



Full Quieting

The Official Journal of The Bellbrook Amateur Radio Club



May 2025 — Issue 45

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From the Editor

Welcome to the month of May! Finally! We can consider winter to be well in the past and summer is before us. Hopefully we will have more than one week of spring before summer rolls in!

In May, of course we have Hamvention to look forward to. Because we're downsizing before our clubhouse move, there will be many BARC items for sale either before Hamvention or certainly at our booth. There will also be items put on display by BARC members of their personal items they would like to send off to a new home. Take this opportunity to grab some radio gear you may need while the opportunity is there. We're not taking anything back to BARC, there's no room!

Also, the POTA season will be heating up and us fair weather people can join the hard crew who have been going out all winter. Join the POTA special interest group / mailing list if you want to plug into this.

In this issue, there is Hamvention information that will help you find BARC's booth; discussion of a unique "hen-delta" antenna from John, AE0EN, a ham from the St. Louis area; some pictures from the Sugar Maple Festival; a completion of my 4-part series on the NanoVNA; Field Day updates; and the usual columns you know and love.

Enjoy! And send me some articles for June!

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

As May rolls in, excitement is building for the biggest hamfest in amateur radio — Hamvention! Whether you're a seasoned operator or just starting out, Hamvention is a wonderful reminder of why we fell in love with this hobby: the endless possibilities for learning, experimenting, and (let's be honest) having a little fun with some new toys.

If you find yourself heading to Hamvention this year, here's my advice: Pick up something that moves you forward... or something that just makes you smile. Maybe it's a new radio to finally dive into digital modes. Maybe it's a kit that will teach you something new. Or maybe it's just that oddball piece of gear you absolutely don't need — but can't live without. (You know who you are.)

On a more serious (but still fun) note: Spring is a great time to set a goal or two for yourself. Think about where you are in your ham radio adventure. What have you always wanted to try? What's that "someday" project you've put off? Let's make this year, the year you take that first step — even if it's just a baby step.

Try something new. Step outside your comfort zone. The best part about amateur radio is that there's always something new to learn, to build, or to explore — no matter how long you've been licensed.

And if you make it to Hamvention — have fun, stay hydrated, wear comfortable shoes... and save a little room in the car. You never know what you'll "accidentally" bring home!

See you on the air — and maybe at our tent in the flea market at Hamvention (spots 7662 and 7663)!

73,

Geoff Kline, [KI5VNB](#)





When Is The Show?

Friday May 16th, 2025 9:00 AM – 5:00 PM
 Saturday May 17th, 2025 9:00 AM – 5:00 PM
 Sunday May 18th, 2025 9:00 AM – 1:00 PM

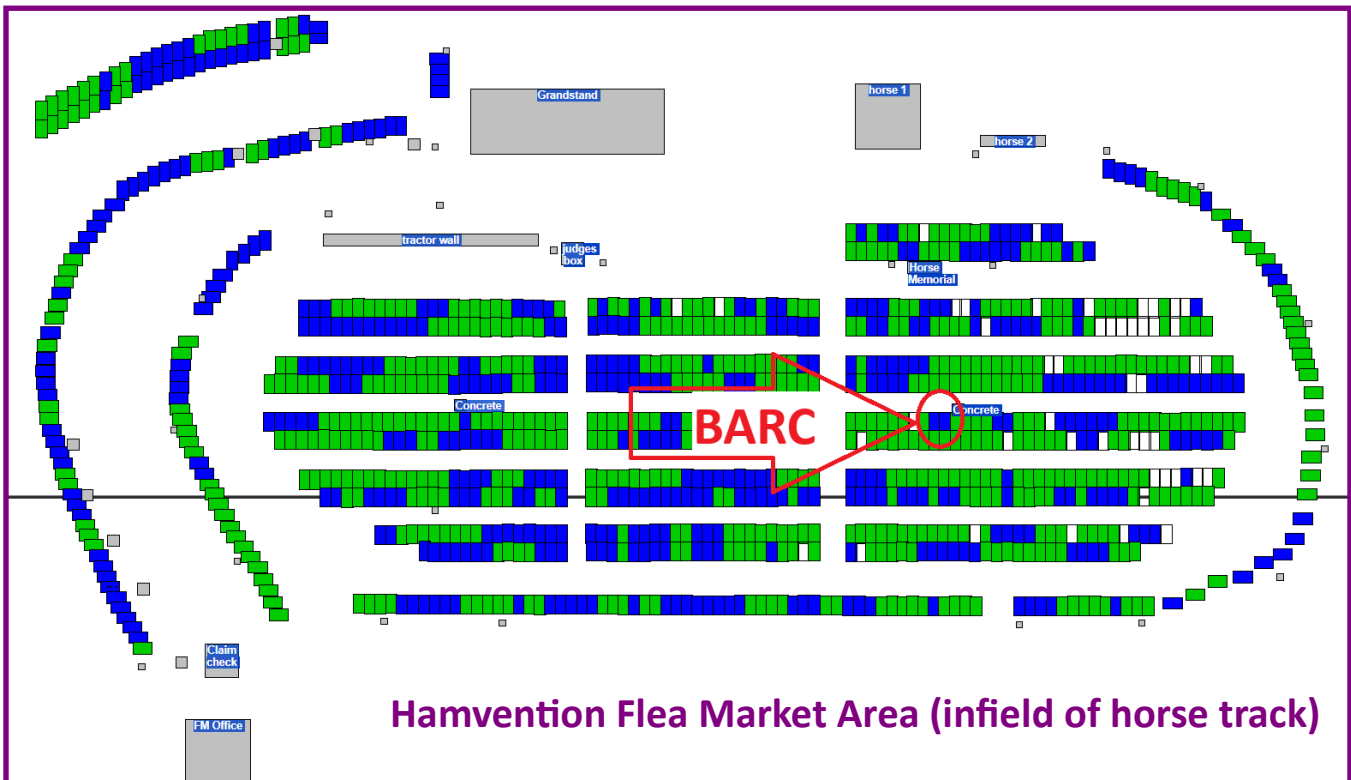
Where Is The Show

Greene County Fair and Expo Center
[210 Fairground Road, Xenia 45385](#)
 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! Or just stop by to visit, have a rest, and cool off!



What's Up BARC?

What's Up BARC?

Ray Hitt, [N8VMX](#)

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



Welcome New Members!

James Fleming, NOCALL

Keith Whites, NOCALL

Jim Adams, W8WY, Amateur Extra

Mike Johnson, KF8DQM, Technician

Sugar Maple Festival Support

On Saturday, April 26th, BARC provided communications support for the Bellbrook Sugar Maple Parade. The weather was cool but very tolerable, much better than the cold April parade weather we have experienced in the past. Don (aka Big Kahuna) KB8PSL was our leader, and John W8LRJ was net control. We used the BAR ("build-a-repeater") repeater instead of simplex and it seemed to work quite well. Thanks to everyone who volunteered to help out! Here are some pictures of the parade.



