



Full Quieting

The Official Journal of The Bellbrook Amateur Radio Club



March 2023 — Issue 19

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From the President & Editor

Greetings, Spring is nearly here! Already time for another issue of *Full Quieting*. You're probably aware that there's a lot of recent interest in Parks On The Air, that's reflected in the articles brought to you in this issue. Another thing you will see here and in the future is the use of solar panels to augment your amateur radio setup. I have a feeling they will become quite common in the years to come.

BARC is reorganizing our educational program, it's not settled yet, but will be very soon. Our mission is to integrate the monthly topical theme covered in the General Membership Meeting, the Sunday Operating Afternoon, and articles in *Full Quieting*. We will be covering DMR & other digital modes, antenna building, CW, operating etiquette on the air, and many other topics to be announced. If there are topics you would like to be educated on, please let me or any of our officers and coordinators know and we will sort out how to make it happen. I think we have a lot of the right people in BARC already to cover just about any topic you could throw at us.

On a personal note — in February we had a substantial vehicle accident in our household. No injuries, but our car is gone, well before its time. I wanted to take a minute to remind everyone to take it easy out there. We have busy lives, but no one is so rushed that they need to take chances to save a little time. Look out for other drivers who may not be as excellent a driver as you are. Show some empathy and compassion towards others. Speaking from experience here! I want to see all your faces for many years to come.

73, Ray Hitt, [N8VMX](#)

BARC President & *Full Quieting* Editor
(937) 974-6781



Daylight Savings Time starts on Sunday, March 12 at 2am. For those of you who still use clocks!

<http://www.clipartbest.com/>

Your views are important to BARC and to *Full Quieting*
Please make yourself heard at the club, via [email](#), and on the air...

2022 BARC Officers and Directors

President: Ray Hitt, [N8VMX](#)

Vice President: Glenn Rodgers, [KE8LZD](#)

Secretary: Jim Gifford, [KD8APT](#)

Treasurer: John Westerkamp, [W8LRJ](#)

Senior Director: Don Parker, [KB8PSL](#)

Junior Director: Jim Lusk, [KC8EFD](#)

2022 Coordinators

Clubhouse: Jim Lusk, [KC8EFD](#)

Comm Center: John Westerkamp, [W8LRJ](#)

Contesting: Ken Gunton, [W8ASA](#)

Education: *Vacant*

Emerg Preparedness: *Vacant*

Field Day: Ray Hitt, [N8VMX](#)

Full Quieting Editor: Ray Hitt, [N8VMX](#)

Hospitality & Librarian: Natinka Siwecki, [KD8NUA](#)

IT: John Westerkamp, [W8LRJ](#)

Lunch Bunch: Jim Totten, [WA8HUB](#)

Net: Paul Sharp, [WS8R](#) (new call!)

Public Service: Don Parker, [KB8PSL](#)

QSLs: Roger Hoffman, [WB9BXT](#)

Repeater: Russ Roysden, [N8NPT](#)

TechNight/Workbench: Trevor Clarke, [K8TRC](#)

Webmaster: John Westerkamp, [W8LRJ](#)

BARC Net: Every Sunday, 8 PM Local

147.045 (+) (no PL)

[Alt = 443.675]

Directions to BARC Clubhouse and Comm Center

Rooms 1 & 3 Lower Level Sugar creek 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?



What's Up BARC?

What's Up BARC?

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



March 12 Operating Event (Glenn Rodgers, KE8LZD)

Once again BARC has another fun event for all who might be interested... a Sunday Operating Event & Antenna Build at our clubhouse! As mentioned at our last membership meeting and a recent Sunday night Net, I'd like to offer a 10M vertical dipole antenna build, test, and operate on Sunday afternoon beginning at 14:00 *{editor: 2pm EDT for you civilians}*. The build is very simple and should be fun for anyone wishing for a quick build. And as you're all aware, part of the fun of ham radio is experimenting and "getting your hands dirty". I'm all for the experimenting, see what works and how well, but sometimes the things I've tried didn't really work out the way I'd expected. When that happens, I'm reminded that I didn't fail... I simply found one way that it didn't work! That in itself is a valuable lesson (at least to my way of thinking)

So that being said... If you're interested in building an antenna that works and is simple and quick to build... meet me at the clubhouse on the prescribed date & time. If you're in agreement that the experimentation itself is fun and worthwhile... meet me at the clubhouse on the prescribed date & time! Because we're not just building an antenna... we'll be building at least 2 (no more than 4 so you don't need to bring your dinner). I've been given some fantastic ideas, and really want to try them out. All antennas will be 10M (probably... maybe slip in a 6M just to see if you're paying attention).

After we build and test for efficiency... some lucky victim (uh...meant to say person) can take home one of the antennas if you have a place for it. Hint...one of these 'should' work well in an attic! It's all fun, all BARC, and definitely No Bite! So mark your calendar and show up... no need to register or commit, just come out and either learn something... or teach me something, but definitely have fun.

Cancelled: BARC-hosted General License Class (Ray Hitt, N8VMX)

The Bellbrook Amateur Radio Club cancelled the General License Class scheduled to run from February 18 through March 11th. This cancellation was due to insufficient enrollment. We will investigate launching a General License Class in the fall. If we decide to launch a class this fall we will take extra steps to ensure enough time to allow registration of interested students.

The General License Class is geared towards those who possess a Technician License (although this is not a requirement). This class is open to all, whether a BARC club member or not. A General license is very useful for Technician class operators looking to expand their reach into more of the HF bands. The period of high sunspot activity is precisely the time when we should be on the HF bands!

