

# Full Quieting



The Official Journal of The Bellbrook Amateur Radio Club

August 2025 — Issue 48

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## From the Editor

Here's a big welcome to August! It's been an amazing summer so far, hot, humid and wet! As I write this we're entering a short-lived cooler period where we can venture out — tending our gardens, activating POTA sites, and exercising without causing harm! And kids will be school-bound very soon.

All the articles this month can be tied to POTA, setting up small computers for FT8 and logging; Octopus Radials; and Part 3 of my series on measuring vertical antennas with the NanoVNA. Make sure you read the article on upgrading your Windows 10 computer to Windows 11, the October, 15 2025 deadline is near. For tech support, reach out.

Our move to the new BARC Clubhouse location is underway. Everyone monitor your e-mail and join the BARC reflector if you haven't already. Keep up to date! For example, we can't say for sure if all of the events can occur just yet in the new spaces. The Planning and Membership meetings will be at the new Common Meeting Area just like July.

New hams — there's opportunity to pitch in and help as we move to the new Radio Room. And pair up with an experienced operator for our support to the Lion's Club Parade on Saturday August 23rd. Don Parker, KB8PSL, will send out an e-mail with more details. It's lots of fun, I guarantee it.

73, Ray Hitt, N8VMX, Full Quieting Editor





Independence Dam State Park, Defiance Ohio, US-1960

#### **2024 BARC Officers and Directors**

President: Geoff Kline, KI5VNB

Vice President: Eric Bramini, KC8OPY

Secretary: Jim Gifford, N8KET

Treasurer: John Westerkamp, <u>W8LRJ</u> Senior Director: Bob French, <u>AC8ZU</u> Junior Director: Don Macon, <u>KE8WVJ</u>

#### **2024 Coordinators**

Clubhouse: Jim Lusk, KC8EFD

Comm Center: John Westerkamp, <u>W8LRJ</u>

Contesting: Ken Gunton, <u>W8ASA</u>
Education: Paul Sharp, <u>WS8R</u>

Emergency Preparedness: Jim Lusk, KC8EFD

Field Day: Glenn Rodgers, <u>W8IO</u>
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, <u>KB8PSL</u>
QSLs: Roger Hoffman, <u>WB9BXT</u>
Repeater: Russ Roysden, <u>N8NPT</u>
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 Common Meeting Area and Radio Room**

St. Pierre Education Center (click for Google Map)

3757 Upper Bellbrook Rd, Bellbrook, OH 45305

Park in front (West) of Building, enter right door on front

for now— Escorted to meeting areas, greeter at door

# **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

Welcome to the dog days of summer! I hope you've all found creative ways to stay cool and make the most of the warm weather — perhaps chasing a few DX stations or testing out antennas in the back-yard shade.

Things have certainly been heating up with our club relocation efforts, and I'm excited to report on our recent progress:

We've officially begun the transition to our new space:

- New carpeting is scheduled for installation
- Internet access is in progress
- We've given the roofing contractor the green light to begin installing conduit to bring coax lines into the new radio room
- Work is underway to clean out the old clubhouse

Our Big Move Day is scheduled for **Saturday, September 6, 2025**. On that day, we'll relocate the bulk of our equipment and furniture. If you're interested in helping, keep an eye on your email for information.

We are also seeking a **licensed and insured electrician** with **commercial experience** to work on a few critical upgrades to the new radio room. If you know someone, please reach out to me directly.

August is shaping up to be a fantastic month for ham radio events around Ohio. If you're looking for parts, gear, or just some good conversation, check out these 2 upcoming hamfests:

August 2 – Columbus Hamfest (<a href="https://aladdinshrine.org/hamfest/">https://aladdinshrine.org/hamfest/</a>)

August 9 - Cincinnati Hamfest (https://cincinnatihamfest.org/)

On **August 16–17**, consider participating in the International Lighthouse and Lightship Weekend (ILLW). This fun annual event brings operators together to activate and contact stations operating from lighthouses and lightships around the world. It's a great way to combine radio with some maritime history.

**Trivia Note**: Did you know that more than 500 lighthouse stations were activated worldwide during last year's ILLW?



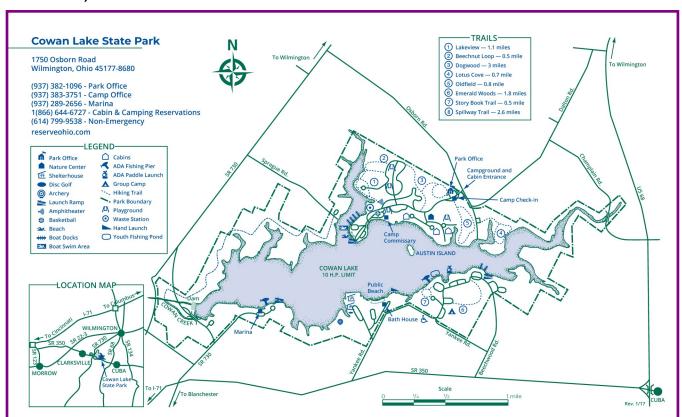
# **Presiden't Corner (continued)**

Mark your calendars for **Saturday, September 13, 2025**. We've reserved a shelter at Cowan Lake State Park for the entire day. It's a great spot for a picnic, an activation, or just a relaxing day with friends. More details and directions will be sent via email closer to the event. We hope you'll bring the family and join us for a fun day in the field.

As always, thank you for your continued support and enthusiasm. I'm looking forward to seeing many of you at upcoming events and especially during our move into the new space. Let's make this transition not just a change of location, but the start of an exciting new chapter for the Bellbrook Amateur Radio Club.

Stay safe, stay cool, and stay on the air.

73, Geoff Kline, KI5VNB



Click on map to go to OH DNR Cowan Lake State Park Webpage



#### **Welcome New Members!**

Nathan Hershberger, **KF8EFZ**, Technician Al Tokarsky, **KB8PJW**, Technician Mark Schreiner, **NK8Q**, Amateur Extra



### **New Member Profile**

#### Mark Schreiner, NK8Q

Thanks to all for the warm welcome. Let me introduce myself a bit ...

I'm originally from Michigan (five hours due north of here in Frankenmuth, just off of I-75 near Saginaw). I don't have any dogs in the fight with UofM or MSU vs OSU or any other sporting and university rivalries. I started in the hobby in 1979 as a Shortwave Listener thanks to my uncle who showed me how to tune around the bands on a Hallicrafters SX-110 receiver. I was licensed as KA8PAK in 1982 when I was 15 years old after I had learned Morse code and the basics to pass a Novice license thanks to one of my many Elmers along the way, Ed, K8OT (SK). I was very active in the local club, the Saginaw Valley Amateur Radio Association (K8DAC) and helped with various public service events, then helped organize them and round up volunteers to fill time



slots, served as the VP of the club and at one point was awarded the ARRL's Hiram Percy Maxim Memorial Award.

When I graduated with my BSEE from Michigan Technological University (where I was the president of the MTUARC, now the Husky ARC, W8YY and taught the ham radio classes while there) I moved east and worked for a company that made satellites (yeah, the ones that get launched into space for supporting commercial communications, direct broadcast TV, meteorological and other earth-studies, deep space research probes, GPS, etc.), now known as Lockheed Martin but at the time was GE Astro-Space near Princeton, NJ and later in Newtown, PA after a variety of business changes including buyouts and mergers. Walt Maxwell, W2DU, who wrote a book titled Reflections and published by the ARRL was a department head prior to my time at AstroSpace, but he was a legend who was still well respected while I worked there through the 1990s. I worked as an RF/Microwave project engineer, then later as a test engineer and eventually as a design engineer. During that time I was a member of the ham club at work but was not active in a local club otherwise, especially while I lived in an apartment in NJ for four years. Then I bought a house on 3 acres in Pennsylvania (I was glad to be back in America ... ask me about that sometime!) where I could set up my own hamshack. I enjoyed various aspects of HF from that property but also got more into VHF/UHF/Microwave weak-signal activities, almost all of that VHF - Microwave equipment I have since gotten rid of after moving a few times and not getting another tower with long-boom yagis on the air. During that time I earned my MSEE at Villanova University as the company had set up an after-hours program and the professors came to where we worked for classes (or I would travel to other businesses that had a similar arrangement, and I also took a few classes online). Not much time for ham radio during that time while studying, working full time, fixing up a house to sell, getting engaged, moving, changing jobs and getting married, life was just too busy to do much ham radio.