What's Up BARC? (continued)

Sugar Maple Festival Support (continued)



What's Up BARC? (continued)

Sugar Maple Festival Support (continued)



What's Up BARC? (continued)

BARC Swag from Emerio KE8JNQ

In April's planning meeting, the club officers approved Emerio KE8JNQ to offer a variety of items for sale all in Blue BARC Color. These items complement the other items being offered for sale from other vendors. Notice that the logo is a larger size so other Amateur Radio Operators can see it better. All BARC members get this discount price. If you need more information or would like to order, contact Emerio KE8JNQ. His telephone number is 937-546-9477.



BARC Swag from Parrot Promo Essentials

We have polo shirts, sweat shirts, hoodies, t-shirts, ball caps, and softshell jackets from Parrot Promo Essentials. You can order them directly from our website, at <https://bellbrookarc.org/wp/order-barc-gear/>. These shirts are a little more expensive than those offered by Emerio, but they match the ones you've seen many of us wearing already.

BARC Mugs from Chris Hanselman, AD8OM

For those of you wanting 20 oz insulated BARC mugs, please contact Chris Hanselman, AD8OM, at deeremt@gmail.com. They are offered in Blue with silver print and Black with copper print. They will keep cold things cold and hot things hot for hours. I use mine almost every day and love it!



What's Up BARC? (continued)

May's Membership Meeting Presentation

Our VP, Eric, KC8OPY has worked tirelessly to arrange for Michael Martins (KB9VBR) of YouTube fame come to speak *in person* at our May Membership meeting. Please come take part, or watch on Zoom, this is surely going to be very interesting and timely with Hamvention right around the corner. Here's a [link to KB9VBR's YouTube page](#), full of educational, uplifting videos to inspire you.

Hen-Delta Antenna

I received a nice e-mail from John, AE0EN, regarding his 2+ years of research into the Hen-Delta antenna, something I'll admit I'm not familiar with. Download his information and let me know what you think, and reach out to John AE0EN if you have any comments. His e-mail reads as follows:

Hi Ray,

I have recently uploaded a PDF which adds remote multi-band capability to a caged Hen-Delta antenna. It's a great DXing antenna! The link is: <https://archive.org/details/caged-hen-delta-antenna>

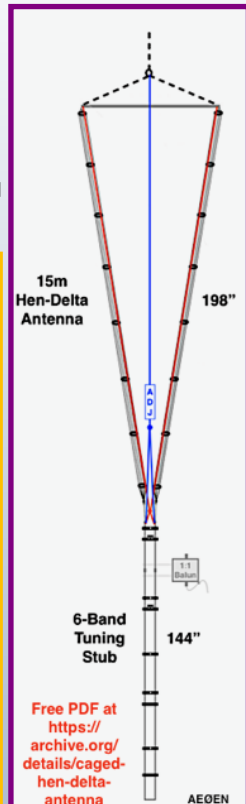
See Appendix-5. The 113-page PDF represents more than two years of personal R&D (it is a non-commercial project).

Very few people know about the nice qualities of the skeleton-slot class Hen-Delta. If you find it interesting you might mention the PDF to your club.

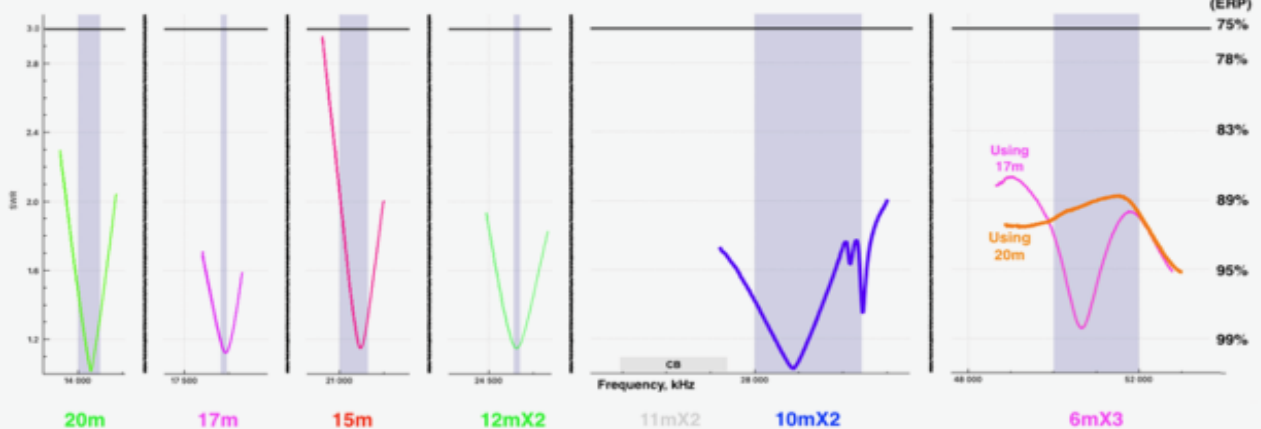
Comments and suggestions welcome!

73!

-John AE0EN



Actual SWR Curves for 6-Band Hen-Delta with a Primary Band of 15m
Tuning Optimized for SSB Portion of Bands



Free PDF download at <https://archive.org/details/caged-hen-delta-antenna>

AE0EN



Officer, Director, and Coordinator Inputs

Treasurer: John Westerkamp, [W8LRJ](#): Expenses outpaced income as is usual this time of year when we renew Zoom, insurance, and Internet with only a few dues payments trickling in. We also reserved our Flea Market booths for Hamvention which is only a few weeks away now!

We continue to be in great financial shape as we look to relocate.

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](#): Be sure to check the website for information on the upcoming Field Day and where you can volunteer to make it happen.

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 presented information about our latest new clubhouse location in the Board of Education Building next to the high school. The radio room is smaller, but we have access to larger meeting rooms for our Membership and Planning meetings. There is also a tower already installed that we may be able to use for our antennas.

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](#): As your secretary I wrote notes of the planning meeting and took minutes of the general membership meeting. I responded and mailed certificates out to five requesting hams for QSL cards from last December's W8W special event station. I also helped with the Sugar Maple parade line up.

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 April 2025 there were approximately 83 check-ins lasting 194 exciting and informative minutes. Topics range from Open Mike, Parks on the Air, what DX contacts have you made, what are your favorite games to play and Hamvention.

Our faithful Net Controllers are, Larry Darner KD8RER, Connie Gifford W8CSG, Jim Gifford N8KET, Tink Siwecki KD8NUA, John Westerkamp W8LRJ and Paul Sharp WS8R.



