In This Issue

From the Editor

April is here, hopefully no one played an April Fool's joke on you! This is an exciting month for many reasons, Easter, flowers emerging from hibernation, spring thundershowers, the start of parade season, better POTA opportunities, the list goes on and on.

This month's Full Quieting is packed with good articles — thanks to everyone who sent something in. Read up on the Clubhouse situation in the *President's Corner*. There are many articles in *What's Up BARC*, so make sure to scan through that. Read about how Jim N8KET and Connie W8CSG took an opportunity to show ham radio to young homeschooled students. Take the leap into digital HF by reading Geoff KI5VNB's article on FreeDV's new RADE mode. After that are a couple of NanoVNA articles by yours truly, and April's Special Event Stations courtesy of Paul WS8R.

Now that I have some good POTA antenna options (new 10-20meter end-fed half-wave, long and short random wires with tuner, verticals with Big Kansas Coil) I need to set up a POTA activation in April. Not in the rain and not when it's cold! We should have some great days in April, so let's get on the air!

73, Ray Hitt, N8VMX
Full Quieting Editor

2024 BARC Officers and Directors

President: Geoff Kline, KI5VNB
Vice President: Eric Bramini, KC8OPY
Secretary: Jim Gifford, N8KET
Treasurer: John Westerkamp, W8LRJ
Senior Director: Bob French, AC8ZU
Junior Director: Don Macon, KE8WVJ

2024 Coordinators

Clubhouse: Jim Lusk, KC8EFD
Comm Center: John Westerkamp, W8LRJ
Contesting: Ken Gunton, W8ASA
Education: Paul Sharp, WS8R
Emergency Preparedness: Jim Lusk, KC8EFD
Field Day: Glenn Rodgers, W8IO
Full Quieting Editor: Ray Hitt, N8VMX
Hospitality & Librarian: Natinka Siwecki, KD8NUA
IT: John Westerkamp, W8LRJ
Lunch Bunch: Jim Totten, WA8HUB
Net: Paul Sharp, WS8R
Public Service: Don Parker, KB8PSL
QSLs: Roger Hoffman, WB9BXT
Repeater: Russ Roysden, N8NPT
Tech Night: Bob French, AC8ZU
Webmaster: John Westerkamp, W8LRJ

BARC Net: Every Sunday, 8 PM Local

147.045 (+) (118.8 PL enc and dec)   [Alt = 443.675]

Directions to BARC Clubhouse and Comm Center
Rooms 1 & 3 Lower Level Sugarcreek Elementary School

51 S. East Street, Bellbrook (One block east & one block south from the traffic light in downtown Bellbrook)

Enter at South end of building

Member Interviews

BARC wants to hear from you!

Whether you're a long-time BARC member or a brand new one, young or old, please tell us about yourself. Here are some simple guidelines, although you're free to use whatever format you're comfortable with.

This page is all about you. It's your chance to let BARC members to get to know you better.

Here's are a few sample questions to help get you started, but you can write whatever you want.

Please send us some pictures of anything you want BARC to see (you, station, antennas, pets, family, anything)

- When you were first licensed?

- How did you learn about Ham Radio (HR)?

- Why did you become a Ham?

- What are your current HR interests?

- What are you most passionate about regarding HR?

- Tell us about your stations (past, present, and future)

- What was the most exciting thing that happened to you in HR?

- What do you do for a living?

- Would you like to say something about your family?

- Do you have other hobbies or interests?

- Any other comments for BARC?

President's Corner

Wow—it's April already! It feels like I was just packing away Christmas decorations. The first quarter of 2025 has flown by, and it's been busy.

As many of you know, our Ad-Hoc Location Committee—formed back in December—has been meeting regularly to address the potential loss of our current clubhouse. For those who might not be aware, our building is still owned and maintained by the Bellbrook-Sugarcreek School System. It turns 100 years old this year and hasn't housed students for the past 15 years.

Maintaining a building of this age is expensive. The school district spends upwards of $30,000 annually in taxpayer funds to keep it running, and several major expenditures are looming. The roof needs repair, the boiler system requires an overhaul, and the parking lot is due for resealing. Understandably, the district would rather direct those funds toward students and active facilities. As a result, they've begun moving forward with plans to divest from the building.

News of this is what prompted the formation of our committee. We've been working hard to explore all options: potential new locations, temporary solutions, and even the idea of purchasing the building ourselves. I'm happy to report that as of mid-March, we have a tentative agreement for a new clubhouse location!

We've been in discussions with the Bellbrook-Sugarcreek School System, and we've been offered space in the Board of Education Office at 3757 Upper Bellbrook Road.

There are still a few steps before we can officially make the transition. First, the room we're slated to use is currently being used for storage and will need to be cleared out. That's expected to be completed by the end of June. Second, we're waiting on a final decision from the school system regarding Sugarcreek Elementary and whether we will need to vacate. Once those pieces are in place, we should be able to move forward. For now, it's business as usual.

President's Corner

In March, most of the Ad-Hoc Location Committee toured the proposed site, and the overall impression was very positive. There are two meeting rooms available for us to use (with scheduling coordination through the school), and a dedicated room for our radio equipment. That room will be secured with a lock for club use and, size-wise, is slightly smaller than one side of our current two-room clubhouse.

Best of all, there's an existing radio tower on-site that we'll be allowed to install antennas on—plus, the location is out of the valley, giving us better elevation and, hopefully, better performance! I've included several photos of the site here (Thanks to Paul Sharp-WS8R and Don Macon-KE8WVJ).

As a side note, we're also exploring the possibility of holding our monthly membership meetings in the auditorium at Miami Valley South Hospital. We plan to try it out for the May Planning Meeting.

Enjoy the warmer weather as it rolls in, and try not to eat too many chocolate Easter bunnies this month!

73, Geoff Kline, KI5VNB

What's Up BARC?

Ray Hitt, N8VMX

> Announcements regarding any member news including: new equipment, antennas, grandchildren, children, pets, operating news, etc.

Welcome New Member!

Erik Burnside **W8XLV,** General

End-Fed Half-Wave Antenna Build Project

On March 9th, BARC hosted a construction project, a 10 and 20-meter end-fed half-wave antenna. This antenna is wildly popular in the POTA community for its compact size, ease of setup, and satisfactory performance without requiring a tuner. Around 25 people showed up, many with soldering irons. Geoff Kline, KI5VNB, led the project. He gave a very good presentation explaining the concept of an end-fed half-wave antenna, the 49:1 balun, then detailed step-by-step instructions including winding our own toroids. The presentation is available on our website.

Thanks, Geoff, for hosting us. I think we have many POTA converts now that they have an antenna to use!

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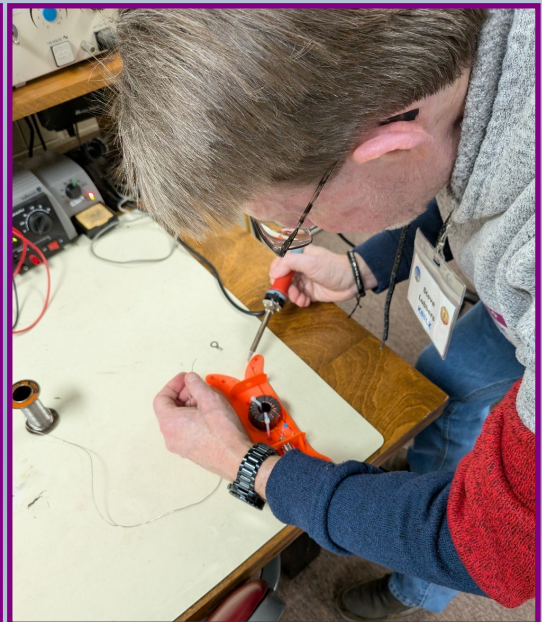
What's Up BARC? (continued)

March General Membership Dinner Meeting

On March 20th, BARC held its annual General Membership Dinner Meeting. This is a tradition where we forego the normal meeting presentation, have a "minimum-but-adequate" formal meeting, then launch into fine dining and fellowship with our fellow club members.

This year we tried a new venue, Fuji Gill, at 8870 Kingsridge Dr., near the Dayton Mall. The building used to be a Golden Corral but now serves Oriental food. Most (but not all) thought the food was good, but certainly the company was great. Here are some photos. Fun bunch to hang out with!

What's Up BARC? (continued)

April General Membership Meeting Presentation

BARC will have a _very interesting_ presentation at the April General Membership meeting, Thursday night, April 17th, 7pm (social), 7:30pm (meeting start). Shawn Waldman, CEO of [Secure Cyber Defense](#) will give a presentation on Cyber Security. Shawn will touch on such cyber security topics as:

- How to avoid Ransomware
- What to do if Ransomware computer is locked
- E-mail threats to expose false sex videos to your e-mail contact list, demanding bit coin payment

Secure Cyber Defense is located in Moraine, OH, and provides expert cybersecurity consulting and managed detection and response services to manufacturing companies, financial institutions, local governments, government contractors, K-12 schools and universities.

This meeting will be carried on Zoom if you cannot attend in person. Watch for login information in your inbox from John Westerkamp, W8LRJ the week of the meeting.

Sugar Maple Festival Parade—Saturday 26 April 2025

The Sugar Maple parade is an annual public service event. BARC provides emergency communications and parade line up assistance.   I'll be sending out an email for volunteers in early April. All BARC members are welcomed to assist with or without an HT. New members are assigned with an experienced member.

We gather at the Bellbrook Community Church at SR725 and Vemco Dr. at 9 A.M. for parade briefing and assignments. I start the parade down the hill at 10:15 A.M. The "official" start time for the parade itself is 10:30 A.M. The parade usually runs about an hour. This is a great opportunity for new ham radio operators to experience working a controlled net operation.

Don - [KB8PSL](#)
Community Service Coordinator

What's Up BARC? (continued)

Lunch Bunch Checks Out a New Restaurant

On March 25th, the Lunch Bunch descended on a new restaurant just added to our Lunch Bunch List. The restaurant is Butterbee's, and we visited the Xenia location at 217 Progress Drive. We needed a replacement to the Golden Corral which has let us down recently. Jim WA8HUB will explain this in his column. Butterbee's has top notch food and quick service. Everyone was well pleased with their lunch. And I made brownie points with my wife by bringing her a loaded baked potato and piece of Reese's Chocolate Peanut Butter pie.

I think this restaurant not only made the cut, but is one of the top restaurants on our list. We'll keep it there.

In the photos below, the restaurant looks empty, but that's because it was 11:15AM. The place was packed by the time we left at 12:30.

