

SIGNAL

A club since 1992



Since 1993

de N1NC

March 2022

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NVARC Monthly Meetings

NVARC general meetings are scheduled for the third Thursday of the month at 2430 UTC (7:30pm, Eastern Time). Meetings are held at the Pepperell Community center. Meetings are simulcast via Zoom. Non-members who are interested in attending may send an email to 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 March NVARC meeting will feature Dimitris Paliyannis, NE1D, speaking on "Hunting and Activating Parks on the Air".

The President's Corner

de Bruce, K1BG

I'm happy to report that the first Technician license class that NVARC has held in many years has come to a successful end!

Out of the 7 students who stuck with the class, 5 have passed the Tech exam so far, and one of them also took and passed the General exam!

The two remaining folks will be testing in the near future. I'd like to congratulate the following:

- Bill Reed, KC1QKJ of Ayer,
- Chris Pinto, KC1QKI of Worcester,
- Dan Connolly, KC1QMQ of Brookline, NH,
- Viraj and Piyush Patel of Hollis (no callsigns yet).

NVARC is offering a year of free membership to graduates of our licensing classes as newly minted hams. Please join me in welcoming these new hams to our club.



While we are still in the throes of Winter Weather, Spring is right around the corner. The club has two activities that need our collective attention:

First off: club officers are elected at the April meeting. I'm looking for club members to participate on the "Nomination Committee" to solicit candidates for a slate of club officers.

If you are interested in volunteering for this, please let me know.

A successful club should have no shortage of volunteers interested in donating a couple of hours a month to help run the club.

It's a rewarding, worthwhile experience. It would be "nice" to have more than one can-

didate running for each position. Besides the normal president, vice-president, secretary, and treasurer's positions, one open directors positions is also available.

Please let me know if you know of anyone interested in one of these positions. That includes YOU!

The second activity in need of Member Attention is planning for ARRL Field Day, which takes place on the fourth full weekend in June. It's perhaps the largest club activity of the year.

Jessica, WU3C, has kindly stepped up and agreed to be Field Day Chairperson this year.

Traditionally, NVARC conducts Field Day from the Heald Street Orchard in Pepperell. It's an open location, with good public exposure. We have had many Field Days over the years from here.

Also traditionally, the club operates two HF stations (one focusses on Phone and one on CW), with stations for VHF/UHF, "GOTA" (a get-on-the-air station targeted towards beginners and non-active amateurs), and data in the mix.

Our members are well fed and well taken care of during this annual activity. Setting up stations, antennas, power, networking, food, etc, takes a certain amount of advanced planning and thought from our members.

One of the committees that I am supposed to appoint as part of my duties as president is the "Field Day Committee". If you are new to amateur radio, new to the club, or just plain enjoy Field Day like I do, please step forward and let me know that you would like to be on the committee. It will go a long way to making Field Day a successful event in 2022.



Our Monday night NVARC 2-meter net on the N1MNX 2-meter repeater has had an uptick in activity. This is widely attributed to the efforts of Bob, W1XP, and Jessica, WU3C, in performing some much-needed diagnostics, repair, and maintenance (kudos to both of you).

Although the repeater is not a "club repeater" we support it as a local resource. It's available for local communications and for emergency communications if so required. More on Jessica and Bob's efforts can be found elsewhere in this Signal.



Finally, Phil, W1PJE, has lined up a great speaker for the March meeting: Dimitris Paliyannis, NE1D.

Dimitris will have a presentation on the "Parks on the Air" program, from the point of view of the person who is actively chasing parks.

Like most things, I know little about the subject and am looking forward to Dimitris' presentation.

I look forward to seeing you at the meeting (either in person or Via Zoom) on Thursday, March 17th.

-de Bruce, K1BG

NVARC YouTube Channel!

Jim, N8VIM, has compiled quite a few fine videos that capture some facets of NVARC and the interests of its members. This entailed filming, editing and publishing the video files to YouTube.

You can view these videos by browsing to youtube.com, and searching for "NVARC", where you can view the videos.

If anyone has old (or new) Ham Radio related videos or electronic projects, and would like to have them edited and put on the YouTube channel, please contact Jim, N8VIM.