BARC May 2025 Event Calendar

Thu May 1, 2025

7pm Planning Meeting..... Where: Miami Valley Hospital South

Sat May 3, 2025

9am BARC Trailer Inventory (Field Day) Where: BARC Clubhouse

Sun May 4, 2025

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

Tue May 6, 2025

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

Sun May 11, 2025

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

Tue May 13, 2025

11:15am Lunch Bunch.....Where: Culp's Cafeteria

Thu May 15, 2025

7pm Membership Meeting Where: BARC Clubhouse

Fri May 16 – Sun May 18, 2025

All Day Hamvention Where: Greene County Fairgrounds

Sun May 18, 2025

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

Thu May 22, 2025

7pm Dessert and Movie Night Where: BARC Clubhouse

Sun May 25, 2025

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

Tue May 27, 2025

11:15am Lunch BunchWhere: City Barbecue

Wed May 28, 2025

7pm Tech Night Where: BARC Clubhouse



BARC Movie and Dessert Night



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

Date	Movie	Genre	Actors	----
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)	Macarons, Cheese cake
March 27, 2025	Paul, Apostle of Christ	Angel food cake & Holy Donuts
April 24, 2025	Jurassic World: Dominion	Dinosaur eggs & ice cream sundaes

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.

BARC 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 June at the Movies!

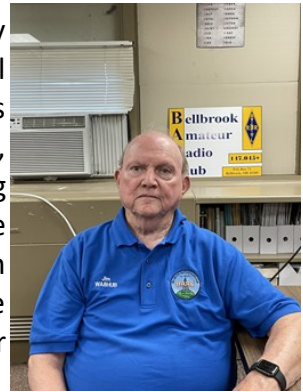
Tink
KD8NUA



Lunch Bunch

Jim Totten, [WA8HUB](#)

Hello my fellow lunch lovers. April 2025 is just about over. I hope everybody got their taxes done and with some great refunds. I was lucky and actually will receive a refund. Way different than last year. The saying goes April showers make May flowers. And time to renew our lunch meetings for this new month, May 2025. 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 months FQ listing our current set of restaurants. The May 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.)

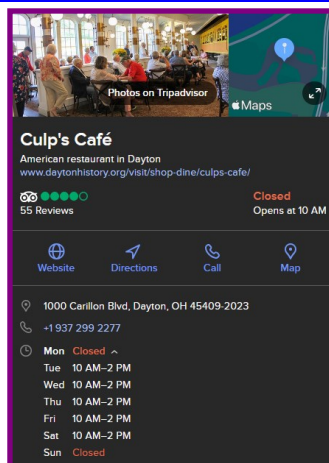
On April 8th we ate at the Shawarma Grill previously known as Yaffa Grill Mediterranean Food. This restaurant is in Beavercreek, across from Wright State. The original count was for 8, but Ruth, KE8ZNU got tied up and Don, KE8WVJ was by his lonesome. The most delicious part of this venue is their buffet. One of our loyal had his first attack of the buffet and was very happy. On April 22nd we had lunch at the Chic-Fil-A in the Cornerstone complex. We had an enthusiastic group of 7. Instead of a sandwich I had chicken strips. Delicious.

Can we top April in May? The first offering is on May 13th at Culp's Café at 1000 Carillon Blvd. At one time you had to step up to a counter and order. Last year they had a wait staff and order from a menu or the verbal offerings. Our second feast will be on May 27th at the new City Barbecue at 2001 E. Dorothy Lane. Same food but at a more accessible location.

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

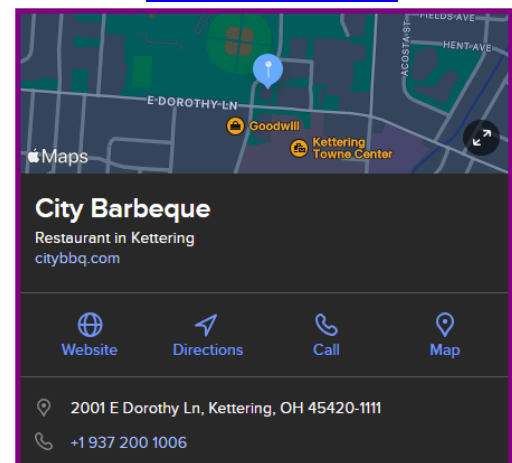
73, Jim, [WA8HUB](#)

[Tuesday, May 13th, 11:15am](#)



*Click pictures or hyperlinks
for more info and maps*

[Tuesday, May 27th](#)



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 <i>The Shoppes at FC</i>	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 Café	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



BARC Field Day

Glenn Rodgers, [WI8O](#)

Field Day is June 28th - 29, and will be held at Sackett Wright Park as usual, with our backup location at the BARC Clubhouse in case of bad weather. Our next scheduled activity in preparation for this event is our annual Inventory & Testing of equipment and supplies stored in the BARC Trailer. This will take place on Saturday, May 3rd beginning at 09:00am. If you have taken part in this in the past, your help will be greatly appreciated. If you haven't had an opportunity to do this before but would like to learn the process and assist, you are most welcome. We will bring the trailer to the parking lot close to our entry door, remove contents and inventory it to make sure we have everything we will need.

We will test all coax for continuity and repair or replace items as required.

The electrical cords and related equipment will be set aside for later inspection and earliest transport to the Sackett Wright Park the morning of June 28th for initial setup by the designated crew.

At our May Membership Meeting we will have suggested arrival times for setup teams, as well as a time for our club Brunch. There will be a discussion of what foods will be provided by the club for our annual Field Day Dinner, as well as suggestions for what individual members may wish to contribute for this event's Pot Luck.

If you are a Committee Chair Person, please be ready to ask for any help you might need. This is a great chance to get involved in the preparation & setup of our various Field Day Events, but it is helpful if only those people that are part of each team report at the designated times. Although we encourage participation and education... initial setup will be pretty hectic and goes much smoother if we only have the people there on specific teams.

We will discuss our anticipated timeline for activation, and will have a signup sheet (currently available on the website, please check it out) so that everyone can participate. This signup is especially helpful for the overnight time as we need at least a minimum number of people there for safety and security reasons... as well as to make contacts and finish off the remaining Dot's Chicken and other leftovers! We look forward to seeing everyone at the meeting and answering any questions you have about the upcoming Field Day.

73, Glenn [WI8O](#)



The Air Force Marathon 2024

Bob Baker, [N8ADO](#)

Volunteer registration for the 2025 Air Force Marathon opens on May 1, so it seems appropriate to release a report on last year's event. Hopefully, this will build a little interest and encourage volunteers to join.

The 2024 running took place on Saturday, September 21. The US Air Force was created on September 18, 1947, and each year, the race date is set on the Saturday closest to the birthday. As usual, there were three main events: A 10 K race, a half marathon, and the full marathon. The number of runners has declined from what was the norm in the pre-COVID era, but the race day runner count was nearly 7000 in 2024. This year will likely have more runners. Regardless of the number of runners, the course is the same as always and it takes a lot of volunteers to cover all of the assignments.

The Air Force Marathon is the largest event that takes place at Wright Patterson Air Force Base. Most of the race takes place on the base and spectator locations are limited. One benefit of being a volunteer is the chance to be in the middle of the action.

