



NVARC

# Signal



VOL. XXXIII...No. 4

WWW.N1NC.ORG

April 2024

## In This Issue

April Meeting	1
Working POTA	2
Elections	3
K1BG ChatGPT Experiment	3
Treasurer's Report	5
QSL Cards	5
Field Day	5
K1YOW Eclipse Experiment	6

**Next Meeting:  
18 April 2024**

The April meeting is a Special Meeting for the election of Officers.

See the blurb on Page 3.

## Monthly Meetings

NVARC General Meetings are scheduled for the third Thursday of the month at 7:30pm local time at the Pepperell Community center. Meetings are not held in July or August.

## April's Guest Speaker

**April's presentation will be "VP9I – Operating from Bermuda".**

As you may or may not know, Les Peters, N1SV, regularly operates SSB DX Contests from the island of Bermuda (VP9). Many of us have worked Les from this DX location, and I'm always excited to get him in my log (and get credit for the new country multiplier in the contest!). Les will talk about his operating experiences from VP9. I'm looking forward to this presentation!



224 N Broadway STE D12 | Salem, NH 03079  
Tel: 603-898-3750 | Fax: 603-898-1041

[www.hamradio.com](http://www.hamradio.com)

## Weekly 2-meter Net

The NVARC Information Net is held Monday nights at 7:30pm local time on the 2m N1MNX repeater, 147.345 MHz, +100PL.

Jim, N8VIM has been improving the repeater incrementally over the past several months.

**Working POTA  
John KK1X**

Through March I continued my quest to make 500 QSOs a month in park activations. As I write this, I'm 47 contacts shy of my primary goal, but my secondary goal of 75 parks worked (a level at which more "wallpaper" is awarded), was achieved on the 19th after activations at Bear Mountain State Forest in Hinsdale NH and the CT River State Park (one of several sites along the river) in Northfield MA. I also made activations in seven other new-to-me parks, as well as return visits to another four. The bulk of the activations was using the N9SAB EFHW, either in 20m or 40m configurations. The antenna is linked at 33', allowing operation if I use a telescoping mast rather than a tall tree. N9SAB's OCFD worked a treat at Oxbow, pulling in 51 contacts in about two hours. The Rybakov was also in the mix. If there are pedestrians or pets around, I shy away from antennas that require radial wires, even though mine are yellow.

These are the parks for March:

- Nashua Rail Trail
- Sandy Point State Reserve
- Parker River NWR
- Salisbury State Reserve
- Cochituate State Park
- Oxbow NWR
- Connecticut River State Park
- Great Brook Farm State Park
- Hubbardston State Forest
- Robert Frost Farm State Historic Site
- Monadnock State Park
- Pisgah State Park
- Pillsbury State Park
- Bear Mountain State Forest

This month I also changed my radial setup (used for the Rybakov and ground-mounted telescoping whip) from 3-33' radials to 6-16.5'

radials, simply halving each wire and juggling terminals around. My thinking was that it should be easier to deploy. My thinking now is that it isn't. Oh well. The longer radials tended to take up a lot of room (basically a 65-foot circle around the antenna. I thought a 30-foot circle would be better, but the dual radials tend to tangle more. I'll continue to use the new radials until I feel compelled to do otherwise. Who knows? Maybe someone will tell me 12-6' radials would be better, HI.  
(oh, and I managed to make the 500 contacts in March. On to April...)

**NEAR-Fest Spring 2024**

NEAR-Fest returns to the Deerfield NH Fairgrounds on April 25 & 26, 2024. Be mindful that scheduling problems move this to a Thursday-Friday event!

*Fran Purcell*

**Electronics Plus**

480 King Street  
Littleton, MA. 01460

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

**(978) 486-3375**

A number of you like the word game WORDLE. I don't know where I stumbled across this, but MORSLE (<https://morsle.fun>) presents a callsign and starts off at 35WPM. You get 21 tries. Your editor needed them, HI.

The Groton Road Race is coming up on May 5, 2024. Contact Ralph KD1SM for information or to volunteer your time.

