



Full Quieting

The Official Journal of The Bellbrook Amateur Radio Club



July 2024 — Issue 35

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From the President & Editor

Greetings,

Happy July, everyone! It seems I was just touting our great June, and here we are again! I hope everyone enjoys July and finds an opportunity to get out into nature (when it's not 100°). Try some POTA, the parks around here are beautiful.

In this newsletter, we mention the 50th anniversary of the founding of the Bellbrook Amateur Radio Club, right after the devastating 1974 Xenia tornado. Since then, BARC has come a long way. There's a special celebration planned, I hope you can make it.

There are pictures of our indoor 2024 Field Day, which we needed to do to protect the health of our members. It turned out really nice and gave us a chance to enjoy our clubhouse, something many of us don't do.

There are also pictures from the Little Miami River Cleanup held June 29th. It's amazing how capable the canoeists are at carrying junk out of the river and staying afloat.

Pay attention to the article on the upcoming "Build-A-Hotspot" Tech Night held late August. There's some reading I recommend before the session for you to get the most out of it if you want to really understand how DMR (and YSF and P25...) hotspots work.

Lastly, enjoy our Independence as a Nation and pray we don't lose sight of what the Founders went through to bestow this great Nation to us.

73, Ray Hitt, [N8VMX](#)

BARC President & Full Quieting Editor

Your views are important to BARC and to Full Quieting

Please make yourself heard at the club, via [email](#), and on the air...



2024 BARC Officers and Directors

President: Ray Hitt, [N8VMX](#)

Vice President: Jim Totten, [WA8HUB](#)

Secretary: Jim Gifford, [N8KET](#)

Treasurer: John Westerkamp, [W8LRJ](#)

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

Junior Director: Bob French, [AC8ZU](#)

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 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?



Bellbrook Amateur Radio Club

50th Anniversary Bash!



The **Bellbrook Amateur Radio Club-W8DGN** will be celebrating **50 years** on the air this summer and we are having a big party at the clubhouse!

Join us **Sunday, July 28, 2024 at 2:00 pm**
at the **BARC Clubhouse**

Here are some of the events we have planned:

- **Mobile Radio Drive-In:** Bring your car and open the hood to show other hams how you did your mobile installation. It doesn't have to be fancy, even just an HT connected to a mag-mount antenna would be cool. BARC members will be available to look at your car and provide ideas for your own mobile installation.
- **Trunkfest Swap Meet:** Bring any radio equipment you would like to sell or browse what others have available for purchase. Set up in your car or bring a table.
- **BARC Open House and SES:** We will open the clubhouse for tours and have the radios available to operate. A Special Event Station in honor of our 50th Anniversary will be on the air from the clubhouse.
- **Cookout:** BARC will provide hamburgers, hot dogs, and drinks. Members are welcome to bring sides and desserts.

Where It's All BARC & No Bite!

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 BARC Members!

Chris Hanselman, KF8BOK, Technician
Doug Hayward, K8DRH, Amateur Extra
Hal Hastings
Francis Swope, N8GIO, Amateur Extra
Peter Callahan
Alex Baltes, KF8BPB, Technician

New Callsign!

Connie Gifford, W8CSG, General

Air Force Marathon Needs A Lot Of Ham Volunteers!

Registration is now open for the USAF Marathon (Saturday, Sept. 21, 2024)

Go to: <https://raceroster.com/events/2024/80803/2024-air-force-marathon-volunteer-registration>

Click on REGISTER

Enter your Email and Password, create a new account if you do not already have one.

(Be sure that there are no errors in the email address!)

Click on the pulldown arrow of Volunteer With Us!

Select "Volunteer on Saturday..."

fill out the personal information

Be sure to enter your callsign in the space provided.

Under "Amateur Radio Operator - 9/21" click the little circular button Check Add to order Select t-shirt size Click on CONTINUE (if you left a required field empty, you will receive an error message of some sort; fix it and CONTINUE)

You should receive a confirmation in a few minutes. If not, check Junk Mail, etc. If still nothing, let us know.

Send a message to AFM.Hams@gmail.com and report that you have registered. If you have questions, include them in the message body. Be sure to include your callsign. Also, at some point, you will need to submit your Driver's License number so that the Air Force can perform a security check. You may submit it at this time. If you are licensed in a state other than Ohio, please indicate.

Bob Baker N8ADO, Volunteer Lead for Amateur Radio support to the Air Force Marathon.

