

Full Quieting

The Official Journal of The Bellbrook Amateur Radio Club



February 2025 — Issue 42

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From the Editor

Happy February, everyone! And Happy Valentine's Day to all of you!

Well, we got through a bitter cold January, hopefully we don't get the typical Ohio ice storms this month—they are really bad for our antennas!

Well, this is a short month, but this is not a short issue of *Full Quieting*—in fact it's a record size jam-packed newsletter this month. We cover a lot of ground; Jim describes a clever use of a Harbor Freight protective case, Larry shares with us a gem of a DMR talkgroup/Wires-X room to listen in on, Don shares one of the best bios I've ever read, I review an excellent Pi5 case, and Paul shares some excellent special event stations.

We also have some great Winter Field Day pictures, and Lunch Bunch photos as well.

On a sad note, we lost Janet W8ICQ. She was a regular Lunch Bunch participant and will be missed. I loved her dry sense of humor, but reading her obituary, there was a lot more to Janet that I never knew.

Things are starting to come together regarding our clubhouse, but too early to report in this newsletter. Stay tuned to the BARC Reflector for news. Feel free to send any questions, comments, or suggestions to me, editor@bellbrookarc.com or to our President, Geoff, president@bellbrookarc.com

If any of you are up to it, please send me an article on something you're interested in. For example, I haven't heard from the CW or FT-8 communities for awhile. And a good Bio is always welcome. Thanks as always!

73, Ray Hitt, N8VMX
Full Quieting Editor



2024 BARC Officers and Directors

President: Geoff Kline, [KI5VNB](#)

Vice President: Eric Bramini, [KC8OPY](#)

Secretary: Jim Gifford, [N8KET](#)

Treasurer: John Westerkamp, [W8LRJ](#)

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

Junior Director: Don Macon, [KE8WVJ](#)

2024 Coordinators

Clubhouse: Jim Lusk, [KC8EFD](#)

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

Contesting: Ken Gunton, [W8ASA](#)

Education: Paul Sharp, [WS8R](#)

Emergency Preparedness: Jim Lusk, [KC8EFD](#)

Field Day: Glenn Rodgers, [W8IO](#)

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

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

IT: John Westerkamp, [W8LRJ](#)

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

Net: Paul Sharp, [WS8R](#)

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

QSLs: Roger Hoffman, [WB9BXT](#)

Repeater: Russ Roysden, [N8NPT](#)

Tech Night: Bob French, [AC8ZU](#)

Webmaster: John Westerkamp, [W8LRJ](#)

BARC Net: Every Sunday, 8 PM Local

147.045 (+) (118.8 PL enc and dec) [Alt = 443.675]

Directions to BARC Clubhouse and Comm Center

Rooms 1 & 3 Lower Level 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?



President's Corner

With Valentine's Day right around the corner, thoughts turn to love. As I reflected on the season, I realized how much I love our club. Everyone has their own reasons for enjoying this hobby and for being a part of BARC, and it's truly inspiring to see how much passion and camaraderie our members bring to the table.

I was thrilled to see such a strong turnout at our January meeting. The buzz of conversations before and after the meeting reminded me of my first experience with BARC. It all began with an email to John Westerkamp, who promptly replied with information about the club and the next meeting. When I arrived that evening, I wasn't entirely sure which door to use, but Jim Totten must have spotted my confusion. He introduced himself and kindly guided me to the meeting room. Once inside, Glenn Rodgers immediately came over to introduce himself, and we had a warm and welcoming conversation. Tink also made a point to greet me and ensured I got to enjoy some of the food that night.

I can't remember everyone I spoke to that evening, but I'll never forget the sense of belonging I felt. People actively engaged with me right away, and that's something that sets BARC apart. In previous clubs I was part of in Texas, newcomers were often left to take the first step. At BARC, the openness and friendliness of our members create a welcoming environment for all.

That's why I love BARC. Everyone's willingness to share their time, experiences, and knowledge makes this club truly special. Let's continue to

build on that tradition. If you see someone new at a meeting, please take a moment to introduce yourself. And if you haven't spoken to someone before, strike up a conversation—you never know where it might lead. Personally, I've learned so much by asking questions and visiting members' QTHs. These interactions have not only been educational but incredibly rewarding.

I'm looking forward to seeing all of you at the February meeting. Don't forget about our upcoming Movie Night on February 27—it's always a fun time. If you're available, consider joining the Lunch Bunch as well. And remember, the weekly BARC net takes place every Sunday at 8:00 PM ET on 147.045+ (118.8 PL). It's a great way to stay connected and hear from fellow members.

