-Class POTA Day .....4
- An Index of Some Very Interesting Ham Radio web links. *de* Joe, K1YOW.....4
- Ham Radio in the Media: An Observation *de* Bruce, K1BG.....5

## NVARC Monthly Meetings

NVARC general meetings are scheduled for the third Thursday of the month at 2430 UTC (7:30pm, Eastern Time). Meetings are usually held at the Pepperell Community center and are lately available via Zoom.

**HOWEVER**, this month’s QSL Sorting meeting will not be available via Zoom. See below.

Non-members who are interested in attending regular meetings via Zoom may send an email to [meetings@n1nc.org](mailto:meetings@n1nc.org) requesting the teleconference details.

NVARC thanks **Medtronic, Inc** for providing the teleconferencing services under their employee volunteer support program for non-profit organizations.

## This Month’s Meeting

The November 2021 NVARC General meeting will be at the Pepperell Community center, and

will consist of our annual QSL Card Sort process that assists in the ARRL Incoming QSL Service.

C’mon down to the Pepperell Community Center and lend a hand. It’s easy & fun!

## Next Month’s Meeting

The November NVARC meeting will consist of our annual “Homebrew Night” Show the club what you’ve been working on!

## The President’s Corner

*de* Bruce, K1BG

November marks an annual high point for me: the annual NVARC QSL card sort!

NVARC has been sorting somewhere around 20,000 cards annually going back to sometime in the mid-1990s.

The sorting itself is interesting: you get to see personal QSL cards from all over the world sent to US hams with a “1” in their callsigns. We help sort those cards so that they eventually get to the desired recipient. Most of them are local here in New England. See <http://www.arrl.org/incoming-qsl-service> for more details on the ARRL services.

The meetings tend to be very social. You strike up interesting conversations with other local hams who come out to help (and not always just NVARC members) while sorting the cards.

The sorting usually takes only about an hour or so (yes, we have it down to a science!), and we finish the night with pizza and soft drinks.

NVARC will also offer our “outgoing” service at the card sort.

To take advantage of this, sort your outgoing international cards according to DXCC country, attach proof of ARRL membership (a copy of your

QST mailing label, for instance), and bring them to the sort. NVARC will pick up any costs associated with sending them out through the bureau.

A word of note: This meeting will **not** be simulcast on Zoom. QSL sorting requires active participation, which is something you can't do remotely. If you want to participate, you need to be THERE.



NVARC has borrowed an idea from the Billerica Amateur Radio Society. The idea is: on a monthly basis, FCC files are scanned, and newly licensed hams in the area are sent a postcard introducing them to NVARC.

The card looks like a QSL card – but it contains information on the club, what we do, and how to find us. BARS has found the program to be very successful in attracting newly licensed hams. I hope we have the same success. If you are interested in helping with this effort – let me know. It's pretty easy, and should be fun.

**NASHOBA VALLEY AMATEUR RADIO CLUB**

# N1NC

[www.n1nc.org](http://www.n1nc.org)

Monthly Meetings – Mentoring – Public Service  
 Newsletter - On-Air-Activities - Social Breakfast

Front of Card

**Welcome to Ham Radio!**

Your information appeared in the FCC ULS database as a newly licensed Amateur Radio operator. Congratulations! When starting any new hobby, connecting with mentors will help you enjoy the experience. Local clubs are the social meeting place of the hobby. They can introduce you to a wide range of activities in Amateur Radio and help make it fun. Please check out NVARC at [WWW.N1NC.ORG](http://WWW.N1NC.ORG). You can also explore other clubs by visiting:

[www.arrl.org/find-a-club](http://www.arrl.org/find-a-club)

Greetings from everyone at the  
 Nashoba Valley Amateur Radio Club!

Back of Card



All of you who are on the club email reflector know that the weekly 2 meter net has started up again.

We are looking for volunteers to take net control once-in-a-while. Again, this is pretty easy – let me know if you can help out.

See you at the card sort!

-de Bruce, K1BG

**A cool ¼ wave counterpoise  
 for a 2m mag-mount**  
*de John, K1JEB*



“This garbage can is a perfect ¼ wave ground plane for my 2m mag mount antenna! I get a 1:1 SWR match. On today's (Nov 8) Monday net it performed better than my other 2m antenna. So far.