[ralph@kd1sm.net](mailto:ralph@kd1sm.net)

# Elections

Elections will happen at the April meeting, and NVARC is seeking candidates to run for all positions. The nominations committee has reached out to every club member to gauge their interest in running for office (president, vice president, secretary, or treasurer), or one of the open three year board positions, with the hope that more than one person would be interested in running for each office. As of today, a full slate of officers has not been determined. If you are interested in running for any office or one of the board of directors positions, please contact nominations committee members John, K1JEB, or Bruce, K1BG, and let them know you are interested.

The April meeting is a “Special Meeting” as detailed in the club by-laws. Paid club members will be asked to vote at the meeting or submit an absentee ballot which you will receive via email in advance of the meeting.

**ChatGPT**  
**Bruce K1BG**

Earlier this week, I attended a conference in Maine put on by TANE – the Technology Association of New England. I listened to a presentation by Bob Gnapp from an organization called NECA – The National Exchange Carrier Association – regarding artificial intelligence, and it got me thinking about ChatGBT.

According to Wikipedia, “ChatGPT (Chat Generative Pre-trained Transformer) is a chatbot developed by OpenAI and launched on November 30, 2022. Based on a large language model, it enables users to refine and steer a conversation towards a desired length, format, style, level of detail, and language. Successive prompts and replies, known as prompt engineering, are considered at each conversation stage as a context.” In essence, it’s a free on-line artificial intelligence tool that will do what you ask it to do. People have it writing simple programs, doing research for them, or writing papers.

One of my passions has been researching licensing requirements for new hams over the years. One story I find particularly interesting regards the establishment of the Novice license by the FCC, how the ARRL board of directors

opposed it, and how George Bailey, W2KH (the president of the league) supported it and ultimately changed the direction of the board. Page 54 of the December 1949 issue of Radio News has an excellent article on this. There is not a lot of information regarding these event out there, so I find the article particularly interesting.

I posed the following questions to ChatGBT. Notice that I spelled Georgy Bailey’s name incorrectly (and this was purely by accident):

“WRITE AN ARTICLE ON THE IMPORTANCE OF GEORGE BAILY WITH REGARDS TO THE NOVICE LICENSE. WHO WAS GEORGE BAILEY? WHAT WAS HIS CALLSIGN? WHY WAS HIS OPINION IMPORTANT? HOW DID HE FEEL ABOUT THE ADOPTION OF THE NOVICE LICENSE?”

This was the reply:

*“Introduction:*

*In the annals of amateur radio history, few figures stand as prominently as George Bailey. His advocacy for the novice license not only transformed the landscape of amateur radio but also paved the way for countless enthusiasts to enter and thrive in the hobby. This article delves into the life and legacy of George Bailey, exploring his pivotal role in championing the novice license and its significance in shaping the amateur radio*

community.

*Who was George Bailey? George Bailey, born in 1919, was a towering figure in the world of amateur radio. With a passion for radio communication that spanned decades, Bailey dedicated himself to promoting and advancing the hobby. His journey in amateur radio began in the early 1930s when he obtained his first license. Over the years, Bailey became known not only for his technical expertise but also for his tireless advocacy for the amateur radio community.*

*What was his callsign? George Bailey's callsign, W1KH, became synonymous with his contributions to amateur radio. As a licensed operator, Bailey utilized his callsign to engage with fellow enthusiasts, conduct experiments, and promote the principles of amateur radio.*

*Why was his opinion important? Bailey's opinion carried significant weight within the amateur radio community due to his extensive experience, technical knowledge, and leadership role. He was deeply respected by his peers for his dedication to the hobby and his unwavering commitment to advancing the interests of amateur radio operators worldwide. As a result, when Bailey spoke, his words resonated with authority and influence, shaping the direction of discussions and initiatives within the community.*

*How did he feel about the adoption of the novice license? George Bailey was a fervent advocate for the adoption of the novice license, recognizing its importance in expanding participation and nurturing talent within the amateur radio ranks. He firmly believed that the novice license provided a crucial entry point for newcomers to the hobby, offering them the opportunity to learn, experiment, and grow as radio operators.*

*Bailey saw the novice license as a means of democratizing amateur radio, breaking down barriers to entry and welcoming individuals from diverse backgrounds into the fold. He championed efforts to streamline the licensing process and provide novice operators with the support and resources they needed to succeed.*

*Moreover, Bailey understood the transformative potential of the novice license in fostering innovation and advancing the state of amateur radio technology. By encouraging experimentation and hands-on learning, he believed that novice operators would contribute fresh ideas and perspectives to the broader amateur radio community, driving progress and innovation in the field.*