# **New Member Profile (continued)**

After nine years at AstroSpace/LockheedMartin, I shifted into the fiber optic telecom business which was booming at the end of the 1990s and early 2000s. I worked for a small startup company, which was an exciting time but unfortunately it didn't succeed despite some brilliant folks who were working there, and I landed elsewhere for a while. Eventually the bubble burst resulting in a couple more job changes within that industry for several years. I always landed on my feet pretty well, though and later found myself as an engineering manager for a mid-sized company that had a diverse product portfolio and vertically integrated manufacturing capabilities, located in State College, PA (home of Penn State University, but again, I don't have a dog in any fight with or against PSU, although I am good friends with Dr. Jim Breakall, WA3FET who is now retired from PSU). For the most part I loved living in State College because it was centrally located in PA allowing me to be mostly anywhere in the state within a couple of hours in order to go hiking in the hills of Penn's Woods, including doing many Summits on the Air (SOTA) activations. Someday I need to figure out which SOTA entities were also POTA entities and upload the logs to get credit for POTA as well! I also enjoyed operating portable for the PA QSO Party (2nd full weekend of October) from different (usually rare) counties each year. I often set a new county record when I would head out to do that activity and I'm currently serving on the PA QSO Party Association's Board of Directors and handle the awards as my primary duties, something which I originally started doing to help out the one and only guy tasked by the Nittany ARC who sponsored the PAQP for many years. I really didn't have a station set up when I lived in State College because I really enjoyed operating portable, either by hiking or driving somewhere to operate for PAQP for the weekend once a year. I also enjoyed using the Nittany ARC's clubhouse which had much better station than I could have set up in town. Oh, I continue to be the Awards manager for the PAQP even after moving here to Ohio and am planning to travel to Greene County (PA) for the PAQP this October.

BTW, the highest summit I have operated from during a SOTAdventure was Mount Evans (renamed to Mount Blue Sky shortly after I activated from there), located about 50 miles from Pikes Peak on the Front Range of Colorado's Rocky Mountains. Mount Evans has the distinction of being the highest mountain in CONUS with a paved road to (nearly) the top at 14,267' ASL, and believe me the air up there is thin and I really noticed it! No, I didn't hike from the valley all the way up, but my buddy Dave, KX3DX, who I used to work with at Lockheed Martin and moved to CO and recently retired from LMCO, drove me to the parking area at the top and we hiked the rest of the way into the Activation Zone. It stands as one of my all-time favorite SOTAdventures, probably second only to hiking across Isle Royale National Park where I operated from three of the four (two-point) summits in 2016 while also counting for ARRL's National Parks on the Air (NPOTA, a predecessor to POTA). My belly has since gained back every bit of the weight I lost when conditioning for that hike, so maybe it is time for me to train for something similar again!



# **New Member Profile (continued)**

As I said, I moved here a couple of years ago, working for a large defense contractor supporting a lab at the AFRL at WPAFB. I love the work I'm doing here and hope to retire from this job (I have a 3 to 6 year plan, we'll see). I'm a systems engineering manager and have a fairly small team who reports to me, including some R&D, software and hardware folks, all of them are amazing engineers which makes my job a lot easier! During my first month here in the area I was living in a hotel near Miamisburg while prepping the house we had just purchased (painting, replacing carpeting, etc.) prior to the moving company bringing our stuff from PA and I joined BARC as a guest operator at Field Day at the park early on Sunday morning, about 5 AM, and operated until maybe 9 AM. I haven't had much time to join BARC as the projects around the house here seem to keep me busy otherwise. I ran into some of your members at Hamvention the last couple of years and again joined you guys for FD efforts this year at the clubhouse. I had fun on 20m CW from late morning through until 2 PM. Everyone I met was genuinely helpful, friendly and welcoming, so of course I had to join BARC!

I look forward to meeting more of the members of BARC and helping out with getting the new clubhouse up and running as well as operating events, especially looking forward to joining some of you for POTAdventures (since SOTAdventures are far and few between here in OH compared to PA), Field Day, some of the contests at the clubhouse or if anyone has a good home station and needs an extra operator to fill a seat for a while (especially if it is CW), by all means let me know. I'm also interested (since Hamvention) in Meshtastic devices and likely would put up a solar node at home and/or at some tall buildings around the area to act as node repeaters to help fill in the density of the local Mesh network (on 915 MHz using LoRa radio technology). If anyone in BARC is interested in that stuff, let me know! It seems like a lot of the local Meshtastic folks are hams, although a few are not (maybe they could be recruited into Ham Radio!).

Please introduce yourself to me when I'm at a club event. Until we meet in person ... 73,

Mark, NK8Q



# 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 <a href="https://bellbrookarc.org/wp/order-barc-gear/">https://bellbrookarc.org/wp/order-barc-gear/</a> 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 <a href="mailto:deeremt@gmail.com">deeremt@gmail.com</a>. 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!



# Officer, Director, and Coordinator Inputs

<u>Treasurer</u>: John Westerkamp, <u>W8LRJ</u>: Income continues to trickle in with a few new members in July. Most of our current expenses are related to our relocation effort including paint and carpet for the radio room. It looks great!

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

<u>Repeater</u>: John Westerkamp, <u>W8LRJ</u>: A Windows Update took out the 440 repeater (surprise, surprise!) which uses a Windows program as a repeater controller and for Wires-X. Once the PC was allowed to reboot and install the updates, operation returned to normal.

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.

<u>Website</u>: John Westerkamp, <u>W8LRJ</u>: Summer is a great time to watch for Public Service Events and BARC Operating Afternoons including the Lions Club Parade and the Air Force Marathon. Watch the website and Newsletter for more information along with news about our summer relocation efforts.

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*!

<u>Communication Center</u>: John Westerkamp, <u>W8LRJ</u>: The ad hoc Clubhouse Committee has begun preparing the radio room at our new location before we move the equipment. The walls have been painted and we are looking to install carpet to deaden some of the echo. A roofing contractor has been contacted to install a 3 inch PVC pipe through the roof into the radio room so we can run all our antenna coax into the radio room.

<u>Secretary</u>: Jim Gifford, <u>N8KET</u>: As secretary I took notes at the planning meeting and minutes at the general membership meeting. I attended meetings about the planned move. I attended a great movie night at the old clubhouse. Lastly, I went to the old clubhouse and gathered all the old and recent minutes from the shelf and filing cabinet. I am in process of placing everything in new binders.

<u>BARC Net Manager</u>: Paul Sharp, <u>WS8R</u>: 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 July 2025 there were approximately 62 checkins lasting 154 exciting and informative minutes. Topics ranges from Open Mike, Parks on the Air, what DX contacts have you made, vacation plans, plans for moving out of our current club house and moving into our new one, Field Day and favorite reading material.

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 Community Service Coordinator**: **Don Parker**, **KB8PSL**: Saturday 23 August, 2025 at 4:00 P.M. will be the annual Bellbrook Lyons Club parade. The BARC club provides communications for the parade and assists with parade line up on Vemco Dr. I'll be asking for volunteers to assist with the activities closer to the parade date.

This event is a great opportunity for members to work with a net control system operation.