We provide a number of services to the event. Foremost is that we create networks to provide communications between hydration stations and medical stations and the incident command post. We also have a ham in the security station which is the back-up incident command post. This year, it was in a multi-room tent which was very noisy as it also served as a briefing room for official visitors. Hopefully, this is better organized in the future. The hydration stations are part of the logistics or "LOG" net. The hams supply race status information to the captains, report race leader information, relay reports of "runner down" and other medical problems, and help with other logistic issues. The medical tents are part of the medical net. The hams provide status information to the medical leaders, report the need for advanced medical care to incident command, provide a back-up to the medical logistics communications, and provide back-up to the medical dispatch communications. Reports of runners needing transportation back to the finish area are also made. We operate a number of other networks. One is "talk-in" which helps to direct the ham volunteers to their assigned location and to resolve issues with base security. We operate a finish line net to funnel "progress of the race" information to the announcer, including the approach of the race leaders. The hams in the finish area act as spotters, keeping an eye on the runners and the net changes into a medical support net if there is an incident. Finally, we have several hams whose vehicles are equipped with APRS equipment and follow the "tail end Charlies" so it is quick and easy to determine where the ends of the full and half marathons are. We also equip bicycle escorts with tracking devices so that we can determine the locations of the lead male and female runners in the various races. The hams in the incident command locations have the ability to display the APRS information which is greatly appreciated by the command staff. After the hotwash meeting, the Incident Commander came up to me and passed along praise for the performance of the ham team that was assigned to the Incident Command Post. He noted that our runner down reports were more complete (we almost always reported the runner numbers) and usually arrived well before the reports received through the other networks.

The Saturday before the race, we held a training session. The session was well-attended and the discussion was meaningful. I had posted all of the information in a Google Drive folder so that our out of town volunteers could be up to speed without actually needing to attend the meeting. Everyone did a spectacular job.



Race day started out cool, but the humidity contributed to an early transition to condition yellow. The heat factor was high, but the race was able to complete as planned.

There are always a few problems and the amateur radio volunteers did a great job of helping the Command Staff in solving them. The number one complaint by the volunteers is how early we must arrive to get in place before the road closures. It is frustrating when early is not early enough.

Several hams provided pictures to share. Use the following link to view them.

https://drive.google.com/drive/folders/1KGRAXgfAZN_vFVuczjK9dw_v4Ymt-kwJ?usp=sharing

To all of the volunteers: thank you for your help with this event. Your performance was truly outstanding. The race director told me that they couldn't do the event without our support. I hope that you had some fun and that you come back again on September 20, 2025.

The Air Force Marathon is produced by a permanent staff assisted by the AFM Steering Committee of which I am a member. The Air Force Marathon is a public relations and recruiting tool. The amateur radio support team is not affiliated with any particular club, but we could not imagine doing the event without the support of a number of clubs and I would like to thank them for their support. Some notable examples: DARA and XWARN for providing the vehicles used for the net control stations; UVARC, HHARC, and XWARN for letting us use their repeaters; DARA, XWARN, and MoCoARES for letting us use their APRS trackers. Of course, our volunteers come from these and a number of other clubs. In 2024, we had volunteers from four states.

I wish to thank a few individuals who provided special support: KE8FMJ who was my general assistant. N2TUJ who coordinated the Logistics Net Team; KD8DGB who coordinated the talk-in and Medical nets. Thanks to the volunteers who showed up on the day before the race and helped to set up the Command Area operation.

The 2025 Air Force Marathon takes place on Saturday, September 20. Save the date and be a part of the biggest Community Support Event in the Dayton area. The featured aircraft is the KC-135.

Best 73,

Bob Baker, N8ADO — Volunteer Lead for Amateur Radio Support of the Air Force Marathon

P.S. I maintain a mail list using a gmail account (AFM.Hams@gmail.com) that I use to recruit volunteers and to send out information to the volunteers who have signed up. If you wish to be added to the mail list, send an email stating your desire. Also, registering for the Air Force Marathon and selecting the race day job "Amateur Radio" will get you on the list. Volunteer Registration opens May 1. More details about registration will be posted on the Ohio District 3 ARES website as they become available: OHD3ARES.ORG



Adventures with a NanoVNA - Part 4

Ray Hitt, [N8VMX](#)

Part 4 – Using NanoVNASaver App

This article continues my multi-part NanoVNA series by focusing on the **NanoVNASaver** app. This PC application is available in Windows and Raspberry Pi executables, plus source code for Linux and Mac. *NanoVNASaver* connects to your NanoVNA via a USB cable (USB-C/USB-C or USB-A/USB-C). This permits NanoVNA operation via your PC opening it up to additional features not available on the NanoVNA itself. From the [NanoVNASaver web page](#), here is a description of the features available in *NanoVNASaver*.

NanoVNASaver connects to your NanoVNA and extracts the data for display on a computer, and for saving as Touchstone files. Touchstone files are the s-parameter values for each frequency in the sweep range saved as **.s1p** and **.s2p** files. The **.s1p** file stores the frequency and s_{11} parameter, while the **.s2p** file contains the frequency, s_{11} , s_{21} , s_{12} , and s_{22} parameters. Since the NanoVNA doesn't calculate s_{12} and s_{22} parameters, those are saved as zeros in the **.s2p** file.

Current features:

- Reads data from a NanoVNA
- Splits a frequency range into multiple segments to increase resolution (tried up to >10k points)
- Averages data for better results particularly at higher frequencies
- Displays data on multiple chart types, such as Smith, LogMag, Phase and VSWR-charts, for both s_{11} and s_{21}
- Displays markers, and the impedance, VSWR, Q, equivalent capacitance/inductance etc. at these locations
- Displays customizable frequency bands as reference, for example amateur radio bands
- Exports and imports 1-port and 2-port Touchstone files
- TDR (time domain reflectometry) function (measurement of cable length)
- Display of both an active and a reference trace
- Live updates of data from the NanoVNA, including multi-segment sweeps
- In-application calibration, including compensation for non-ideal calibration standards
- Customizable display options, including "dark mode"
- Exports images of plotted values

There are a lot of useful features here. The NanoVNA by itself is quite capable but can be hard to use because of its small size. Connecting a computer to the NanoVNA and running NanoVNASaver allows you to control the NanoVNA through the PC app and gain new features and the ability to save data to your PC for offline analysis or to generate reports.



Adventures with a NanoVNA - Part 4 (continued)

Installation

NanoVNASaver is available from github at this link: <https://github.com/NanoVNA-Saver/nanovna-saver/releases>. There are some files you can download based on your computer type, and I grabbed a screen shot of the choices available (right).



Raspberry Pi: The [nanovna-saver.raspi](#) file is for the Raspberry Pi and can be downloaded and used without any installation required. I entered these commands (below) to make the program name compatible with the Windows and Linux versions. After entering the commands in the box below, type *NanoVNASaver* to run the program.

```
cd ~/Downloads
wget https://github.com/NanoVNA-Saver/nanovna-saver/releases/download/v0.7.3/nanovna-saver.raspi
sudo cp nanovna-saver.raspi /usr/local/bin/NanoVNASaver
sudo chmod +x /usr/local/bin/NanoVNASaver
```

Windows: Download [NanoVNASaver.x64.zip](#), then create a folder where you would like to operate your NanoVNASaver app. Extract the contents of the zip file, [nanovna-saver.exe](#), into that folder. You can run *nanovna-saver.exe* directly from there.