Lastly, we're still looking for a volunteer to step up as our Field Day coordinator. Due to personal reasons, our current coordinator is unable to continue in this role. However, he's generously offered to help guide his successor through the transition and will remain available for support moving forward. If you're interested, please reach out to me at president@bellbrookarc.org or give me a call at 614-397-8967 (voicemail is best during the day).

Thank you for all you do to make this club such a wonderful community. Let's keep the spirit of BARC alive and thriving!

73, Geoff Kline, K15VNB



What's Up BARC?

What's Up BARC?

Ray Hitt, [N8VMX](#)

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



Welcome New Members!

Andrew Margraff, **KC8AZW**, Amateur Extra

James Rogers, **No Call**

Joe Fahrenholtz, **KC8RKL**, Amateur Extra

Benjamin Supinger, **KF8CTD**, General

Congratulations New Licensee and Upgrade!

Brent Kerlin, **W8PPP**, Technician

Chris Hanselman, **AD8OM**, Amateur Extra

A Little Help for the BARC Net

I love to check in to the BARC Net on Sunday nights, and usually check in from my mobile radio on the ground floor. It has lots of power and a base station antenna 35 feet up, so no problem. But, I am sometimes in the basement man-cave / grandkid-cave instead, and have problems with the signal dropping out when I set my handheld radio down in the basement. When I'm holding the radio, BARC comes in OK, but it fades when I set it down.

That got me remembering my antenna basics. The handheld radio's antenna is pretty small and is actually only half of the antenna. In your hand, the radio couples into your body which forms the ground plane, the second half of your antenna. When you set the radio down, like on a wood coffee table, the ground plane goes away and your signal drops.

For fun, I took the trash can lid off my 10 gallon metal EMI enclosure and set my handheld on it. To my delight, the signal perked back up, nearly the same as if I was holding the radio. Try this trick if you're having trouble checking in or monitoring the net.

By the way, you can also stick a mobile mag-mount on this lid, or a metal pizza pan, and connect that to your radio. You'd be surprised how well it does. —Ray N8VMX

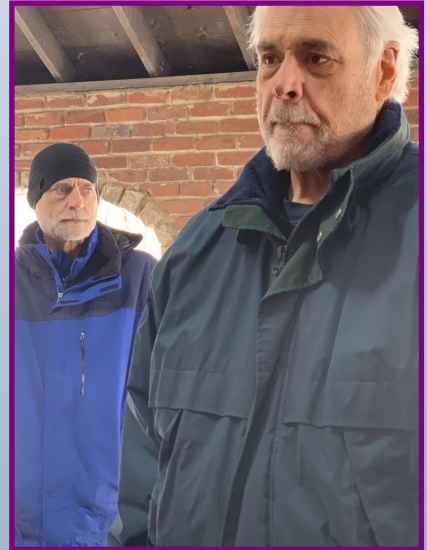


What's Up BARC? (continued)

BARC Takes Part in 2025 Winter Field Day

It was snowy, but the weather broke and we avoided temperatures in the low teens with a more hospitable sunny day and temperatures in the 30's. Winter Field Day is meant to challenge our ability to deploy in less than ideal weather conditions, put up antennas, and work the radio contacting other WFD participants. BARC operated as 4O OH (4 transmitters outdoors) and was on the air from Twin Oaks shelter at Hills and Dales MetroPark from 11 am until about 4 pm. We met all our goals except working for 6 hours continuously. We did get to enjoy lukewarm chili after the generator stopped working but it was all fun!

Special thanks to Jim Gifford, N8KET, and Glenn Rogers, WI8O, who organized the event, and to Bill Curtice, WA8APB, who copied the WFD Bulletin that was broadcast during the event. BARC ended up with over 75 contacts and 1100 points for our 5 hours of operation. Thanks to everybody who joined in as we had over 25 members stop by throughout the afternoon.



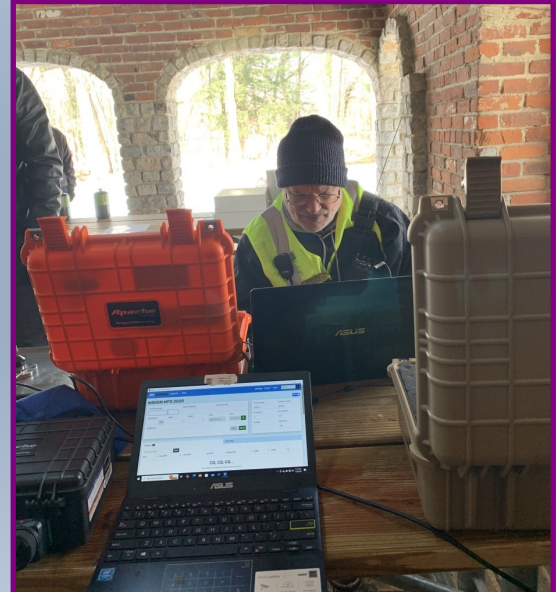
What's Up BARC? (continued)