# **BARC August 2025 Event Calendar**

{Editor — Some meetings are tentative until the Radio Room at our new location is ready for use. Check your e-mail for exact details for those meetings **Sun August 3, 2025** Tue August 5, 2025 6:30pm POTA SIG Meeting......Where: TBD **Thu August 7, 2025** Sun August 10, 2025 Tue August 12, 2025 Sun August 17, 2025 Thu August 21, 2025 7pm Membership Meeting .......Where: New Common Meeting Room Sat August 23, 2025 Sun August 24, 2025 Tue August 26, 2025 Wed August 27, 2025 Thu August 28, 2025 7pm Dessert and Movie Night ................................. Where: New Common Meeting Room Sun August 31, 2025 



# **BARC Movie and Dessert Night**



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

<b>Date</b>	Movie	Genre	Actors	
August 28, 2025	Captain Ron (1992)	Comedy	<b>Kurt Russell, Martin Short</b>	
September 25, 2025	TBD			
October 23, 2025	TBD			
Past movies and Desserts:				

January 23, 2025	<b>Harvey</b> (1950)	Carrot Cake & Carrots
February 27, 2025	<b>Edge of Tomorrow</b> (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
May 22, 2025	Twisters (2024)	Pound cake with fruit & a twist of Whipped Cream
June 26, 2025	Fly Me to the Moon (2024)	
July 24, 2025	Witness	

We are planning a full calendar of movies for the 2025 BARC Movie and Dessert Nights: September and October included! Due to our clubhouse situation the September & October movie nights are tentative. Our plan is to continue our BARC Movie & Dessert Nights after the move to a new clubhouse. Please check your e-mail for last minute updates.

BARC movie nights are held on the **Fourth Thursday** of each month **January** through **October** at **7:00 PM in the BARC Clubhouse** (through August). 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 August at the Movies!

Tink KD8NUA



BARG

## **Lunch Bunch**

#### Jim Totten, WA8HUB

Hello my fellow lunch lovers. July 2025 is just about over. The saying April showers make May flowers. Apparently the "showers of April and May and June even July" have not been enough. It is time: time to renew our lunch meetings for this new month, August 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 August restaurants are highlighted. I updated all of the dates for all of the restaurants on our list. 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.

How did we do in July? On July 8, 2025 we had our lunch at end of our list but by no means anything but great food. The Beavercreek Pizza Dive is a unique dining experience. They have several pizzas already cooked and on a warming plate. All big. You can pick a slice or two of what is on display or order from the menu. If you pick one of the display, it's heated and then served. We had 8 eating and all satisfied. Our next adventure was on July 22, 2025 and we wen to the top of the list: The Cherry House cafe. The menu is extensive. Cold and hot sandwiches, appetizers, quiche, dinners and special mixes. I had the Rueben Sandwich with a broccoli/raison side. Eleven folks graced our tables.

Now for the August offerings. On Tuesday August 12, 2025 our stop is Another Broken Egg Cafe, 2543 Esquire Dr., Beavercreek, OH 45431. Tele (937) 912-5074. This restaurant is only open 7:00 am to 2:00 pm. We have never had any meal that wasn't great. Tuesday August 26, 2025 the venue is the China Garden Buffet. 112 Woodman Dr. (Airway Shopping Center) Dayton, OH 45431. Tele (937) 781-9999. You can not leave until you're stuffed.

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

73, Jim, <u>WA8HUB</u>

### Tuesday, August 12th, 11:15am



Click pictures or hyperlinks for more info and maps

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# Tuesday, August 26th, 11:15am



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# **Lunch Bunch 2025 List**

# Jim Totten, WA8HUB

Date	Restaurant	Address	City	Phone Number
04/08/25	Shawarma Grill	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
06/24/25	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
07/08/25	Beavercreek Pizza Dive	4021 Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669
07/22/25	Cherry House Cafe 7:00 am to 2:00 pm	1241 Meadow Bridge Dr	Beavercreek, OH 45434	(937) 320-6200
08/12/25	Another Broken Egg Cafe 7:00 am to 2:00 pm	2453 Esquire Dr.	Beavercreek, OH 45431	(937) 912-5074
08/26/25	China Garden Buffet	112 Woodman Dr. Airway Shopping Center	Dayton, OH 45431	(937) 781-9999
09/09/25	First Watch 7:00 am to 2:30 pm	5245 Cornerstone North Blvd	Sugarcreek Twp, OH 45440	(937) 732-9013
09/23/25	Submarine House	3195 Dayton-Xenia Rd.	Beavercreek, OH 45434	(937) 429-8650
10/14/25	Roosters Wings	2430 N. Fairfield The Shoppes at FC	Beavercreek, OH 45431	(937) 702-9500
10/28/25	Butterbee's	217 Progress Dr.	Xenia, OH 45385	(937) 352-6504



# **Upgrade Your Windows 10 Computer to Windows 11**

Ray Hitt, N8VMX

Many of you who attended our last BARC General Membership meeting heard from Shawn Waldman, CEO, Cybersecurity. He prefaced his talk saying that "We might leave here and not sleep tonight." He also recommended that no one continue to use Windows 10 after **Oct 14, 2025** when Microsoft discontinues technical support updates to Windows 10 (Microsoft has extended Windows 10 support for one year if you sign up for Extended Service Updates, however this is only a short term solution).

I have been troubled at the thought of so many people throwing their computers away in October to buy a new Windows 11 machine that may not be in their budget. Good news is that I discovered a clever way to upgrade your computer from Windows 10 to Windows 11 for free, plus you won't lose your information in the process. This upgrade even works on most of those computers that Microsoft has determined unable to be upgraded!

The method to upgrade involves an installation program called *FlyBy11*, which is available for free on GitHub at this link: <a href="https://github.com/builtbybel/Flyby11">https://github.com/builtbybel/Flyby11</a>. This program will perform a simple check to make sure that your computer is capable of running Windows 11 (using sane computer programming principles instead of Microsoft's overly stringent requirements). It will then install the Windows 11 software from an ISO file that you either downloaded already or have selected from a menu within <code>FlyBy11</code> itself. Once the Windows 11 installation program is running, it's Microsoft software at that point and is a typical installation of Windows 11 Server Edition. No fear, the Windows 11 Server Edition contains the same software as other editions of Windows 11 but it skips the stringent tests that would otherwise prevent Windows 11 from installing.

To save time, I put the *FlyBy11* software, along with the Windows 11 ISO (which I downloaded from Microsoft from my other Windows 11 computer) onto a USB SSD hard drive (you could also use a USB memory stick of at least 8 GByte). I then ran FlyBy11 directly from the USB hard drive. I was able to upgrade all three of my Windows 10 computers to the latest Windows 11. If you had Windows 10 Home Edition you would end up with Windows 11 Home Edition, and if you had Windows 10 Pro you would end up with Windows 11 Pro and so on. And all your programs, apps, and data are still intact.

Out of the three Windows 10 computers I upgraded, one upgraded with no problems at all on the first try. The other two failed on the first attempt. When they failed, they got restored back to the state they were in before I started, i.e. Windows 10. To get Windows 11 installed on them, I installed all Windows 10 updates, including the optional Performance Preview update, and then tried again. On the second try, both the remaining Windows 10 computers updated to Windows 11.

There's an excellent YouTube Video by <u>@AskYourComputerGuy</u> walking you through this very software. You should view this before you attempt it. And back up your computer before you start!

Here's the link to the YouTube video: <a href="https://www.youtube.com/watch?v=C\_p3dBrr\_Sg">https://www.youtube.com/watch?v=C\_p3dBrr\_Sg</a>

73, Ray **N8VMX** 



# Vertical Antenna Analysis Using NanoVNA—Part 3

#### Ray Hitt, N8VMX

In Part 3 of my series of using a *NanoVNA* to measure various vertical antennas, I will talk about one of the two vertical antennas I have left to measure. I'll be talking about my 102-inch "CB Whip", and next month I will cover a 22-foot WW2 vintage vertical that I found in Fred Stone W8LLY's (sk) garage when we were examining the numerous amateur radio items left in his estate. I wanted to do both of these in this issue of Full Quieting but I made the judgement call that the article became just a bit too long!

**CB-Whip**: I picked this antenna up decades ago at R and L Electronics. It's a simple design — a single piece of stainless-steel tapered whip 102" (9-feet) in length. I still see them on Amazon and eBay for around \$80 and up. This antenna is the one I use on my Fusion connected to an SG-237 antenna coupler mounted in the trunk lid with a very short piece of insulated RF braid to the center conductor. The SG-237 grounds itself directly to the car body with braid. When I'm not using this 102" whip I replace it with a short 3-foot whip to keep the guick disconnect protected from corrosion.