*Conclusion: George Bailey's legacy as a champion of the novice license endures as a testament to his passion for amateur radio and his commitment to its future. His advocacy laid the groundwork for the widespread adoption of the novice license, opening doors for countless individuals to discover and embrace the wonders of radio communication. As we reflect on Bailey's contributions, we are reminded of the profound impact that one individual can have in shaping the trajectory of a beloved hobby and fostering a vibrant community of radio enthusiasts."*

So how did ChatGBT do? Refer to my original questions, and let's look at the answers. First, George Baily W2KH was born in 1887, not 1919. ChatGBT got that wrong. The answer never mentions that George Bailey was the President of the American Radio Relay League, and that is the primary reason his opinion was so important. And while ChatGBT did correctly identify his early callsign as W1KH, by the time the Novice license was proposed in 1939 his callsign was W2KH. The ARRL lists him as "Past President of the ARRL, G.W. Bailey, W2KW, 1940 – 1952". And finally, the articles says his journey in amateur radio began in the early 1930's. George Bailey, 1KH, is listed in the 1927 Callbook.

In my opinion, ChatGBT has a lot of work to do! Give it a try. Your results may differ.

Bruce, K1BG

## Treasurer's Report

NVARC had no income and no expenses for March.

Current balances:

General fund	\$3,150.70
Community fund	\$6,878.25

As of 4 April we have 43 members who are current with their dues and 42 renewals outstanding. Renewal months are in the member list on [www.n1nc.org](http://www.n1nc.org) in the Member's area; check yours on <https://www.n1nc.org/Members/Roster> or you may also email me. Special 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 in the same Members area.

If you are joining ARRL or renewing your membership please note ARRL's instructions to enter your NVARC membership information. As an Special Service Club, the ARRL expects a majority of Club members to also be ARRL members and will send a portion of your new or renewal ARRL membership fee back to the Club. Contact Ralph for further information if you need it.

Ralph, KD1SM

## QSL Cards

Rod, WA1TAC, handles QSL cards for the Club. If you sort your cards by DXCC listing and provide proof of ARRL membership (QST label, etc.), Rod will forward them to the ARRL for forwarding, at Club expense! Who doesn't like to save a bit of money?

## Field Day 2024

ARRL Field Day for 2024 occurs on June 22 and 23. NVARC usually sets up at the Heald Street Orchard.

Lots of help is needed for setup and teardown. Especially teardown. We are hot, We are tired. I am terribly grumpy.

We will also need operators. Come out and spend a few hours working guys in Alabama who shouldn't even be on the radio.

There are very few limits on what we'll try.

Contact your editor for nominal coordination.

## Breakfast at Tiny's

Just about every Saturday, a number of Club members gather for breakfast at Tiny's in Ayer. While our numbers dwindled sharply during Covid, we are pulling tables together to accommodate the larger gatherings of late.

We order at 8:00 AM sharp.