Ubuntu: There is a convoluted process to install the latest *NanoVNASaver* version involving Python pip. Instead of that, you can simply install the *NanoVNASaver* package directly from the Ubuntu repository as shown in the box below. This will however install a slightly older version. To run the program, type **NanoVNASaver**

```
sudo apt install nanovna-saver
```

MacOS: I don't have access to a Mac, but I found very simple installation directions on Youtube at [How to Easily Install NanoVNA Saver on macOS: Step-by-Step Guide \(2024\)](#). Detailed step-by-step instructions are in the comments on the YouTube page. This process installs homebrew, git, Python3, and clones the source code. To run the program, type the following commands.

```
cd nanovna-saver
python3 nanovna-saver.py
```

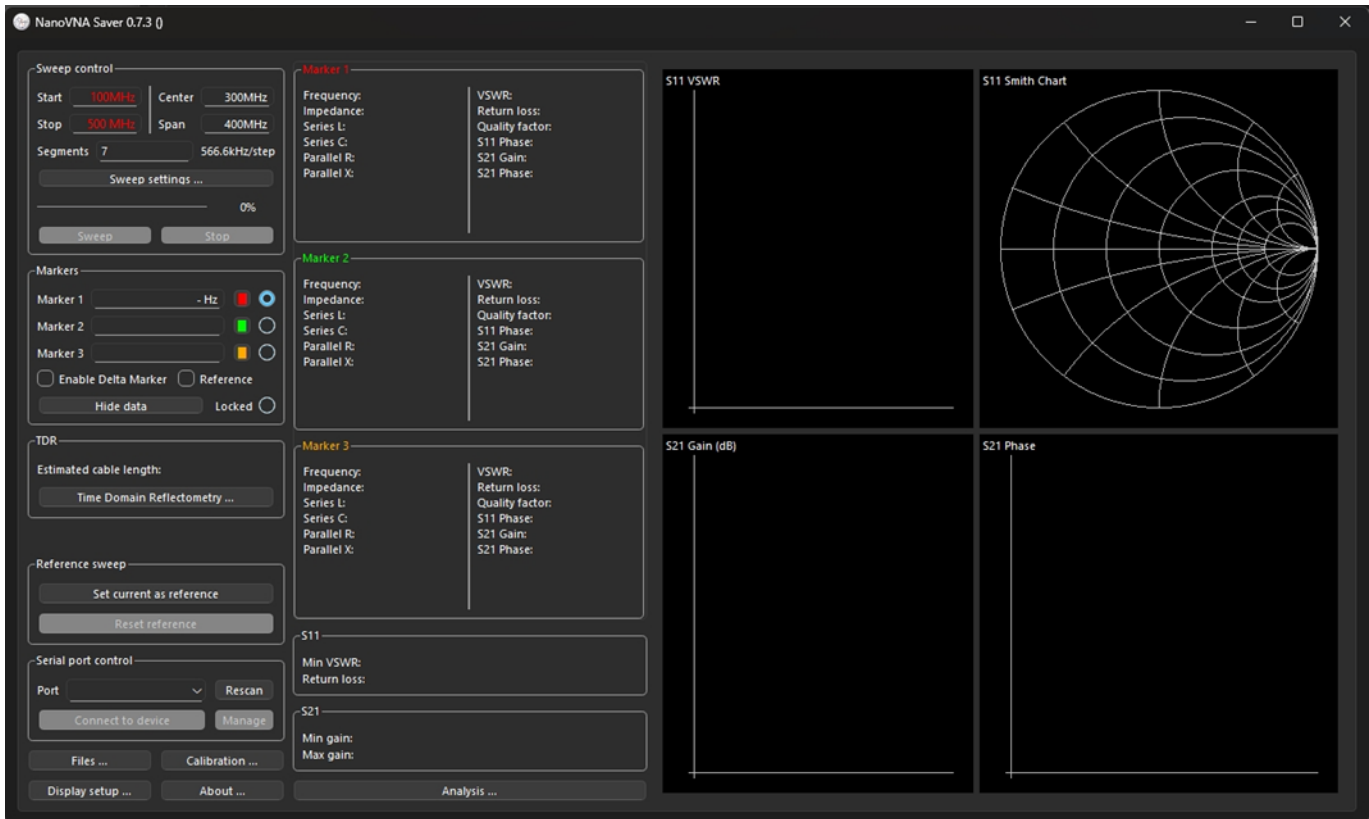
Using NanoVNASaver

Whether you are using Windows, Raspberry Pi, other Linux, or MacOS; using NanoVNASaver is the same for all of them. In fact, the data files generated in Linux can be opened in Windows and vice versa. I set up a NanoVNASaverData directory on my home network that can be accessed by Windows and Linux versions of NanoVNA so that I can share configuration data and captured Touchstone files. I'll explain what those files are in a bit.



Adventures with a NanoVNA - Part 4 (continued)

The program looks like this when it opens:



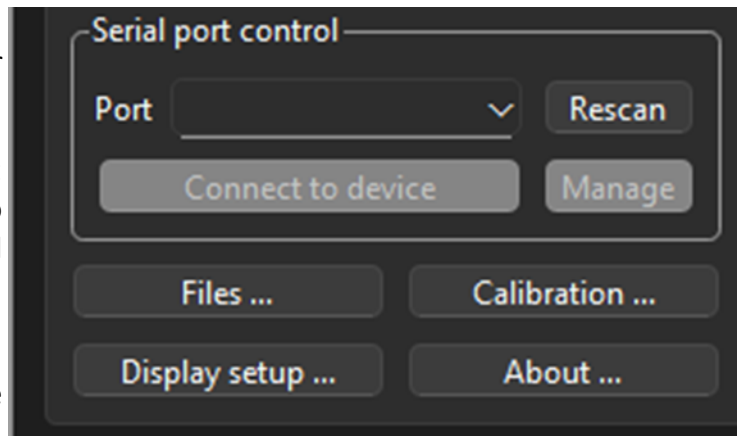
To start out, focus on the lower-left section of the screen. Here, you can select the serial port of the NanoVNA connected via USB. You can connect and disconnect here. Below that are *Files ...*, *Calibration ...*, *Display setup ...*, and *About ...*

Files: This is where you save Touchstone (.s1p and .s2p files) and import previously collected .s1p and .s2p files.

Calibration: This calls up the Calibration menu where you can perform calibration or call up previously saved calibrations.

Display setup: This allows you to change font size (recommended), select what charts to display, line colors, widths, marker types, and more.