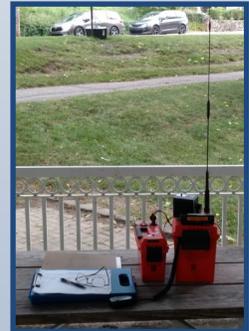


What's Up BARC? (continued)

BARC Supports the Little Miami River Cleanup (LMRC)

Darryl Fowler, **KD8JQE**, headed up the BARC support to the LMRC held June 29th. The LMRC provided volunteers who cleaned up the Greene County segment of the Little Miami River on kayaks and canoes. BARC then provided on-shore support by tracking how many LMRC volunteers and watercraft entered the river at 3 out of 4 launch sites. They also recorded how many volunteers and watercraft came ashore at the next launch site downstream. The main cleanup activity ran from around 0830 to 1330. Afterwards, the volunteers and BARC support team congregated at Bellbrock Park for food, music, and social interaction with many informational booths located there. Thanks to the following BARC members providing support to LMRC: Darryl Fowler **KD8JQE**, John Westerkamp **W8LRJ**, Randy Allen **KA0AZS**, Jim Lusk **KC8EFD**, Karl Kuwik **KD8FHS**, Ken Cornett **N8SPW**, Fred Stockwell **KE8ZPN**, Jim Totten **WA8HUB**, Ray Hitt **N8VMX**, Steve Siwecki **KD8NUC**, Tink Siwecki **KD8NUA**, John Rawson **KE8HUV**

Bellbrock Park



River's Edge



What's Up BARC? (continued)

BARC Supports the Little Miami River Cleanup (LMRC) (continued)

Constitution Park



Mill Bridge



Officer, Director, and Coordinator Inputs

Treasurer: John Westerkamp, W8LRJ: June was a great month for the BARC Treasury! We made over \$1000 at the Hamvention Flea Market. Thanks to everybody who made that happen! We also had Kroger Rewards income of \$83.00 as well as income from 7 new members who joined during our Field Day event. Expenses were the usual Internet feed, Field Day refreshments, and some replacement parts for the laptops we use for logging during Field Day.

We continue to be in great financial shape.

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

Website: John Westerkamp, W8LRJ: Thanks to everybody who helped out at Field Day! This year we had to move indoors to avoid the heat, but we had a great event nonetheless scoring a clean sweep of all the U.S. states and Canadian Provinces as well as several DX. Be sure to watch the website for upcoming Tech Night events, POTA events, and the BARC 50th Anniversary Bash on Sunday, July 28, from 2 pm until whenever!

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: We are still deciding whether to fix the fan dipole antenna and replace the balun or to purchase a new EFHW antenna. The remaining rooftop work may have to wait until the fall so we don't have to work in the summer heat. In the meantime, we have an EFHW installed on the rooftop (used for Field Day) that is currently using the fan dipole feedline. Connect your radio to the open 80-60-40m line on the antenna patch panel to use it.

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 asked Jim Totten to take Planning notes while I traveled out of state. Jim did such a great job, I just sent them out without any edits. Thanks Jim! I also wrote minutes for the General meeting. I had the pleasure of helping photograph Field Day, and sent the photos to Don Parker and Ray Hitt.

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 June 2024 there were approximately 81 check-ins lasting 181 exciting and informative minutes. Topics ranges from Open Mike, Parks on the Air, what did you do and buy at Hamvention, what are your plans for the summer, did you participate in Field Day, and tell us about any exciting contacts you made. We often have non BARC members checking in to enjoy the Net.

Our faithful Net Controllers are, Larry Darner, KD8RER, Joe Menchaca KE8UUQ, Tink Siwecki KD8NUA, Paul Sharp WS8R, and John Westerkamp W8LRJ. Jim Dean, W8UD, is an alternate.



BARC July 2024 Event Calendar

Tue July 2, 2024

6:30pm POTA SIG Meeting..... Where: [Caesar Creek Gorge State Nature Preserve](#)

Sun July 7, 2024

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

Tue July 9, 2024

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

Thu July 11, 2024

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

Sun July 14, 2024

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

Thu July 18, 2024

5pm POTA Demonstration Where: BARC Clubhouse

Thu July 18, 2024

7pm Membership Meeting Where: BARC Clubhouse

Sun July 21, 2024

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

Tue July 23, 2024

11:15am Lunch Bunch..... Where: Golden Corral

Thu July 25, 2024

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

Sun July 28, 2024

2pm 50th Anniversary Bash Where: BARC Clubhouse

Sun July 28, 2024

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

Wed July 31, 2024

7pm Tech Night Where: BARC Clubhouse



BARC Movie and Dessert Night

Next up on July 25th we will be watching *Father Goose* (a fun Classic with Cary Grant) and *The Lost City* (fun romantic comedy with Sandra Bullock) coming up in September and *Ghost Busters: Afterlife* finishing off the **2024 BARC Dessert & Movie Night** in October.