If interested, look for an announcement this Summer and reply to John Westerkamp, [W8LRJ](#), Paul Sharp, [W8SR](#), Glenn Rodgers, [KE8LZD](#), or Ray Hitt, [N8VMX](#) to reserve a spot in the next General License Class!

(Continued on next page)





License Upgrade!

Congratulations to Jordan Rio, KE8VYB, on passing his General License exam!
And it's good to hear you check in on our Sunday Night BARC net!

Connected with a former BARC member (Randy Allen KA0AZS)

I recently was able to Work D2UY in Angola on 17 m FT8.

After the contact I received an e-mail from KØIN in Ames Iowa. We exchanged a couple of emails and here's the gist of it. Thought folks might be interested:

(Note: compiled from several e-mails)

"Heard you work D2UY and looked up your call to see if I was having a shot, and found out you were from Iowa but now in Moraine - I used to live in Bellbrook, member of the club there until 2010 when I moved, and have been in Ames Iowa for the past 10 years."

"...my son is a senior at U of Iowa! "(he mentioned this because I am a graduate of Iowa)

"...my call was W8MU at the time."

73 and God bless!
Fr. Marty Watt KØIN
Ames, Iowa

Got Questions? (John Westerkamp, W8LRJ)

Building a new antenna and have questions about the design? Or are you stumped on how to operate your new radio or connect it to your computer? Hams always have lots of questions, and in a club like BARC, there are many *Experts and Mentors* available and willing to help you out. Here are a couple of ways you can reach an *Expert or Mentor*.

1. Join the *BARC Member Forum* on the website! There are already several topic areas filled with questions and answers.
2. Just send a note via the *Contact* page on the website. Your question will be forwarded to an *Expert or Mentor* who will respond with as much help as they can.

Don't be afraid to ask an *Expert or Mentor* to visit your shack if things really get difficult and you need some hands-on help or tutoring. BARC members visit each other's shacks all the time to work on various projects. So ask away!



Officer, Director, and Coordinator Inputs

BARC has six Officers and Directors and 15 Coordinators

- Some have monthly columns, and the rest can use this space to let you know what they're doing and what's happening in their areas of responsibilities.
- Feel free to contact them if you have specific requests. All their emails are listed and hyperlinked.

- **BARC Net: 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 2023 there were approximately 74 check-ins lasting 174 informative minutes. Topics ranged from Open Mike, Super Bowl and your traditions, topics for BARC education, interesting contacts, and did you see the green comet? We often have non BARC members checking in to enjoy the Net.

Our faithful Net Controllers are Jim Dean W8UD, Eric Vinande KG6NFJ, Tink Siwecki KD8NUA, Paul Sharp WS8R, and John Westerkamp W8LRJ.

- **Secretary: Jim Gifford, [KD8APT](#):** As club secretary I attended planning and general membership meetings and took note and minutes, which I published and distributed. I wrote an article on a POTA activation for Full Quietening's March issue.
- **Treasurer: John Westerkamp, [W8LRJ](#):** Dues, a \$65 Amazon Rewards check, and our Silent Auction were the main sources of income for February. Thank you to everyone who bid on the equipment. We will continue the Silent Auction at each Membership Meeting until Hamvention. Our main expenses continue to be toward upgrades to the Communication Center.

One note: The Amazon Smiles Rewards Program was discontinued as of February 20, 2023. Although Amazon will be making a one-time donation to the club, we will be losing a nice free income stream. Thank you to all the BARC members who supported us through Amazon Smiles!

The 2023 Budget was approved at the February Membership Meeting so we are ready to begin our work on the rooftop as soon as the weather permits.

Remember that the 2023 dues should be paid by the first week in March 2023 to be a member in good standing, so get your payments in soon. Yearly membership is \$15 (\$18 per family). You can send a check made out to BARC to the club P.O. Box 73, Bellbrook, OH 45305, or pay via PayPal by sending to w8lrj@arrl.net. When using PayPal, be sure to select for Friends and Family since BARC does not have to pay the PayPal fee. Thank you so much for your support!

- **Repeater Network and Nodes: John Westerkamp, [W8LRJ](#):** Want to see what a repeater site looks like? Watch for upcoming Shack Tours where we hope to schedule a trip to the BARC repeater site for a tour. 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.

(Continued on next page)



Officer, Director, and Coordinator Inputs (continued)

- **Website:** John Westerkamp, [W8LRJ](#): Be sure to watch the website for upcoming events, especially the Operating Afternoon on March 12 and the POTA Activation on March 19! 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](#): Hopefully, everyone has seen the updates to the clubhouse Communication Center. We have painted the back wall, added a TV monitor running HamClock for propagation information, hung some awards and posters, and completed the wiring up to the front Station #4. We are still hoping for some decent weather so we can install the R9 mount on the rooftop as well as the R9 antenna. Following that, we plan to redo all the grounding and bonding to move the lightning arrestors outdoors, add some ground rods, and bond everything together with the electrical service ground. Stay tuned!

Temporary Rotor Control

Randy Allen , [KA0AZS](#)