**The History of Entry-Level Licensing
Part 6
de Bruce, K1BG**

Last month, I detailed how the original concept of the Novice License as established in 1951 was all but gone in the mid to late 70s. The original concepts -

- Simple test – basic rules and regulations
- Limited Privileges
- Limited Duration (one year), non-renewable
- Distinctive callsign

were eliminated in the mid 70s.

The ARRL was having problems with the new FCC "syllabus" question, and the ARRL made note¹. The "It seems to Us" editorial in the August 1978 issue of QST laments that fact that the FCC exam process is completely screwed up. It's really

a good read. "One thing we would be very reluctant to do is modify the Training Program to "teach to the exam" (like the old license manuals) instead of teaching for comprehension".

And, apparently, the ARRL knew that they had a problem with this new "syllabus" style requirement, particularly for the Novice License.

In 1979, the league went back to an old style "question and answer" study guide, just like the older license manuals (what happened to teaching for comprehension?).

The last of the traditional Radio Amateur's License Manual (edition 75, published in 1976), contained 49 FCC published questions in the Novice section. In 1979, the league published The ARRL Novice Q and A Book. It contains a whopping 223 questions! For the same (or similar?) 20 question Novice exam! Talk about keeping it simple...

Other amateurs were seeing big problems with the new "syllabus" based program. Dick Bash, KL7IHP, started publishing a series of study guides called The Final Exam in 1979.

Bash claimed a skyrocketing failure rate on FCC administered amateur exams (said to be 69%), and saw a need. Of FCC license applicants Bash wrote:

"The principal reason for their failure was not that they didn't study. It was because the material they studied was not on the exams and there was no single text that contained all (or even some) of the material the FCC was asking questions about. "

Bash would either personally, or via proxies, interview hams leaving FCC exam sessions and ASK them what questions were on their exams!

His study guides specifically addressed questions contained on the exams, and helped a generation of struggling hams either get their Novice license or upgrade to a higher class license.

This was considered blasphemy² by many! Bash was widely bashed (no pun intended) by the ham community, including this author.

He was accused of printing what amounts to a cheat-sheet that allowed unscrupulous examinees to pass a test they knew nothing about.

Only two publishers (CQ and Ham Radio Magazine) would carry his advertisements.

However, having now studied the history and the times in more detail, and having acquired multiple editions of his study guides, in 20/20 hindsight I view Bash and an innovator who solved a real need.

His guides were based on the questions found in the tests. However, the answers are all long hard technical responses to the questions. The publications satisfied the needs of the students, and taught technical comprehension of the material.

In conducting my research on this subject, I have reached out to Dick Bash several times with no response. I would love to hear his opinion today on this subject, but I sense he does not want to entertain a discussion. And I want to respect his privacy.

What does all this have to do with entry level licensing, you ask?

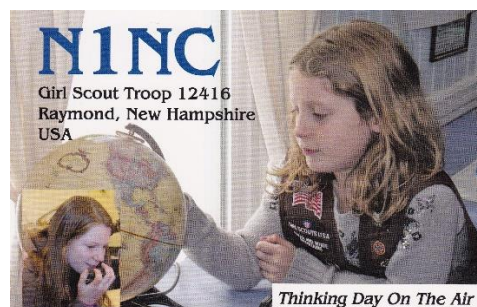
The requirements for getting a Novice license were no longer simply studying a few easy questions and passing an exam. It was still a simple, easy test, you just had to "jump through more hoops" to get there.

As the 60's song goes: "The times they are-a-changing"! Next month, we will talk about the 80s, the creation of the VE program, and Novice Enhancement.

1. <https://worldradiohistory.com/Archive-DX/QST/60s/QST-1978-08.pdf>, page 11.
2. <https://archive.org/details/73-magazine-1980-09/page/n39/mode/2up?q=bash>, page 40.

-de Bruce, K1BG

Girl Scout Thinking Day on the Air: Some Observations de Skip, K1NKR



Given our great experiences in the past, I intended to make a few QSOs during the Girl Scout "Think-

ing day On the Air” (TDOTA) weekend in February.

I checked all the suggested frequencies numerous times. Nada—no QSOs. No hits on the spotting websites. It was a disappointing weekend.

I checked the TDOTA website. Registered participation is only a fraction of what it was when NVARC was supporting the local troops.