I got the can at Aubuchon HW”

*de John, K1JEB*

**The History of Entry-Level Licensing  
 Part 2**  
*de Bruce, K1BG*

Last month I talked about the history of entry level licensing through the 1920s. In this installment I'll try to cover history in the 1930's and into the late 1940's.

Beginning in 1930, the ARRL published a series of articles in QST called “Passing the Government Examination for Amateur Operator's License”<sup>1,2</sup>.

This was a two-part series, which published all of the questions and answers that one might receive when being tested for the amateur operator's license.

<sup>1</sup> <https://worldradiohistory.com/Archive-DX/QST/30s/QST-1930-01.pdf>, page 35

<sup>2</sup> <https://worldradiohistory.com/Archive-DX/QST/30s/QST-1930-02.pdf>, page 39

In 1933, this culminated in the publication of the first Radio Amateurs License manual (which I have a .pdf copy of if anyone is interested).

The Radio Act of 1932 somewhat altered amateur radio in the US again.

First, the Federal Radio Commission was re-branded the Federal Communications Commission. The names of the license classes were again changed, with the entry level class now being the new "Class B" (with "Class C" being by mail if you lived too far from an FCC office).

The test at this time consisted of a 10 WPM Morse code test plus a 10-question essay exam.

In 1936, the Morse code requirement for an amateur license was increased from 10 WPM to 13 WPM. This was done at the request of the ARRL<sup>3</sup>.

The "Operating News" column in QST thoroughly discusses the background and thinking involved in this change:

"The ham body as a whole is relieved and pleased to know that F.C.C. acted so promptly and effectively to 'make better hams' of those joining the fraternity".

In my opinion, this was lots and lots of verbiage to support making amateur radio more "elite".

Beware of what you ask for! QST's "It Seems to Us" editorial in the May 1938 edition laments that the average age for ARRL member is increasing, from 22 years old in 1926 to 30 years old in 1938<sup>4</sup>, and that the minimum age for entering the hobby is increasing.

"The major trend in amateur radio during the past decade seems to have been toward an increasing maturity". Amateur radio "has long been more than just a hobby for youngsters; it has now gotten well beyond their reach".

1940 brought two related changes to the entry level test. First, the test went from a 10 question "blue book" essay exam to a 40 question "mostly" multiple choice exam<sup>5</sup>.

<sup>3</sup> <https://worldradiohistory.com/Archive-DX/QST/30s/QST-1936-09.pdf>, page 43

<sup>4</sup> <https://worldradiohistory.com/Archive-DX/QST/30s/QST-1938-05.pdf>, page 7

<sup>5</sup> <https://worldradiohistory.com/Archive-DX/QST/40s/QST-1940-06.pdf>, page 7

There were questions that required drawing a schematic diagram, but most of the questions were multiple choice.

Around this time, the FCC started publishing the questions that would appear in the various educational guides being published. The ARRL License Manual published these questions provided by the FCC, and then answered those questions for the student.

With this revision, the questions in the license manual for a class B license went from 168 questions to 68 questions.

Again, I have many of the license manuals in .pdf format, and if you would like to compare these, please let me know.



The attack on Pearl Harbor and World War II curtailed amateur radio for the early half on the 1940s. Many sailors and soldiers returned from the war with both the technical skills and operating skills necessary to become licensed radio amateurs.

The country, however, was changing. Besides the need for skilled radio engineers, the new field of television was rapidly developing. Meanwhile, the average age of an amateur operator was on the increase, now being almost 34 years old<sup>6</sup>.

In April 1949, the FCC released a Notice of Proposed Rule Making, NPRM-9295<sup>7</sup>. It proposed wide ranging changes to amateur radio. Amongst these was a new class of license: The Novice Class.

The NPRM specifically said the following: "Paragraph 7(c): Creation of initial interest on the part of the novice, particularly youth, through the establishment of a short term, non-renewable beginner's license of comparatively easy attainment."

The Novice license would become the entry level license for the next 40+ years.

In the next installment, I'll talk in detail about the novice license, the politics in making it a reality, and its impact on amateur licensing in the United States.

de Bruce, K1BG

<sup>6</sup> <https://worldradiohistory.com/Archive-Radio-News/40s/Radio-News-1948-09-R.pdf>, page 8

<sup>7</sup> <https://worldradiohistory.com/Archive-DX/QST/40s/QST-1949-06.pdf>, page 20

## Boston Amateur Radio Club's Technician Class POTA Day

The Boston Amateur Radio Club will host a Parks on the Air (POTA) event with a special invitation to Technician license holders and new hams on November 20th, 2021.