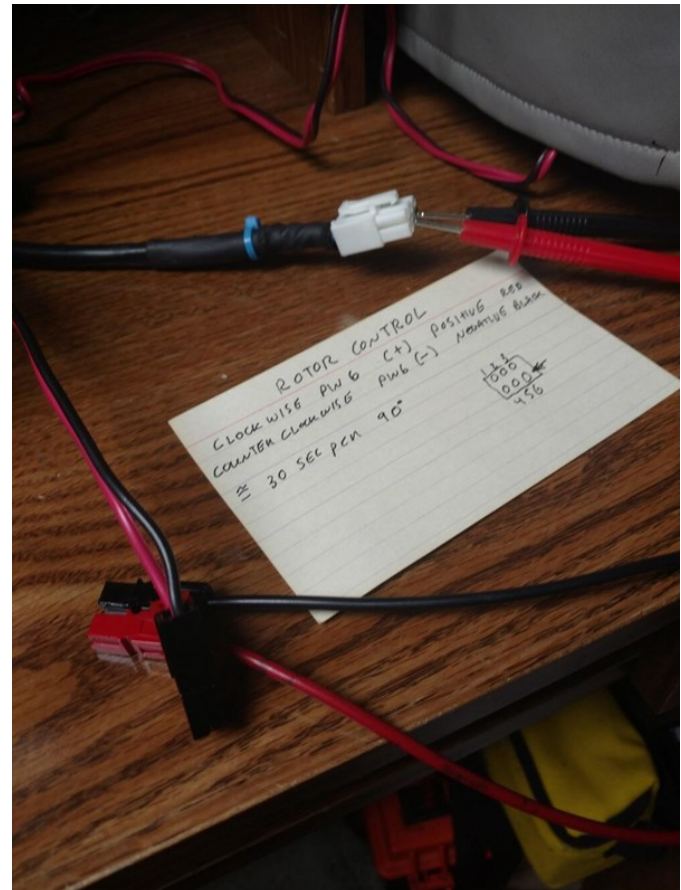
The rotor control box for my Yaesu G-450A died a couple of weeks ago. Yaesu tech support has been great, giving me troubleshooting tips and having me send it in under warranty.

They also gave me a tip on how to use the rotor while the control box is in the shop. By applying 12V DC to pins 5 and 6 of the cable connector, I can get the rotor to operate, reversing polarity to change direction.

I researched getting the mating plug that goes into the control box, but it was twice the price of the plug for shipping from the PRC, and it would probably get here about the time my control box is due back from Yaesu.

So, here's my temporary rotor control set up. I used some old multi-meter probes and Anderson Power Poles. Power from my shack power supply. I hook up the probes to my power supply, apply them to the pins of the connector, and start counting to guesstimate position of beam. I then run upstairs to visually confirm.

It's a kludge, but it works. The most important thing is I've been able to position the antennas (Hexbeam and VHF/UHF Yagi) into the wind during the high winds we've experienced recently.



Lunch Bunch

Jim Totten, [WA8HUB](#)

Hello my fellow lunch lovers. It is now February, 2023. So far our year hasn't been that rough. There is not much left of February and our last lunch in February will be at Roosters Wings.

We agreed in November that two lunches per month was a good schedule. Previously, I had been just going with every other week regardless of how they lined up with position in the month. We settled on a schedule much like our club activities. For example, Planning meeting is always First Thursday; General meeting 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.



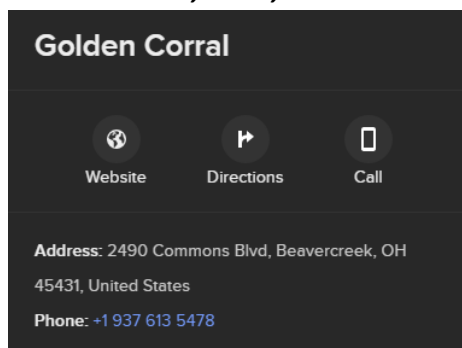
Now, how will the lunches be selected? Accompanying this information page is the same chart in last months *Full Quieting* listing our current set of restaurants. The restaurants are listed in the order most popular (at least for the first few) and with a balanced variation. No two chicken restaurants in sequence. 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.

Great news!!! Notice the new restaurant below Roosters Wings. The Golden Corral is **back**. They will be the first lunch in March.

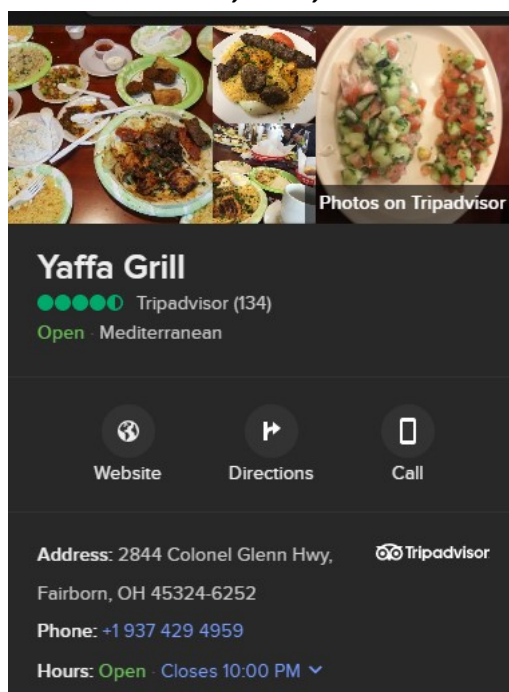
The lunches for March are set. You can see the chart in Full Quieting (next page). The best news is that the Golden Corral Buffet is number ONE in March.

73, Jim, [WA8HUB](#)

March 14, 2023, 11:15am



March 28th, 2023, 11:15am



Lunch Bunch 2023 List

Jim Totten, [WA8HUB](#)