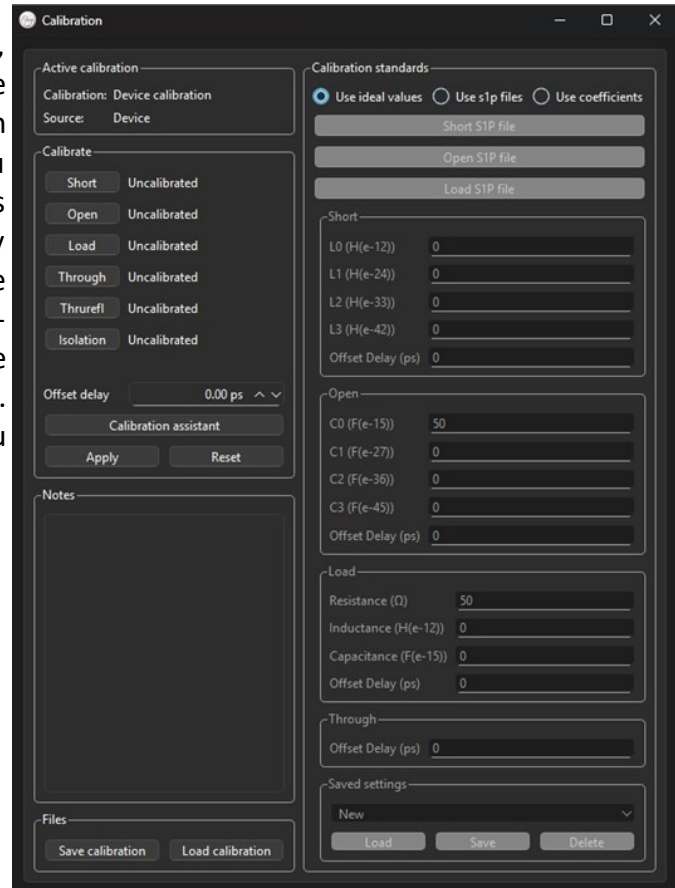
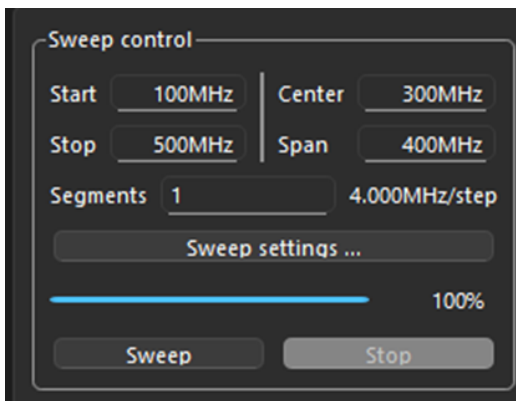
About: This provides detailed information about the software, operating system, update checks, and a link to the software repository.



Adventures with a NanoVNA - Part 4 (continued)

Initial Use: The first thing to do is to connect your NanoVNA and see that it is detected. It usually will show up right away, but you can rescan to try again. Once it's connected, the sweeps generated by the NanoVNA will also be shown on the NanoVNASaver app charts. It's recommended that you calibrate the NanoVNA itself before using NanoVNASaver.

Calibration: When you hit the *Calibrate...* button, this menu (right) appears. To calibrate, hit the Calibration assistant. This will take you through the calibration process step-by-step, where you connect an SMA short, open, and 50Ω load. This completes the 1-port calibration. You can apply these calibrations or optionally continue with the isolation and through steps to complete the 2-port calibration. Once complete, you can save this calibration to avoid having to do it again. Note that calibration is required when you change the frequency range or number of points.



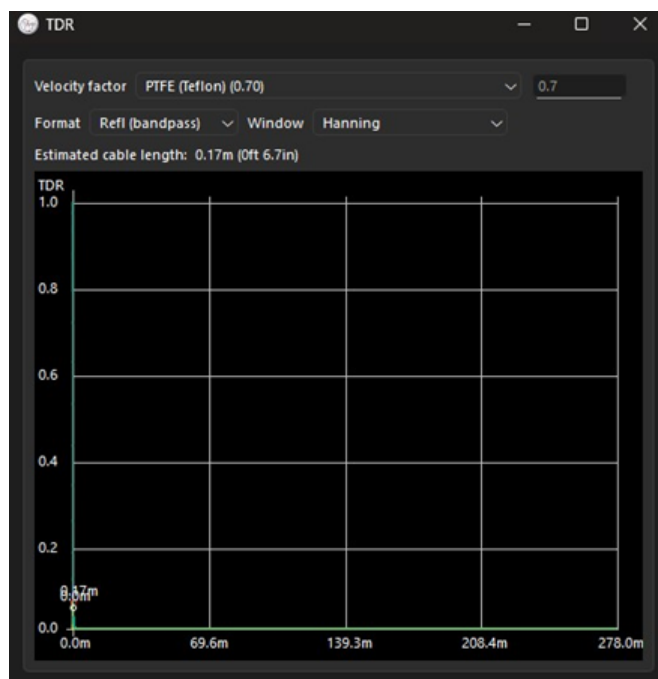
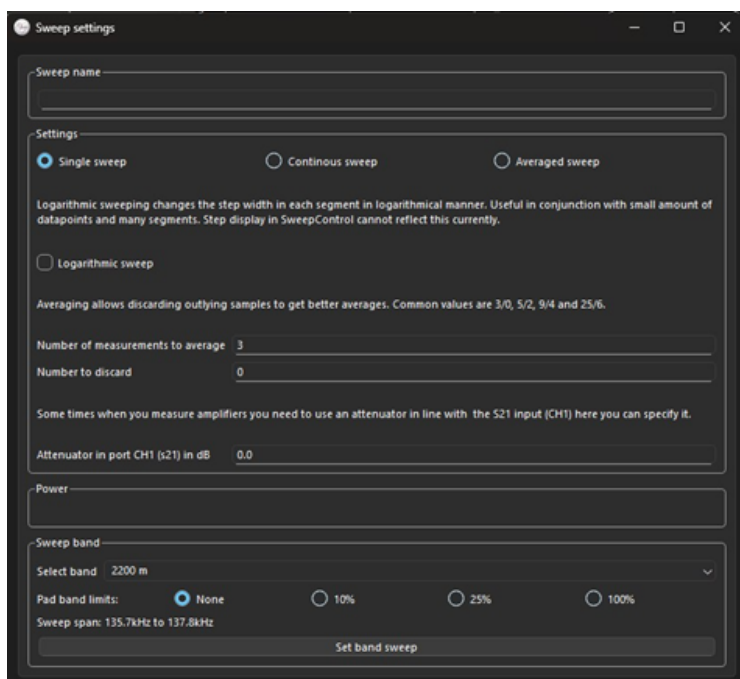
Focusing on the upper left side of the screen, the *Sweep control* (above left) can be used to change the frequency range and the number of segments. Segmenting the band will divide the frequency range into that many segments and command the NanoVNA to scan the frequency range segment by segment. This greatly increases the number of data points and resolution of the frequency sweeps.

Note: If you add segments to the sweep before you perform the calibration, the calibration will contain a larger number of points and should be more accurate.