The event will take place in the Blue Hills Reservation in Milton at the Mount Chickatawbut summit. BARC will attempt to "activate" the park according to POTA rules using VHF, UHF, and the Technician segments of the HF bands.

Bring your handheld and any other radio you want to try out on the summit. BARC will provide some power sources and a few different antennas for you to experiment with.

You will also have an opportunity to operate on six and ten meters.

Brendan, NW1S, and Joe, NV1W, will be on hand to answer questions and help introduce you to amateur radio in the great outdoors. There will even be prizes for accomplishments things like most contacts made, farthest contact, and most Technician bands used. Afterwards there will be a social event of food and drinks.

You may park at a lower parking lot and hike the short path to the summit. The Boston Amateur Radio club is attempting to organize a car to bring those who cannot, or wish not to walk the distance to the summit. Further information on the Blue Hills can be found at:

<https://friendsofthebluehills.org>.

Please email Brendan, NW1S at [nw1s.brendan@gmail.com](mailto:nw1s.brendan@gmail.com) if you're planning to attend.

Join us at the 110 Grill in Braintree afterwards for some food and drinks! Please include in your email if you will be joining us at 110 Grill so we can make a proper reservation.

Updates on the Tech POTA Day can be found at BARC.org, and @W1BOS on Facebook and Twitter.

Do you want to participate without making the trek up Mount Chickatawbut? You can hunt for BARC operators on Saturday: look for BARC on the POTA.us spot page, the @W1BOS Twitter or on the National Calling Frequencies.

## An Index of some Very Interesting Ham Radio Web Links *de Joe, K1YOW*

[Editor's Note: Joe had previously eMailed this Index to the NVARC members via the NVARC email reflector, It is included here in case members missed it, and for the benefit of non-members reading a print copy of Signal. If you are reading a print version, know that an easy way to access these somewhat long URLs is to log onto the NVARC web server, [n1nc.org](http://n1nc.org), and view this edition of Signal there. It is at <http://n1nc.org/Newsletters/2021/3011.pdf>]

Joe wrote:

"Links R Us. LOL!

I put together a bunch of links for another ham on where to find web sites on things in the areas of propagation, weather, space weather, etc., so I thought I would pass them along to all.

I am sure that there are many others, but these are the basic stakes in the ground (or should I say in the ionosphere and atmosphere?).

Winter Sporadic E

<https://hamsci.org/publications/winter-sporadic-e-propagation-6-meters>

Upper Level Lows and Sporadic E

<https://hamsci.org/publications/upper-level-lows-and-six-meter-50-mhz-sporadic-e>

HamSCI 2021 Sporadic E PPT Slides

[https://drive.google.com/drive/folders/10PvaTGU\\_YRzEC25BK-Om6b0DWEmZ0zy7](https://drive.google.com/drive/folders/10PvaTGU_YRzEC25BK-Om6b0DWEmZ0zy7)

Ionosphere MUF Maps:

<https://prop.kc2g.com/>

<http://www.propquest.co.uk/graphs.php>

<http://climateviewer.org/history-and-science/atmospheric-sensors-and-emf-sites/maps/digisonde-ionosonde-network/>

Space Weather predictions and observations:

<https://www.swpc.noaa.gov/>

<https://www.spaceweather.com/>

Weather maps and models. On the models, you can change the views with the mouse.

<https://www.windy.com/?42.753,-71.584,3>

<https://earth.nullschool.net/#current/wind/surface/level/orthographic=-41.87,24.75,281>

<https://www.wunderground.com/maps/wind/jet-stream>

<https://www.weather.gov/oun/sfcmats>

<https://www.netweather.tv/charts-and-data/global-jetstream#2021/11/05/0600Z/jetstream/surface/level/overlay=jetstream/orthographic=-6.72,57.59,712>

<https://rainscatter.com/>

<https://www.dxinfocentre.com/tropo.html>

HamSCI sites:

<https://hamsci.org/>

<https://groups.google.com/g/hamsci>

de Joe, K1YOW

**Ham Radio in the Media**  
**An Observation**  
de Bruce, K1BG

I wrote an article for the January 2018 edition of the signal with the same title. At one of our recent breakfasts at Tiny's, I mentioned the article and there were a lot of questions about it. So here is that article – with some updates.

