



Full Quieting

The Official Journal of The Bellbrook Amateur Radio Club



March 2025 — Issue 43

In This Issue

- [From the Editor](#) **1**
- [Full Quieting Masthead](#) **2**
- [Member Interview Questions](#) **2**
- [President’s Corner](#) **3**
- [What’s Up BARC?](#) **4**
- [Officer, Director, and Coordinator Inputs](#) **5**
- [BARC Event Calendar](#) **6**
- [BARC Movie and Dessert Night](#) **7**
- [Lunch Bunch Plans for the Month](#) **8**
- [Lunch Bunch Calendar](#) **9**
- [New HamClock Version 4.14](#) **10**
- [DMR – Tx and Rx Color Codes Now?](#) **13**
- [Special Event Stations for February](#) **15**
- [Amateur License Test Questions](#) **17**
- [Editorial Policy and Style Guidelines](#) **20**
- [Miscellaneous BARC Information](#) **22**

From the Editor

Welcome to March, and what I hope is a quick transition to Spring! I think I will take Geoff’s advice in his President’s Corner article by prepping my antennas and radios for POTA operation. It’s been hard to get out and operate, being a full-time grandpa (which I wouldn’t trade for anything), but getting things ready for a nice weekend POTA activation soon makes a lot of sense.

You’ll notice fewer articles this month, that’s ok, February’s issue was overflowing! I did write a couple of articles this month, one on some nice features in the latest HamClock (you’re all using Hamclock, right?) that might entice you to update your own setup. I also wrote a DMR article uncovering some issues to be aware of with the new concept of unique TX and RX color codes.

Keep an eye on the calendar in March for our annual Membership Dinner, on March 20th at 6pm. It’s at a new location, so read up on it on [page 4](#).

I’d like to hear from you all in the next few months. I’d like to know what things you like in *Full Quieting*, and what things you’d like to see that have been missing. I’d also like to know if any of you are able and willing to submit articles of things you are interested in for me to publish. With over 160 members, we have a diverse set of viewpoints and experiences and we all would benefit greatly from through sharing them in Full Quieting.

Now, go out and make some contacts! Enjoy spring!

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 Quietening 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

March is here, and while I'd normally be strategizing ways to catch a leprechaun and negotiate for some of that elusive gold, this year my thoughts have shifted. With spring just around the corner, I find myself thinking more about warmer weather, spring cleaning, and—of course—hamfests!

Looking around my ham shack, it's clear that a deep clean is long overdue. In fact, I've decided to go all in—everything is coming out, a fresh coat of paint is going up, and I'm investing in some much-needed additional storage. Why? Because we all know that hamfests have a way of bringing home new radio gear, and I need to make room for whatever treasures I may find!

Speaking of hamfests, Ohio has a busy schedule coming up. There are two in March, three in April, and three in May—including the big one, Hamvention. If you're planning to attend any of them, I encourage you to reach out to the club via email—you might find a fellow member who wants to carpool or explore the event together. You can check out the full list of upcoming hamfests on the ARRL website: <http://www.arrl.org/hamfests/search/page:2/Location.state:OH/model:Event>.

For those who enjoy operating outdoors, now is the time to start prepping for the season. Whether you're into POTA, SOTA, World Wide Flora & Fauna, or one of the many other "on-the-air" activities, it's a great opportunity to get your

gear ready. Warmer weather also means it's time to assess any antenna damage from the winter and start making repairs. After all, it's a lot easier to work on antennas when you're not battling freezing temperatures and icy winds!

On the topic of warm weather, I was fortunate enough to attend Hamcation in Florida this year for the first time. While I still think Hamvention is the better event overall, I have to admit—80-degree weather in early February was tough to beat! I attended some great forums, had some interesting conversations, and came away with a few new ideas to explore, including experimenting with FreeDV, getting more out of SDRs, and learning about what excites younger amateur radio operators.

I'm looking forward to seeing what the next few months bring for the club and the hobby. Whether it's attending a hamfest, getting on the air, or tackling a new radio project, there's plenty to keep us all busy as we shake off the winter chill.

73, Geoff Kline, [K15VNB](#)



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 Member!

Bert Barnes **KB9UVJ**, General

Congratulations New Licensee

Peter Callahan **KF8DLM**, Technician

March General Membership Dinner Meeting

Many of you will remember that before COVID we use to have a dinner meeting in March.

For many years we ate at a restaurant in Waynesville. They closed and then we ate at the Golden Corral in Beavercreek. COVID hit and they closed. The year they reopened under new ownership/management we tried again. Made a reservation for the special closed dining room. When we arrived the closed dining room was full of women having a birthday party. We were relegated to a group of tables in the back corner opposite the closed dining room.

This month we are going to have the meeting in a new venue.