Dayton Hamvention®
Sponsored by Dayton Amateur Radio Association
Since 1952

When Is The Show?	Where Is The Show
Friday May 16th, 2025 9:00 AM – 5:00 PM	Greene County Fair and Expo Center
Saturday May 17th, 2025 9:00 AM – 5:00 PM	210 Fairground Road, Xenia 45385
Sunday May 18th, 2025 9:00 AM – 1:00 PM	Coordinates are 39.702 N – 83.9420 W

BARC Hamvention Flea Market Booth: spots 7662 and 7663

Send e-mail to N8VMX@bellbrookarc.org with times you'll be able to help during Hamvention Weekend. Paul (WE8Y) and Ray (N8VMX) need time to browse around too!

Hamvention Flea Market Area (infield of horse track)
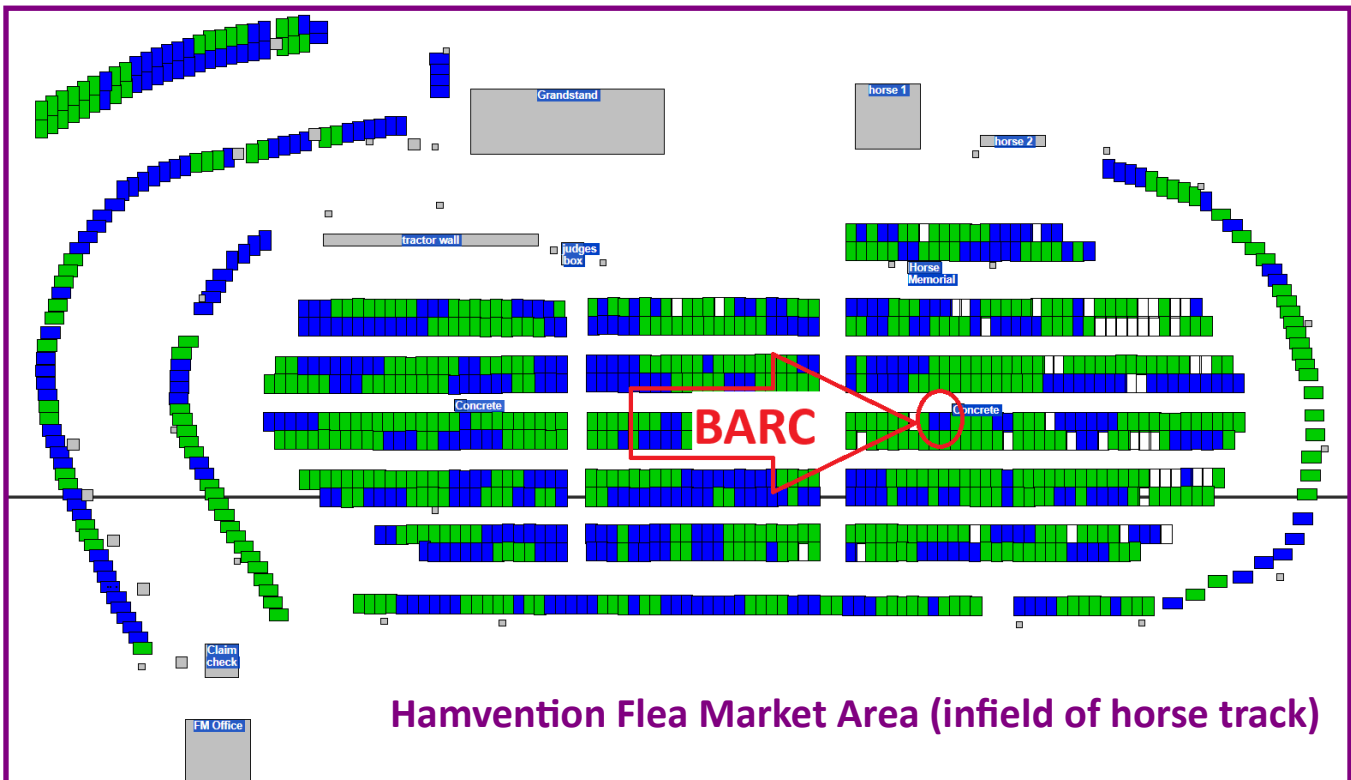
Officer, Director, and Coordinator Inputs

Treasurer: John Westerkamp, W8LRJ: The 2025 numbers are in and we now have 152 paid members at BARC! Thank you all for your support! Expenses outpaced income as is usual this time of year when we renew Zoom and Internet without any dues income. We did have Kroger Rewards income of almost $90.00 so thank you!

Despite several yearly expenses like insurance and Zoom renewal coming due, we continue to be in great financial shape..

Repeater: John Westerkamp, W8LRJ A reminder that when using Allstar or Echolink, if the repeater is in constant use and unable to drop the carrier, a local user will not be able to send a *73 to disconnect and the connection will remain active forever! I have since taken steps to prevent this, but if it happens to you, please text me at 937-271-3119 and I can disconnect the node for you. You can also use the Contact Form on the website to reach me.

Website: John Westerkamp, W8LRJ: Lots of spring events coming up like our Open House on April 12 so watch the website for more information.

And don't forget about the Member Forum where you can ask questions and make announcements. The website has a new section *Mentors and Experts*! You can find a list of experts by selecting *Mentors and Experts* under the *Membership* tab. Send your questions via the *Contact* page for our Experts!

Communication Center: John Westerkamp, W8LRJ: The *ad hoc* Clubhouse Committee is looking at several options for a new meeting location as well as a new location for our radio stations and antennas. We have several great possibilities and will present the information when our plans firm up.

We are meeting regularly to inventory all our radio equipment and decide what we can bring with us to our new clubhouse. Watch out for our Hamvention Flea Market schedule and you can pick up some great deals!

Secretary: Jim Gifford, N8KET: Jim N8KET and Connie W8CSG went to a church on Stroop Road and taught four groups of at least 20 homeschool children each about ham radio. As secretary, took notes from the planning meeting in minutes from the general meeting. I am also in the process of answering half a dozen QSL requests from our special event station, W8W.

BARC Net Manager: Paul Sharp, WS8R: Every Sunday at 8:00 PM you can listen to and participate in the exciting BARC Net, on 147.045. For the 4 weeks in March 2025 there were approximately 59 check-ins lasting 133 exciting and informative minutes. Topics ranged from Open Mike, Parks on the Air, what DX contacts have you made, what are your favorite games to play, and did you participate in St. Patrick's Day? Connie Gifford is our almost newest Net Control, she is training her husband, Jim Gifford, who took Net Control for Tink this month.

Our faithful Net Controllers are, Larry Darner, KD8RER, Connie Gifford, W8CSG, Tink Siwecki KD8NUA, Paul Sharp WS8R, and John Westerkamp W8LRJ.

BARC April 2025 Event Calendar

Tue April 1, 2025

      6:30pm POTA SIG Meeting... Where: BARC Clubhouse

Thu April 3, 2025

      7pm Planning Meeting... Where: BARC Clubhouse

Sun April 6, 2025

      8pm Weekly Net .... Where: 147.045+ (118.8 Hz tone)

Tue April 8, 2025

      11:15am Lunch Bunch...Where: Yaffa Grill

Sun April 13, 2025

      8pm Weekly Net .... Where: 147.045+ (118.8 Hz tone)

Thu April 17, 2025

      7pm Membership Dinner Meeting .... Where: BARC Clubhouse

Sun April 20, 2025

      8pm Weekly Net .... Where: 147.045+ (118.8 Hz tone)

Tue April 22, 2025

      11:15am Lunch Bunch .... Where: Chic-Fil-A

Wed April 23, 2025

      7pm Tech Night .... Where: BARC Clubhouse

Thu April 24, 2025

      7pm Dessert and Movie Night .... Where: BARC Clubhouse

Sun April 27, 2025

      8pm Weekly Net .... Where: 147.045+ (118.8 Hz tone)

BARC Movie and Dessert Night

• • •

September and October movie nights are tentative due to our clubhouse situation but we are planning a full calendar of movies for the 2025 BARC Movie and Dessert Nights.

Upcoming Dates & Selections for Our 2025 BARC Movie & Dessert Nights:

Date	Movie	Genre	Actors
April 24, 2025	**Jurassic World: Dominion**	**Action**	Chris Pratt
May 22, 2025	**Twisters** (2024)	**Action**	Glen Powell
June 26, 2025	**Fly Me to the Moon** (2024)	**Rom/Com**	Scarlett Johansson
July 24, 2025	**Witness**	**Drama**	Harrison Ford
August 28, 2025	**TBD**		
September 25, 2025	**TBD**		
October 23, 2025	**TBD**		

Past movies and Desserts:

January 23, 2025	**Harvey** (1950)	**Carrot Cake & Carrots**
February 27, 2025	**Edge of Tomorrow** (2014)	
March 27, 2025	**Paul, Apostle of Christ**	

Our movie nights are held on the **Fourth Thursday** of each month **January** through **October** at **7:00 PM in the BARC Clubhouse**. We take November and December off for the holidays. At each movie night we pop up, *fresh*, BARC's famous popcorn and you never know what we will come up with for dessert!

We'll see you in April at the Movies!

Tink
KD8NUA

Lunch Bunch

Jim Totten, [WA8HUB](#)

Hello my fellow lunch lovers. April 2025 is here. And time to renew our lunch meetings for this new month. To recap: Our club meetings are on Thursdays. The Planning meeting is the first Thursday of the month and the General meeting on the Third Thursday. Our Lunch Schedule is the Second and Fourth Tuesday of each month. If a scheduled Tuesday gets slammed by some unforeseen event the lunch is just cancelled. The invitation messages will go out Wednesday or Thursday of the previous week.

Now, how will the lunches be selected? Accompanying this information page is the same chart in last month's *Full Quieting* listing our current set of restaurants. The **April** restaurants are **highlighted**. I updated all of the dates for all of the restaurants on our list. This includes the restaurants in 2025. This published list is the order we will select each lunch day. You now know what the whole order is and know what's coming next (did you notice the plural tense above?).

In March we had the standard two lunches, one of the two restaurants a favorite. On March 11 we we ate at Roosters Wings near Fairfield Commons. The food was very good. We had 10 of our friends attend. On March 25 we were scheduled to eat at the Golden Corral. I got some very negative feedback about this choice. In March 2024 we used the Golden Corral for the March Dinner meeting. Our reservation for the front party room was ignored by the current management and we were forced to eat in open seating. We were close together but we weren't expected to be. So, our lunch for March 25 was Butterbee's near Xenia. The least I can say is <u>outstanding</u>. We had 11 diners and everyone praised the food. I had a Black and Blue burger with some delicious coleslaw.

Can we top March in April? The first offering on April 8th is Yaffa Grill Mediterranean Food (now re-named 'Mr. Shawarma & Grill'). This restaurant is in Fairborn, across from Wright State. Then on April 22nd, our venue is the Chic-Fil-A in the Cornerstone complex. Plenty of parking.