This description comes from an August 21, 1986 article in the Washington Post reporting on the mass murder by Patrick Sherrill in the Edmond Oklahoma Post Office<sup>8</sup>.

“In some respects, Sherrill fit the pattern of previous mass murderers. He lived alone in northwest Oklahoma City in a modest house, which he had shared with his mother before she died.

He had few friends, according to neighbors on 27th Street, and liked ham radios and guns. Several neighbors complained that Sherrill's ham radios constantly interfered with their television reception. They said he was an odd person.”

To what “pattern” are they referring?

The term “going postal” originated with this event.

The article depicts his interest in ham radio as being part of his odd behavior, “following a pattern of previous mass murderers”.

To my knowledge, there have been no other ham operators who were also mass murderers. (Sherrill, BTW, was N5PS, and you can find other disturbing items related to him on the web).

<sup>8</sup> [Mail Carrier Kills 14, https://www.washingtonpost.com/archive/politics/1986/08/21/mail-carrier-kills-14-self-at-oklahoma-post-office/7181cf62-81f3-451f-94f8-67de5a0fe3c6/](https://www.washingtonpost.com/archive/politics/1986/08/21/mail-carrier-kills-14-self-at-oklahoma-post-office/7181cf62-81f3-451f-94f8-67de5a0fe3c6/)

This happened over 35 years ago; what does it have to do with today? Read on...

One of my favorite programs on TV is NCIS. Mostly fantasy with little reality, NCIS is one of the most popular shows on television.

Reruns happen on a daily basis on one or more cable channels, the program is streamed on Netflix, and people will be watching episodes for years. In a Season 15 episode “Trapped”, ham radio plays a central part of the episode's plot (a Google search says this is Season 15, Episode 6, Netflix has it as Season 15, Episode 5).

At the beginning of the episode, ham radio is viewed positively. The only means of communications after 911 and hurricane Katrina—that kind of thing.

But as the plot develops, in my opinion, they get most of the “facts wrong” (confusing CB operating habits with amateur radio, callsigns, handles, you name-it). And hams are again being depicted as social misfits and odd people. See for yourself (if you have Netflix. Otherwise, look for a rerun on cable).

Why does this matter?

What we do as hams matters, and how we are viewed by the public matters. We are available whenever there is a disaster, put the experience on our resumes, and volunteer for public service.

Youth highlight their ham experience on their college applications. How we are viewed matters, and uninformed people may view us negatively based on what they see in the media.

Our opportunities for jobs, public service, colleges, etc. will suffer.

What can we do? I'm not sure. On an individual basis, letting CBS know that you care is step one (<http://www.cbs.com/feedback/>).

The ARRL has taken a stand on this: The January “Second Century” editorial is entitled “NCIS Newington: The Willing Suspension of Disbelief”<sup>2</sup>.

We all (both individually and the league) have to promote amateur radio positively on both a local and national basis. That means letting the media know when we do something good (which means all the time). And we need to let people know when they get it wrong.

de Bruce, K1BG



Have **YOU** paid your NVARC Dues? See:  
<http://n1nc.org/Members/Roster>  
 for your renewal month.

**Treasurer's Report**

Income for October was \$15 in membership renewals. Expenses were \$114.20 for flowers for Karen KA1JVU, leaving a net expense of \$99.20 for the month.

Current balances:

General fund	\$2,517.89
Community fund	\$6,628.25

As of 4November we have 35 members who are current with their dues and 40 renewals outstanding.

Renewal months are in the member list on [www.n1nc.org](http://www.n1nc.org) in the Member's area; check yours at <http://www.n1nc.org/Members/Roster>.

Thank you to those of you who mail your renewals or use PayPal without a reminder.

To pay membership dues via PayPal see the instructions at <http://n1nc.org/Members/dues>.

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. As a Special Service Club, the ARRL expects a majority of Club members to also be ARRL members. Contact Ralph for further information if you need it.

*de Ralph, KD1SM*

**Board Meeting 7October2021**

George visited HRO and Electronics Plus and dropped off 10 copies each of Signal.

George indicated that he would like to relinquish administration of the NVARC Facebook page, turning such minimal tasks over to Bruce, who has agreed, and perhaps to other co-administrators.