The CB whip is supposed to match the 11-meter Citizen's Band (CB) but can be matched to the 10-meter amateur band without too much difficulty. I added a 8-inch spring, and a bayonet quick disconnect which are essential for use on an automobile. These affect the *NanoVNA* measurements because they add to the electrical length of the antenna.

The setup for these measurements is a Big Kansas Coil (BKC) mounted to its tripod, a coil spring, bayonet quick disconnect, then the CB whip with its 3/8 x24 threaded mount (Figure 1). I did several measurements of the 102" CB whip:

- 1. Three 33-foot radials (supplied with the BKC) lying on the ground.
- 2. Three 33-foot radials elevated at the far end with 3-foot plastic electric fence posts.
- 3. Two 43"x 118" Faraday cloths directly below the BKC tripod.
- 4. One 43" x 118" Faraday cloth directly below the BKC tripod.

I swept the *NanoVNA* from 2-30 MHz and connected it to my Raspberry Pi-5 running NanoVNASaver (see Part 1 of this series for more details). I had the software divide the 2-30 MHz into 7 regions, each with 101 points, to provide more granularity in the data.



Figure 1- BKC tripod, spring, bayonet quick disconnect, radials



**Baseline Measurements**: Here's a look at the SWR from 2-30 MHz (*Figure 2*), and zoomed in near 22 MHz (*Figure 3*).

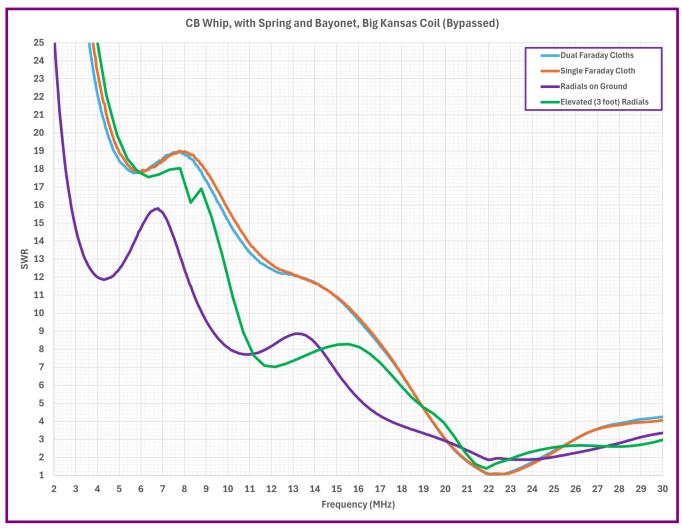


Figure 2 - SWR Sweep, 102" CB Whip, 2-30 MHz

Results: This antenna setup resonated around 22-23 MHz, depending on the type of ground. The best performance was by using the Faraday cloth, around 1.08:1 at 22.05 MHz. There was almost no difference between using dual Faraday cloths and one Faraday cloth; those lines almost entirely overlapped. This is nice to know because setting up two ground planes is a bit tricky, not to mention I could keep the second cloth as a spare. The elevated radials got a SWR as low as 1.4:1 around 21.9 MHz. The radials on the ground had worse performance (1.9:1 at 23.5 MHz). I noticed there was an unusual resonance anomaly around 22 MHz, and I reported on it in Part 2 of this series. This anomaly is affecting these measurements slightly, the curves should look more parabolic without a "wiggle" in the measurement.



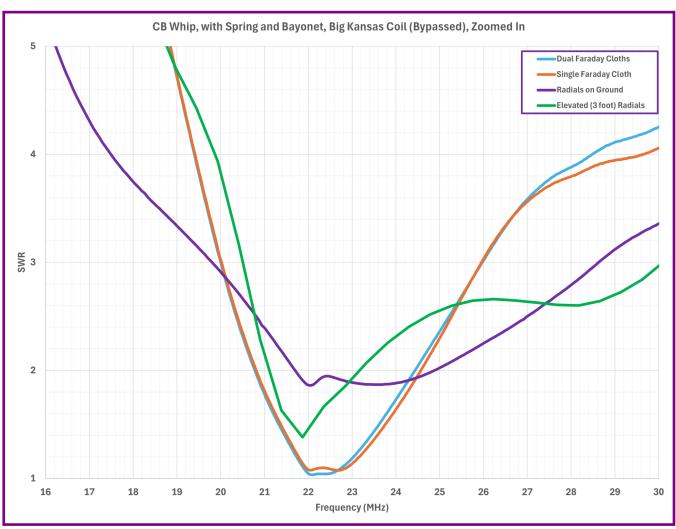


Figure 3 - SWR Sweep, 102" CB Whip, Zoomed in 16-30 MHz

Raising the Resonant Frequency: Recall in Part 2 of this series of articles that the resonant frequency of the AT-271 or AN-131 could be raised by not extending the top 1,2, 3 or maybe 4 segments of the foldable manpack whips. Since the 102" CB-whip is fixed in length, that is not an option, except by permanently cutting off short lengths until the desired match is achieved. I will not be doing that, so I am skipping this option for now.

**Lowering the Resonant Frequency**: The BKC can be used to add inductance at the base of the antenna, lowering the resonant frequency. The coil shows the number of coil turns along the side, running from zero (coil completely bypassed) to 40 (coil full inserted). I took measurements at 0, 5, 10, ... 40. I used the power of Excel to put all of these 9 measurements on a single chart (*Figure 4*). Since the double ground plane was the best performer I used a double 43 x 118" Faraday cloth ground plane for these measurements. The single ground plane was nearly identical.



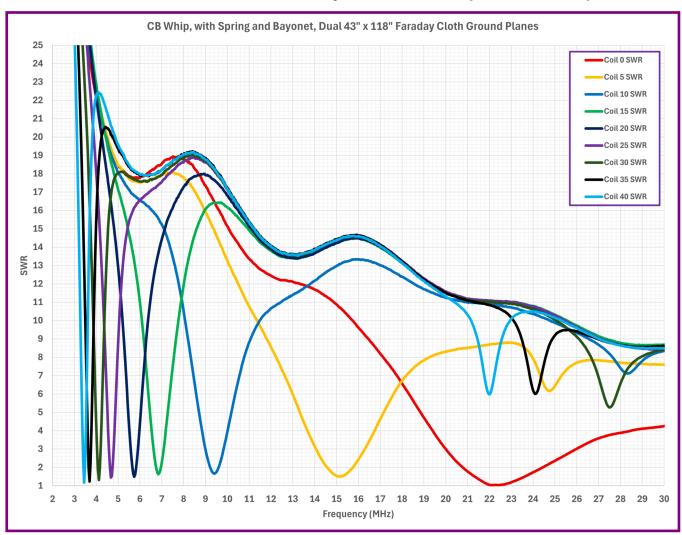


Figure 4 - Change in Resonant Frequency as Coil Turns are Added

The baseline measurement with the BKC bypassed (Coil 0 SWR shown in red) on Figure 4 is the same curve as Figure 1. Look at the different SWR curves as the number of coil taps increases from 0 to 40. Notice a couple of things: First, the resonant frequency goes down as coil turns are added to the antenna. The amount of frequency change is less as more coil is added until there is almost no change between 35 and 40 coil turns. Second, the low SWR bandwidth (below 2.0:1 for example) is decreased as more coil turns are added. In other words, as more coil turns are added, the curve showing range of frequency where there is low SWR becomes very sharp and narrow. This is due to the Q (quality) factor of the antenna and coil, where an inductor has a very high Q compared to the straight piece of wire forming the antenna. The more coil in the circuit, the higher the Q-factor, and the sharper the resonance. When you're trying to tune this antenna at the lower end of the HF band, 80-meters for example, the amount of movement on the coil to get the frequency to resonate where you want is very small. And for the lower resonant frequencies (Coil 30, 35 and 40) you can see harmonics show up around 22-27 MHz as small SWR dips around 5:1 to 7:1, not good enough to match most radios even with built-in tuners.