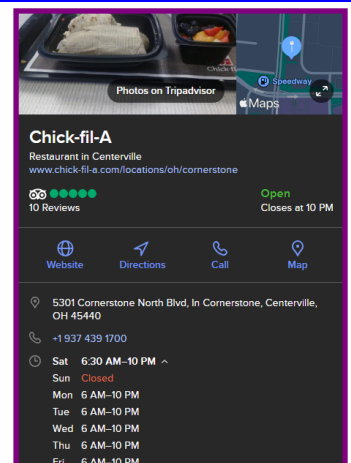That's a wrap for this month. Happy eating.

73, Jim, [WA8HUB](#) {Editor's note: Restaurant addresses are below and on next page.}
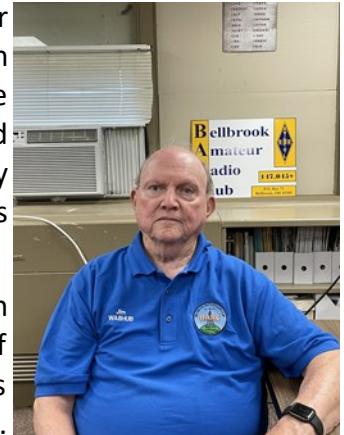
[Tuesday, Apr 8th, 11:15am](#)

[Tuesday, Apr 22th, 11:15am](#)
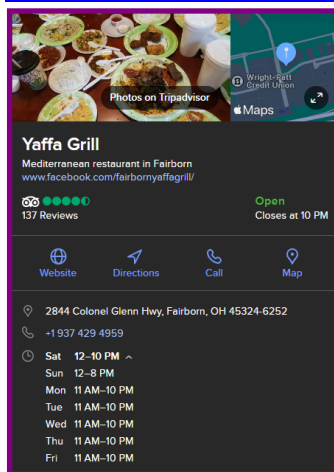
Click pictures or hyperlinks for more info and maps

(Continued on next page)

Lunch Bunch 2024 List

Jim Totten, [WA8HUB](#)

Date	Restaurant	Address	City	Phone Number
12/10/24	Cherry House Cafe 7:00 am to 2:00 pm	1241 Meadow Bridge Dr	Beavercreek, OH 45434	(937) 320-6200
01/14/25	Another Broken Egg Cafe 7:00 am to 2:00 pm	2453 Esquire Dr.	Beavercreek, OH 45431	(937) 912-5074
01/28/25	China Garden Buffet	112 Woodman Dr. Airway Shopping Center	Dayton, OH 45431	(937) 781-9999
02/11/25	First Watch 7:00 am to 2:30 pm	5245 Cornerstone North Blvd	Sugarcreek Twp, OH 45440	(937) 732-9013
02/25/25	Submarine House	3195 Dayton-Xenia Rd.	Beavercreek, OH 45434	(937) 429-8650
03/11/25	Roosters Wings	2430 N. Fairfield *The Shoppes at FC*	Beavercreek, OH 45431	(937) 702-9500
03/25/25	Butterbee's	217 Progress Dr.	Xenia, OH 45385	(937) 352-6504
04/08/25	**Yaffa Grill Mediterranean Food**	**2844 Colonel Glenn Hwy**	**Fairborn, OH 45324**	**(937) 429-4959**
04/22/25	**Chic-Fil-A**	**5301 Cornerstone N Blvd**	**Sugarcreek Township, OH 45440**	**(937) 439-1700**
05/13/25	Culp's Cafeteria	1000 Carillon Blvd	Dayton, OH 45409	(937) 293-2841
05/27/25	City Barbecue	2001 E. Dorothy Lane	Kettering, OH 45420	(937) 200-1006
06/10/25	Marion's Piazza	1320 N Fairfield Rd.	Beavercreek, OH 45432	(937) 429-3393
07/08/25	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
07/22/25	Beavercreek Pizza Dive	4021 Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669

Bringing Ham Radio to the Homeschooled
Jim Gifford, N8KET, Connie Gifford, W8CSG

One evening, during a Tech Night session, I noticed a visitor seated near the back and introduced myself. She said she was associated with the church that meets in our building. She asked if anyone from BARC could come and speak to a homeschool group about amateur radio. Since neither our education or youth coordinators were still present, I volunteered Connie W8CSG and I to meet with her group.

On Friday, March 7, we met with the home-school children at the Assembly of God church on East Stroop Road. We spoke to four groups of about 20, divided by ages five through 12. Since I am a former Boy Scout, I arrived prepared with a PowerPoint presentation with three videos, two of which were young ham radio operators describing, excitedly, ham radio. We also brought the Yaesu FT-891 in my POTA box, two Family Radio Service (FRS) walkie talkies, two 2m HTs, a scanner, and a Morse key and oscillator.

Well, 80 children over three hours, what could go wrong? First, the videos would not play, which caused me great angst, but not that pro Sunday School teacher, Connie, who taught this age group for more than 20 years. With great enthusiasm Connie and I spoke, demonstrated radios, and answered questions all morning (without the PowerPoint).

First we passed around two FRS radios and let them "yell or whisper" (no in between) to one another. Even in a short space, FRS radios have a lot of static. Then, Connie went out and walked down the hall and I remained in the room, and we spoke to each other on 2m simplex, which was loud and crystal clear as a demonstration of good amateur radio.

If you have never talked in front of this age group, you may not realize that their attention span is about five seconds. While we were teaching, 20 feet outside the classroom window were men breaking up a concrete pad and a large cement truck pulled up to pour new cement. Connie had just left the classroom and was in the hall talking to me on the radio. The kids loved

Bringing Ham Radio to the Homeschooled (continued)

hearing our back-and-forth conversation. Connie said, "It's too chilly to play on the playground to-day." I responded, "Yes, but there are men out there playing with blocks." Suddenly, about 20 kids jumped up and ran to the window!

We also allowed each child to tap out dots and dashes (some very, very L O N G dashes) using the key. and oscillator. One young man raised his hand and said he knew SOS. He came up first and keyed it perfectly. An eight-year-old girl stepped up and slowly but carefully keyed in some characters. I was holding the key down so it would not move and read her name tag. I am not good at Morse, but can hear some letters if it's keyed slowly enough. She keyed the letters of her name! I asked her if she knew Morse Code, and she said she learned it in Girl Scouts. Wow, we were amazed! Another, a young man, said his dad is a ham and he is studying for Technician.

We gave out BARC W8DGN QSL cards to each child. It was a great day. When we got home, we collapsed and rested--WHEW!

Jim and Connie Gifford

N8KET and W8CSG

Venturing into FreeDV: A New Era with RADE Mode

Geoff Kline, KI5VNB

At HamCation 2025, I stumbled across a booth discussing FreeDV, a digital voice mode for HF radio. If you're like me, your first question might be: *What exactly is FreeDV?*

FreeDV is a suite of open-source digital voice modes designed specifically for HF communication. It was first introduced in 2012 by David Rowe, VK5DGR, as an alternative to analog SSB (Single Sideband). Unlike other digital voice modes (such as D-STAR or DMR), FreeDV works entirely over HF, making it unique in its ability to deliver digital voice at very low signal levels.

However, early versions of FreeDV had major limitations—they required significant CPU processing power, were highly dependent on good RF conditions, and often produced robotic, unnatural audio that made conversations tiring. Many hams who tried FreeDV years ago left with a less-than-stellar impression.

The Game-Changer: RADE Mode

Fast-forward to 2023/2024, and FreeDV has undergone a revolutionary upgrade. A new mode called Radio Autoencoded (RADE) has been developed, leveraging Machine Learning (ML) and Digital Signal Processing (DSP) to deliver high-quality speech even in weak-signal conditions.

RADE Mode Highlights:

- Operates at -2 dB Signal-to-Noise Ratios (SNR) (even when SSB struggles).
- Uses just 1.5 kHz of RF bandwidth but delivers 8 kHz audio clarity.
- Less CPU-intensive, making it accessible on most modern computers.
- Works remarkably well even with low power setups.

Curious to see if FreeDV worked well, I decided to install and test it myself.

Setting Up FreeDV on My HF Station

Step 1: Install FreeDV & HamLib

Since I operate a Yaesu FTDX10, I first had to install HamLib (https://hamlib.github.io) to handle CAT control for my radio. After confirming it was working, I downloaded the latest version of FreeDV from GitHub:

☞ https://github.com/drowe67/freedv-gui/releases

At the time of writing, I'm running v2.0.0-20250130 on Windows. The software is also available for macOS, and while a Linux front-end exists, I didn't see it in the latest pre-release version.

Venturing into FreeDV: A New Era...(continued)

Step 2: Configuring FreeDV

Setting up FreeDV required a bit of troubleshooting. Initially, I had issues getting it to work on Windows until I realized that HamLib needs to be in the Windows PATH environment variable (I modified my path to include C:\Program Files\hamlib-w64-4.6.2\bin).

Once that was sorted, I launched FreeDV and used the Easy Setup Wizard:

1) Select the Radio Device (USB interface for your transceiver).
2) Set up audio input/output (where you hear the audio and where the mic captures your voice).
3) Configure CAT control to let FreeDV handle radio tuning.
4) Enable reporting (optional, but useful for seeing active stations).

TIP: Since FreeDV is a digital mode, I set my output power to 30 watts and ensured my SWR was within acceptable limits before transmitting.

Using FreeDV Reporter to Find Activity

One of the coolest tools in FreeDV is FreeDV Reporter—a live activity map that shows stations transmitting or receiving in real time.

- Red rows indicate stations currently transmitting on a frequency.
- Blue rows show stations receiving and decoding FreeDV signals.
- The SNR column displays signal reports, helping you gauge your reach.

As a side note, FreeDV operates in the phone portion of the bands (it is a voice mode) and follows the same USB/LSB conventions as traditional voice SSB, making it easy to integrate into your normal HF operation.

My First QSO Using FreeDV RADE

Once I had everything running, I checked FreeDV Reporter and noticed activity on 15 meters. I tuned in and, within 30 seconds, I was in a three-way QSO with:

- Richard, W7YC (Texas, USA)
- Gerhard, OE3GBB (Austria)

I was only running 30 watts and they had no trouble hearing and decoding my signals with FM-like clarity. Gerhard was running 500 watts, Richard was at 100 watts, and yet the conversation remained stable and clear for everyone involved.

Both operators had used older FreeDV versions and agreed that RADE mode is a game-changer in:

- Speech quality (far superior to earlier FreeDV modes).
- Reduced CPU load (doesn't bog down your computer).
- Better stability in noisy conditions (great for weak-signal DXing).