Upcoming Dates for Our 2024 BARC Movie & Dessert Nights:

- ✓ July 25, 2024 **Father Goose**
- ✓ August 22, 2024 **The Lost City**
- ✓ September 26, 2024 **The Meg II: The Trench**
- ✓ October 24, 2024 **Ghost Busters: Afterlife**



Past movies and desserts:

- ✓ January 25, 2024 **The Adventures in Baby Sitting**
- ✓ February 22, 2024 **Murder on the Orient Express**
- ~~✓ March 28, 2024~~ ~~**Paul, Apostle of Christ**~~ (Cancelled due to scheduling conflict)
- ✓ April 25, 2024 **The Meg**
- ✓ May 23, 2024 **Mission Impossible: Dead Reckoning Part One**
- ✓ June 27, 2024 **The Call of the Wild**

All 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!

We'll see you in June at the Movies!

Editor



Lunch Bunch

Jim Totten, [WA8HUB](#)

Hello my fellow lunch lovers. July 2024 is here. And time to renew our lunch meetings for this new year. 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 June restaurants are highlighted. I updated all of the dates for 2024. 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.

June was an outstanding month. We had two meals and they were winners. We had our first meal of June at the First Watch (7 eaters) restaurant in the Cornerstone complex. Then on June 25th we attacked the Submarine House (6 eaters) in Beavercreek. There are several Submarine Houses in the area but this is the best.

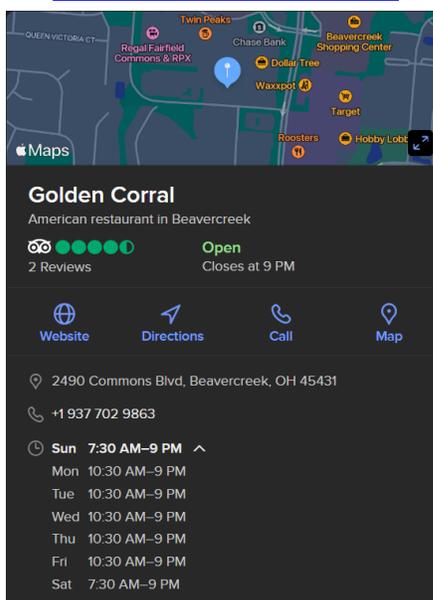
July's restaurants are almost next to each other. On July 9th we will be dining at Roosters Wings, located in "The Shoppes at FC". This small center is on the right as you head north on Fairfield. Our next lunch is on July 23, 2024 and at an old favorite, Golden Corral Buffet and Grill (located on the left side of Fairfield Rd as you head north). That's a wrap for this month. Happy eating.

73, Jim, [WA8HUB](#)

Tuesday, July 9, 11:15am



Tuesday, July 23, 11:15am



Lunch Bunch 2024 List

Jim Totten, [WA8HUB](#)

Date	Restaurant	Address	City	Phone Number
4/9/24	Cherry House Cafe	1241 Meadowbridge Dr.	Beavercreek, OH 45434	(937) 320-6200
4/23/24	Another Broken Egg Cafe 7:00 am to 2:00 pm	2453 Esquire Dr.	Beavercreek, OH 45431	(937) 912-5074
5/21/24	China Garden Buffet	112 Woodman Dr. Airway Shopping Center	Dayton, OH 45431	(937) 781-9999
6/11/24	First Watch 7:00 am to 2:30 pm	5245 Cornerstone North Blvd	Sugarcreek Twp, OH 45440	(937) 732-9013
6/25/24	Submarine House	3195 Dayton-Xenia Rd.	Beavercreek, OH 45434	(937) 429-8650
7/9/24	Roosters Wings	2430 N. Fairfield The Shoppes at FC	Beavercreek, OH 45431	(937) 702-9500
7/23/24	Golden Corral Buffet and Grill	2490 Commons Blvd.	Beavercreek, OH 45431	(937) 613-5478
8/13/24	Yaffa Grill Mediterranean Food	2844 Colonel Glenn Hwy	Fairborn, OH 45324	(937) 429-4959
08/27/24	Chic-Fil-A	5301 Cornerstone N Blvd,	Sugarcreek Township, OH 45440	(937) 439-1700
09/10/24	Culp's Cafeteria	1000 Carillon Blvd	Dayton, OH 45409	(937) 293-2841
09/24/24	City Barbecue	2001 E. Dorothy Lane	Kettering, OH 45420	(937) 200-1006
10/08/24	Marion's Piazza	1320 N Fairfield Rd.	Beavercreek, OH 45432	(937) 429-3393
10/22/24	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
11/12/24	Beavercreek Pizza Dive	4021 Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669



Field Day 2024 Early Results

John Westerkamp, [W8LRJ](#)

Field Day 2024 was quite a bit different this year as excessive heat indices forced us indoors into the BARC Clubhouse. Rather than our normal Field Day Class of 4A, we were now 4D, a home licensed station site on commercial power. The set up was certainly a lot easier and the clubhouse was a familiar atmosphere so we were able to entertain more guests and keep cool and well fed. An additional EFHW 80-10m antenna was added to the rooftop for Field Day.