[FUJI GRILL, 8870 KINGSRIDGE DR. DAYTON, OH 45458.](#)

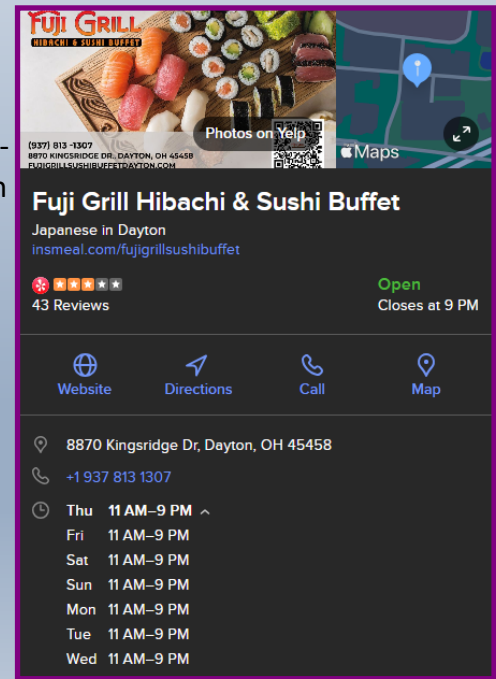
The reservation has been made. **March 20, 2025, 6:00PM.**

Remember this is not just a members night but family is included. We have the front closed room. I was there this afternoon and the place sparkles.

--

73

Jim Totten WA8HUB



Officer, Director, and Coordinator Inputs

Treasurer: John Westerkamp, [W8LRJ](#): Dues continue to trickle in. We are near 90% renewal rate with 150 paid members for 2025 which is fantastic! If you have not renewed your membership, please do so very soon to remain a member in good standing. Thank you all for your support of BARC!

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

Repeater: John Westerkamp, [W8LRJ](#): I gave a tutorial on using Wires-X on the BARC 440 repeater at the February Membership Meeting. You can download the presentation from the BARC website under *Programs...Membership Meetings*.

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](#): A reminder that you can download all past Membership Meeting presentations by selecting *Programs...Membership Meetings* from the top menu on the website. Also, there is now a status messages under the *Repeaters* page on the website. If something is not working, send a message via the *Contact* page.

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](#): Two additional Morgan bandpass filters have been added to the stations. These are available for portable use during Field Day events or POTA activations with multiple transmitters to keep the transmitters from interfering with each other.

Future plans include updating all the grounding and bonding to move the lightning arrestors outdoors, adding some ground rods, and bonding everything together with the electrical service ground. Stay tuned!!

Secretary: Jim Gifford, [N8KET](#): As secretary I attended the Planning and General Membership meetings and recorded notes and minutes. Notes and minutes are loaded onto thumb drives, located in the club filing cabinet, after approval.

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 February 2025 there were approximately 54 check-ins lasting 134 exciting and informative minutes. Topics ranges from Open Mike, Parks on the Air, did you watch the Super Bowl, what exciting contacts have you made, and do you use DMR or other digital modes? We often have non BARC members checking in to enjoy the Net. Connie Gifford is our newest BARC Net Control doing an excellent job!

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



BARC March 2025 Event Calendar

Sun March 2, 2025

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

Tue March 4, 2025

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

Thu March 6, 2025

7pm Planning Meeting..... Where: BARC Clubhouse

Sun March 9, 2025

1:30pm EFHW Antenna Build Where: BARC Clubhouse

Sun March 9, 2025

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

Tue March 11, 2025

11:15am Lunch Bunch..... Where: Roosters Wings

Sun March 16, 2025

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

Thu March 20, 2025

6pm Membership Dinner Meeting Where: Fuji Grill, 8870 Kingsridge Dr.

Sun March 23, 2025

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

Tue March 25, 2025

11:15am Lunch Bunch Where: Golden Corral

Wed March 26, 2025

7pm Nano VNA Tech Night Where: BARC Clubhouse

Thu March 27, 2025

7pm Dessert and Movie Night Where: BARC Clubhouse

Sun March 30, 2025

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



BARC Movie and Dessert Night



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

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

Date	Movie	Genre	Actors
March 27, 2025	Paul, Apostle of Christ	Drama	Jim Caviezel
April 24, 2025	Jurassic World: Dominion	Action	Chris Pratt
May 22, 2025	Twisters (2024)	Action	Glen Powell
June 26, 2025	Fly Me to the Moon (2024)	Rom/Com	Scarlett Johansson
July 24, 2025	Witness	Drama	Harrison Ford
August 28, 2025	TBD		
September 25, 2025	TBD		
October 23, 2025	TBD		

Past movies and Desserts:

January 23, 2025	Harvey (1950)	Carrot Cake & Carrots
February 27, 2025	Edge of Tomorrow (2014)	

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

We'll see you in March at the Movies!