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For these 9 coil measurements (Coil 0, 5, 10,...40), I noted the lowest SWR and the frequency where it occurred for each curve and put them into *Table 1*. Table 1 was then used in Excel to plot the resonant frequency versus coil tap setting (*Figure 5*). To use this chart, look for the band you want to operate in and see what coil number matches where the line intersects the dashed band markers. This chart is worth printing and using for POTA.

That's it for this month. Next month, I will describe the performance of the 22-foot SCR-506 WW2 vintage antenna. And hopefully finish up this series.

<b>Coil Setting</b>	Resonant Frequency
0	22.0539
5	15.1700
10	9.3060
15	6.8375
20	5.5241
25	4.6742
30	4.1218
35	3.6969
40	3.4419

Table 1- Coil Setting vs Resonant Frequency

#### 73, Ray **N8VMX**

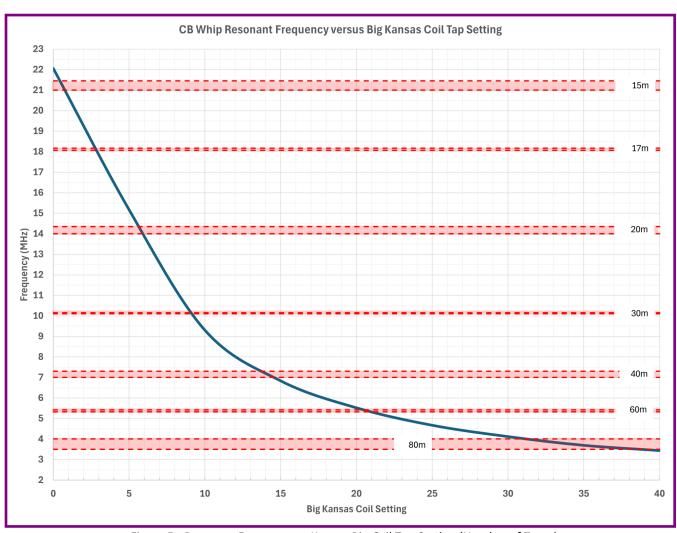


Figure 5 - Resonant Frequency vs Kansas Big Coil Tap Setting (Number of Turns)



# **Octopus Radials**

Jim Gifford, N8KET

At our July Parks on the Air (POTA) meeting at the BARC clubhouse, a couple of us were talking about antennas that worked and some that did not work to expectations. I mentioned my MFJ Octopus, which I found to be very difficult to match for a good SWR.

I formerly had the MFJ 2100 Octopus mounted on top of a pole next to my garage, and the coax from the unit disintegrated from sun exposure. So I took it down a year ago, and it was hanging uselessly in my garage.

After our POTA meeting discussion I had a thought. I started to say a "brilliant" thought, but the jury is still deliberating on whether any of my ideas come anywhere near "brilliant." I decided to reconfigure my Octopus into a radial array for POTA.

The Octopus was set up by MFJ as a multi-legged dipole using Hamsticks. The Hamsticks are described on MFJ's page: "Each is ruggedly constructed. A heavy duty 4 foot, 3/8 inch diameter fiberglass rod, a nearly indestructible .125 inch diameter PH-17-7 stainless steel whip and chrome plated brass fittings will give you years of dependable service."

The MFJ page describes the Octopus: "Octopus antenna hub turns your ham-sticks into four fully balanced dipoles in minutes!"



MFJ 2100 Octopus

I am sure user error is fully involved here, but my experience with fully balanced in "minutes" never occurred! Now MFJ is out of business, but I am sure the Octopus is still available from various sources.

So, how did I make it into a radial? In its original configuration the unit is divided into two sections, one section for the left sides and one for the right sides of four dipoles. I simply soldered both sections together so that all elements were connected (see right). I then soldered an extension wire to that circuit and an alligator clamp on the loose end. In essence when the Hamsticks are screwed into the extended nuts (see photo right) they are on the same circuit as the extended wire.



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# **Octopus Radials (continued)**

Opening my trusty junk box, I found the parts and screws needed to mount the Octopus to my tripod. NOTE: My dad taught me to keep odds and ends in case I needed them one day. In my garage I have plastic tool boxes sitting on shelves labeled with a general description of the various parts of odds and ends in each box. If anyone ever says Jim Gifford "has a screw loose" be assured I know where to find it.

I just happened to possess four 20m Hamsticks, although I believe for this radial configuration installing various Hamsticks of different bands may work as well. I connected the Hamsticks across from each other on the Octopus. Notice I did not have to use all eight possible connections (see photo below), although you could do so. I connected the extended wire with the alligator clip to the ground portion of the coax screwed into the bottom of the coil.

In the photo notice I am using a Wolf River Coil with a 17-foot whip on top. The photo reveals a setup I used for 40m.



Using this setup in our driveway, with four 20m Hamsticks, the Wolf River Coil was tuned to 20m, the whip fully extended, and the tripod extended up another five feet, we were able to contact the French 13 Colonies operator on our Yaesu 710. I say "we" because Connie W8CSG and I, Jim N8KET, were each able to separately speak to him. It was fun to hear him call Connie "Mademoiselle."

I tied plastic bright yellow caution tape to the ends of the whips so folks would not run into them.

Was this any easier to set up than merely tossing out a few radials along the ground? Not easier, but about the same. The ad-

vantage is that the radials are elevated, which I have read and heard is better than laying on the ground. But the proof will come when I actually use them on a POTA. I hope to see you in a local park, on the air soon!

73, Jim <u>N8KET</u>



# **Interesting Small Windows 11 Computer**

Ray Hitt, N8VMX

At our last Membership meeting, Geoff Kline, KI5VNB, brought in a small (2.75" L x 2.75" W x 1.75" H) Windows 11 computer. He even set up W8LRJ's Field Day presentation on it. I was so intrigued I bought one. This addresses my frustration at a POTA activation earlier in June using a Raspberry Pi that failed me with quirky software (see my article later in this *Full Quieting*).

I'll mention up front that these PCs are going fast. The 12GB RAM, 256 GB SSD version is marked down to \$138 from \$180. Not sure how long that price is lasting. Plus, in Ohio, the state sales tax is waived from 1-14 August for all personal items under \$500. Sounds like the perfect storm to flood Dayton with small PCs!



From techradar.com review article

The <u>Amazon link for this PC is here</u>. It's called a *GMKtec NUCBox G5*. Since I just got this PC, I don't have a lot to report yet, I'm still putting it through its paces. However, I did load it with the software I need for a digital POTA activation. I ran *flrig, fldigi or wsjtx, gridtracker 2,* and *hamclock* simultaneously (but would you do all that with one monitor?!). It runs web browsers, and the web version of Microsoft Office (I haven't loaded the full Office apps on the Desktop, nor do I want to).

This little PC is powered through the USB-C power connector on the front. GTKtec provides the correct power adapter to run it off 120VAC, but it is also generally compatible with the USB-C PD (Power Delivery) standard. It doesn't run off 5V like the Raspberry Pi 5 does. Instead, it requires 12V at 3A. When you plug a USB-C to USB-C cable into the PC and a compatible USB PD charger, they will negotiate and select the proper voltage. I suggest you purchase a USB-C voltage tester to see if your particular USB charger is 12V-capable. The USB-C laptop chargers I installed in my battery boxes (see July 2023 Full Quieting) are 12V-capable (Link to USB-C PD Laptop Charger). This means I can run my amateur radio, this PC, and the monitor all off my LiFePO2 battery at a POTA event. Safety tip: Don't use a USB-C cable, they permit 5V only and may damage the PC.

This PC came with Windows 11 Pro preinstalled. Just connect it to a monitor, keyboard, and mouse, power it up, let it finish the installation and then log in with your existing Microsoft credentials.

I do recommend if you want to run many USB accessories or backlit gaming keyboards, get a powered USB hub too. I bought one that runs off 12V and made a PowerPole adapter cable to power it. If you plug too many high current USB devices into this PC directly, it will crash. With a powered USB hub handling all your accessories, this PC itself on draws only around 5 to 10 watts. I haven't stress tested it yet, but I don't set a high bar for a computer this small.