Date	Restaurant	Address	City	Phone Number
	Cherry House Cafe	1241 Meadowbridge Dr.	Beavercreek, OH 45434	(937) 320-6200
12/06/22	Another Broken Egg Cafe 7:00 am to 2:00 pm	2453 Esquire Dr.	Beavercreek, OH 45431	(937) 912-5074
1/10/2023	China Garden Buffet	112 Woodman Dr. Airway Shopping Center	Dayton, OH 45431	(937) 781-9999
1/24/2023	First Watch 7:00 am to 2:30 pm	5245 Cornerstone North Blvd	Sugarcreek Township, OH 45440	(937) 732-9013
2/14/2023	Submarine House	3195 Dayton-Xenia Rd.	Beavercreek, OH 45434	(937) 429-8650
2/28/2023	Roosters	2430 N. Fairfield <i>The Shoppes at FC</i>	Beavercreek, OH 45431	(937) 702-9500
3/14/2023	Golden Corral Buffet and Grill	2490 Commons Blvd.	Beavercreek, OH 45431	(937) 613-5478
3/28/2023	Yaffa Grill Mediterranean Food	2844 Colonel Glenn Hwy	Fairborn, OH 45324	(937) 429-4959
	Chic-Fil-A	5301 Cornerstone N Blvd,	Sugarcreek Township, OH 45440	(937) 439-1700
	City Barbecue	2330 N. Fairfield Rd.	Beavercreek, OH 45431	(937) 320-0000
	Giovanni's Pizzeria e Ristorante Italiano	215 W Main St.	Fairborn, OH 45324	(937) 878-1611
	Marion's Piazza	1320 N Fairfield Rd.	Beavercreek, OH 45432	(937) 429-3393
	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
	Beavercreek Pizza Dive	4021Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669





BARC Movie & Dessert Nights

We still have eight opportunities this movie season, to get together for our BARC Movie & Dessert Nights. As you know, we always take November and December off for the holidays.

So far we've enjoyed two great suggestions from members, for movies; January we saw *Top Gun-Maverick* and in February we enjoyed *My Big Fat Greek Wedding*. Since St. Patrick's Day is in March, we already have a request to watch the fun film: *Darby O'Gill and the Little People*. Irish Scones with jam is on the dessert menu.

If you have a suggestion for a movie and/or dessert just drop us an email and we'll try to make it happen!

January 26, 2023 — *Maverick-Top Gun* with Cheese cake

February 23, 2023 — *My Big Fat Greek Wedding* with Apple & Oranges Bundt cake & Baklava

March 23, 2023 — *Darby O'Gill and the Little People* with Irish Scones & jam

April 27, 2023

May 25, 2023

June 22, 2023

July 27, 2023

August 24, 2023

September 28, 2023

October 26, 2023

Tink/KD8NUA

P.S. Sometimes glitches happen so we may have to change the scheduled movie and/or dessert.



Communication Center Update

John Westerkamp, [W8LRJ](#)



In previous articles, we showed all the steps in tearing down the original Communications Center Station setup and the final new arrangement of the Stations with #'s 1 through 3 along the back wall and #4 up front for demonstrations. This arrangement greatly improved the space available for operators and observers during events in the clubhouse.



Since then, we have been hard at work pulling cable up to Station #4 for the second coax line, the rotor controller, networking cable, and a large ground line. This was very challenging as there is a wall that goes all the way up to the ceiling in the middle of the clubhouse where the divider is. A previous cable pull punched a hole in the ceiling so we could slide cable over the wall. We were smart enough to add a pull line this time so we would not have to deal with the ceiling wall again! Station #4 is now completely ready for HF/VHF/UHF operation and rotor control.

All we had left was the finishing touches! We ended up painting the back wall BARC Blue and mounting a PC monitor on the wall running HamClock. [HamClock](#) is an amateur radio application that provides local and DX weather information and propagation information across the globe as well as VOACAP info. Additionally, we added the BARC W8DGN license, several contest and ARRL awards, and pictures of Henry Bussey, W8TOG, and H. Fred Stone, W8LLY (SK) who were founding members of Bellbrook ARC and longtime contributors to the growth of the club.

The only thing left now is to use the stations! We have several events coming up in March and April including Operating Afternoon, Rookie Roundup, and ARRL DX SSB Contest. Enjoy!

73, John, [W8LRJ](#)



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Communication Center Update (continued)



Parks On The Air

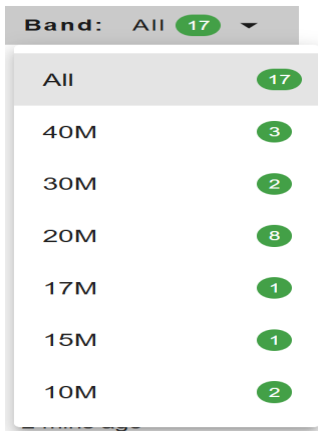
Paul Sharp, [WS8R](#)

What is a POTA and why should you use your valuable electrons to contact a park? Like all things in ham radio, it is a fun activity. You can enjoy it from the comfort of your shack or set up in a park and start transmitting. There are 2 parts to POTA: the activator and the hunter. The activator sets the radio equipment up in a POTA recognized park, calls CQ, answers the thousands of anxious operators and then submits a contact log. The hunter sits in their warm shack, answers the activator's CQ and moves on to the next CQ. POTA is not a contest but is a special event with lots of pileups and interesting conversations with the activators about the park they are in and the equipment they are using.

To get started, I recommend you log into the POTA website, explore it and sign in to establish an account: <https://parksontheair.com/>.

Once you have established an account, go to <https://pota.app/>. Here you can see many of the POTAs that are activated and waiting your call.

There is a lot of information to see and to use to make contacts. For instance, you can see all of the parks that are operating on all of the bands or you can select the just the band you are interested in. This screen shot shows all the bands and how may parks are operating on each band. This is helpful to select the band that has the most parks operating.



Band	Count
All	17
40M	3
30M	2
20M	8
17M	1
15M	1
10M	2

For more options, in the upper left corner you will see this helpful screen. Click on the 3 horizontal bars and ham radio magic appears.



Don't change the channel, more about this site in future articles.

(Continued on next page)



Parks On The Air (continued)

There are many awards you can receive for being a faithful POTA operator and chaser. Here is an award from Mark Crabtree, N8PEP, my first mentor and good friend.