Venturing into FreeDV: A New Era...(continued)

Why Should You Try FreeDV (Or Try it Again)?

If you've never used FreeDV before—or tried it years ago and found it frustrating—now is the time to give it another shot. The improvements in RADE mode make FreeDV a viable alternative to SSB, especially for low-power stations, digital experimenters, and weak-signal DXers.

Who Can Use FreeDV?

- General & Extra license holders → Use FreeDV on 20m, 40m, 80m, and more.
- Technician license holders → Can operate FreeDV in the 10m voice segment.

How to Get Started?

- Download the latest FreeDV software.
- Check FreeDV Reporter for active frequencies.
- Join a QSO and experience digital voice on HF!

This looks like it could be a fun mode to play with. If you need help setting it up, feel free to reach out as I'm sure we could work through it together.

73, Geoff KI5VNB

Answers to Amateur Radio Test Questions on pages 30-32

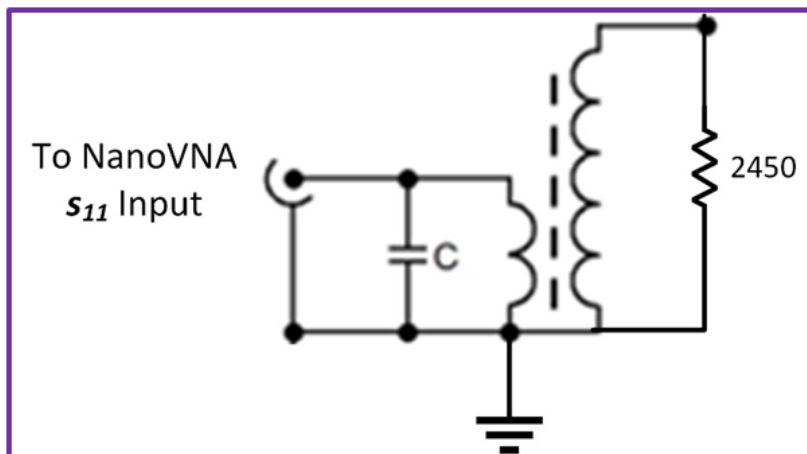| Technician (pg 30)	General (pg 31)	Amateur Extra (pg 32)
T7B11 (C)	G1E03 (A) [97.221]	E7H04 (C)
T1D01 (A) [97.111(a)(1)]	G1A03 (B) [97.305]	E7H10 (B)
T8A06 (A)	G3C05 (C)	E7B09 (D)
T2A05 (C)	G9B12 (A)	E7E03 (D)

Measure an EFHW with the NanoVNA

Ray Hitt, [N8VMX](#)

I recently built a 10-20 meter end-fed half-wave (EFHW) antenna at a BARC build session on March 9th. I wanted to put my NanoVNA to the test to measure my unun on the workbench and tune the EFHW when installed in a tree as in a POTA deployment.

Measuring the Unun: The EFHW construction project we built uses a 49:1 unun. This takes the high impedance of an EFHW and transforms it lower by a factor of 49. So, to test the balun, you can connect a 2450Ω resistor to the antenna connection and ground. This should appear as $\frac{2450\Omega}{49} = 50\Omega$ at the coax input.


Rummaging through my drawer full of resistors, I found some color coded red-red-red. This is 2,2 and two zeros (100 multiplier), or 2200Ω. One was actually measured at 2457Ω. Score! So, I took that resistor and connected it to the antenna output and ground. I then connected the unun input to the s_{11} input on my NanoVNA. This is the same input connection that would run from the unun to the transceiver power output when it all is connected. Below are a picture of the NanoVNA unun test set-up and the VSWR/Smith Chart results of the unun from 1.5-30 MHz.

(Continued on next page)
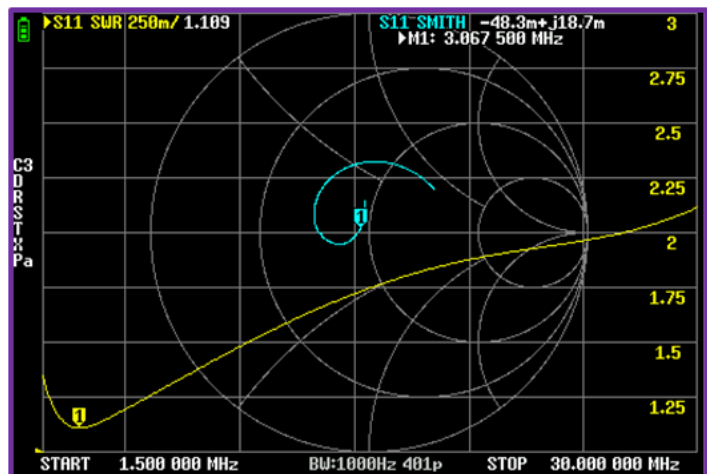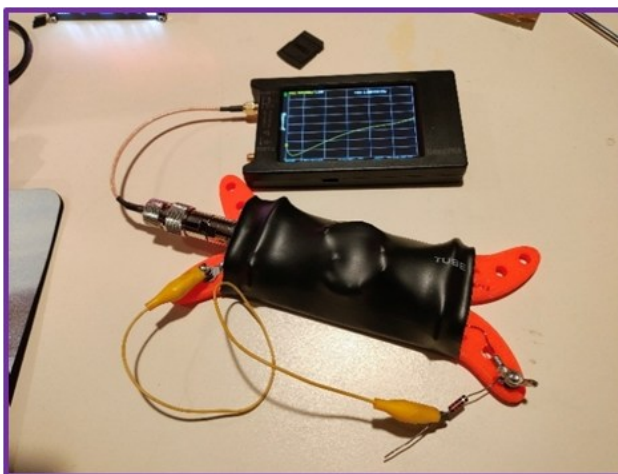
Deployed EFHW Measured Performance: When I initially installed this antenna I noticed that it was resonant way above where I expected. Close inspection of the balun and antenna wires showed me that I had accidentally reversed the antenna and counterpoise wires! The counterpoise is significantly shorter and is not required to be resonant. So, I swapped the black antenna lead with the yellow counterpoise, and pulled the EFHW into a tree in my backyard and connected the NanoVNA to take some measurements. Here's how it performed after I trimmed a few inches off the antenna lead. This is fine without a tuner across 10 and 20-meter bands.
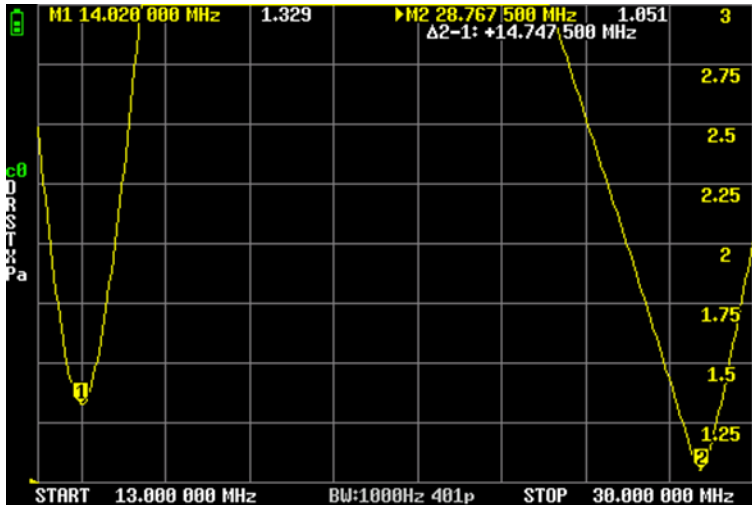
This VSWR Plot was a direct screen capture from the NanoVNA. You can do this either by saving to the built-in SDCard (for those versions that support an SDCard), or with the screen capture button on *NanoVNA-App* on the PC while connected to the NanoVNA.
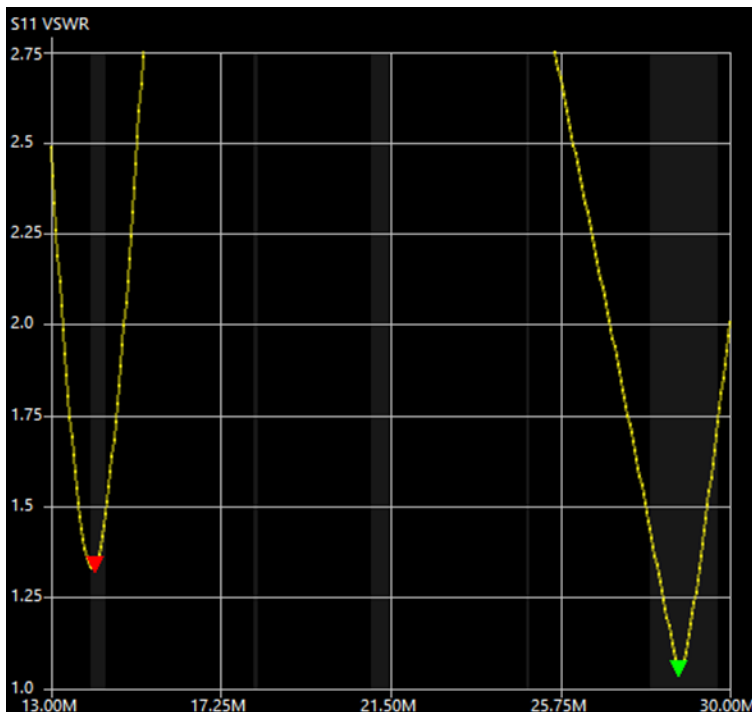

This VSWR Plot was generated in *NanoVNA-Saver* app, by importing the .s1p file generated by the NanoVNA and loading it into *NanoVNA-Saver App*. This is also the plot that would be generated real-time if the NanoVNA were connected to the *NanoVNA-Saver app.*

Notice the gray bands showing the 20, 17, 15, 12 and 10-meter bands (The 17 and 12-meter bands are *very thin* bands on this plot).