The good news is that BARC operators made a clean sweep of all 86 U.S. and Canadian RAC Sections! Although I have not computed the final results yet (including all the Bonus Points), I can tell you that we had the following contacts and points.

Total Contacts = 946

Total Points = 1,448

Total Contacts by Operator:

W8ASA 234

N8DRG 127

KI5VNB 113

W8LRJ 101

KE8NJY 99

KC8OPY 93

KE8KWI 66

N8KET 29

N8VMX 25

KE8WVJ 20

W8IFF 12

KE8YMA 10

K8SJM 6

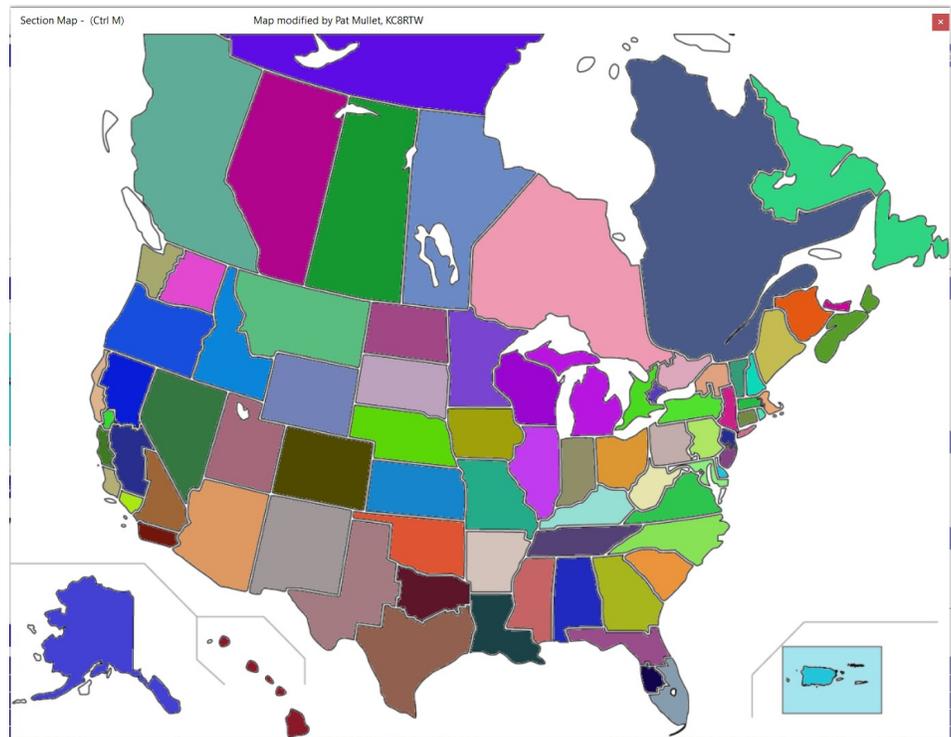
KE8ZPN 4

W8CSG 4

KG6NFJ 2

KD8NUB 1

Total = 17



KE8NJY is our young Milo who had just under 100 contacts! We also had 17 different operators during the day and maybe more if they did not enter their Operator information before working the radio. Great to see so many hams on the air!

73 de [W8LRJ](#)



Field Day 2024 Pictures



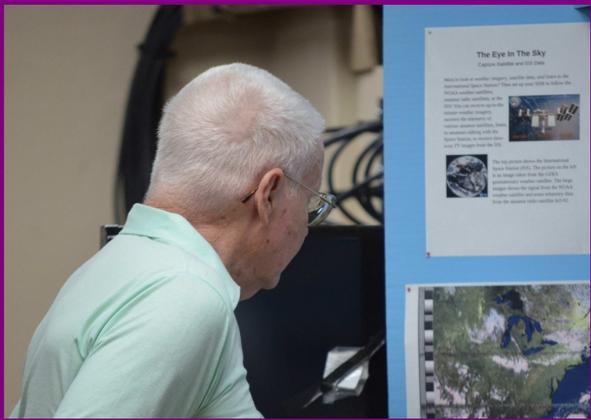
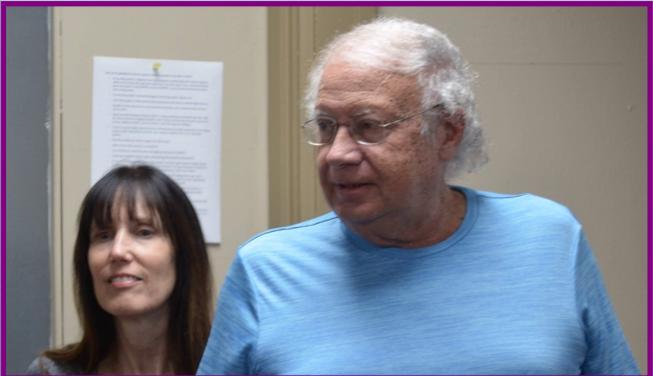
Field Day Pictures