## What was I doing during the Eclipse? Joe, K1YOW

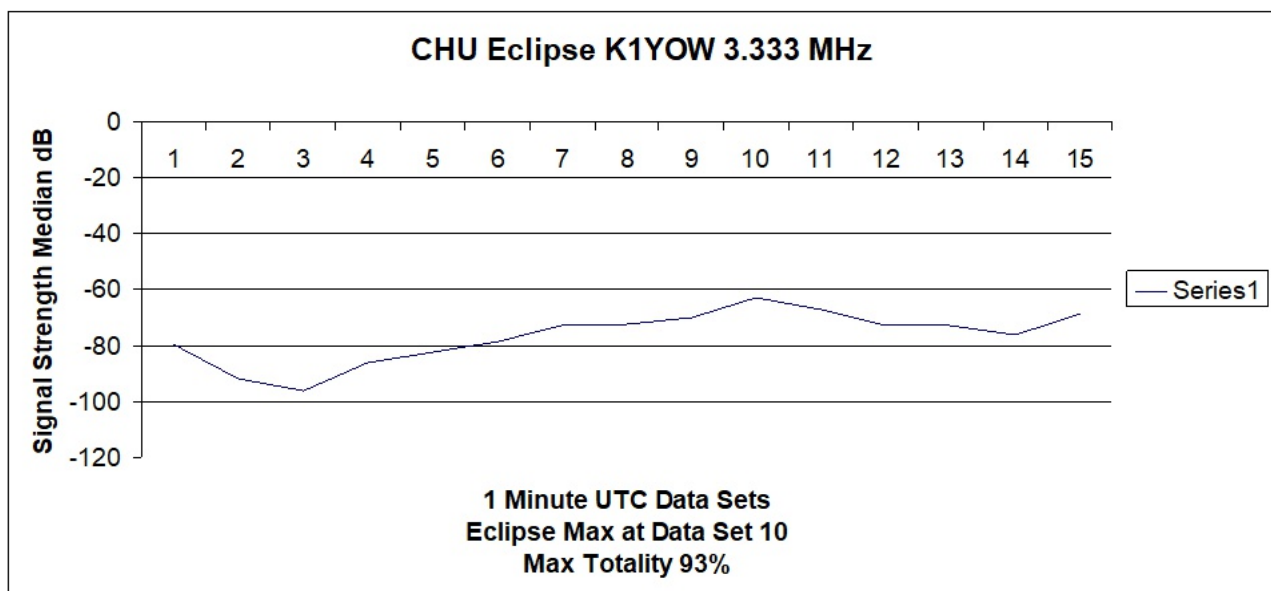
Now, what was I doing during the eclipse? Using ham radio to see what the effect of the eclipse was on the D layer of the Earth's ionosphere, LOL. I expected that when the moon covered the sun, that it would also block UV radiation from hitting the ionosphere. The D layer of the ionosphere absorbs radio signal energy below around 8 MHz during the day because the UV radiation keeps the ionization pot stirred. The experiment was to see at eclipse totality, how fast the pot becomes unstirred because with the lack of UV radiation, the D layer ions should recombine and the D layer should start to vaporize and disappear.

I picked out the Canadian time station at 3.333 MHz because 3.333 MHz is on a frequency affected by the D layer of the ionosphere. I recorded 15 one minute signal strength samples with data points every 5 seconds per sample.

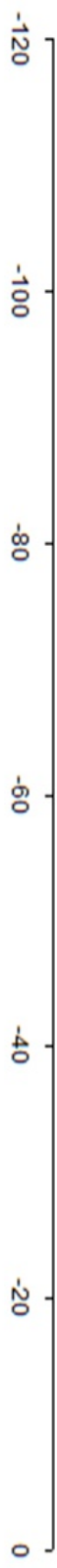
The experiment showed that during the maximum eclipse, the D layer of the ionosphere started to dissolve quickly due to the lack of UV radiation to keep the ion pot stirred. Then when the sun came back, the D layer started to reform, but did not come back as before, mainly because the sun was now at a lower angle.

The charts are statistical, but basically the lower the negative signal report number, the stronger the signal is, and all three charts show maximum signal strength at the maximum eclipse, meaning the D layer of the ionosphere was dissolved to some extent, and thus could not absorb the signal as much. Data set 10 is at eclipse maximum at time 19:29 UTC (science time is UTC which is 4 hours ahead of EDT).

Charts on subsequent UV pages rotated to get reasonable resolution - Ed.