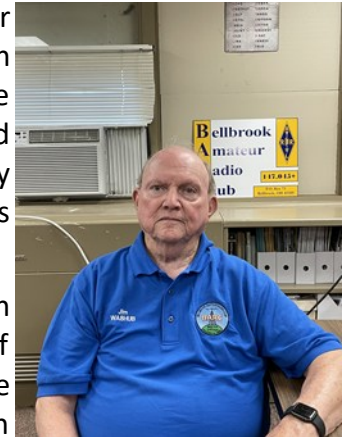
Tink
KD8NUA



Lunch Bunch

Jim Totten, [WA8HUB](#)

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



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

In February we had the standard two lunches. The two restaurants were also great favorites. February 11, 2025 we ate at the First Watch in the Cornerstone complex. The food was again outstanding. We again had 9 of our friends attend. On the fourth Tuesday February 25, 2025 we ate at the best Submarine House in the area just off N Fairfield Rd. near a Marion's and a big Kroger. There were only 6 diners this day. One of the stalwart couples had a health issue.

Can we top February in March? The first offering is on March 11, 2025 at Roosters Wings in Beaver-creek. They have a varied menu, not just wings, always something to choose from. On March 25, 2025 we will be at a very familiar venue, Golden Corral Buffet and Grill. You can overeat here.

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

73, Jim, [WA8HUB](#) {Editor's note: Restaurant addresses are linked below and on next page.}

Tuesday, Mar 11th, 11:15am

Roosters
Chicken wings in Beavercreek
roosterswings.com/locations/view-all-locations/
33 Reviews Closed
Opens at 11 AM
Website Directions Call Map
2430 N Fairfield Rd, Beavercreek, OH 45431
+1 937 702 9500
Thu 11 AM–11:15 PM
Fri 11 AM–11:15 PM
Sat 11 AM–11:15 PM
Sun 11 AM–11:15 PM
Mon 11 AM–11:15 PM
Tue 11 AM–11:15 PM
Wed 11 AM–11:15 PM

Click pictures or hyperlinks for more info and maps

Tuesday, Mar 25th, 11:15am

Golden Corral
American restaurant in Beavercreek
www.goldencorral.com/locations/951/golden-corral-commons-bl...
2 Reviews Open
Closes at 9 PM
Website Directions Call Map
2490 Commons Blvd, Beavercreek, OH 45431
+1 937 702 9863
Thu 10:30 AM–9 PM
Fri 10:30 AM–9 PM
Sat 7:30 AM–9 PM
Sun 7:30 AM–9 PM
Mon 10:30 AM–9 PM
Tue 10:30 AM–9 PM
Wed 10:30 AM–9 PM



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	Golden Corral Buffet and Grill	2490 Commons Blvd.	Beavercreek, OH 45431	(937) 613-5478
04/08/25	Yaffa Grill Mediterranean Food	2844 Colonel Glenn Hwy	Fairborn, OH 45324	(937) 429-4959
04/22/25	Chic-Fil-A	5301 Cornerstone N Blvd	Sugarcreek Township, OH 45440	(937) 439-1700
05/13/25	Culp's Cafeteria	1000 Carillon Blvd	Dayton, OH 45409	(937) 293-2841
05/27/25	City Barbecue	2001 E. Dorothy Lane	Kettering, OH 45420	(937) 200-1006
06/10/25	Marion's Piazza	1320 N Fairfield Rd.	Beavercreek, OH 45432	(937) 429-3393
07/08/25	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
07/22/25	Beavercreek Pizza Dive	4021 Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669