Field Day Pictures



Field Day Pictures



Field Day Pictures



Prep for DMR Hotspot Tech Nights

Ray Hitt, [N8VMX](#)

In August I will be giving a 2-part Tech Night on DMR Hotspots on the 21st and 28th of August. The first night (Wed August 21 at 7pm), I will walk through setting up Pi-Star on your hotspots. On the second August Tech Night (Wed August 28th at 7pm), I will walk through setting up WPSD on your hotspots. These hotspots can either be the “Build-A-Hotspot” designs I presented in the April 2024 Full Quietening or can be pre-built hotspots. These Tech Nights won’t cover hotspots using anything other than Raspberry Pis because I’m not familiar with those hotspot types (yet). If there’s interest, they could be covered by someone in a future Tech Night.



Over the past few months, I have written many articles on DMR, starting from scratch and ending up with you being able to program your own radio and hotspot. I’m providing links to all this background information as a recommended prerequisite for you to go over ahead of time. I’d prefer to spend the time at Tech Night tweaking setups that you have already tried, and not spend as much time going over what DMR is, what a hotspot is, and all the preliminary information that you already have available to you. If you read these articles, order the parts or buy a pre-built hotspot, and then try to program your radio, you may find you can do most of this on your own. I can then try to fill in the gaps if you run into problems.

Below are the three sizes of hotspots I delve into in my “Build-A-Hotspot” article from April 2024’s Full Quietening.



**Mini-Sized Simplex
Raspberry Pi Zero 2W**



**Mid-Sized Simplex
Raspberry Pi 3A**



**Top of the Line Duplex
Raspberry Pi 3B**

The next page has a quick reference on where my prior DMR articles are located and what they’re about. Each hyperlink will take you to the specific Full Quietening issue containing the article. You may want to print these all out and put them in a binder to keep as a reference:



DMR – Prep for DMR Hotspot Tech Nights (continued)

Introduction to DMR: [Full Quieting Sept 2023 pg 17-18](#) This article explains what DMR radio is, the digital waveform, some history.

DMR – Setting Up Your Radio: [Full Quieting Oct 2023 pg 16-20](#) In this article I explain how to use the Anytone AT-D878 and AT-D578 CPS (customer programming software) to set up radio channels from scratch. The concept of talk groups, channels, color codes, zones and other programmable parameters are explained. There's enough information in this article to build a new codeplug (an old Motorola DMR term describing the file containing radio programming information, generated by a computer program (CPS) that can be uploaded into the radio to enable those channels.) This information would also be helpful if you have another brand of DMR radio because of the similarities in the CPS used by each radio manufacturer.

DMR – Programming Your Radio: [Full Quieting Nov 2023 pg 15-18](#) This article builds on the previous one to take the codeplug created in the Oct 2023 issue and using the CPS software to upload the codeplug into your radio. There are links to get new Digital Contact Lists, and new Firmware updates for your radio (again focused on Anytone radios because that's what I'm familiar with, but the concepts port over to other radios too).

DMR – Setting Up A Pi-Star Hotspot: [Full Quieting Dec 2023 pg 14-17](#) This article explains what a hotspot is, how to get the free software to set it up. A Pi-Star hotspot uses a Raspberry Pi single-board computer, along with a MMDVM card, and the Pi-Star operating system/software. If you are building a hotspot using Pi-Star, you'll want to study this article.

DMR – Setting Up A WPSD Hotspot: [Full Quieting Jan 2024 pg 17-21](#) This article explains how to set up a WPSD hotspot, as an alternative to Pi-Star. Some of the previous Pi-Star article items apply to WPSD too, so you'll want to read both these articles to get the complete picture.

DMR – Change your Hotspot Frequency: [Full Quieting Apr 2023 pg 24-27](#) This article shows how to pick or change your hotspot frequency – both in Pi-Star and in the AnyTone AT-D578/878 radios through the CPS (customer programming software).

DMR – Picking a Frequency (or pair) for your DMR Hotspot: [Full Quieting Apr 2023 pg 28-29](#) This article is a table of suitable UHF frequencies for your hotspot in either simplex or duplex mode (Courtesy N8RMA at MichiganOne DMR Net).

Build-A-Hotspot (BAH): [Full Quieting Apr 2024 pg 12-19](#) This article describes how to construct a Raspberry-Pi based hotspot, running either Pi-Star or WPSD. There are three sizes of hotspots, a mini-sized simplex, a mid-sized simplex, and a full-sized duplex. There are links to Amazon where the parts can be ordered, and price quotes for each size. This article shows how to build up the hardware but refers to the earlier Pi-Star and WPSD articles for the software.