What's Up BARC? (continued)



What's Up BARC? (continued)



What's Up BARC? (continued)

In Loving Memory of Janet Ann Graham (née Larger) {W8ICQ, sk} April 10, 1945 – December 27, 2024

It is with deep sorrow that the family of Janet A. Graham (née Larger) of Dayton announces her passing on Friday, December 27, 2024, at the age of 79.

Janet will be lovingly remembered by her two children, Karen (Tom) and Ross (Erin); her grandchildren, Zoë (Jon), Ryan, and Sarah; as well as numerous other family members and friends.

She was predeceased by her beloved husband, Richard; her parents, Joseph and Zelma; and her brothers, David and Michael.

Janet had a full and vibrant life marked by many passions and accomplishments. In her early twenties, she enjoyed participating in barrel racing and goat-tying with her two horses, Lucky Chance and Sam.

A proud and dedicated member of the Centerville High School community, she worked as a secretary in the Athletic Office for nearly 30 years. Her kindness, compassion, and dedication positively impacted countless students, teachers, and staff during her tenure.

Janet shared a special bond with her husband, Richard, as both were Amateur Radio operators. They enjoyed this hobby together, connecting with people around the world and sharing the joy of radio communication.

An avid crafter, Janet spent many years quilting, crocheting, and doing crewel embroidery, creating beautiful and meaningful pieces that she shared with those she loved. In more recent years, she became a craft beer enthusiast, a hobby she cherished and enjoyed sharing with both of her children.

A private Celebration of Life will take place in 2025 to honor Janet's memory.

In lieu of flowers, memorial donations may be made in Janet's name to the Montgomery County Animal Resource Center, 6790 Webster Street, Dayton, OH 45414. For more information, please contact the Montgomery County Animal Resource Center at animalshelter@mcohio.org



Officer, Director, and Coordinator Inputs

Treasurer: John Westerkamp, [W8LRJ](#): Dues continue to trickle in. We are over 75% renewal rate so far, but should be over 85% by now. If you have not renewed your membership, please do so before the end of February to remain a member in good standing. Thank you all for your support of BARC!

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

Repeater: John Westerkamp, [W8LRJ](#): We had one Allstar lock-up during the month that affected Echo-Link and Allstar. I was able to reboot the Allstar node remotely and restore service quickly. If you notice any issues with the repeater system, be sure to send me a text or an email.

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](#): Check the website and the newsletter for photos and results from a successful Winter Field Day! There is now a status messages under the Repeaters page on the website. If something is not working, send a message via the Contact page.

And don't forget about the Member Forum where you can ask questions and make announcements. The website has a new section *Mentors and Experts*! You can find a list of experts by selecting *Mentors and Experts* under the *Membership* tab. Send your questions via the *Contact* page for our Experts!

Communication Center: John Westerkamp, [W8LRJ](#): A Winkeyer has been added to Station #3 for CW operation. This will help keep manual keying consistent and add an automated keying capability to Station #3.

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](#): I took notes at the planning meeting and minutes at the general meeting. I helped with, and attended, our Winter Field Day at Hills and Dales Park. We received several QSL cards and requests for W8DGN QSL cards after our Special Event (W8W), even though we stated that all requests would be handled via email. I completed and mailed out several cards and certificates. In all, BARC received many positive comments online and via mail about the W8W event.

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 January 2025 there were approximately 85 check-ins lasting 184 exciting and informative minutes. Topics ranges from Open Mike, Parks on the Air, an exciting contact, Winter Field Day, and what would get if you had a 10 minute shopping spree at R&L? We often have non BARC members checking in to enjoy the Net. Connie Gifford is our newest BARC Net Control replacing Joe Menchaca who resigned his position as of Dec 2024.