The same .s1p file was fed into *NanoVNA-App* generating this plot (below). The VSWR plot looks different because a logarithmic scale is used for the VSWR value. Notice also that there are gray bands in the graph that represent the amateur radio bands for 20, 17, 15, 12, and 10-meter bands.
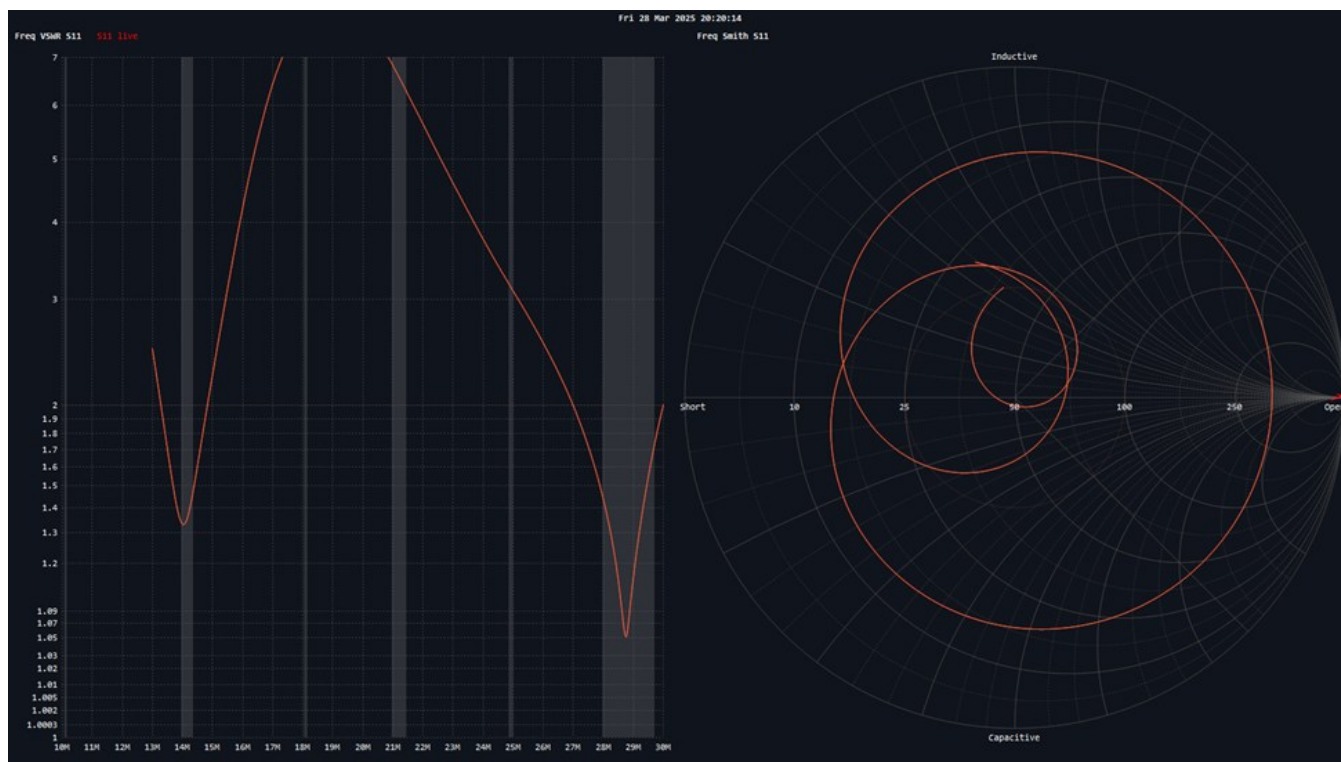
Results: I am pleased with the performance of this antenna. For as small as it is and how quickly it can be set up, I was able to work in the 10 and 20-meter bands. The VSWR performance of the unun itself was below 2.25:1 well past 30 MHz. It would be usable for the not only 10 and 20, but also 40, 80 and even the 160-meter bands. I may fabricate a 40-meter element and see how this antenna performs. When I do, I'll give you an update.

73, Ray **N8VMX**

Adventures with a NanoVNA – Part 2

Ray Hitt, N8VMX

This is another article of a series that describe the NanoVNA, what it is, how is it used and why you might want to get one. In July 2023's *Full Quieting* I described the NanoVNA, how to calibrate it and how to measure a dual-band handheld antenna connected to it. In August 2023's *Full Quieting*, I described how to update the flash within the NanoVNA. I wrote this Part 2 article in 2023 and accidently buried it — it was supposed to be read before August 2023's Part 3! Not sure how that happened. Anyway, in this article I want to show how you can use PC applications to greatly augment the use of the NanoVNA. Once you use some of these applications, you may not want to use NanoVNA standalone anymore; although there are times when you need to (on top of a tower for example).

These applications make use of the USB-C connector on the NanoVNA. You can connect with a USB-A to USB-C cable or a USB-C to USB-C cable, depending on what your computer supports. It not only passes data to/from the computer, but also charges up the NanoVNA's internal battery. Bonus!

{Note: Since this article was written, I started using the NanoVNASaver app which I will talk about next month. I still use NanoVNA-App for many of it's unique features though. Don't confuse the two.}

The application I will discuss here is called **NanoVNA-App**. It is cited on NanoVNA.com's web page, but there is a stale link there. I found the latest version on Github, version 1.1.209-OD18 dated 13 June 2024. You can install the exe setup file under Windows (I have used it in Windows 10 and Windows 11). Note that you may get a Windows malware warning when trying to install it, mainly because this is not a common application. I went ahead and installed it anyway. There are also source code and "tar balls" (*.tar.gz) files for compiling in Linux.

Turn on the NanoVNA and plug it into one of your computer's USB ports. When you launch *NanoVNA-App*, you should get a screen like this {right}. I selected the appropriate COM port and it immediately connected. The baud rate can be adjusted, I've used 921600 to speed things up.

I know, this program looks quite busy, but it's approximating a piece of sophisticated test equipment. To get started, you can hover your mouse pointer over every button and it will explain what it does. That's how I learned how to use *NanoVNA-App*.
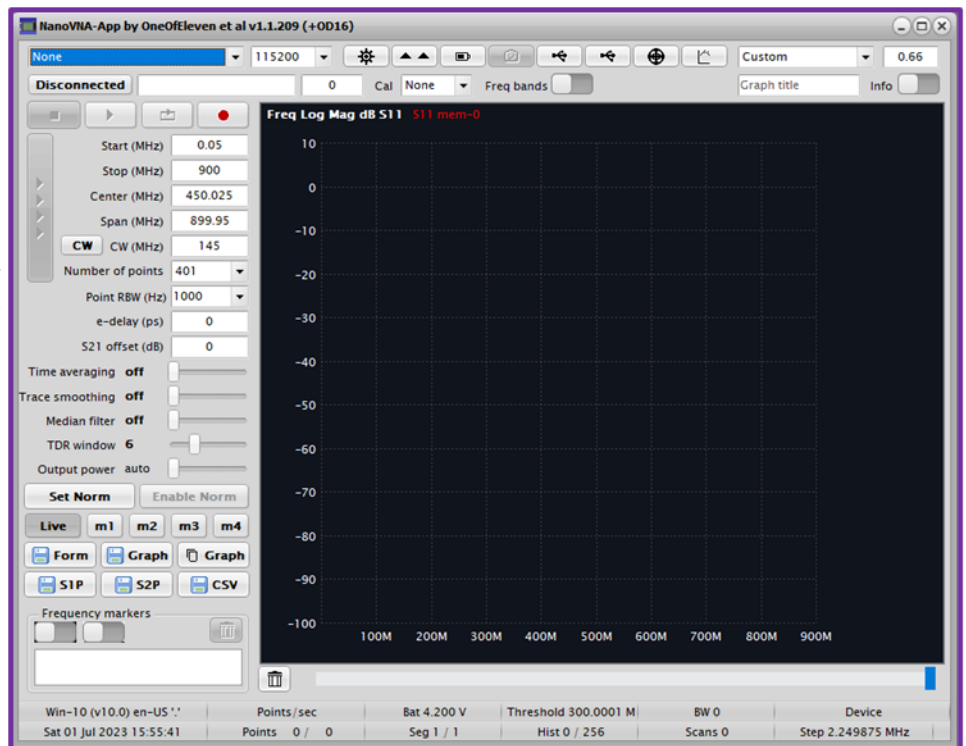

(Continued on next page)

Adventures with a NanoVNA – Part 2 (continued)

To start out, in the upper left, you need to select the COM port that the NanoVNA is attached to on your computer. If you have Bluetooth turned on, there are probably a lot of COM ports. In my case, the Nano VNA tried to use a COM port that Bluetooth was already using, so I had to get into Device Manager and manually assign the COM port number to something not used already. I was able to use COM10, so once I picked COM10, the NanoVNA showed as Connected. Here's what the display looks like now {below}.
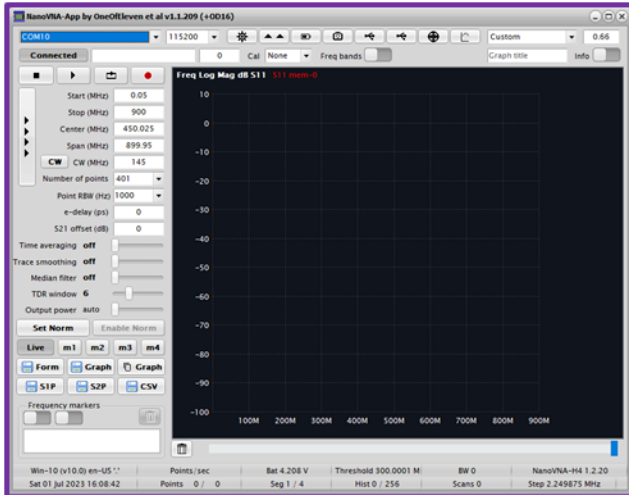

You'll notice {left} some of the buttons are no longer greyed-out and can be used. If you want to grab a single pass of data from the NanoVNA, press the *play* button. The button to its right does a *continuous scan* instead of a single sweep. The *stop* button ceases the continuous scan, and the *record* button saves off the session in .s2p files.

The NanoVNA is not calibrated yet; this needs to be done before we go any further. What's interesting is there are two different calibrations you can use: the NanoVNA's own calibration, or the NanoVNA App calibration. Even if you calibrate using NanoVNA app, it's recommended to calibrate the NanoVNA itself first to avoid data going "out of range". The main reason for doing calibrations in NanoVNA app is to save them to the computer and call them up later. My NanoVNA H4 Version 4.2 doesn't have an SDcard to save calibrations, that was introduced in NanoVNA H4 Version 4.3. Also, I'll explain this later, but you can have an expanded number of points in *NanoVNA-App*, so the calibration needs to be done in *NanoVNA-App* to be accurate.