Oh, and you can upgrade it. The memory at 12 GB seems plenty, but you can upgrade it if you need to. And the SSD M.2 NVME SSD can be upgraded too. I don't plan on loading too much on this PC, I have other machines for everyday uses, so a 256GB SSD should be enough hard drive (for now!).

Good Luck, and look for more info next month.

73, Ray <u>N8VMX</u>

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# **Digirig Setup for POTA**

Ray Hitt, N8VMX

This month I did a deep dive into what's going on with audio setup for Digirig in Windows. I wanted to document what my settings were that work for me. Chances are they will work for you too, but the audio levels might need to be adjusted for your radio. I am doing this because I took my Raspberry Pi-5 to a POTA activation and it let me down, everything that worked at home failed at the park. So, I am configuring an old Windows 10 laptop to take to the next POTA activation. Linux audio is still a hot mess until I sort it out. I use Windows 11 and noticed that the audio settings are identical to Windows 10.



One of the first things I noticed was that when I plugged the Digirig into the laptop, Windows would automatically detect it (good) and set it up to be the *Default Device* (very bad!) and *Default Communications Device* (very bad!). This is not something you want to have happen because all your Windows audio might go out over the radio.

The second thing I noticed what that whenever I unplugged the Digirig and plugged it into the same USB port, it would remember all its settings from before. However, if I plugged it into another USB port, Windows would know nothing about it and set it up again with default (very bad) settings. Who's idea was that?

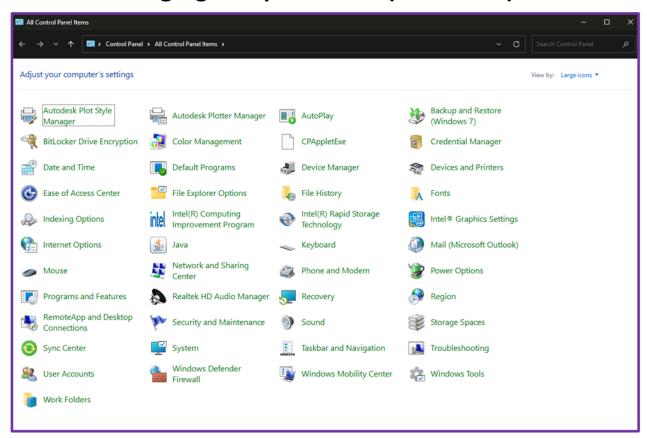
So, I took a morning and plugged my Digirig into a USB port, changed all the settings, moved it to the next USB port and set it up the same. I did this for the four USB ports on my Windows 10 laptop and for grins, also did the same thing on my Windows 11 laptop. The Windows 11 laptop won't ever go on a POTA activation, but I do use it at home on the deck if I am playing radio there. I also use the Windows 11 laptop to do the Full Quieting articles, so all the screen captures for this article were captured there. If you use a powered USB hub, you would set up the Digirig in all those ports too.

This took about two hours for two laptops but was easy to do because all the settings were identical from one port to the next. I also noticed that once it was done, whenever I plugged into any USB port, it would remember all the settings from last time. The benefit of doing this is also to avoid confusion when you set up *flrig*, *fldigi*, *wsjtx*, or other software because everything will be consistent. So, let me walk you through the process.

The settings for audio are done in the *Control Panel* app, which is not very easy to find anymore on Windows, but you can search for "control panel" in your search bar near the Windows logo on your taskbar and run it. Here's what the *Control Panel* looks like (next page).

All the settings for audio are done in the *Sound* applet in the *Control Panel*. Click the Sound applet and you'll get the dialog boxes for all your sound devices. The devices on your computer will be different than mine of course. The Digirig will initially show up as a "*Speaker*" (for playback) and a "Microphone" (for recording). This is vague, so the first thing I did was change the name to "*Digirig Mobile 1.9*" and the icon to a modem. This will be what shows up in all the programs when you select the audio device later. You can change it to whatever suits you as long as it's a unique description you can find when you're on a POTA activation and things go south on you!





Windows 11 Control Panel (All Control Panel Items View)

**Playback Settings**: When you select the Sound applet, this is the first dialog box you'll see. There are 4 tabs for *Playback, Recording, Sounds,* and *Communications*. I only needed to adjust settings in *Playback* and *Recording,* so I'll walk you through those two tabs in this article, starting with *Playback*.

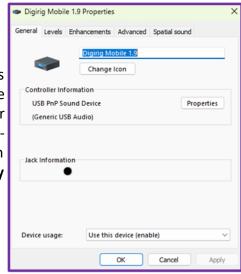
Notice that my Digirig has already been renamed so it's easy to find. Remember you may have to look for a *Speaker* that is a *USB PnP Sound Device*. I'll show you how to change its name and icon next. For now, select that device (*Digirig Mobile 1.9* here), then hit the *Properties* button to change all the playback properties.



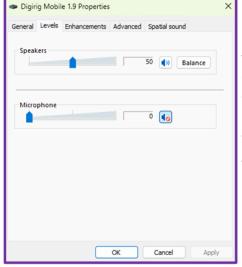
Playback Settings



The first tab under *Playback Properties* is the *General* tab. This is where I changed the name and the icon to match what I have shown here. The Digirig is much more than what the speaker icon and name alone can represent. Once you make these changes, **don't hit OK just yet**. Instead, visit each one of these tabs in order, *Levels, Enhancements, Advanced*, and *Spatial sound*. **Only hit OK when you're done with all these tabs**.



General Tab Under Playback Properties

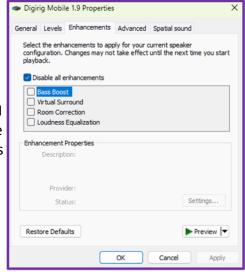


Levels Tab Under Playback Properties

The Levels tab lets you set the Digirig Playback audio level. This is what will be fed into the radio's Line Input. It can get confusing; the Digirig's output is the radio's input and vice versa. If you're old enough to have ever connected a cassette player to a stereo, the Line In and Line Out jacks are similar.

The level is set to a nominal 50 here, if you adjust it here, remember the setting to apply when you switch USB ports later on and repeat this setup process.

The *Enhancements* tab contains nothing of any use for Digirig so I checked the *Disable all enhancements* checkbox. Nothing more to do here. Note that your setup may have different options here, this is computer-specific.

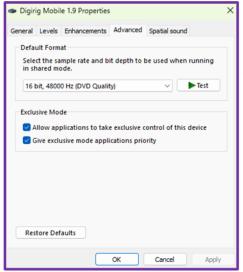


Enhancements Tab Under Playback Properties



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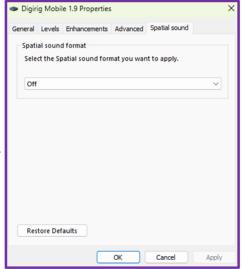


The Advanced tab had these defaults and they are all acceptable. Notice that this is where you would grant applications Exclusive Mode. This would let wsjtx, fldigi and other programs take over the Digirig audio when running. It's the place where you can ensure that no other program is trying to send audio through your Digirig (and transmitted out your radio!)

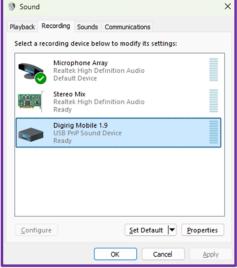
Advanced Tab Under Playback Properties

This is the last tab under *Playback Properties: Spatial sound*. Make sure it's turned Off, which is the default.

After this tab, you can hit *OK* to accept all the *Playback Properties* for all these tabs.



Spatial Sound Tab Under Playback Properties



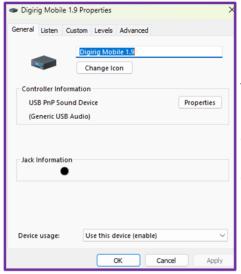
Now, move over to the Recording tab. Make sure you select Digirig, or whatever it's called before you rename it next (probably defaults to *Microphone USB PnP Sound Device*). Then hit the *Properties* button to adjust all the *Recording* properties for the Digirig.