If you look over these articles, and hopefully the supply chain can get the components to you in time, you'll be all set to have a productive Tech Night in late August. But start now!

73, Ray [N8VMX](#)



Special Event Stations

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: Boy Scouts, Colonial Williamsburg, first steps on the moon, nuclear ship, bike riding, railroads, EAA Air Venture (as a side note, our own Joe Muchnij, flew the first supersonic flight in an open cockpit Piper Cub), and a 9 day bike ride. Such a deal, all for the price of yearly dues!

07/01/2024 | Trail to Eagle. Jul 1-Jul 5, 0100Z-0400Z, K2BSA/8, Metamora, MI. Garden City Amateur Radio Club (GCARC) Boy Scouts of America/Michigan Crossroads Council. 14.330 7.270 3.840. QSL. GCARC, P.O. Box 482, Garden City, MI 48136-0482. We will be teaching the Radio merit badge to interested scouters during the week. Part of their requirement is to have a QSO with an on air operator. We will monitor the frequencies as often as available. <https://scoutingevent.com/272-TTE2024>

07/04/2024 | Hams to Ham House (Mathia Ham House). Jul 4, 1600Z-2100Z, W0DBQ, Dubuque, IA. Great River Amateur Radio Club. 20 and 40 meters; 7.285 14.285. Certificate. GRARC, Colin Wheatley W9UPK, PO Box 1384, Dubuque, IA 52004. <https://www.w0dbq.org>

07/06/2024 | Colonial Williamsburg Special Event. Jul 6, 1400Z-2000Z, K4RC, Williamsburg, VA. Williamsburg Area Amateur Radio Club. 7.265 14.265. Certificate & QSL. QSL Manager, WAARC, PO Box 1470, Williamsburg, VA 23187. To celebrate the passage of the Declaration of Independence by the Continental Congress on July 4, 1776. FOR CERTIFICATE: The Historic Triangle Certificate is available for contacting the Jamestown, Williamsburg, and Yorktown Special Event Stations. You do not have to contact these stations in the same calendar year. For a Certificate send QSO info from the three stations to qslmgr@k4rc.net. <https://www.k4rc.net/events/special-event-stations>

07/12/2024 | Bladensburg World War 1 Peace Cross. Jul 12, 1800Z-2100Z, N3TAL, Lanham, MD. American Legion Post 275 Amateur Radio Team. 7.275 Mhz (+/-) LSB. QSL. American Legion Post 275 Amateur Radio Team, 8201 Martin Luther King Jr Hwy, Lanham, MD 20706. N3TAL275@gmail.com or www.qrz.com/db/n3tal

07/13/2024 | Commemorating US Independence Day (7/4/1776). Jul 13, 1600Z-2300Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 7.250 14.320 14.070 PSK31 DSTAR on Papa system repeaters. QSL. USS Midway Museum Ship CONEDTRA, 910 N Harbor Drive, San Diego, CA 92101. www.qrz.com/db/ni6iw



Special Event Stations (continued)

07/14/2024 | Celebrating St Croix Island Landing 1604. Jul 14-Jul 22, 1300Z-2100Z, W1S, Calais, ME. St Croix Valley Amateur Radio Club. 7.200 14.270 21.300 28.600. QSL. Roger Holst - W1S, 70 Cooper Road, Baileyville, ME 04694. QSL's will be available via LOTW stcroixvalleyamateurradioclub.com

07/19/2024 | W3A Commemoration of Live TV From the Moon that Allowed the World to See Mankind's First Steps on the Lunar Surface. Jul 19-Jul 21, 1300Z-2200Z, W3A, Hunt Valley, MD. Amateur Radio Club of the National Electronics Museum (ARCNEM). 14.269 14.069 7.269 7.069. Certificate & QSL. ARCNEM, 338 Clubhouse Road, Hunt Valley, MD 21031. Amateur Radio Club of the National Electronics Museum (ARCNEM) will operate W3A commemorating live TV from the moon that allowed the world to see mankind's first steps on the lunar surface. One of the remaining Westinghouse cameras is on display at the National Electronics Museum. Operation on 80M (3.869, 3.569) and digital modes possible during event. Frequencies +/- according to QRM. QSL and Certificate available via SASE; details at ww-2.us.

07/20/2024 | Nuclear Ship Savannah Launch Anniversary. Jul 20, 1300Z-2100Z, K3S, Baltimore, MD. Nuclear Ship Savannah ARC. 7.1 14.1 21.1 28.1. QSL. K3LU, 980 PATUXENT ROAD, Odenton, MD 21113. Single transmitter SSB and CW aboard N/S Savannah. Please check spotting networks for frequencies. Info on QRZ.com www.qrz.com/db/k3s

07/20/2024 | RAGBRAI 51. Jul 20-Jul 27, 0000Z-2359Z, WOR, Durham, NC. AF4ZE. 14.074 21.074. QSL. John Swartz AF4ZE, 6203 Chesden Drive, Durham, NC 27713. WOR Whiskey Zero RAGBRAI. Biking across Iowa for RAGBRAI 51. Will operate bike-mobile, QRP as time permits, likely in the evenings July 20-27, 2024. FT8, CW, SSB. QSL af4ze@arrl.net, LoTW, and QRZ.com. af4ze@arrl.net.