Sweep Settings: The sweep can be changed from *Single Sweep*, *Continuous Sweep*, or *Averaged Sweep* (see next page). Averaging can cancel noise at higher frequencies. At the bottom of the menu, some preset bands can be selected, most of which are amateur bands. They however are not correct for the United States (this software is German and uses their amateur bands).



Adventures with a NanoVNA - Part 4 (continued)



TDR (Time Domain Reflectivity): This is a very useful feature that can help you to calculate the length of a cable or location of an open or short in a longer cable. There are settings for various types of cables, or you can add a velocity factor for the cable if you know it. The estimated cable length will be shown in this graph.

That's enough to get you started. If you have any questions, reach out to me. Good Luck!

73, Ray [N8VMX](#)



Answers to Amateur Radio Test Questions on pages 26-28

Technician ([pg 26](#))

T5B12 (D)

T7D06 (C)

T1B12 (D) [97.313(b)]

T7C06 (D)

General ([pg 27](#))

G7C12 (C)

G1E09 (A) [97.115]

G4D10 (A)

G4E03 (A)

Amateur Extra ([pg 28](#))

E1E11 (B) [97.509(i)]

E6D08 (B)

E5A03 (D)

E4C03 (C)



Special Event Stations for May-June

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. We hit the jackpot this month with many exciting SES. There are SES commemorating: Armed Forces including Audie Murphy, maritime stations, a Bug Roundup, police, music, Museum Ships Weekend, Boy Scouts, and a late one for Easter.

05/03/2025 | Ozark Highlands Nature Center 5th Anniversary. May 3, 1400Z-2300Z, W5NX, Springdale, AR. Bella Vista Radio Club. 7.225 14.250 21.300 28.450. QSL. Don Banta, 3407 Diana Street, Springdale, AR 72764. NOTE: Original date was April 19 - event postponed due to inclement weather. www.qrz.com/db/w5nx or <https://bellavistaradioclub.org>

05/03/2025 | Pedals for Paws. May 3, 0100Z-0700Z, W4LKZ, Gallatin, TN. Sumner County Amateur Radio Association. 14.275 14.325 21.325 28.425. Certificate. Sumner County Amateur Radio Association, P.O. Box 171, Gallatin, TN 37066. Peddles for Paws is an annual bike ride in Sumner County Tennessee in support of Sumner Spay and Neuter Alliance. sumnerradio@gmail.com or <https://www.scara.net>

05/08/2025 | 80th Anniversary Of The Victory In Europe, VE Day. May 8-May 18, 1300Z-2359Z, W2V, Gastonia, NC. Radio Gastonia . 7.245 14.245 21.345 28.445. QSL. Dave Arruzza, NC4DA, 243 Moore Dr, Gastonia, NC 28056. <https://www.qrz.com/db/W2V>

05/09/2025 | Liberation by British Forces of the Channel Islands 9 May 1945. May 9-May 11, 0000Z-2359Z, GU80LIB, Castel Guernsey, CHANNEL ISLANDS, BRITISH ISLES. Guernsey Amateur Radio Society. 7.180 14.180 21.180 28.350. QSL. c/o Keith Le Boutillier, Tiverton, Bailiffis Cross, St Andrew's, Guernsey GY6 8RT, CHANNEL ISLANDS, BRITISH ISLES. This marked the end of the Islands' occupation since 30 June 1940, by Germany during World War II. www.qrz.com/db/gu80lib

05/10/2025 | Armed Forces Day. May 10, 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 Ship COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101. www.qrz.com/db/ni6iw

05/10/2025 | Golden Spike Special Event Station - W7G. May 10, 1500Z-2300Z, W7G, Corinne, UT. Ogden Amateur Radio Club (OARC) W7SU. 7.235 14.255 7.040 14.040. QSL. Ogden Amateur Radio Club (OARC) W7SU, PO Box 3353, Ogden, UT 84409. Commemorating the completion of the US trans-continental railroad at Promontory Point Utah by driving the final spike, a Golden Spike, in 1869. Refer to: <http://w7g.org> , <http://ogdenarc.org> w7g.org

05/10/2025 | Jamestown Special Event. May 10, 1400Z-2000Z, K4RC, Williamsburg, VA. Williamsburg Area Amateur Radio Club. 7.265 14.265. Certificate & QSL. QSL Manager, WAARC, P.O. Box 1470, Williamsburg, VA 23187. Commemorating the 418th anniversary of England establishing the oldest English-speaking colony on the American continent in May 1607. For QSL send your QSL and SASE to QSL Manager, WAARC, PO Box 1470, Williamsburg, VA 23187. The Virginia Historic Triangle Certificate is available for working the Jamestown, Williamsburg, and Yorktown Special Event Stations. You don't



Special Event Stations for May-June (continued)

need to make these contacts in the same calendar year. For a Certificate send QSO info from the three stations to qslmgr@k4rc.net. <https://www.k4rc.net/events/special-event-stations> <https://www.k4rc.net>

05/10/2025 | National Police Appreciation Week. May 10-May 17, 0000Z-0000Z, N4P, Gainesville, FL. W.T. Lofton High School ARC K4WTL. 14.325 MHz. QSL. W.T. Lofton High School ARC K4WTL, 3000 East University Avenue, Gainesville, FL 32646. Let's show some appreciation for the work our Police do for us!

05/11/2025 | National Police Week - Honoring Our Fallen Heros. May 11-May 18, 0001Z-2359Z, K3FBI/0-9, Fredericksburg, VA. FBI Amateur Radio Association. 14.275 14.050 7.250 7.030. Certificate. Jay Chamberlain, 27 Fox Run Ln, Fredericksburg, VA 22405-3303. To honor all Law Enforcement members who have died in the line of duty. All bands and all modes. Multiple stations from around the U.S. On May 11, K3FBI/9 will operate from the Little Bohemia Lodge, in Manitowish Waters, WI. This was the scene of the 1934 raid to capture John Dillinger and Baby Face Nelson where FBI Special Agent W. Carter Baum was killed. Downloadable PDF certificate ONLY about end of June at QRZ, <https://www.qrz.com/db/K3FBI>. www.qrz.com/db/K3FBI

05/16/2025 | Armed Forces Day. May 16-May 19, 1100Z-2359Z, K9NBH, Salem, WI. Great Lakes Radio Club. 7.250 14.250 21.250 SSB, FT8, FT4, PSK31. Certificate. Great Lakes Radio Club, General Delivery, Salem, WI 53168. <https://www.qrz.com/db/K9NBH>

05/17/2025 | Air power Museum Honoring all veterans. May 17, 1300Z-2000Z, W2GSB, West Babylon, NY. GREAT SOUTH BAY AMATEUR RADIO CLUB . 28.340 21.250 14.246 7.245. Certificate. GREAT SOUTH BAY AMATEUR RADIO CLUB, PO BOX 1356 , West Babylon, NY 11704. Operating inside the historic hangar from World War Two is where Rosie the Riveter became famous. This special event honors all who have served and done their part to defend our country and democracy. Please join us on the air for this special event station certificates. Look us up on qrz WWW.GSBARC.ORG