The calibration is only valid for the start, stop, and number of points you plan on using, so let's set that up before we calibrate. For example, I am interested in measuring a dual band antenna between 100 MHz and 500 MHz. I want to use 1601 points instead of the default 401 points, to give more resolution. You only need to enter Start, Stop and Number of points, the rest are calculated for you. Here's what I put into the NanoVNA {right}.
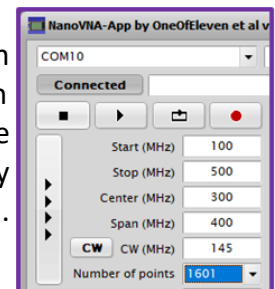

The *Calibration* ⊕ button brings up another dialog box. You need the SMA short, SMA open and SMA load connectors I talked about in July 2023's article. If you need to measure s_{21} parameters, you need a second SMA load for CH1 to measure **Load/Isoln**, and an SMA-SMA cable connected to CH0 and CH1 to measure **Through**. You can do these in any order, just attach the SMA connector and hit the button it describes. It will take a few moments to calibrate, then a check mark will show up in that button. Take off the SMA connector and repeat this process with the other two SMA connectors.
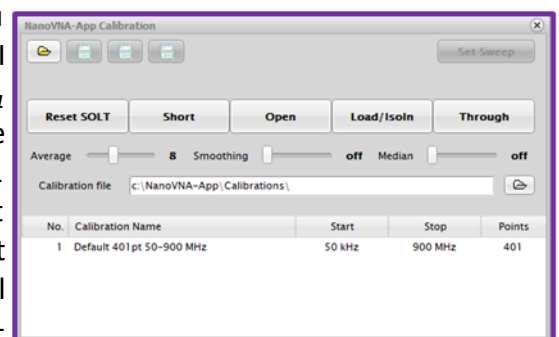
Adventures with a NanoVNA – Part 2 (continued)

Once you're done calibrating, you can {should} save the calibration so that you can load it again the next time you need it. The save buttons are not greyed out anymore once the calibration is done. In the example here {right}, you can see I have saved two calibrations so far on this computer, one of them is selected for use and is also displayed at the top of the dialog box for confirmation.
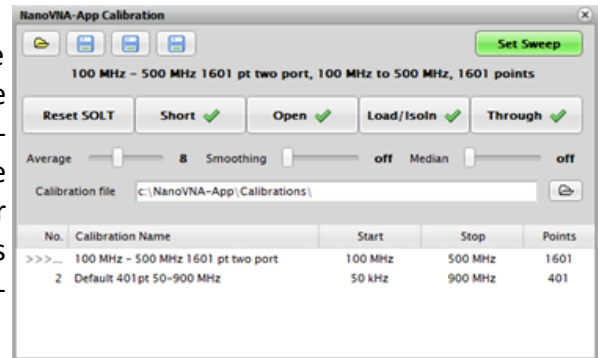
Now that the calibration is done, the fun can begin. Put *NanoVNA-App* in Continuous Scan mode. Connect a typical dual band handheld antenna to CH0. The graph area defaults to showing **Freq Log Mag dB S₁₁** which is mathematically related to VSWR by the formula:

$$VSWR = \frac{1 + |\Gamma|}{1 - |\Gamma|}$$

where Γ is the *reflection coefficient*, related to **s₁₁** by the formula:

$$s_{11} = 20 \, log(|\Gamma|)$$

The *reflection coefficient* is the percentage of signal reflected. It's between 0 and 1, where 0 is no reflection at all and 1 is total reflection. A *reflection coefficient* of 0 gives a SWR of 1.0, and a *reflection coefficient* of 1 gives a SWR of ∞. If you want to view *SWR* instead, select it from the multiple choices available by right-clicking on the graph area. You can also set the Y-axis scale and customize it further. Another thing you can do is tile graphs together in the main graph window. I chose to tile two graphs side by side, with the left graph being *SWR* and the right graph being *Smith chart s₁₁ imped-*

(Continued on next page)
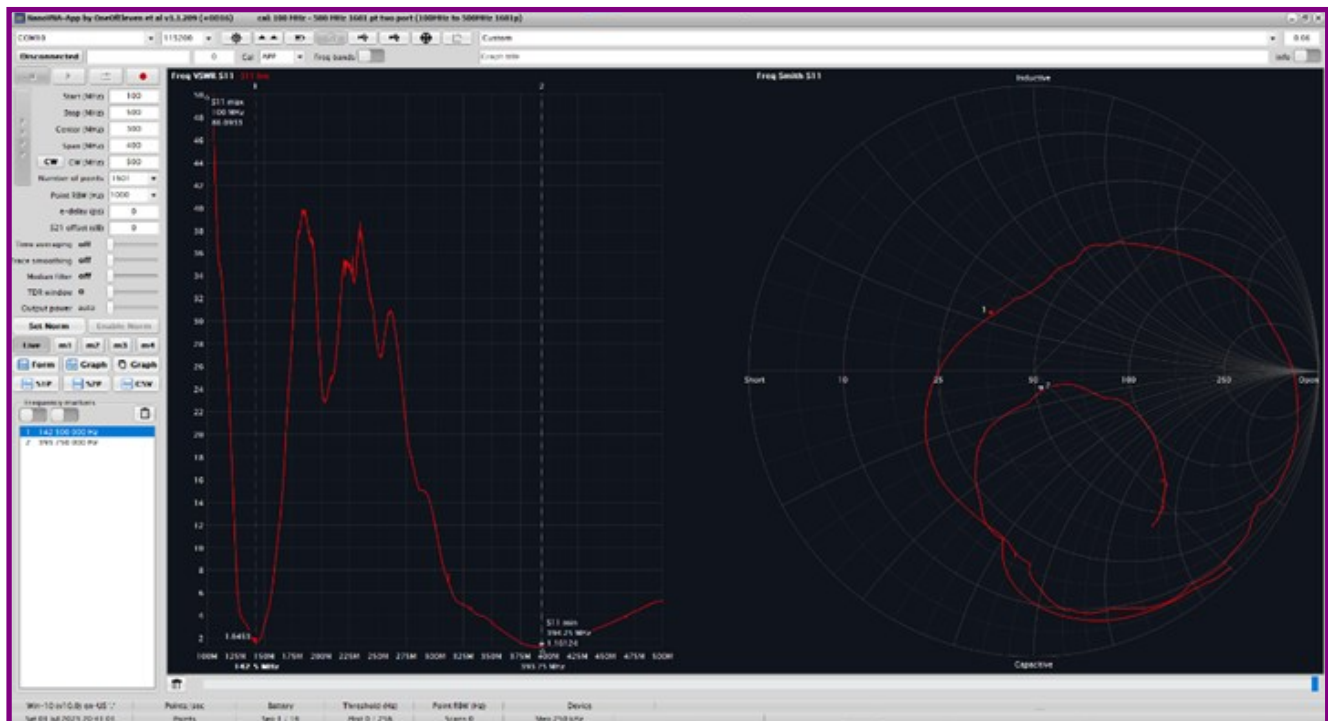
ance.

You can also generate tearaway graphs by hitting the Graph button . You can do this as many times as you wish and customize each graph in its own way. A good way to spend a long weekend!

Another useful tool is to capture the actual NanoVNA screen and display it on your computer and save it as an image. You do this by hitting the Capture VNA Screen button. Here's a sample of what the NanoVNA was calculating:
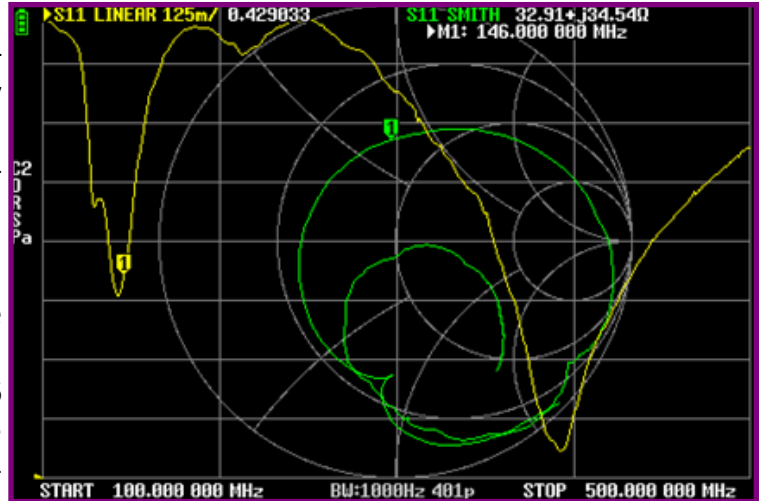
There are two s_{11} traces here, a linear trace (yellow) from 0 to 1, which is related to the reflection coefficient, and a s_{11} Smith Chart (green). In both cases, I put a marker at 146 MHz, the center of the 2m band. You can see that this dual band antenna has better performance in the 70cm band by examining the yellow trace, seeing the minimum is just under 400 MHz. This antenna was measured away from other objects, typically a human is near the antenna which would alter its performance.

The next thing to try is to measure the passband performance of a filter. This makes use of both CH0 and CH1 ports. The input of the filter would attach to CH0 and the output would connect to CH1.

This filter example is a 162MHz bandpass filter / preamp. The ANT port is connected to CH0, and the
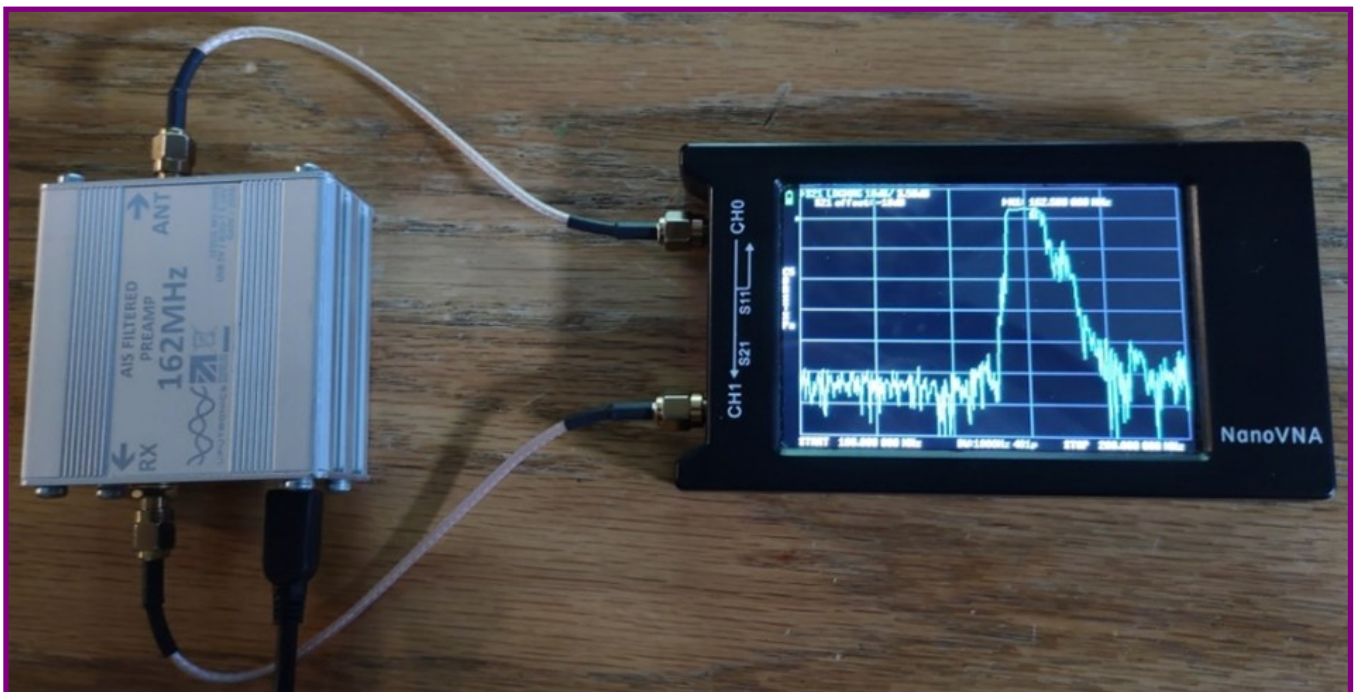
Adventures with a NanoVNA – Part 2 (continued)

RX port is connected to CH1. Some filters are bi-directional and it wouldn't matter which is treated as input or output, but since this one contains a preamp, it only functions properly in one direction.