07/20/2024 | Railroad Rendezvous. Jul 20, 1300Z-2100Z, W4DOC, Kennesaw, GA. Atlanta Radio Club. 7.250 14.200. QSL. Atlanta Radio Club - Railroad, 227 Sandy Springs Place Suite D-306, Atlanta, GA 30328. Railroad Rendezvous offers the rare opportunity to step aboard the General locomotive, made famous during the Civil War's Great Locomotive Chase of 1862, and tour the cab of the historic steam locomotive, fee applicable. A variety of activities celebrating the railroad and other industrial enterprises will be taking place throughout the day. Send SASE for QSL card. www.atlantaradioclub.org/railroadrendezvous

07/22/2024 | EAA AirVenture 2024, World's Largest Airshow. Jul 22-Jul 28, 1300Z-2030Z, W9ZL, Appleton, WI. Fox Cities Amateur Radio Club. 14.270 7.250 50.150. Certificate. W9ZL Special Event Station, PO Box 2346, Appleton, WI 54912. www.fcarc.club

07/22/2024 | Orleans County NY 4H Fair. Jul 22-Jul 27, 0000Z-2359Z, W4H, Albion, NY. Orleans County Amateur Radio Club. 7.180 14.074. QSL. Orleans County Amateur Radio Club, 14064 W County House Road, Albion, NY 14411. ocarc.us

07/22/2024 | Tallahassee, Florida Bicentennial. Jul 22-Jul 29, 1400Z-0200Z, K4TLH, Tallahassee, FL. Tallahassee Amateur Radio Society. 14.260 7.260 28.380. Certificate. Ava, by email only, wa6poz@arrl.net. In March 1824, Tallahassee was established to become the Florida Territorial Capital later the state capital. Contact can be on any legal bands including the WAC bands. Modes can be SSB, CW, FT8, FM or RTTY. Repeater contacts are not valid. Request for certificates accepted by only email, sent to WA6POZ.NET. Emails must contain log information, i.e., date time (UTC) frequency and signal report, K4TLH.org



Special Event Stations (continued)

07/26/2024 | Jeux Olympiques de Paris 2024. Jul 26-Aug 9, 0000Z-2359Z, TM2024JOP, Lillers, FRANCE. Union des RadioClubs. 7.000 14.000. Certificate & QSL. Union des RadioClubs, 3 rue Saint Luge, Lillers 62190, FRANCE. All bands will be activated. <https://log-et-qsl.associations-radioamateurs.org/wp>.

07/27/2024 | 50th Anniversary of Discovery House. Jul 27, 1200Z-2200Z, NJ2KC, Hammonton, NJ. New Jersey Knights of Columbus Amateur Radio Club. 14.250 28.450; other HF frequencies possible. Certificate & QSL. Thomas M. Perrotti, N2JIE, 785 Vineland Avenue, Bridgeton, NJ 08302. (Discovery House <https://dmi-nj.org>). NJ2KC.org

07/27/2024 | 50th Annual Bix 7 Road Race. Jul 27, 1500Z-2000Z, W0BXR, Davenport, IA. Davenport Radio Amateur Club. 14.326. QSL. Davenport Radio Amateur Club, W0BXR, P.O. Box 1523, Davenport, IA 52809. <https://drac.club>

07/27/2024 | World Ranger Day. Jul 27-Jul 31, 0000Z-2359Z, W4R, Dallas, GA. Silver Comet Amateur Society. 14.074 (FT8) 14.240 (SSB) 7.074 (FT8) 7.240 (SSB). Certificate & QSL. David Walk - K4BBH, 46 Ashwood Court, Rockmart, GA 30153. www.qrz.com/db/w4r or www.silvercometars.com

07/28/2024 | Buffalo Soldiers - Commemorating the official formation date of July 28, 1866. Jul 28-Jul 29, 1400Z-0100Z, WW5HF, Marion, TX. The HiFivers Amateur Radio Club. 14.295 USB 14.074 USB 28.500 USB 28.074. QSL. WW5HF - HIFIVERS AMATEUR RADIO CLUB, 15480 BEXAR BOWLING RD, Marion, TX 78124. Self Addressed Stamped Envelope Required. <https://www.qrz.com/db/WW5HF>