05/17/2025 | National Maritime Day. May 17, 1330Z-2100Z, K3S, Baltimore, MD. Nuclear Ship Savannah Amateur Radio Club. 7,14,18,21,28. QSL. Ullis Fleming, 980 Patuxent Rd, Odenton, MD 21113. Check spotting networks for frequency. See QRZ.com info for Savannah Award qrz.com/db/k3s

05/17/2025 | W6SFM Bug Roundup. May 17-May 19, 0000Z-0000Z, W6SFM, Fair Oaks, CA. Samuel F. Morse Amateur Radio Club. 3.533 7.033 14.033 28.033. QSL. Samuel F. Morse Amateur Radio Club, 4901 Minnesota Avenue, Fair Oaks, CA 95628. The Samuel F. Morse Amateur Radio Club (W6SFM), a Sacramento, California based CW enthusiast club wanted a special time to bring bug operators together on the air. In the same spirit as ARRL's Straight Key Night, participants are encouraged to make simple, conversational, "rag chew" QSO's using their bug type key. This is an opportunity to exercise, share and exhibit your personalized fist. Call "CQ BR" so folks know you are a Bug Roundup Participant. <https://w6sfm.org/bug-roundup>

05/18/2025 | National Maritime Day 2. May 18, 1330Z-2100Z, K3S, Annapolis, MD. Nuclear Ship Savannah Amateur Radio Club. 7,14,18,21,28. QSL. Ullis Fleming, 980 Patuxent Rd, Odenton. Check spotting networks for frequency. See QRZ.com info for Savannah Award qrz.com/db/k3s

05/19/2025 | National EMS Week. May 19-May 25, 0000Z-0000Z, N4E, Gainesville, FL. W.T. Lofton High School ARC K4WTL. 14.325 MHz. QSL. W.T. Lofton High School ARC K4WTL, 3000 East University Avenue, Gainesville, FL 32646. Help us celebrate the work by EMS workers!



Special Event Stations for May-June (continued)

05/24/2025 | Living History Cruise of SS John W Brown: WW2 Liberty Cargo Ship. May 24, 1500Z-2000Z, K8JWB, Baltimore, MD. Project Liberty Ship (SS John W Brown). 7210.00 14230.00 21300.00 28320.00. Certificate. Project Liberty Ship K8JWB, Pier 13, 4601 Newgate Ave, Baltimore, MD 21224. Join the SS John W Brown while it sails on the Chesapeake Bay maritime mobile. Remembering the United States Merchant Marine, Navy Armed Guard crew and the shipbuilders including Rosie the Riveter who built 2710 of them who deeply impacted the winning of WW2. Those people and ships were critical to Winning the war www.ssjohnwbrown.org

05/28/2025 | Scott Joplin International Ragtime Festival. May 28-May 31, 1000Z-2000Z, WOR, Sedalia, MO. Sedalia-Pettis AR Klub (SPARK). 28.4 14.250. QSL. Bret Kuhns, 1880 Quisenberry Rd, Sedalia, MO 65301. Sedalia Missouri is where Ragtime Music started. An annual Ragtime Festival is held drawing musicians from all over the globe. The local WA0SDO SPARK Amateur Radio Club will be operating a special event station using the call sign WOR (for Ragtime!). wa0sdo.org

05/30/2025 | Portland Rose Festival. May 30-Jun 6, 0100Z-2301Z, W7R, Portland, OR. Portland Amateur Radio Club. 14.290. QSL. Ken MInes, 32355 NW Beach Rd., Hillsboro, OR 97124. <https://w7lt.org>

05/31/2025 | Audie Murphy . May 31, 1400Z-2000Z, W2A, Christiansburg, VA. New River Valley Amateur Radio Club. 14.275. QSL. Danny Wylam, 710 McDaniel Dr., Christiansburg, VA 24073. Operating on the Appalachian Trail. dannywylam@gmail.com or www.n4nrv.org

Late notice: The Easter SES is on the air:



Amateur License Test Questions

[Answers are on page 22](#)

Technician

T5B12

Which is equal to 28400 kHz?

- A. 28.400 kHz
- B. 2.800 MHz
- C. 284.00 MHz
- D. 28.400 MHz

T7D06

Which of the following can damage a multimeter?

- A. Attempting to measure resistance using the voltage setting
- B. Failing to connect one of the probes to ground
- C. Attempting to measure voltage when using the resistance setting
- D. Not allowing it to warm up properly

T1B12

Except for some specific restrictions, what is the maximum peak envelope power output for Technician class operators using frequencies above 30 MHz?

- A. 50 watts
- B. 100 watts
- C. 500 watts
- D. 1500 watts

T7C06

What does an SWR reading of 4:1 indicate?

- A. Loss of -4 dB
- B. Good impedance match
- C. Gain of +4 dB
- D. Impedance mismatch



Amateur License Test Questions (continued)

[Answers are on page 22](#)

General

G7C12

What is the frequency above which a low-pass filter's output power is less than half the input power?

- A. Notch frequency
- B. Neper frequency
- C. Cutoff frequency
- D. Rolloff frequency

G1E09

Under what circumstances are messages that are sent via digital modes exempt from Part 97 third-party rules that apply to other modes of communication?

- A. Under no circumstances
- B. When messages are encrypted
- C. When messages are not encrypted
- D. When under automatic control

G4D10

How close to the lower edge of a band's phone segment should your displayed carrier frequency be when using 3 kHz wide LSB?

- A. At least 3 kHz above the edge of the segment
- B. At least 3 kHz below the edge of the segment
- C. At least 1 kHz below the edge of the segment
- D. At least 1 kHz above the edge of the segment

G4E03

Which of the following direct, fused power connections would be the best for a 100-watt HF mobile installation?

- A. To the battery using heavy-gauge wire
- B. To the alternator or generator using heavy-gauge wire
- C. To the battery using insulated heavy duty balanced transmission line
- D. To the alternator or generator using insulated heavy duty balanced transmission line



Amateur License Test Questions (continued)

[Answers are on page 22](#)

Amateur Extra

E1E11

What must the VE team do if an examinee scores a passing grade on all examination elements needed for an upgrade or new license?

- A. Photocopy all examination documents and forward them to the FCC for processing
- B. Three VEs must certify that the examinee is qualified for the license grant and that they have complied with the administering VE requirements
- C. Issue the examinee the new or upgrade license
- D. All these choices are correct

E6D08

Which of the following materials has the highest temperature stability of its magnetic characteristics?

- A. Brass
- B. Powdered iron
- C. Ferrite
- D. Aluminum

E5A03

What is the magnitude of the impedance of a series RLC circuit at resonance?

- A. High, compared to the circuit resistance
- B. Approximately equal to capacitive reactance
- C. Approximately equal to inductive reactance
- D. Approximately equal to circuit resistance

E4C03

What is the term for the suppression in an FM receiver of one signal by another stronger signal on the same frequency?

- A. Desensitization
- B. Cross-modulation interference
- C. Capture effect
- D. Frequency discrimination



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 attachment 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*.**



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.