Recording Settings



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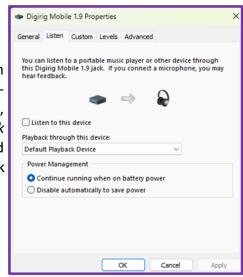
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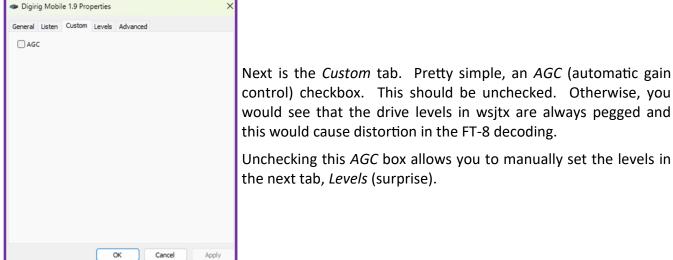
General Tab Under Recording Properties

Just like before, the first tab under Recording Properties is the General tab. Change the name and the icon to match what you did for playback. Just like before, once you make these changes, don't hit OK just yet, but visit each one of these tabs in order, Listen, Custom, Levels, and Advanced. Only hit OK when you're done with all these tabs.

The *Listen* tab is not normally used but can come in handy when you are troubleshooting. When you check the Listen to this device checkbox, this will feed the Digirig output to your speakers, headphones, monitor, whatever you select in the *Playback* through this device dropdown list. I wouldn't leave this checked for very long, it may drive you and your family crazy! So, uncheck it when you are done!



Listen Tab Under Recording Properties



Custom Tab Under Recording Properties

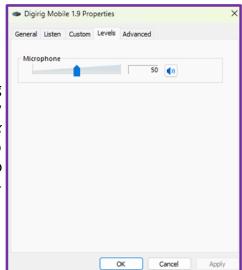
control) checkbox. This should be unchecked. Otherwise, you would see that the drive levels in wsjtx are always pegged and this would cause distortion in the FT-8 decoding.

Unchecking this AGC box allows you to manually set the levels in the next tab, Levels (surprise).

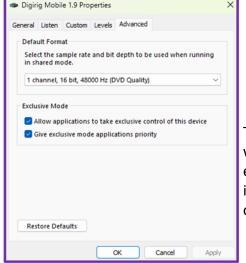
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The Levels tab under Recording Properties sets the levels going into the computer from the radio's Line output. I set it nominally to 50, midrange. You'll have to tell by using the radio and wsjtx or fldigi if this needs to be adjusted further. Most radios also have input and output level adjustments too. Just set them all to mid range too, then adjust further once wsjtx or fldigi are running.



Listen Tab Under Recording Properties



Advanced Tab Under Recording Properties

The *Advanced* tab is the last to be adjusted. Just like before when setting up playback, this tab has *Exclusive Mode* checkboxes that allow your apps to directly control the Digirig recording inputs. This level of control will keep other Windows nonsense out of your radio experience (hopefully!).

Once you are done with these settings, unplug the Digirig and plug it into the next USB port. Let Windows detect it and let things settle down, then open up its Sound settings and repeat this process. I did this eight times in total across two computers. If you set up everything right, you won't have to mess with it again. If you do end up having to change audio levels, just make note of what you changed (maybe on a printout of this article) and repeat it across the other ports so they all match.

It's worth mentioning that over the past three days, there were times when everything worked great, then other times when there was no sound output from the radio into the computer or no sound output from the computer into the radio. Instead of tearing your hair out like I almost did; shut down the computer, turn off the radio, and unplug the Digirig from everything. Plug everything back together, turn on the radio and computer and things might strangely be working perfectly again. Software, ugggh....

*73,* Ray <u>N8VMX</u>



# **Special Event Stations for August**

#### 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 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 lottery this month with many exciting SES. There are SES commemorating: The Indiana State Fair, Alcatraz, KDKA, cat, dogs, lighthouses, Airstream Campers, the Auburn Cord Duesenberg, Return to Paradise, ship wrecks and California.

**08/01/2025** | **Antique Power Show**. Aug 1-Aug 3, 1300Z-2359Z, W9R, Beaver Dam, WI. Rock River Radio Club. 14.275 28.375 7.275 21.275. Certificate & QSL. Rock River Radio Club, PO Box 26, Juneau, WI 53039. To get a nice Certificate, send a QSL card, two stamps and a \$1.00. <a href="https://www.dcapclub.org">https://www.dcapclub.org</a>

**08/01/2025** | Indiana State Fair. Aug 1-Aug 17, 0000Z-2359Z, W9ISF, Indianapolis, IN. Indiana State Fair ARC. 7.240 14.240 21.300. QSL. Ken Bandy, 7405 E County Road 900 N, Brownsburg, IN 46112. <a href="https://www.indianastatefair.com/p/state-fair">https://www.indianastatefair.com/p/state-fair</a>

**08/01/2025** | **Pro Football Hall of Fame Enshrinement Festival**. Aug 1-Aug 4, 0400Z-0400Z, W8AL, Canton, OH. Canton Amateur Radio Club. 7.260 14.260 21.320 28.400. Certificate. Canton ARC, PO Box 8673, Canton, OH 44711-8673. On air times, bands, and modes subject to operator's availability. Watch for spots & digital modes. <a href="https://w8al.org">https://w8al.org</a>

**8/02/2025** | Alcatraz. Aug 2, 0130Z-0830Z, W6P, Vacaville, CA. Vacaville Amateur Radio Club (W6VVR). 7.200 MHz 14.250 MHz 28.500 MHz. QSL. Art Aronsen, 7319 June Bug Lane, Vacaville, CA 95688. There will be 3 stations on Alcatraz Island during times stated. All stations will be on SSB on battery. <a href="https://w6vvr.net/">https://w6vvr.net/</a>

**08/02/2025** | KDKA Shortwave Network Centennial. Aug 2, 1200Z-2000Z, KD3KA, Wexford, PA. Allegheny Valley Radio Association. 7.040 7.240 14.040 14.240. QSL. AVRA, P.O. Box 24, Wexford, PA 15090. AVRA & Skyview Radio Society will commemorate the centennial of Westinghouse station KFKX in Hastings, Nebraska. In 1925, following Frank Conrad 8XK's successful shortwave experimentation and the establishment of the Hill Station, KFKX was networked via shortwave with KDKA in Pittsburgh to achieve nationwide KDKA broadcasting. https://www.grz.com/db/kd3ka



# **Special Event Stations for August (continued)**

**08/07/2025** | International Cat Day Special Event . Aug 7-Aug 8, 0000Z-2359Z, W1C, Prospect, CT. KB1FGC. 7.040 14.040 21.040. QSL. Richard Guerrera, 19 Terry Rd, Prospect, CT 06712. QSL or Cerificate can be downloaded <a href="https://www.qrz.com">https://www.qrz.com</a>

**08/09/2025** | **US** Coast Guard Birthday. Aug 9, 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. <a href="www.qrz.com/db/ni6iw">www.qrz.com/db/ni6iw</a>

**08/16/2025** | Fire Island Lighthouse US0019. Aug 16, 1000Z-2030Z, W2GSB, 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. International Lighthouse Lightship Weekend, we will be on the air with two stations using all modes. Please join us on the air for this excellent event. The lighthouse number is US0019. It is also an IOTA and POTA station. <a href="https://gsbarc.org/">https://gsbarc.org/</a>

**08/16/2025** | International Lighthouse Weekend - Eagle Harbor Lighthouse, MI. Aug 16, 1300Z-1800Z, K8L, Eagle Harbor, MI. KCRA, CCRAA Copper Country Radio Clubs. 14.270. QSL. Jeffrey Stricker W9GY, 59624 Dextrom Rd., Calumet, MI 49913. SASE Please. <a href="https://kcra-mi.net">https://kcra-mi.net</a>