07/29/2024 | 2024 National Order of the Arrow Conference (NOAC). Jul 29-Aug 2, 1900Z-2300Z, K2BSA/0, Boulder, CO. Boy Scouts of America. 7.200 14.290 18.140. QSL. Frederick Donkin, 6092 Contadora Dr, Salt Lake City, UT 84128. The station will be operating from the campus of CU Boulder primarily from 19:00 to 23:00 UTC daily. QSL via LoTW. ka7mmm@arrl.net



Answers to Amateur Radio Test Questions on pages [23-25](#)

Technician	General	Amateur Extra
TOA03 (B)	G8A03 (D)	E9B04 (B)
T1F10 (A) [97.205(g)]	G8C16 (D)	E6F09 (D)
T6C05 (D)	G2E12 (D)	E9H03 (D)
T1E04 (D) [97.103(b)]	G9D11 (D)	E9G02 (B)



Amateur License Test Questions

In honor of our Amateur Radio Training classes, here are some questions pulled from the Technician, General, and Extra question pools. Try to answer them and see how you did. **Answers are on [page 22](#).**

Technician

T0A03

In the United States, what circuit does black wire insulation indicate in a three-wire 120 V cable?

- A. Neutral
- B. Hot
- C. Equipment ground
- D. Black insulation is never used

T1F10

Who is accountable if a repeater inadvertently retransmits communications that violate the FCC rules?

- A. The control operator of the originating station
- B. The control operator of the repeater
- C. The owner of the repeater
- D. Both the originating station and the repeater owner

T6C05

What is component 4 in figure T-1?

- A. Resistor
- B. Transistor
- C. Ground symbol
- D. Battery

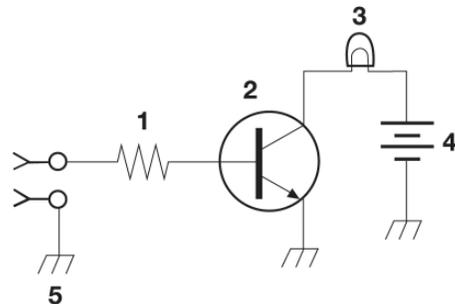


Figure T-1

T1E04

What determines the transmitting frequency privileges of an amateur station?

- A. The frequency authorized by the frequency coordinator
- B. The frequencies printed on the license grant
- C. The highest class of operator license held by anyone on the premises
- D. The class of operator license held by the control operator



Amateur License Test Questions (continued)

General

G8A03

What is the name of the process that changes the instantaneous frequency of an RF wave to convey information?

- A. Frequency convolution
- B. Frequency transformation
- C. Frequency conversion
- D. Frequency modulation

G8C16

Which of the following provide digital voice modes?

- A. WSPR, MFSK16, and EasyPAL
- B. FT8, FT4, and FST4
- C. Winlink, PACTOR II, and PACTOR III
- D. DMR, D-STAR, and SystemFusion

G2E12

Which of the following describes Winlink?

- A. An amateur radio wireless network to send and receive email on the internet
- B. A form of Packet Radio
- C. A wireless network capable of both VHF and HF band operation
- D. All of the above

G9D11

Which of the following is a disadvantage of multiband antennas?

- A. They present low impedance on all design frequencies
- B. They must be used with an antenna tuner
- C. They must be fed with open wire line
- D. They have poor harmonic rejection



Amateur License Test Questions (continued)

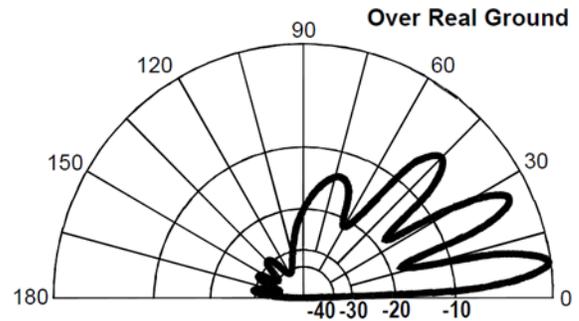
Amateur Extra

E9B04

What is the front-to-back ratio of the radiation pattern shown in Figure E9-2?

- A. 15 dB
- B. 28 dB
- C. 3 dB
- D. 38 dB

Figure E9-2



E6F09

What is the efficiency of a photovoltaic cell?

- A. The output RF power divided by the input DC power
- B. Cost per kilowatt-hour generated
- C. The open-circuit voltage divided by the short-circuit current under full illumination
- D. The relative fraction of light that is converted to current

E9H03

What is Receiving Directivity Factor (RDF)?

- A. Forward gain compared to the gain in the reverse direction
- B. Relative directivity compared to isotropic
- C. Relative directivity compared to a dipole
- D. Forward gain compared to average gain over the entire hemisphere

E9G02

What type of coordinate system is used in a Smith chart?

- A. Voltage circles and current arcs
- B. Resistance circles and reactance arcs
- C. Voltage lines and current chords
- D. Resistance lines and reactance chords

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.