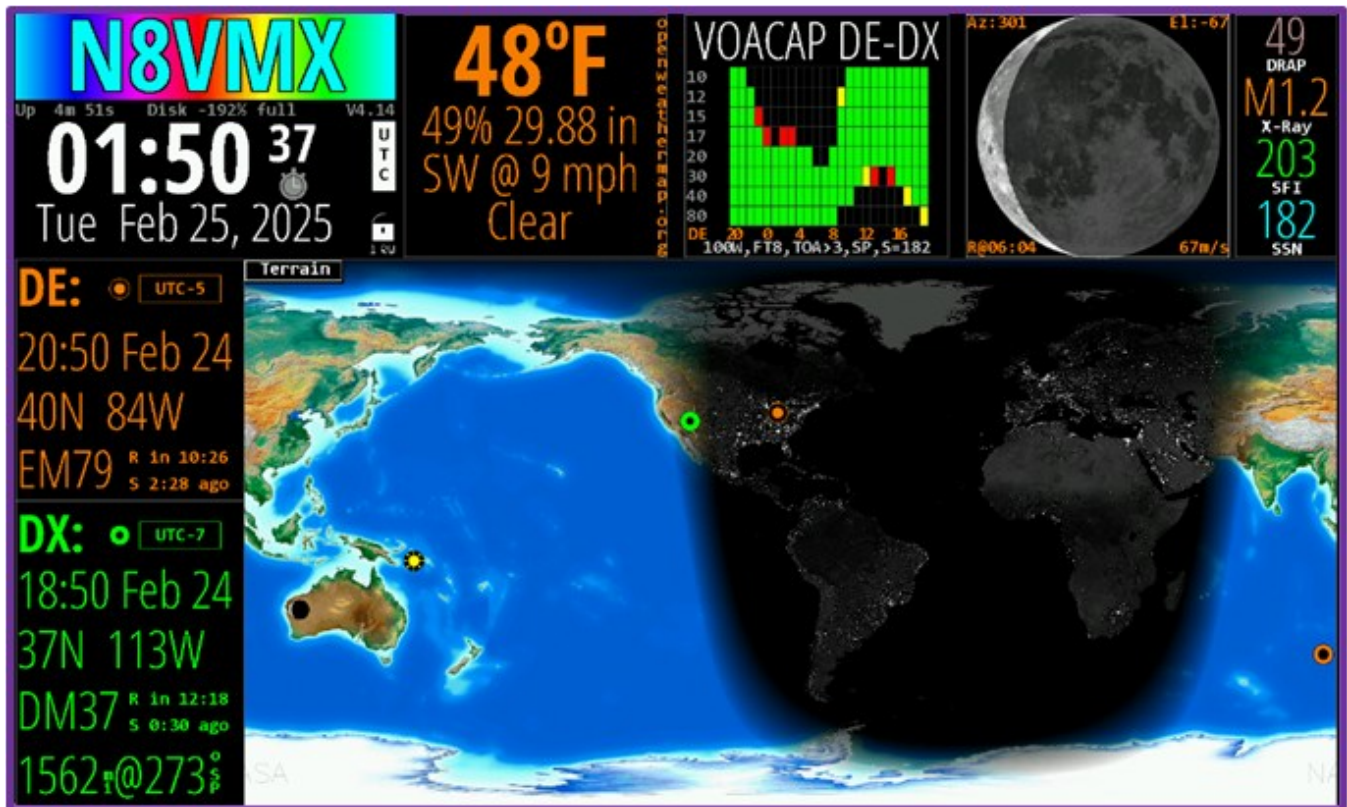
New HamClock Version 4.14

Ray Hitt, [N8VMX](#)

Well, it's apparent to me that [HamClock](#) is a dynamically changing program – there are always new features being incorporated. I only updated to version 4.13 a couple weeks ago, and now there's a version 4.14! **{note: version 4.15 just released!}** Good thing I have automated the upgrade process!

I wanted to bring version 4.14 to your attention due to one thing; the new ability to display Earth maps with the current cloud formations displayed. Any of you who have played with HamClock know that it is very customizable. There are many types of maps you can display, and you can also (since Version 3.07 — April 2024) zoom and pan the map from the whole earth to a smaller zoomed in location (for example zoomed into the CONUS). Download the latest [User Guide](#) to read up on what you can customize and how to use all of the many program features.

Here's a look at the typical map shown in HamClock, showing day/night, topographical features, your location (orange circle), DX location (green circle) and all the other tiles that can be customized.