**08/20/2025** | International Dog Day 2025 . Aug 20-Aug 26, 0000Z-0000Z, K2D, K2D/x , MELVILLE, NY. Caryn Eve Murray, KD2GUT. 7.045 14.050 21.030 28.050. Certificate. Caryn Eve Murray, 2 Wallingford Dr, Melville, NY 11747. After August 1st, chasers may look to see where K2D and our international partners are on the air by visiting <a href="https://hamlog.online/idd dogdayradio.org">https://hamlog.online/idd dogdayradio.org</a>

**08/23/2025** | Commemorating the 68th Annual International Airstream Rally and 62 years of the WBCCI ARC. Aug 23-Aug 27, 1400Z-1800Z, W1A, York, PA. Wally Byam Caravan Club International - WBCCI Amateur Radio Club (WB8RC). All bands, all modes, as available based on conditions. QSL. WBCCI Amateur Radio Club, c/o Jim Cocke, PO Box 1307, West Jefferson, NC 28694. Times are daily. Please check spotter pages daily. QSL via QRZ.com and USPS. <a href="https://www.qrz.com/">https://www.qrz.com/</a>

**08/23/2025** | **NS Savannah Maiden Voyage Anniversary**. Aug 23, 1330Z-2100Z, K3S, Port of Baltimore. 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 <a href="https://www.qrz.com/db/k3s">www.qrz.com/db/k3s</a>



# **Special Event Stations for August (continued)**

**08/24/2025** | **Festival Special Event Station**. Aug 24-Sep 6, 0000Z-2359Z, K9A, Auburn, IN. Northeastern Indiana Amateur Radio Association. 7.180 MHz 14.250 MHz 28.360 MHz. Certificate & QSL. K9A - NIARA, P.O Box 145, Auburn, IN 46706. QSL Information: There will be no Log Book of the World or eQSL. For a QSL card only, Please send your card and a SASE. For a Certificate and QSL Card, Please send your card and \$4.00 USA – \$6.00 International We will furnish certificate, QSL card, envelope, and postage. The mailing address for this special event station is: K9A – NIARA P. O. Box 145 Auburn, IN 46706-0145 THANK YOU FOR YOUR PARTICIPATION! W9OU@W9OU.ORG.

**08/30/2025 | Return to Paradise 47th Anniversary**. Aug 30-Sep 1, 1600Z-1600Z, K7RDG, Sierra Vista, AZ. Cochise Amateur Radio Assoc. 3.890 7.225 14.070 14.285; Voice/FT8/FT4/JS8. Certificate & QSL. Cochise ARA, PO Box 1855, Sierra Vista, AZ 85636-1855. <a href="https://k7rdg.org/rev2/">https://k7rdg.org/rev2/</a>

**08/31/2025 | 100th** anniversary of wreck of USS Shenandoah airship. Aug 31, 0400Z-0800Z, W8VP, Ava, OH. Cambridge Amateur Radio Association. 7.230. Certificate. Evelyn Barton, P.O. Box 1474, Cambridge, OH 43725. 9 X 12 SASE ENVELOPE send to CARA P.O.Box 1474 Cambridge OH 43725 www.w8vp.org

**09/01/2025** | **175th** Anniversary of California Statehood **1850-2025**. Sep 1-Sep 10, 0000Z-2359Z, K6S, Monterey, CA. Monterey DX Group. **14**.275 21.275 28.375 7.275. QSL. G. Costello WC6DX, PO Box 1332, Monterey, CA 93942-1332. In 1849, the California Constitutional Convention convened in the capital Monterey in order to draft a constitution for statehood the following year. On 09 September 1850, California joined the Union as the 31st state. A commemorative paper QSL card is available for a SASE to QSL Manager WC6DX; no Log Book of the World or e-QSL.



Answers to Amateur Radio Test Questions on pages 32-34

Technician (pg 32)	General (pg 33)	Amateur Extra (pg 34)
T5D10 (A)	G1A04 (D) [97.303(h)]	E3B07 (C)
T1C01 (D) [97.9(a), 97.17(a)]	G7A13 (A)	E7H10 (B)
T2A07 (A)	G9B09 (A)	E9D04 (C)
T1F06 (D) [97.119(c)]	G8A10 (C)	E2C12 (C)



# **Amateur License Test Questions**

#### Answers are on page 31

#### **Technician**

#### T5D10

What is the voltage across a 2-ohm resistor if a current of 0.5 amperes flows through it?

- A. 1 volt
- B. 0.25 volts
- C. 2.5 volts
- D. 1.5 volts

#### T1C01

For which license classes are new licenses currently available from the FCC?

- A. Novice, Technician, General, Amateur Extra
- B. Technician, Technician Plus, General, Amateur Extra
- C. Novice, Technician Plus, General, Advanced
- D. Technician, General, Amateur Extra

#### T2A07

What is meant by "repeater offset"?

- A. The difference between a repeater's transmit and receive frequencies
- B. The repeater has a time delay to prevent interference
- C. The repeater station identification is done on a separate frequency
- D. The number of simultaneous transmit frequencies used by a repeater

#### T1F06

Which of the following self-assigned indicators are acceptable when using a phone transmission?

- A. KL7CC stroke W3
- B. KL7CC slant W3
- C. KL7CC slash W3
- D. All these choices are correct



# **Amateur License Test Questions (continued)**

#### Answers are on page 31

#### **General**

#### G1A04

Which of the following amateur bands is restricted to communication only on specific channels, rather than frequency ranges?

- A. 11 meters
- B. 12 meters
- C. 30 meters
- D. 60 meters

#### **G7A13**

Which symbol in Figure G7-1 represents a tapped inductor?

- A. Symbol 7
- B. Symbol 11
- C. Symbol 6
- D. Symbol 1

# \*DC \*DC \*OUT \*B \* 5 \* OUT \*B \* 5 \* OUT \*B \* Figure G7-1

#### G9B09

Which of the following is an advantage of using a horizontally polarized as compared to a vertically polarized HF antenna?

- A. Lower ground losses
- B. Lower feed point impedance
- C. Shorter radials
- D. Lower radiation resistance

#### G8A10

What is meant by the term "flat-topping," when referring to an amplitude-modulated phone signal?

- A. Signal distortion caused by insufficient collector current
- B. The transmitter's automatic level control (ALC) is properly adjusted
- C. Signal distortion caused by excessive drive or speech levels
- D. The transmitter's carrier is properly suppressed



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# **Amateur License Test Questions (continued)**

#### Answers are on page 31

#### **Amateur Extra**

#### E3B07

What effect does lowering a signal's transmitted elevation angle have on ionospheric HF skip propagation?

- A. Faraday rotation becomes stronger
- B. The MUF decreases
- C. The distance covered by each hop increases
- D. The critical frequency increases

#### 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

#### E9D04

Why should antenna loading coils have a high ratio of reactance to resistance?

- A. To swamp out harmonics
- B. To lower the radiation angle
- C. To maximize efficiency
- D. To minimize the Q

#### **E2C12**

What indicates the delay between a control operator action and the corresponding change in the transmitted signal?

- A. Jitter
- B. Hang time
- C. Latency
- D. Anti-VOX



# **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**

<u>Language</u>: 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.

<u>File format</u>: 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**.

<u>Pictures and other graphics</u>: 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 <u>two-page check list</u> 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, 147.390 (+) 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: 147.390+, CC 13, Secondary: 444.4375+, CC 11, [Talkgroup 310557]

**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, W&LRJ ASAP but BEFORE the next meeting.

#### BARC Fundraising Opportunity — Kroger's Rewards Pro-

**gram** 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 <u>BARC Treasurer</u>).

**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

**BARC Clubhouse** — The BARC Clubhouse is moving from its current location on 51 S. East Street , Bellbrook OH to its new location at **3757 Upper Bellbrook Rd, Bellbrook, OH 45305**. This building is known as the **St. Pierre Education Center**. Park in front (West) of the building and enter the right-hand door on the front of the building. Here's a <u>Google Map link</u> to the building.

The current procedure is to be greeted at the door and escorted to the Common Meeting Room or Radio Room, depending on the circumstance. Procedures will change once we are fully operational.

The previous BARC Clubhouse is no longer open for business, except by prior arrangement with a club officer.