Version 2

If you are interested in learning more, please check out these web sites:

<https://docs.pota.app/> Info about POTA.

<https://www.youtube.com/watch?v=odegfaGczAc> An introduction to POTA.

<https://www.youtube.com/watch?v=7wM7T2VuzVA> Getting started with POTA.

<https://www.youtube.com/watch?v=WQNayyncaHg> , info about hunting.

73, Paul, [WS8R](#)



First Parks on the Air Activation

Jim Gifford, [KD8APT](#)

I don't wish to replace the excellent articles on POTA submitted by Paul Sharp, so I will leave activation and hunting details to him. I do want to encourage newer hams to become active and get on the air.

On Thursday February 23, 2023, I met Glenn Rodgers KE8LZD at Spring Valley Wildlife area on a surprisingly warm Ohio winter day. He was there activating a POTA park and doing it by himself for the first time. When I arrived he had been on 10m and really had not made any con-



tacts. I helped (I only held a line) while he threaded a line and the attached long-wire antenna over a tree branch about 30 feet overhead. After pulling the length of wire through the tree, Glenn attached the end to an anchor we had screwed into the muddy Ohio clay.



After tuning his receiver, he as-

certained the frequency on 20m was not being used and started calling "CQ CQ CQ KE8LZD Parks on the Air." Static. Again he repeated the CQ. And once again, and then there was an answer from Pennsylvania. Well, that certainly got his blood flowing (me too)! Once the data was recorded, he went back again calling. Then there was one from the Ozarks, Long Island, Canada, Florida, and a total pile up. Callers were scrambling to talk to KE8LZD. Glenn was writing so furiously he kept breaking the lead in his mechanical pencil.

Glenn was writing so furiously he kept break-



He had earphones on, but I could hear the hungry ham operators as they piled up hoping to make a POTA contact. Glenn talked to several telling them this was his first activation, and several operators encouraged and thanked him for activating a park.

Now Glenn is not a new operator, but this POTA was new to him. Did he have an elaborate antenna setup? No, it was an end-fed long wire sloped antenna. Did it matter which way it was anchored? Well he equally was 5/9 east, west, north, and south, and all signals received in Ohio came in booming.

And as you can see by the photos, the view wasn't too bad either. That structure he sat in was a bird-watching blind. I enjoyed the experience. You will too. I encourage you to get your General or Extra class license. You can also get on HF as a Technician on 10m. Let's get active! Let's encourage one another in new pursuits.

73, Jim, [KD8APT](#)

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First Parks on the Air Activation (continued)



HamClock Update 2.89

Ray Hitt, [N8VMX](#)

I just updated HamClock to the latest version, 2.89 and noticed some new features that you may have missed if you're not paying attention. They are described in the printed [User Guide](#) which is updated with every release. Here's some info I pulled from the User Guide.

The new features I'm most interested in are:

On The Air: This shows up in the HamClock center top pane and will show recent activations for either Parks on the Air or Summits on the Air. Tapping one of the frequencies will display the location on the map, then set the DX pane with the lat long, distance, weather, time, and other parameters.

Weekend Contests: This is a list showing current or upcoming contests. If the number of contests exceeds the space, scroll arrows are displayed. Clicking on the Title (WA7BNM Weekend Contests) opens a web browser to examine in more detail.

Live Spots: This is a pane choice that can overlap the map with personalized spots from WSPRnet.org, PSKReporter.info, or ReverseBeacon.net. With WSPR and PSK you may choose spots posted **by** your own DE call or from your grid; or spots which others post **of** your DE call or grid. These allow you to explore the effectiveness of your specific station or propagation to or from your general location. RBN only works with skimmer spots **of** your call because grids of spotted transmitter stations are not readily available. Tap the band table to display a menu that controls these choices as well as maximum age; whether to show count or distance to farthest spot; and which bands to display. Chosen bands show their corresponding map color as background while others still work but are dimmed. Paths are marked with a circle at the TX end, a square at the RX end and the farthest path for each band is marked with a target. Note the ESP platform does not show paths.

Frequency	Call Sign	Distance
7250.0	VA2HWY	1831
28074.0	NAJKO	1831
7074.0	EA7KCN	1831
14307.0	VA3GHB	1831
14074.0	K7CAR	1831
14310.0	KC1YL	1831
24919.0	NA8W	1831

Contest Name
WA7BNM Weekend Contests
CQ 160-Meter Contest, SSB
REF Contest, SSB
UBA DX Contest, CW
South Carolina QSO Party
North American QSO Party
NA Collegiate
High Speed Club CW Contest
North Carolina QSO Party

Band	Count	Band	Count
160m	0	17m	0
80m	0	15m	0
60m	0	12m	0
40m	9538	10m	0
30m	8538	6m	0
20m	6791	2m	0

Max distance (mi) 0

You can download the latest version of Hamclock from the Download tab at <https://clearskyinstitute.com/ham/HamClock/>. This is a *zip* or *tgz* source code file meant to be compiled in a Linux environment. Directions to compile this are in the Desktop tab at the same webpage. Please read them over before you start.

```
#!/bin/bash
cd /$HOME/Downloads
pwd
sudo rm -r ./ESPHamClock
sudo rm -r ./_ESPHamClock
rm ESPHamClock.tgz
wget http://www.clearskyinstitute.com/ham/HamClock/ESPHamClock.tgz
tar -xvzf ./ESPHamClock.tgz
cd ESPHamClock
make hamclock
sudo mv hamclock /usr/local/bin
make hamclock-big
sudo mv hamclock-big /usr/local/bin
```

Update-HamClock.sh

If you use HamClock and would like to automatically update it, I wrote a Linux bash script to download the source code, compile it, and install HamClock in the default location. This was built in Debian (tested on both Raspberry Pi OS and Ubuntu). This compiles two versions, a 800x600 pixel size and a 1600x1200 size. They are given different file names so as not to overwrite each other. Feel free to tweak this to meet your needs.