The s_{21} parameter comes into play with a two-port device, i.e with an input and output. The s_{21} parameter represents the *Transmission Coefficient*, which is the negative of the *Insertion Loss* between the output and the input. Since this filter has a preamp, there is a gain of 13.32 dB at 162MHz and over 50 dB of attenuation outside the bandpass.

Here is a left-right comparison of the s_{21} *transmission coefficient* of the NanoVNA (left side) and *NanoVNA-App* (right side).
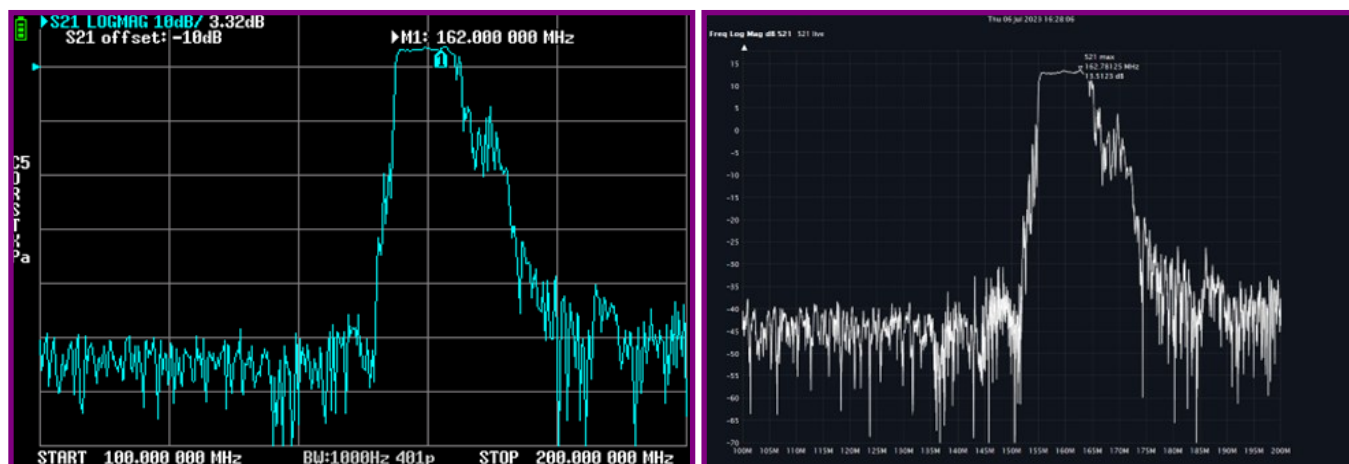
The number of points was increased from 401 points in the NanoVNA {below left} to 3201 points in *NanoVNA-App* {below right}. Additionally, *NanoVNA-App* had its own calibration. Despite that, you can see the data is virtually identical between the two.

That should be enough to get you going using *NanoVNA-App*. In Part 3 (August 2023 *Full Quieting*), I talked about using *NanoVNA-App* to upload new firmware into the NanoVNA. Then, in Part 4 (May 2025 *Full Quieting*), I'll describe another PC app, *NanoVNA Saver*. I use both *NanoVNA-App* and *NanoVNA Saver*, they each have unique features. You may settle in on one over the other, but I can't let go of either one!

Special Event Stations for April

Paul Sharp, WS8R

Here are a 2 links you can follow to find many SES that suit your varied interest. I may repeat and update some of these links as there are only a few many sites focused on SES.

http://www.arrl.org/special_events/search/page:2/model:Event.

https://www.qsl.net/va3rj/spevents_dx.html.

Here is my pick of the litter of SES that I think will be of interest to my fellow BARC members. Once again, something for everyone! This month there are SES for commemorating: GERATOL for all you old folks who need extra wattage, National Library Week, Shark's Tooth Festival, World Amateur Day, a DX Expedition to St. George Island (off the coast of Florida), and 2 events for Marconi Day.

04/06/2025 | GERATOL NET 52nd Anniversary . Apr 6-Apr 13, 0001Z-2359Z, N1KL, Wheelwright, MA. GERATOL NET. 3.668. Certificate. Kevin Lynch, POB 124, Wheelwright, MA 01094. The GERATOL Net Worked All States net is celebrating 52 years of service to the Amateur Radio community. For special downloadable certificate, look for W1G Special Event on 3.668 Mhz starting at 0100Z each evening. https://geratol.net

04/11/2025 | National Library Week 2025 . Apr 11-Apr 13, 1600Z-1600Z, K8L, Youngstown, OH. The Public Library of Youngstown & Mahoning County. 14.074 7.074 14.250 7.250. QSL. K8L (National Library Week), 239 Elvira Ct., Mc Donald, OH 44437. Celebrate National Library Week 2025. We will be operating from various libraries local to Youngstown, OH. We will be on mainly 20m and 40m, both SSB & FT8. Receive a themed QSL card. More information on QRZ. www.qrz.com/db/wf8u

04/12/2025 | Mississippi State Parks on the Air. Apr 12, 1300Z-2300Z, N5OS, Biloxi, MS. Jackson County MS ARA. 14.074. Certificate. Jerry Davis, P.O. Box 234, Gautier, MS 39553. 2nd Annual MS State Parks on the Air event https://jcmsara.org/mississippi-parks-on-the-air

04/12/2025 | Operation Frequent Wind. Apr 12, 1600Z-2300Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 14.320 7.250 14.070 PSK31 DSTAR on Papa System Repeaters. QSL. USS Midway Museum

04/12/2025 | Venice Florida Shark's Tooth Festival. Apr 12-Apr 13, 1020Z-1017Z, K4S, Venice, FL. Tamiami Amateur Radio Club. 14.136 21.136 28.136. QSL. TAMIAMI AMATEUR RADIO CLUB, PO BOX 976, Nokomis, FL 34274-0976. QSL includes a fossilized shark's tooth from the beach in Venice, FL when

04/16/2025 | 2025 NFL Draft. Apr 16-Apr 30, 0000Z-2359Z, W9D, De Pere, WI. Green Bay Mike & Key Club. 10-80 meters CW and SSB; 7.030, 7.230 28.060, 28.450 14.030, 14.230 3.555, 3.900. Certificate & QSL. Green Bay Mike & Key Club, 3004 Quarry Park Dr. #10, De Pere, WI 54115. Commemorating 2025 NFL Draft in Green Bay, Wisconsin. 0000Z to 2400Z. k9eam@yahoo.com or www.k9eam.org

Special Event Stations for January (continued)

04/18/2025 | WORLD AMATEUR RADIO DAY 2025. Apr 18, 1300Z-2000Z, W2JLD, Rochester, NY. ROC-HAM RADIO NETWORK. ALLSTAR: 2585,47620,531310; ECHOLINK: ROC-HAM CONFERENCE; DMR TGIF Talk Group 2585 20M:14.316, 40M:7.266. Certificate & QSL. JOHN DERYCKE, 85 AMHERST ST #2, Rochester, NY 14607. *******TO GET A QSL CARD PLEASE SEND A S.A.S.E. OR 5$ DONATION TO MY PAYPAL ACCOUNT DMOTORSPORTS@GMAIL.COM TO COVER POSTAGE AND HANDLING………. *********TO CONFIRM YOUR QSO ON QRZ LOG PLEASE USE THE MODE:VOI AND THE USE FREQ: 446.025 THAT WAY WHEN YOU GO TO CONFIRM OUR INFO WILL MATCH, IF YOU USE SOMETHING OTHER THAN WHAT I HAVE PUT HERE YOU WILL NOT GET A CONFIRMATION**** https://www.roc-ham.net/ward-2025

04/19/2025 | World Amateur Radio Day. Apr 19-Apr 20, 1300Z-2359Z, N6AJ*, Bakersfield, CA. Terry Godley. 28.425, 14.074; 10 - 40 meters, FT8, SSTV. QSL. Terry Godley, 2701 Fordham Street, Bakersfield, CA 93305. Also participating, W6W, W6A, W6R and W6D.

04/25/2025 | Handiham Program 58th Anniversary QSO Party. Apr 25-Apr 27, 1900Z-1900Z, W0ZSW & W0EQO, Minneapolis, MN. Handiham Radio Club & Handiham Radio Club of Minnesota. 28.050 CW & 28.350 SSB 21.050 CW & 21.350 SSB 14.050 CW & 14.250 SSB 7.050 CW & 7.200 SSB. QSL. Handiham Program, 3915 Golden Valley Road, Mail Route 78446, Minneapolis, MN 55422. In honor of the Handiham Program's 58th Anniversary, the Handiham Radio Club and the Handiham Radio Club of Minnesota are sponsoring a QSO Party. The object is for Handiham members to work as many stations as possible during the 48-hour operating period. We also will use this opportunity to promote and give more details about the Handiham Program and the Handiham Radio Clubs for those who are interested. We will be active on all amateur bands and modes to make contacts including digital and VOIP modes. The exchange is simply name and state, province, or county. Stations will be using their own call signs in addition to the club call signs. Please listen for stations calling CQ Handiham 58, and give us a contact! www.handiham.net https://handiham.org

04/26/2025 | DXpedition to St.George Island. Apr 26-May 6, 0000Z-2359Z, K4D, St. George Island, FL. K5TEN . 7.027.5 14.027.5 21.280 28.310. QSL. Bruce Brady K5TEN , 208 Mt Tabor Road, Hot Springs National Park, AR 71913. IOTA DXpedition to St. George Island NA-085. FL007S. Operation 40-6m CW&SSB. QSL to K5TEN SASE required. Logs also uploaded to LOTW. Call sign K4D. Grid EL79. k5ten@aol.com

04/26/2025 | International Marconi Day - Official Station. Apr 26, 1330Z-2100Z, K3S, Port of Baltimore, MD. Nuclear Ship Savannah Amateur Radio Club. 7,14,18,21,28. QSL. Ulis Fleming, 980 Patuxent Rd, Odenton, MD 21113. Check spotting networks for frequency. See QRZ.com info for Savannah Award qrz.com/db/k3s

04/26/2025 | Marconi Day Event. Apr 26, 1300Z-2030Z, W2GSB, Babylon, NY. GREAT SOUTH BAY AMATEUR RADIO CLUB . 28.340 21.250 14.246 7.245. Certificate. W2GSB GSBAC, PO Box 1356, Babylon, NY 11704. Operating from the Babylon Village Historical Society Museum for Marconi Day, which was the home of the Marconi School for radio operators 3 stations using CW SSB FT8 WWW.GSBARC.ORG

Amateur License Test Questions

Technician

T7B11

What is a symptom of RF feedback in a transmitter or transceiver?