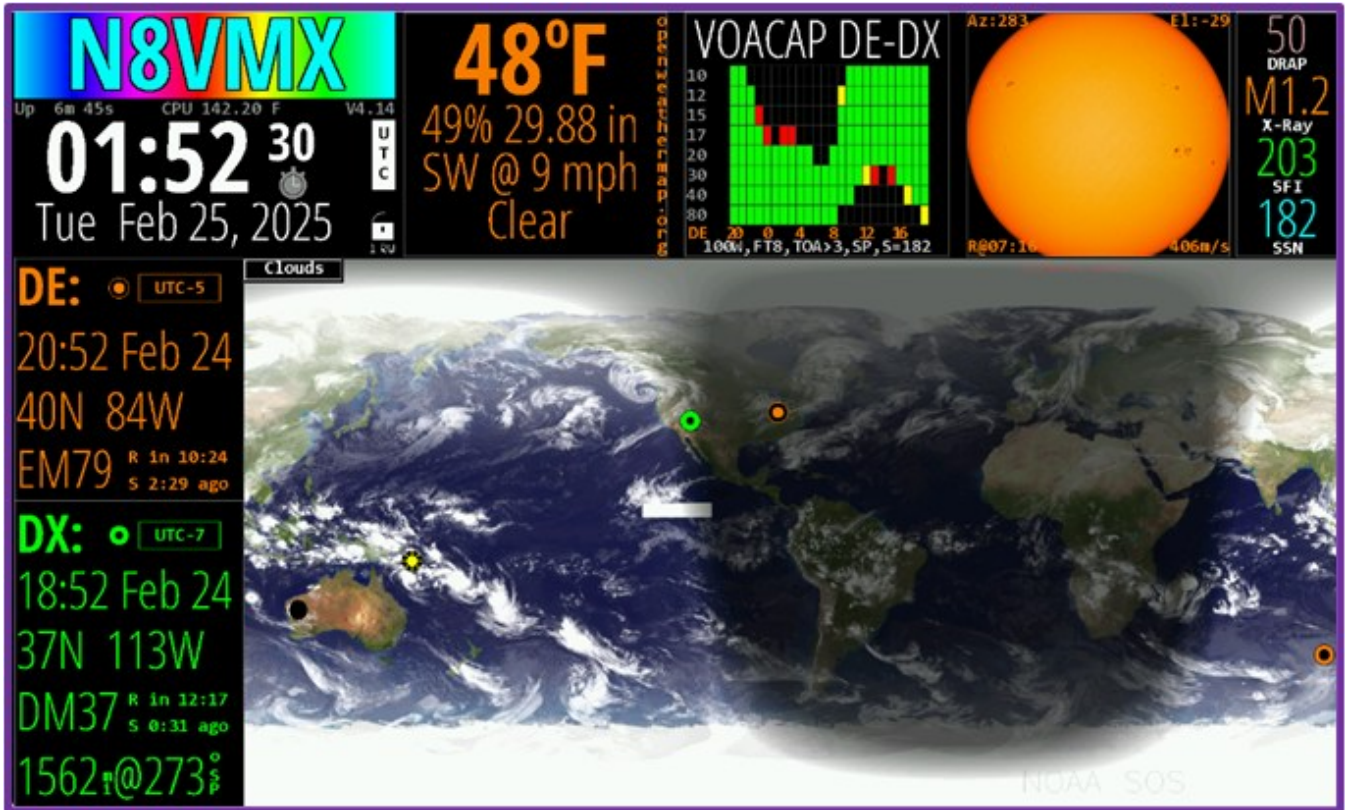


On the next page is a comparison view of the cloud map new in Version 4.14, also showing day/night and DE/DX locations. As I mentioned earlier, these are real-time accurate cloud formations.

In December 2024's Full Quieting (pg 14-16), I described how to compile and use HamClock as an app on your DMR Raspberry Pi-based hotspot. In fact, the maps in this article were from a Raspberry Pi-3 hotspot running HamClock web server which I was viewing from a Windows laptop. I did find some errors in my December article I need to correct here.



New HamClock Version 4.14 (continued)



First, there are some prerequisite programs that need to be installed on the hotspot (or any Linux installation). I didn't mention that in my December article. Refer to the [Hamclock Main page](#), under the *Desktop* tab, the prerequisites are listed for Raspberry Pi, Debian, Ubuntu, and other Linux variants. If you get compile errors for Raspberry Pi and generic Debian run the following commands to install some missing essential components and try to compile again:

```
sudo apt-get update
sudo apt-get -y install curl make g++ libx11-dev libgpiod-dev xdg-utils
```

I wrote a compile script that you can execute on your Raspberry Pi (hotspot or general) to make a new version of HamClock when it becomes available (when your version number turns **red**). I recently found some errors that I corrected. I got errors when compiling again and again which was corrected by adding several *make clean* commands. This gets rid of previously compiled files that were causing errors. The corrected script is shown on the next page. Use *nano* to edit a new file called **update-HamClock.sh** and enter all these lines into it. Save it, then change it to an executable file by typing **chmod +x ./update-HamClock.sh**.

The next time a HamClock update occurs, just run **./update-HamClock.sh** to automatically compile and save all these versions of HamClock onto your Pi. To run a certain version of HamClock, type one of the following:

- hamclock-800x480** Run 800x480 pixel version of HamClock on your pi's screen
- hamclock-1600x960** Run 1600x960 pixel version of HamClock on your pi's screen



New HamClock Version 4.14 (continued)

These two versions not only display on your monitor but also launch a web server where you can also view HamClock on another computer's web browser. View it on your browser by typing <http://192.168.1.60:8081/live.html> assuming that the IP address is 192.168.1.60 for your hotspot or raspberry pi. Your IP address will most likely be different, so just substitute your ip address for mine.

```
#!/bin/bash
# Remove old versions of HamClock source code
cd /$HOME/Downloads
sudo rm -r ./ESPHamClock
sudo rm -r ./_ESPHamClock
rm ESPHamClock.tgz
# Download and extract latest HamClock source code into ESPHamClock working folder
wget http://www.clearskyinstitute.com/ham/HamClock/ESPHamClock.tgz
tar -xvzf ./ESPHamClock.tgz
cd ESPHamClock

# Make on-screen versions and move them into /usr/local/bin.
# Leave commented for computers with no attached monitors
# Change the number behind -j to match the number of processor cores to speed up compile

#make clean
#make -j 1 hamclock-800x480
#sudo mv hamclock-800x480 /usr/local/bin
#make clean
#make -j 1 hamclock-1600x960
#sudo mv hamclock-1600x960 /usr/local/bin

# Make web browser version (no screen) at four resolutions and move them into /usr/local/bin

make clean
make -j 1 hamclock-web-800x480
sudo mv hamclock-web-800x480 /usr/local/bin
make clean
make -j 1 hamclock-web-1600x960
sudo mv hamclock-web-1600x960 /usr/local/bin
make clean
make -j 1 hamclock-web-2400x1440
sudo mv hamclock-web-2400x1440 /usr/local/bin
make clean
```

update-HamClock.sh update script (Linux)