73, Ray, [N8VMX](#)



Solar Setup for 12V Amateur Use

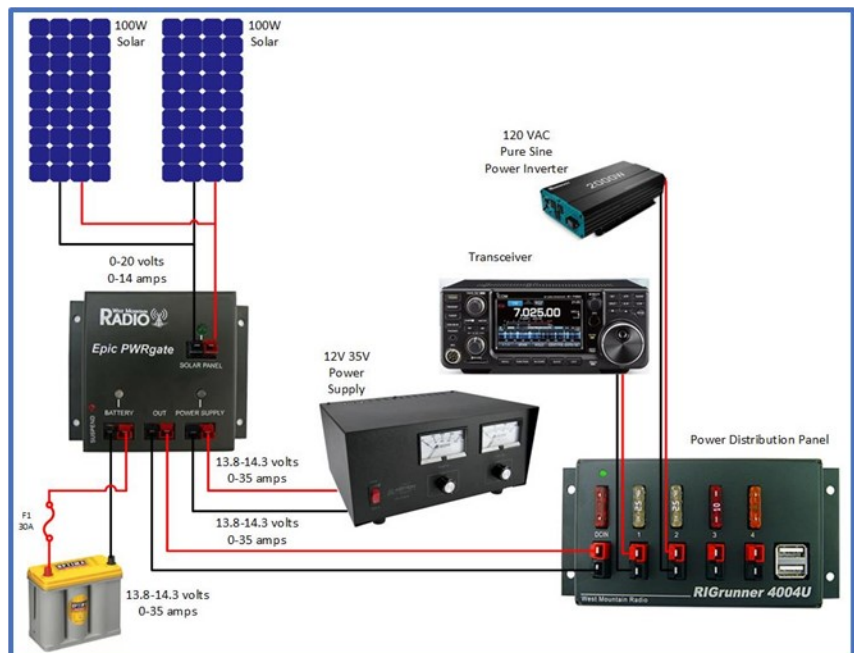
Ray Hitt, [N8VMX](#)

Solar panels are a natural to give the amateur radio operator great leverage when operating in the field. With the right choice of solar panel and batteries, you could operate non-stop for an extended time. I started well over a decade ago and have noticed solar panel capability has grown and prices have fallen. For example, I bought a pair of 25W panels way back when for \$125, now I am seeing 100W panels being offered for sale under \$99. They're even showing up at [Harbor Freight!](#)

The solar panel is just one part of an overall system to provide alternative power to your ham radio setup. The system also includes proper choice of storage battery, power distribution and other optional accessories to make your life better. So, let me walk you through it. I'll describe my setup, but bear in mind that everyone's requirements are different and your needs will drive how your system is built. I'm also covering this at a high level, there are very detailed YouTube references in the back of this article that will guide you further.

You're probably aware of your typical amateur radio system, at the simplest level consisting of transceiver, power supply, and antenna. Extending this setup into a solar-equipped system requires the addition of a 12V storage battery, a solar panel, and a charge controller. I also highly recommend adding a PowerPole distribution panel since you'll be plugging in 12V items in addition to your transceiver. Some additional 12V accessories to consider would be 12V to 5V USB adapters to allow cell phone charging; and a 12V to 120VAC pure sine wave power inverter to allow low wattage 120V appliances to operate on 12V solar, to include a low wattage computer. My solar setup is shown in the figure shown below. I'll describe all the components used here.

Solar Panel: Solar panels generate power when in sunlight. The wattage varies, but current panels are commonly 100 watts. These panels generate around 22-24 volts in direct bright sunlight when not connected to any load. 100W solar panels typically would generate 8A of current when connected to a short circuit in bright sunlight. For the panel I am using, its highest wattage is obtained at its optimum voltage of around 20.5V and 4.9A.



Since I am optimizing for 12V, when I added a second panel, I connected it in parallel, not series, with the other panel. This doubles the available current, leaving the voltage unchanged. You could also connect them in series which would double the voltage, leaving the current unchanged. However, when connected to the charge controller, it would limit the voltage to what is necessary to charge the 12V battery, which would vary from 13.8 to 14.5 volts. The doubling of voltage of a series-connected solar panel would waste that extra voltage in the voltage limiters in the charge controller, dissipated -- wasted as heat, or just "left on the table". Some newer charge controllers

(Continued on next page)



My Solar Setup for 12V Amateur Use (continued)

have DC-DC conversion to mitigate this problem. The benefit would be that there's less power loss from a higher voltage, lower current setup when using a long run of power cable. I haven't studied these newer MPPT charge controllers to see how much, if any, RF noise they might generate in the DC-DC conversion.

Charge controller: The charge controller regulates the solar panel output and provides the proper charging voltage and current for the battery. Charging a battery from solar panels without a charge controller would fry the battery in no time. Solar panels (100W) can put out up to 23V at up to 8A (each), well above what the battery would be able to tolerate.

As an aside, I can personally attest to generating a smoke cloud when I connected a solar panel directly to a 12-120VAC power inverter without either a charge controller or even a battery connected. Don't ask why I did that, it was not a good idea, trust me on this!

I chose the Epic PowerGate for several reasons; it is adjustable for all types of batteries, it is reprogrammable to set the max charge voltage, current, and other parameters, it has a bypass to temporarily turn it off at the push of a button – useful if you have a faint HF contact and want to eliminate all HF noise sources to pick it out. And it allows you to connect both a solar panel and 13.8V power supply to transfer over to a power supply at nighttime to avoid draining the battery.