A. Excessive SWR at the antenna connection
B. The transmitter will not stay on the desired frequency
C. Reports of garbled, distorted, or unintelligible voice transmissions
D. Frequent blowing of power supply fuses

T1D01

With which countries are FCC-licensed amateur radio stations prohibited from exchanging communications?

A. Any country whose administration has notified the International Telecommunication Union (ITU) that it objects to such communications
B. Any country whose administration has notified the American Radio Relay League (ARRL) that it objects to such communications
C. Any country banned from such communications by the International Amateur Radio Union (IARU)
D. Any country banned from making such communications by the American Radio Relay League (ARRL)

T8A06

Which sideband is normally used for 10 meter HF, VHF, and UHF single-sideband communications?

A. Upper sideband
B. Lower sideband
C. Suppressed sideband
D. Inverted sideband

T2A05

How should you respond to a station calling CQ?

A. Transmit "CQ" followed by the other station's call sign
B. Transmit your call sign followed by the other station's call sign
C. Transmit the other station's call sign followed by your call sign
D. Transmit a signal report followed by your call sign

Amateur License Test Questions (continued)

General

G1E03

What is required to conduct communications with a digital station operating under automatic control outside the automatic control band segments?

A. The station initiating the contact must be under local or remote control

B. The interrogating transmission must be made by another automatically controlled station

C. No third-party traffic may be transmitted

D. The control operator of the interrogating station must hold an Amateur Extra class license

G1A03

On which of the following bands is image transmission prohibited?

A. 160 meters

B. 30 meters

C. 20 meters

D. 12 meters

G3C05

Why is long-distance communication on the 40-, 60-, 80-, and 160-meter bands more difficult during the day?

A. The F region absorbs signals at these frequencies during daylight hours

B. The F region is unstable during daylight hours

C. The D region absorbs signals at these frequencies during daylight hours

D. The E region is unstable during daylight hours

G9B12

What is the approximate length for a 1/4 wave monopole antenna cut for 28.5 MHz?

A. 8 feet

B. 11 feet

C. 16 feet

D. 21 feet

Amateur License Test Questions (continued)

Amateur Extra

E7H04

How is positive feedback supplied in a Colpitts oscillator?

A. Through a tapped coil
B. Through link coupling
C. Through a capacitive divider
D. Through a neutralizing capacitor

E7H10

What information is contained in the lookup table of a direct digital synthesizer (DDS)?

A. The phase relationship between a reference oscillator and the output waveform
B. Amplitude values that represent the desired waveform
C. The phase relationship between a voltage-controlled oscillator and the output waveform
D. Frequently used receiver and transmitter frequencies

E7B09

What is characteristic of an emitter follower (or common collector) amplifier?

A. Low input impedance and phase inversion from input to output
B. Differential inputs and single output
C. Acts as an OR circuit if one input is grounded
D. Input and output signals in-phase

E7E03

What is a frequency discriminator?

A. An FM generator circuit
B. A circuit for filtering closely adjacent signals
C. An automatic band-switching circuit
D. A circuit for detecting FM signals

Editorial Policy and Style Guidelines for *Full Quieting*

Editorial Policy

Full Quieting welcomes articles from BARC members on any ham radio subject that is relevant to BARC. Our focus is our BARC members. We will not reprint items or articles that are easily available by other means (web, magazines, etc.).

Most articles will be "how to" or "what I did" articles that focus on technical or operational subjects such as a construction (antennas, equipment, stations, etc.), the use of hardware or software, operating in unique/ challenging circumstances, or a memoir.

Full Quieting will also consider an occasional article on policy issues regarding the various national licensing/ regulatory agencies and/or amateur radio associations so long as the article is relevant to BARC members and constructive in tone and recommendations.

Although all *Full Quieting* articles represent the experiences and points-of-view of their authors and not BARC, articles that focus on policy issues will be specifically labeled as a reflection of the author's opinion.

Regardless of subject, when you submit an article you acknowledge that you are the original author or creator and you grant publication rights to BARC. Anything you submit remains your property and you may have it published elsewhere without the need for permission from *Full Quieting*.

Style Guidelines

Language: English is the official language of *Full Quieting* and all articles should be submitted in English. Don't be concerned if English is not your first language: just tell your story in your own voice and use translating tools such as Google Translate to help if necessary.

File format: Submit your article as a Word, Word Perfect, OpenOffice or text file attachment to an email. A shared document available for download (such as a Google Doc) is also okay. **Do not submit as an email or PDF file**.

Pictures and other graphics: Do not embed pictures or tables in the article. Please submit as an email attach-ment or a shared image available for download. Please reduce the file size of the images before you send them to *Full Quieting*. Large files can be attached to a series of emails. Keep file size in mind regarding publication quality: for example, a half page image in the final PDF version of *Full Quieting* should be at least 400 pixels wide. If a photograph or graphic was taken or created by someone else, you should have their permission to use it and the permission of anyone identifiable in the image. **If you capture images from the web, provide a citation (URL) for that source and make sure the source does not prohibit use of the image in *Full Quieting*.**

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Editorial Policy and Style Guidelines for *Full Quieting*

(Continued from previous page)

Use these style conventions

- We are hams, not Hams, and our hobby is ham radio This is a change to our original format

- The name of our organization is: Bellbrook Amateur Radio Club or BARC

- The code we use is Morse (capitalize the M)

- We use Yagi antennas (capitalize the Y)

- Q codes should be capitalized: QRM, QSB QSY

- The plural of QSO is QSOs, not QSO's

- Modes should be capitalized: CW, SSB, FT8, RTTY

- Bands are written as 10 m, 15 m etc.

- The abbreviation for a Silent Key is SK.

- You might have had an Elmer, not an elmer

Bruce N7RR has provided a two-page check list of common International System of Units (SI) formats and abbreviations.

Use these formatting conventions:

- Set all borders to 1 inch. The preferred font is Calibri, 12 point.

- Do not use tabs or spaces at the beginning of a paragraph

- Use only a single paragraph or carriage return at the end of each paragraph

- To enhance readability, use two spaces after the period at the end of a sentence.

Misc BARC Info

REGULARLY SCHEDULED NETS

Daily (Sunday through Saturday) 1030, 1615 and 1845 Ohio Single Sideband Net (OSSBN) Primary: 3972.5 KHz LSB Alternates: 3968 & 7272 KHz LSB

Weekdays (Mon-Fri) 1130 DMR Net Brandmeister Talk group 310557. Accessible via hotspot, 444.875 (+) CC13 TS2(Dayton East), 444.4375 (+) CC11 TS2 (Dayton West)

Sundays 1900 Newcomers & Elmers Net (Cincinnati) 146.670 (-) (123.0 PL)

Sundays 2000 **BARC Weekly Net 147.045 (+) (118.8 PL) [Alt 443.675 (+) (118.8 PL)]**

Sundays 2100 Miami Co. Voice & Data Net (Data Net follows Voice Net) 145.230 (-) (no PL)

Winlink Tuesdays GCARES Winlink Net Any time on Tuesdays Eastern Time Send To: W8LRJ, Cc: KE8FMJ W8GCA-10 445.010 (S), W6CDR-10 145.010 (S)

Tuesdays 1900 Dayton Veterans Admin Amateur Radio Club Net (W8DVA) 443.850 + 107.2 pl

Tuesdays 1915 Ohio ARES HF Net W8SGT Net Control at OEMA HQ Primary: 3902 KHz LSB (+/- QRM) Alternate: 7240 KHz LSB (+/- QRM)

Tuesdays 1945 Ohio Digital Emergency Net Primary: 3584.5 KHz USB (1500 WF) Alternate: 7072 KHz USB

Tuesdays 2000 MoCoARES Weekly Net 146.640 (-) (123.0 Hz PL) (Except—No Net on last Tuesday of even months (MoCoARES meeting) (Except—On 2nd Tuesday: Voice and Data Net on 444.250 (+) (123.0 PL)

Tuesdays 2030 Greene County DMR Net Primary: 444.875+, Color Code 13

Tuesdays 2100 GCARES Net (Voice & Data) 146.910 (-)(no PL) [Alt = 442.725]

Ohio Winlink Wednesdays OH ARES Winlink Net Any time on Wednesdays Eastern Time Send To: K8EAF, Cc: W8LRJ, KE8FMJ W8GCA-10 445.010 (S), W6CDR-10 145.010 (S)

Wednesdays 2000 Ohio District 3 ARES Net (West Central Ohio Regional Net) Primary: 145.110 (-) (67.0 PL) Alternate: 146.820 (-) (77.0 PL)

Wednesdays 2000 Beginners Net (Dayton Area) 444.875 (+) (94.8 PL)

ZOOM-Basic Setup & Configuration

Here's a link to the Zoom Video Tutorials: [Zoom how-to video tutorials – Zoom Help Center](#)

Also see: "Join a Meeting" and the "Joining & Configuring Audio & Video" tutorials for new users. Send questions or problems to John, [W8LRJ](#) ASAP but BEFORE the next meeting.

BARC Fundraising Opportunity — Kroger's Rewards Program Please use your Kroger Card when shopping at Kroger's and support BARC. If you haven't signed up and need help, bring your Kroger Card to the next BARC meeting, and we'll help you get registered (contact the [BARC Treasurer](#)).

ARRL Discounted Membership Offer One of the benefits of club membership is the opportunity to become an ARRL member at a discounted price. BARC is an ARRL affiliated club and receives a commission for new first-time ARRL memberships transacted through the club. BARC passes on this commission (discount) as a club membership benefit to promote ARRL membership. BARC members currently receive a $15 discount on a NEW first year ARRL membership cost when placed through the Club. Please contact the [BARC Treasurer](#) for details.