If your hotspot has no computer monitor attached (it probably won't), then these versions of HamClock should be run instead:

<i>hamclock-web-800x480</i>	Run 800x480 pixel version of HamClock as web page server
<i>hamclock-web-1600x960</i>	Run 1600x960 pixel version of HamClock as web page server
<i>hamclock-web-2400x1440</i>	Run 2400x1440 pixel version of HamClock as web page server
<i>hamclock-web-3200x1920</i>	Run 3200x1920 pixel version of HamClock as web page server

When you launch one of these, the computer's web browser may automatically scale HamClock to it's window size anyway, so the number of pixels doesn't matter a whole lot. The smaller resolution versions do result in slightly grainier images however, but they use fewer computer resources in the Pi.

For more details on running web server versions of HamClock, look back at the December issue of Full Quieting. E-mail me if you have any questions.

73, Ray [N8VMX](#)



DMR – Tx and Rx Color Codes Now?

Ray Hitt, [N8VMX](#)

I recently purchased the latest Anytone DMR radio, the [AT-D168UV](#). It's a sleeker version of the AT-D878UV, much smaller, with fewer features (no GPS or Bluetooth), but with more modern and faster processors and improved audio. However, when programming it, I ran into a snag and learned something worth sharing with you.

With the latest firmware update, version 1.05, there's a new feature, separate Transmit and Receive Color Codes. There were warnings in the CPS (customer programming software) when loading the 1.04 codeplug into the 1.05 CPS that there were no TX color code values in the 1.04 codeplug — asking if you want them to be set equal to the RX color code values. I didn't use my previous codeplug, though, I was importing my AT-D878UV code plug via the CSV spreadsheet import function. Apparently, when importing CSV files there is no checking of the TX=RX color code. So all my TX color codes were set to 1, which was OK for my hotspot, but I was wondering why I couldn't access Tim N8NQH's two repeaters that use color codes of 11 and 13.

So, I had to manually check every channel to make sure my TX and RX color codes matched. But, once I did, everything works great. I really like this radio.



After the dust settled on this little exercise programming my radio, I wondered to myself why you would need a separate TX and RX color code? Not coming up with any answers, I submitted a question to Grok, Elon Musk's AI engine. Here's what Grok said...

N8VMX Question: What is the rationale for the latest DMR radios to have independent receive and transmit color codes? This is a new occurrence.

Grok Answer: The introduction of independent receive and transmit color codes in the latest Digital Mobile Radio (DMR) designs reflects an evolution in how these radios are engineered to handle increasingly complex communication environments, particularly in amateur radio and professional settings. While traditional DMR radios have typically used a single color code for both transmitting and receiving—analogous to a CTCSS tone in analog systems—the shift to independent color codes offers greater flexibility and addresses specific operational challenges.

In DMR, a color code acts as a digital filter, ensuring that a radio only communicates with repeaters or other radios sharing the same code, reducing interference on shared frequencies. Historically, a single color code was sufficient because the radio's transmit and receive operations were tightly coupled to a specific repeater or simplex channel, where both ends of the communication used the same code. However, as DMR networks have grown—especially with the rise of interconnected systems like BrandMeister and the use of hotspots—new use cases have emerged that benefit from decoupling these functions.

Continued ->



DMR – Tx and Rx Color Codes Now? (continued)

One key rationale is improved interference management in dense RF environments. Imagine two nearby repeaters operating on the same frequency but with different color codes. A radio with a single color code might struggle to selectively receive from one repeater without accidentally triggering the other during transmission. By allowing a different receive color code, the radio can "listen" to a specific repeater while transmitting with a code that aligns with a different system or avoids clashing with nearby users. This is particularly useful in urban areas or during large events where frequency reuse is common.

Another factor is enhanced compatibility with mixed-mode or dynamic network setups. Modern DMR systems often link repeaters and hotspots across regions or even globally, and operators may want to monitor traffic from one source (e.g., a regional talkgroup with its own color code) while transmitting to a local repeater or simplex group using a different code. Independent color codes enable this kind of asymmetric operation, giving users more control over their communication paths without needing multiple radios or constant reprogramming.