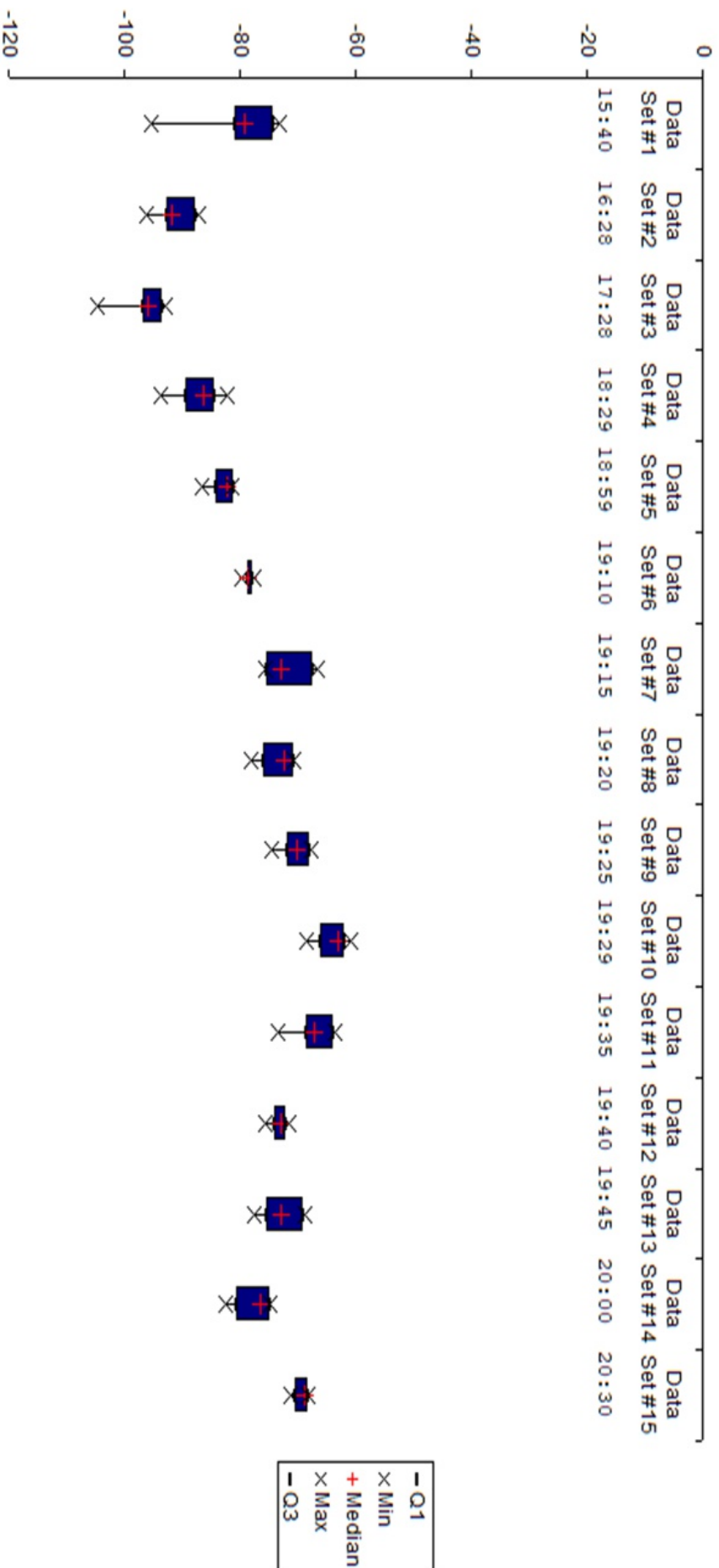


### CHU 3.333 MHz dB at K1YOW



- ◆ Data Set #1
- ▲ Data Set #2
- ◆ Data Set #3
- Data Set #4
- ◆ Data Set #5
- ▲ Data Set #6
- ◆ Data Set #7
- Data Set #8
- ◆ Data Set #9
- ▲ Data Set #10
- ◆ Data Set #11
- Data Set #12
- ◆ Data Set #13
- ▲ Data Set #14
- ◆ Data Set #15

**CHU Signal dB 3.333MHz  
UTC Eclipse at K1YOW  
Eclipse Max at Data Set 10**





**Upcoming VE Session**

**Montachusett ARA (MARA) will be holding a VE session on June 1, 2024 at the Lunenburg library at 10AM.**

**Contact Ray AA1SE**

Nashoba Valley Amateur Radio Club  
PO Box 900  
Pepperell MA 01463-0900  
<https://n1nc.org>

President: vacant  
Vice President: Phil Erickson W1PJE  
Secretary: John Bielefeld K1JEB  
Treasurer: Ralph Swick KD1SM

Board Members:  
Bruce Blain K1BG 2022-2025  
Robert J. McArthur K1QT 2023-2026  
James Hein N8VIM 2021-2024

N1NC Trustee Bruce Blain K1BG

Join NVARC! Annual dues are  
\$15 individual, \$20 family

Contact us on the N1MNX repeater:  
442.900(+), PL100  
147.345(+) PL100  
53.890(-) PL100

This newsletter is published monthly. Submissions, corrections, and inquiries should be sent to editor (at) n1nc (decimal) org to reach the newsletter editor.

Editor: John Griswold KK1X  
(C)2024 NVARC