One of the difficulties in supporting TDOTA activities is that the activities must be organized by the scouts themselves and nowadays few scouts have knowledge of, or connection to, Amateur Radio.

Without a continuous connection (e.g., club to scouting adults), these TDOTA activities don't just “start themselves.”

This is an assumption, but the eleven organizations registered on the 2022 TDOTA website seem to have established relationships with some ham organizations or have a ham activity of their own.

We might help sometime in the future, but that will be up to the scouts.

So, in a retrospective mood, I concluded that NVARC's multiple successful TDOTA “outings” constituted a successful breakthrough—we seem to be the first in the US to have done so—and a historical highlight in the history of the club.

de Skip, K1NKR

Some Interesting Links

[Ed: I'd like to make this section a regular feature of Signal: wherein readers submit links to articles that they have run across that might be of interest to NVARC members.

If you are reading a hardcopy of Signal, you can easily navigate to these links by opening this edition Signal on our server at <http://n1nc.org/Newsletters/2022/3103.pdf>.

If you have others, please email them to editor@n1nc.org.]



The MIT Flea is Back! Hoo-Ray!! The first session will be held on April 17th.

<https://w1mx.mit.edu/flea-at-mit/>



<Insert Your Interesting Link here.>



N1MNX Repeater Repairs *de Jessica, WU3C*

Jessica, WU3C, and Bob, W1XP have inspected the N1MNX repeater to determine the cause(s) of recent poor performance. Jessica reports:

2m/440 antenna at tower top is INOP, which is why 440 is off the air.

Currently, the 2m repeater is using the 440 controller. the 2m controller CTCSS board has problems causing clipping of modulation. People are NOT over modulating: the CTCSS board is broken.

I performed tests on the 2m radios and they meet specs and are back in service.

I have the 2m controller on the bench and it will be repaired and improved.

The repeater badly needs new storage batteries. the approximate cost is 6 batteries x \$140.

Antenna work will be done in the spring. Ralph has a potential new antenna from Dan, KW2T. The repeater may need new feed line.

I intend to put the packet back in service when the antenna work is complete.

Lastly: the repeater is owned by Dave Peabody. There are home brew and upgraded equipment from Bob, W1XP, Ralph, KD1SM, and Stan, KD1LE, in use. Extensive documentation and maintenance records exist.

de Jessica, WU3C

Monday Night NVARC 2m Net *de George, KB1HFT*

This past Monday, I joined the Monday night 2m net, and I must say, the repeater's performance has significantly improved! Thank you, Jessica and Bob.

Eight people joined the net from around the area:

- Pepperell 2
- Harvard 2
- Ayer 2
- Littleton 1
- North Chelmsford 1

with all signals either fully quieting or close to it, and no “drop-outs”. A lively discussion was had on member’s recent radio projects and adventures.

Bruce, K1BG, served as NCS. After the net, several participants stuck around to comment further on various doings. A good time was had by all!

Come join in next Monday, 7:30pm EST at 147.345 MHz, with a PL of 100.

Musty Books de Skip, K1NKR

I’ve been killing time by finally reading a three-volume set of A History of Broadcasting in the United States¹ that I picked up in a used bookstore years ago. I won’t suggest you go out and get the set (it’s a 1970 copyright) but George twisted my arm to provide a book report for the Signal, so here goes.

Make no mistake. These aren’t Amateur Radio history books. They trace the development of radio (and television) broadcasting—from the era of spark gaps and coherers, through the advent of personal and newspaper-owned stations, to the takeover of networks, to the industry’s de-facto control by advertisers.

Throughout though, the books give a fascinating review of the organizational, ethical, and business events of the first three-quarters of the 20th century.

They touch on everything from drugstore soda fountains to presidential elections and assassinations; to the content of entertainment, news, commercials, and propaganda; and to all three wars—concentrating on the effect of broadcasting and the effect on broadcasting.

Incidentally, appendixes contain the texts of the Radio Acts of 1912 (reaction to the sinking of the Titanic), 1927 (establishment of the Federal Radio Commission), and 1934 (establishment of the Federal Communications Commission), plus the Central Intelligence Agency Act of 1949.