Distribution panel: A PowerPole distribution panel is required to provide 12V battery voltage to multiple devices equipped with PowerPole connectors. You can use a simple PowerPole block or can have individually fused PowerPole connections. The example I show here is one with a few PowerPole connectors and some 5V USB connectors to keep your cell phone charged, or in my case, to power a Raspberry Pi that is part of the amateur radio station.

Battery: You can use a 12V AGM, standard 12V wet cell deep cycle battery, or LiFePO4 (Lithium) batteries. For a stationary application, I'd use a 12V AGM battery; they are less costly than a Lithium battery and have a higher capacity. They are extremely heavy though. Lithium batteries are lighter, but expensive (dropping in price though so keep an eye on that). The choice of battery depends on what you're wanting to do. Check that the charge controller you're using is capable of being configured for the type of battery you want to use. Charging a battery to the wrong voltage by using a charge controller set to the wrong battery type will greatly reduce the battery lifetime or cause serious damage to your battery or your QTH.

12V to 120VAC inverter (optional): This would allow small wattage 120 VAC appliances to run from the 12V solar setup. Pure sine wave types are preferred, they generate less noise that would interfere with the transceiver. Current 120VAC table lamps can be equipped with 4W LED bulbs that won't strain the solar system very hard at all. An inverter opens the possibilities for this sort of device. Don't think you can run a space heater or high wattage appliance off the inverter, they don't typically allow more than around 2000W (unless you have big \$\$\$).

12V to 5V USB converters (optional): Small USB outlets can be installed that run off 12V but provide USB and USB-C charging outlets for cell phones and other USB-powered devices. You could easily charge your family's cell phones from these outlets and they are recharged via solar. I charged our cell phones for a week when Hurricane Ike came through and our power was out. If you plug a [PowerPole to 12V lighter plug adapter](#) (available online), you can use your existing mobile cell phone chargers in your solar setup.

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My Solar Setup for 12V Amateur Use (continued)

Tradeoffs:

For a home system, or a system installed somewhere with no intention of moving it around, get as much solar panel as you can afford in the space you have available. Use as large a capacity 12V AGM bank of batteries sized for the power load you anticipate. Use a simple charge controller or the Epic PowerGate if you plan on simultaneously using 120VAC with a standard power supply as well.

For a mobile QRP system, you'll still want a 100W panel if available in a smaller foldup or rollup configuration. I'd recommend a LiFePO4 (Lithium) battery and a charge controller optimized for this type of battery. The Epic PowerGate can be configured for Lithium batteries, but be cautioned that Lithium is not its default setting.

As a tangent, it is possible to connect this solar setup temporarily to your automobile's 12V battery as a float charger. I have a PowerPole connector installed into my fused subwoofer in the trunk that is directly wired to the car battery. I run a 20' PowerPole jumper to my solar charging station, connecting in parallel with the solar system battery. I did this a few times during the pandemic when I knew I would not be driving for a few days and didn't want to have a dead battery from the car sitting too long. Connecting the car's battery to your solar charging station should only be done if the charge controller and voltage is compatible with the battery type in your car. In my case, I use the same AGM battery in my car and my solar charging station so the compatibility is not an issue. Once the batteries are at the optimum voltage, there is only a very small trickle current needed from the solar charging system to keep the batteries charged properly.

Good luck setting up your solar charging station, if you have questions, you can reach out to me or check out the numerous resources available on YouTube and the Internet at large. Listening to Dave Casler's videos, he mentioned a new concept that I may try; using a "relay battery" mounted closer to your radio that is charged by the main battery near your solar panel. You can never have too many batteries!

73, Ray, [N8VMX](#)

References:

Dave Casler ke0og's YouTube video, [Solar Power for your Ham Station](#) (Ask Dave #52)

Another Dave Casler video, [Solar Power at ke0og](#) (Ask Dave #262)

Solar Panels

[Home Depot: 100W Solar Panel, Renogy RNG-100D-SS, 84.99 \(reg 124.72\)](#)

[Harbor Freight: 100W Solar Panel, Thunderbolt, \\$129.99 \(\\$99.99 if in the Inside Track Club\)](#)

Charge Controllers:

[West Mountain Epic PWRgate](#) \$189.95, Backorder until 1 July 2023

[Renogy Wanderer 30A Solar Charge Controller](#) \$33.31 at Lowe's

PowerPole Distribution Blocks :

[K9JEB Power Distribution Center Kit](#) (currently unavailable due to supply chain)

Powerwerx [PowerPole Distribution page](#) has a great selection of things to choose from.

West Mountain Radio [RigRunner page](#), \$90-\$180

Alternate from Amazon (cheaper but Chinese) - [Chunzehui F-1005](#), \$59.00

[K7JLX blog](#), an interesting description on building a 100AH battery box with solar charging



YouTube Surprises

Jim Totten, [WA8HUB](#)

Hello all members of this great club. Bellbrook Amateur Radio Club. I was talking to Ray Hitt, N8VMX, about writing an article for the January *Full Quieting*. Ray was complaining about the number of articles. Then a crashing thought came. Let 's look at the world of YouTube Creators. The lists and comments are in no particular order. Luck of the draw. The total number I have identified is currently 53. That may not be the end. This is the third installment of exposing these YouTube Creators. As I was writing issue #2, I was continuing to read the January issue of QST. Towards the back of the issue I found a piece by Steve Goodgame, K5ATA on YouTube channels. He started with Ham Radio Crash Course. Steve has indicated this will be continuing feature. Well, in the February Issue of QST, Steve kept his word and discussed a YouTube creator, 'KM4ACK'. That will be #54 in my list. Today (2/13/23) I saw and listened to a HRCC piece from HAMCATION talking to Scott KE4WMF @StealthGTI. He is #55. Then Jim KD8APT showed me a POTA guy, KC4XL Dom #56.