This feature also supports advanced simplex operations, like Dual-Capacity Direct Mode (DCDM), where two radios might coordinate on the same frequency but use distinct color codes to separate their transmit and receive streams. While less common in amateur radio, this capability mirrors commercial applications where precise channel management is critical.

The "newness" of this occurrence likely ties to recent firmware updates or radio models from manufacturers like TYT, Anytone, or Retevis, which cater to the growing amateur DMR community. These radios are designed with more programmable options to meet the demands of tech-savvy hams experimenting with custom configurations. It's less about a sudden shift in the DMR standard (ETSI TS 102 361 hasn't mandated this) and more about manufacturers responding to user feedback and the practical realities of modern DMR ecosystems.

In short, independent receive and transmit color codes give DMR radios greater versatility, allowing them to adapt to crowded airwaves, diverse network setups, and creative operational needs—something earlier, simpler designs didn't prioritize. It's a natural progression as the technology matures and users push its boundaries.

Thanks Grok for explaining this! So, we may not actually need separate TX and RX color codes in our scenario, but they're here now, and you may start seeing this in your radio's future firmware updates. Just make sure you set up your radio carefully to avoid the problems I faced. Good luck!

73, Ray [N8VMX](#)



Answers to Amateur Radio Test Questions on pages 17-19

Technician ([pg 17](#))

T2C03 (C)

T5C04 (C)

T5D14 (B)

T2B04 (D)

General ([pg 18](#))

G2B06 (A)

G2B03 (C)

G4D04 (C)

G2D01 (A)

Amateur Extra ([pg 19](#))

E7F09 (A)

E8D04 (C)

E8A02 (A)

E9F09 (A)



Special Event Stations for March

Paul Sharp, [WS8R](#)

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

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

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

Here is my pick of the litter of SES that I think will be of interest to my fellow BARC members. Once again, something for everyone! This month there are SES for commemorating: Florida becoming a state, The Bataan Death March, Cherry Blossoms, White House Communications Agency, and for all you aviation enthusiasts: The Sun & Fun Aerospace Exposition.

03/08/2025 | Celebrating Florida's Statehood, Mar 8, 1300Z-2200Z, W4F, Winter Springs, FL. Lake Monroe Amateur Radio Society and Ham Radio Outlet Winter Springs. 14.255 21.335 28.360. Certificate. Joe Marsh, 2596 Creekview Circle, Oviedo, FL 32765. Lake Monroe Amateur Radio Society and Ham Radio Outlet Winter Springs are celebrating Florida's statehood, March 3rd 1845. A Special Event Certificate will be available a few days after the event for all contacts at, <https://b4h.net/certificates/>. 20, 15, and 10 meters SSB will be operated on as conditions allow. Frequencies will be +/- dependent on QRM. We will try to be specifically on 10 meters from 1500z (1000Est) to 1700z (1200 Est) so technician level operators have an opportunity to make contact. <https://www.lmars.org/annual-events/w4f-special-event-florida-statehood>

03/08/2025 | USS Midway launched in 1945. Mar 8, 1700Z-2359Z, 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.grz.com/db/ni6iw.

03/18/2025 | Honoring WII Gunners at Buckingham Airfield. Mar 18-Mar 20, 1218Z-1218Z, W4LX, Fort Myers, FL. Ft Myers Amateur Radio Club. 28.360 21.360 14.270 147.345. Certificate & QSL. FMARC Ft Myers Amateur Radio Club, PO Box 61183, Fort Myers, FL 33906. Honoring the Men and Woman who trained at the Buckingham Army Airfield during the late 1940's during World War II as an Army Air Forces Training Command airfield. Some 48,000 gunners were trained. FMARC.NET

03/21/2025 | 2025 Bataan Memorial Death March. Mar 21-Mar 23, 1200Z-1200Z, K5B, Las Cruces, NM. Mesilla Valley Radio Club. 146.55 146.58 147.750. Certificate. George Earl Drexler Jr, 608 Hansen Ave, Las Cruces, NM 88005-1224. earld7a@gmail.com

03/22/2025 | Battle of New Bern Adventure Day Special Event. Mar 22, 1600Z-2000Z, N4B, New Bern, NC. New Bern Amateur Radio Club. 14.330 7.065. QSL. John Riley, 980 Dry Monia Road, New Bern, NC 28562. www.grz.com/db/N4B



Special Event Stations for January (continued)

03/22/2025 | Cherry Blossom Special Event Station. Mar 22, 1400Z-2000Z, W4BKM, Macon, GA. Macon Amateur Radio Club. 7.225 14.240. Certificate. Macon Amateur Radio Club, 305 Millwood Court, Macon, GA 31210. <https://maconamateurradioclub.wordpress.com>

03/22/2025 | The White House Communications Agency 83rd Anniversary. Mar 22-Mar 29, 0000Z-0000Z, W0H, Jackson, OH. White House Communications Agency Amateur Radio Club. 3.875 7.275 14.250 28.550. Certificate. Lowell Yates, 6809 Four Mile Rd, Jackson, OH 45640. <https://whitehousecomms-arc.org>