All in all, reading the three volumes really ended up being a good way of occupying what would

¹ Barnouw, Eric. A History of Broadcasting in the United States (vols 1-3). New York, Oxford University Press, 1966-1968-1970.

have been lost or wasted time, and provided me an expanded perspective of 20th century history.

de Skip, K1NKR

From the Shack de George, KB1HFT



Lately I’ve been tinkering with some long-neglected projects.

Firstly, the “FT8 Phaser” FT8 transceiver kit that I last worked on a year ago.

It’s quite a nice kit, with good instructions, and well labelled parts.

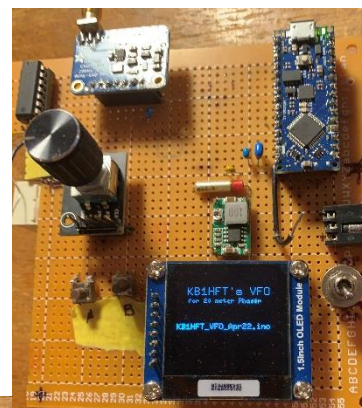
This one is for 20meter FT8. Other kits are

available for other bands.

Its default frequency is 14.074MHz, the 20meter FT8 “standard”, although it can be tuned incrementally via a pair of front-panel buttons.

I built the board and tested it – Success! But I stopped short of building the shielded enclosure.

Being an Arduino nut, I thought that I might be able to add a VFO capability, so that one could do FT8, and perhaps other 20m modes, on other than the standard 20meter FT8 frequency



But then, as part of addressing “Domestic Tranquility”, I decided to move my several (no, many!) projects to an upstairs workroom, which entailed boxing them all up in separate boxes to bring upstairs,

and filing them in storage racks where they sat for a year, unfortunately, unlabeled.

Last week I powered up the prototype, just to see if it still worked. To my surprise, it powered up and worked just as incorrectly as it had when I left it a year ago.

Luckily, I found the Arduino's source code, so, here we go a-debugging...



I've also rediscovered my RTL-SDR.com "PC dongle" which, using the Air-Spy "SDR#.exe" PC app, tunes from 500kHz to 1766MHz. It is just the thing for SWL-ing upstairs, rather than at my "operating position" in the relatively cold basement.



de George, KB1HFT



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

Treasurer's Report

Income for February was \$345 in membership renewals, some for multiple years. Expenses were \$3.30 in PayPal fees, leaving a net income of \$341.70 for the month.

Current balances:

General fund	\$2,765.41
Community fund	\$6,628.25

As of 3March we have 44 members who are current with their dues and 30 renewals outstanding. Renewal months are in the member list on www.n1nc.org in the Member's area; check yours on <https://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 February 3, 2022

Attendees:

Bruce, K1BG, Jim, N8VIM,
John, K1JEB, Jim, AB1WQ,
George, KB1HFT

1. Call to order: 7:32pm
2. Secretary's Report: A motion was made at the club general meeting to allow license class graduates who obtain a Technician Class License to be members of the club for one year for free.
3. Signal is still being taken by customers at HRO and Electronic Plus. It was suggested to add more pictures.
4. Facebook Update and page likes need to be better monitored.
5. Bruce will send out two New Ham QSL cards this month. He will send some welcoming cards as well.
6. March Guest Speaker is Demitris Paliyannis, NE1D, Topic is "Hunting and Activation of Parks On the Air" Demitris be remote on Zoom and will be using Power-Point. We will be recording the presentation.

7. The repeater is working better but there are some technical issues to be resolved. A discussion was done concerning maintenance and management of the repeater. There is some confusion concerning this.
8. Saturday's Breakfast at Tiny's is still going well.
9. CW Help group is still going on.
10. The Visioning program will need to wait till more members can attend the General Meetings in person
11. Special Services Club Renewal is still a work in progress.
12. The Boston Marathon has met their quota of volunteers.
13. Jessica, WU3C, has volunteered to be this year's Field Day Chairman.
14. There was a discussion concerning possible extra club activities like Parks on The Air, Shack Clean Ups and Elmering new licensed hams.
15. Ralph emailed that the board needs to get ready for the elections of club officers in April.
16. The board is planning to reschedule the Dues Call-athon to next month.

Meeting ended at 8:35pm

de John, K1JEB

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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.

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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. Articles and graphics in most PC-compatible formats are OK.

Editor: George Kavanagh, KB1HFT

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