21. Ria's Shack Ham Radio <https://www.youtube.com/@n2rj> I am Ria, and I'm a ham radio operator originally from Trinidad and Tobago now living in NJ, USA. My #hamradio callsign is N2RJ. I post videos for the new ham, the old ham, the non-ham, and those who just love the tech. Amateur radio, GMRS, FRS, CB, SWL and other radio communications, electronics and occasionally renewable energy. I post lots of educational topics about ham radio, electronics and wireless technology. Occasionally I talk about energy storage and renewable energy. **By the way, Ria is also the Hudson Division Director.**

22. Red Summit RF <https://www.youtube.com/@RedSummitRF> Hi YouTube Friends. My name is Charlie, NJ7V (I use my nickname, Red, for CW ops). This channel is all about portable ops. From the "All Portable Discussion Zone" (APDZ) livestream to the Summits on the Air activation videos, you'll learn about amateur radio operations in the field. Guest interviews, SOTA activations, projects and builds, short 5-minute tips, and more. I participate in a YouTube content creators collaboration and release content with other creators on Mondays and Thursdays. I also often appear on their channels. <https://youtubershmfest.com/viewing-schedule/> Catch the "All Portable Discussion Zone" livestream every other Sunday at 2300 UTC where my co-hosts, Brian W7JET, Dan KC7MSU, and I interview portable ops enthusiasts. This livestream is also available as a podcast.

23. The Tech Prepper <https://www.youtube.com/@TheTechPrepper> I'm The Tech Prepper (Amateur Radio Call is Unknown) and I try to produce frequent videos on all topics related to preparedness. If you're into the outdoors, ham radio, battery/solar projects and general prepper stuff, you've come to the right place. If you enjoy the content and want to support the channel, check out some of the affiliate product links in the video descriptions. As an Amazon Associate I earn from qualifying purchases. A couple of recent videos are "Improvised Field Comms, Jungle Antenna" and "Quartzfest 2023 N9SAB Linked Dipole".

24. Thomas (K4SWL) <https://www.youtube.com/@Thomask4SWL> This channel is devoted to real-time, real-life, no-edit park and summit field activation videos. I also feature shortwave receiver reviews and comparisons. My videos have no advertisement interruptions as I've turned off YouTube monetization. Thomas also has a UK License, MOCYI. Here is one of his videos. "Saturday Morning POTA Activation 2: Pairing the KX2 and AX1 at Lake James State Park".

(Continued on next page)



YouTube Surprises (continued)

25. Temporarily Offline Ham Radio <https://www.youtube.com/@temporarilyoffline> Steve KM9G has a very unique channel. Many of his videos include somebody else. He has covered getting old computers to work again to exploring new operating modes. He loves to talk about FT8, POTA operations sometimes SOTA with K6ARK and his tiny end fed antennas. His channel is full of videos about almost any of the newer Ham gear. His sign out is "THANKS FOR BEING AWESOME." Astro Leah is his daughter. We reported on her last month.

26. Gregg K6EGG <https://www.youtube.com/@GreggK6EGG> Gregg says "Bringing amateur radio to your computer or mobile device! I'm doing this for fun to connect with people, I'm NOT looking for monetization or sponsorship." Gregg has a Tech license and his main radio is the Icom 9700. Latest videos are from Hawaii. Pictures show him on land, in a boat etc. With his handheld.

27. WA5AZQ Ham Radio <https://www.youtube.com/@wa5azqhamradio> His statement, Chronicling my career as an amateur radio operator using a very special, legacy callsign. No indication on the background of that. His videos include several VHF and UHF contests. Crazy Antenna placements was a series. Most of his work is about contacts and difficulty.

28. Tech Minds <https://www.youtube.com/@TechMindsOfficial> If it involves RF, then count me in! Mad about Software Defined Radio, Antenna building, RF projects, satellites and decoding any form of digital comms. Matthew Miller, M0DQW, uses an endfed antenna with 49/1 feedpoint matching unit. As he says the joy of a small english garden. His latest video is 'SDRplay RSP1A SDR Receiver'. Another recent one is his 49:1 Endfed half wave antenna. Turns out this was a project of his local radio club.

29. Digital Analogue Ham <https://www.youtube.com/@digitalanalogueham> Chris Andrews, 2E0UKH, lives in Kettering, England. Many of his YouTube videos are about across the pond contact using relative low power. Usually 50 watts or so. His main radio is the Icom 7100 both mobile and in station. He has explored using color filters on the 7100 and other mods to change the display.

30. HB9BLA Wireless <https://www.youtube.com/@HB9BLA> The things presented on this channel are mainly for licensed HAM radio operators. Please respect the laws of your country before you start a project that will emit radio frequencies. Otherwise, you will be punished. Those wise words are from Andreas Spiess, HB9BLA. His own words give his background and status. "When I was young I worked as a radio operator for the Red Cross (IKRK) and for the Swiss Army. Then was the family break. Recently I started with a DMR radio and a hotspot. Then I built my QO-100 ground station. And now I am QRV on many more bands (IC-7300 and IC-705). Mostly on FT-8, but also listening to CW to get me fit again."

73, Jim, WA8HUB



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*.**

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Editorial Policy and Style Guidelines for *Full Quieting*

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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
- 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



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

Sundays 1900 Newcomers & Elmers Net (Cincinnati) 146.670 (-) (123.0 PL) Sundays 2000 **BARC Weekly Net 147.045 (+) (no PL) [Alt = 443.675]**

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 Opportunities

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 [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.



Time to get ready for Field Day!!!