03/23/2025 | The White House Communications Agency 83rd Anniversary Special Event. Mar 23-Mar 25, 0000Z-0000Z, W0H, Jackson, OH. White House Communications Agency Amateur Radio Club. 3.875 7.275 14.250 28.550. Certificate. Lowell Yates, 6809 Four Mile Rd, Jackson, OH 45640. Join the White House Communications Agency Amateur Radio Club Amateur Radio club with the 83'rd anniversary celebration of the establishment by President Roosevelt of the White House Communications Agency. www.whitehousecomms-arc.org

03/29/2025 | 70th Anniversary of the Birmingham Zoo. Mar 29-Mar 30, 0000Z-2359Z, W7P, Birmingham, AL. N4GHP. 7.290 7.296 14.296. Certificate & QSL. Lloyd Palmer, 1325 Windsor Ct., Alabaster, AL 35007. This event is planned for March 2025. Watch for more details. www.qrz.com/db/n4ghp

04/01/2025 | Sun & Fun Aerospace Exposition. Apr 1-Apr 6, 1300Z-2200Z, W4S, Lakeland, FL. Lakeland Amateur Radio Club. 14.40 7.40 18.93 28.40. QSL. Lakeland Amateur Radio Club, PO Box 90853, Lakeland, FL 33804. Lakeland International Airport, KLAL info@lakelandarc.org



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



BARC Hamvention Flea Market Booth: spots 7662 and 7663

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



Amateur License Test Questions

Answers are on [page 14](#)

Technician

T2C03

What technique is used to ensure that voice messages containing unusual words are received correctly?

- A. Send the words by voice and Morse code
- B. Speak very loudly into the microphone
- C. Spell the words using a standard phonetic alphabet
- D. All these choices are correct

T5C04

What is the unit of inductance?

- A. The coulomb
- B. The farad
- C. The henry
- D. The ohm

T5D14

In which type of circuit is voltage the same across all components?

- A. Series
- B. Parallel
- C. Resonant
- D. Branch

T2B04

Which of the following could be the reason you are unable to access a repeater whose output you can hear?

- A. Improper transceiver offset
- B. You are using the wrong CTCSS tone
- C. You are using the wrong DCS code
- D. All these choices are correct



Amateur License Test Questions (continued)

Answers are on [page 14](#)

General

G2B06

How can you avoid harmful interference on an apparently clear frequency before calling CQ on CW or phone?

- A. Send "QRL?" on CW, followed by your call sign; or, if using phone, ask if the frequency is in use, followed by your call sign
- B. Listen for 2 minutes before calling CQ
- C. Send the letter "V" in Morse code several times and listen for a response, or say "test" several times and listen for a response
- D. Send "QSY" on CW or if using phone, announce "the frequency is in use," then give your call sign and listen for a response

G2B03

What is good amateur practice if propagation changes during a contact creating interference from other stations using the frequency?

- A. Advise the interfering stations that you are on the frequency and that you have priority
- B. Decrease power and continue to transmit
- C. Attempt to resolve the interference problem with the other stations in a mutually acceptable manner
- D. Switch to the opposite sideband

G4D04

What does an S meter measure?

- A. Carrier suppression
- B. Impedance
- C. Received signal strength
- D. Transmitter power output

G2D01

What is the Volunteer Monitor Program?

- A. Amateur volunteers who are formally enlisted to monitor the airwaves for rules violations
- B. Amateur volunteers who conduct amateur licensing examinations
- C. Amateur volunteers who conduct frequency coordination for amateur VHF repeaters
- D. Amateur volunteers who use their station equipment to help civil defense organizations in times of emergency



Amateur License Test Questions (continued)

Answers are on [page 14](#)

Amateur Extra

E7F09

Why is an anti-aliasing filter required in a decimator?

- A. It removes high-frequency signal components that would otherwise be reproduced as lower frequency components
- B. It peaks the response of the decimator, improving bandwidth
- C. It removes low-frequency signal components to eliminate the need for DC restoration
- D. It notches out the sampling frequency to avoid sampling errors

E8D04

What is the primary effect of extremely short rise or fall time on a CW signal?

- A. More difficult to copy
- B. The generation of RF harmonics
- C. The generation of key clicks
- D. More difficult to tune

E8A02

Which of the following is a type of analog-to-digital conversion?

- A. Successive approximation
- B. Harmonic regeneration
- C. Level shifting
- D. Phase reversal

E9F09

What impedance does a 1/4-wavelength transmission line present to an RF generator when the line is shorted at the far end?

- A. Very high impedance
- B. Very low impedance
- C. The same as the characteristic impedance of the transmission line
- D. The same as the generator output impedance



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.