On the subject of building an NVARC Facebook "Group": George pointed out that Facebook has redesigned the "page" UI such that a "Group", with its attendant Moderator Tasks, might not be optimal for NVARC, since now posts from viewers on the NVARC "page" are not buried under the "Community" drop down, but appear up front.

As for the NVARC new Ham QSL card it was found that there was a typo which will be corrected. If all is well with the card an order will be placed with CheapQSL.com

Next November General Meeting will be QSL Sorting night. There has been a suggestion that it be recorded on video. Pizza and sodas will be provided by NVARC.

December meeting will be Homebrew Night.

The AA1VX downsizing project is on hold till next month.

The NVARC 2meter Repeater is not operating reliably on the Monday NVARC net.

Bruce Blain would like to continue the License Classes when there is access to the Pepperell Community Center, hopefully by January.

Saturday NVARC breakfast at Tiny's is going well with an average of 12 members and guests give or take. Last weekend was short do to the CQWW DX Contest.

Bruce Blain covered the CW Help group meeting with 20 individuals showing up. There were various interests and differences. It was a challenge to

prioritize the various topics. So, it is a work in progress.

Under new business:

- Jim Hain requested a motion to be reimbursed for the Corel Video Studio 2021 Video Editor Software that cost \$58.43. The motion was made and passed.
- Jim Hain went over Studio Dashboard tool for YouTube videos. Started to get several likes and 42 views and 4 subscriptions. The 42 views are for the YASME video alone, and we gained 4 subscribers after they had viewed the video.
- The club has a few FoxFinder RF sniffer PCB boards but, not the full kits.

Meeting was adjourned at 8:38pm

de John, K1JEB

## Sponsors



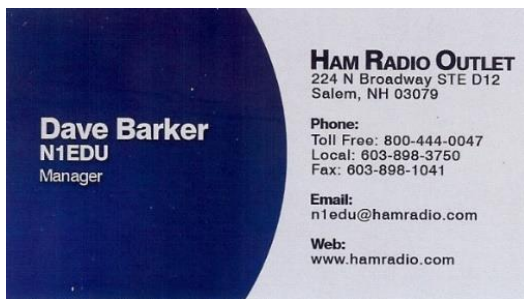
Fran Purcell

**Electronics Plus**

480 King Street  
Littleton, MA. 01460

fipurcell@electronicsplus.com  
Hours: M-F 9-6, Sat. 9-5

(978) 486-3375



**Dave Barker**  
N1EDU  
Manager

**HAM RADIO OUTLET**  
224 N Broadway STE D12  
Salem, NH 03079

**Phone:**  
Toll Free: 800-444-0047  
Local: 603-898-3750  
Fax: 603-898-1041

**Email:**  
n1edu@hamradio.com

**Web:**  
www.hamradio.com



**Nashoba Valley  
Amateur Radio Club**  
PO Box # 900  
Pepperell Mass 01463-0900  
<http://www.n1nc.org/>

**President:** Bruce Blain, K1BG  
**Vice President:** Phil Erickson, W1PJE  
**Secretary:** John Bielefeld, K1JEB  
**Treasurer:** Ralph Swick, KD1SM

### Board Members:

Jim Wilber, AB1WQ, 2019-2022  
Skip Youngberg, K1NKR, 2020-2023  
Jim Hein, N8VIM 2021-2024

Property Master: John Griswold, KK1X  
Librarian: Peter Nordberg, N1ZRG  
N1NC Trustee: Bruce Blain, K1BG

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

NVARC general meetings are scheduled for the third Thursday of the month at 2330 UTC (7:30pm, Eastern Time). Non-members interested in attending may send an email to [meetings@n1nc.org](mailto:meetings@n1nc.org) requesting the teleconference details. NVARC thanks Medtronic, Inc for providing the teleconferencing services under their employee volunteer support program for non-profit organizations.

Contact us on the N1MNX repeater.  
442.900 (+), 100Hz  
147.345 (+), 100 Hz  
53.890 (-), 100Hz

This newsletter is published monthly. Submissions, corrections and inquiries should be directed to the newsletter editor: [editor@n1nc.org](mailto:editor@n1nc.org). Articles and graphics in most PC-compatible formats are OK.

Editor: George Kavanagh, KB1HFT

Copyright 2021 NVARC





**Nashoba Valley Amateur Radio Club**

*PO Box 900*

*Pepperell, MA 01463-0900*