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



BARC February 2025 Event Calendar

Sun February 2, 2025

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

Tue February 4, 2025

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

Wed February 5, 2025

6:30pm DMR Troubleshooting Session Where: BARC Clubhouse

Thu February 6, 2025

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

Sun February 9, 2025

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

Tue February 11, 2025

11:15am Lunch Bunch..... Where: First Watch

Sun February 16, 2025

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

Thu February 20, 2025

7pm Membership Meeting Where: BARC Clubhouse

Sun February 23, 2025

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

Tue February 25, 2025

11:15am Lunch BunchWhere: Submarine House

Wed February 26, 2025

7pm Tech Night Where: BARC Clubhouse

Thu February 27, 2025

7pm Dessert and Movie NightWhere: BARC Clubhouse



BARC Movie and Dessert Night



We had a *Hopping* good start to the **2025 Season** of **The BARC Movie & Dessert Nights** with the movie **Harvey** (Jimmy Stewart) and we enjoyed carrot cake and carrots. I also heard the remaining carrots were turned into a delicious carrot soup!

When choosing movies we try to include comedies, Sci-Fi, Rom Coms, old movies and newer releases, etc... Recommendations are always welcomed!

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

Date	Movie	Genre	Actors
February 27, 2025	Edge of Tomorrow (2014)	Sci-Fi/Action	Tom Cruise
March 27, 2025	Paul, Apostle of Christ	Drama	Jim Caviezel
April 24, 2025	TBD		
May 22, 2025	Twisters (2024)	Action	Glen Powell
June 26, 2025	Fly Me to the Moon (2024)	Rom/Com	Scarlett Johansson
July 24, 2025	TBD		
August 28, 2025	TBD		
September 25, 2025	TBD		
October 23, 2025	TBD		



Past movies and Desserts:

January 23, 2025 **Harvey (1950)** **Carrot Cake & Carrots**

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

We'll see you in February at the Movies!

Tink

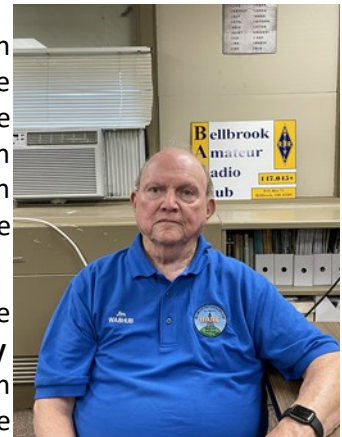
KD8NUA



Lunch Bunch

Jim Totten, [WA8HUB](#)

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



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

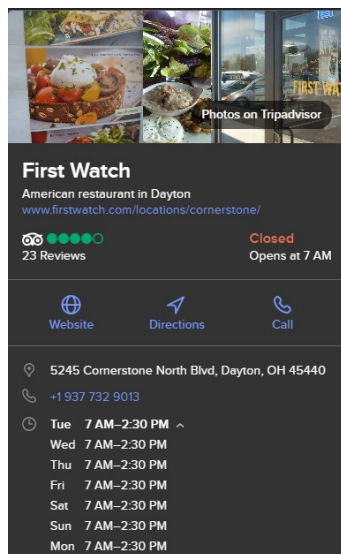
In January we were back to the standard two lunches per month. The two restaurants were also great favorites. On January 14 we ate at Another Broken Egg Cafe. The food was again outstanding. We had **9** of our friends attend. Then on January 28, we had a beautiful lunch at another favorite, the China Garden Buffet. The lunch was enjoyed by **12** friends plus **1** baby. See the pictures on the next page.

How are we going to top that in February!! Well: we have two more top flight restaurants coming up. The first will be on February 11, at **First Watch** in the Cornerstone Complex on Wilmington Pike. The next lunch will be on February 25, 2025 at our favorite **Submarine House**, 3195 Dayton-Xenia Rd. The parking lot is bounded on one end by Marion's Piazza and the other direction by a large Kroger. This particular Submarine House is the best of all!

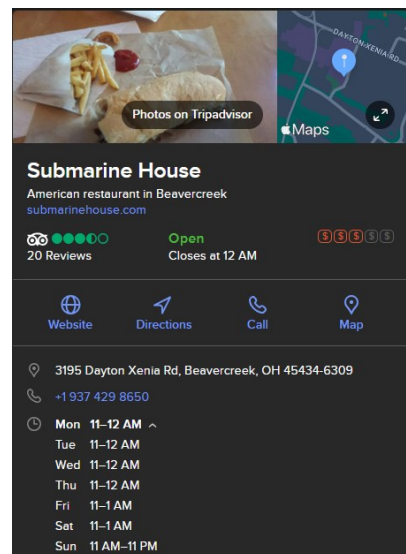
That's a wrap for this month. Happy eating.

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

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



[Tuesday, Jan 25th, 11:15am](#)



Click hyperlinks for more info and maps



Lunch Bunch (continued)

Great Lunch Bunch

There was a super turnout at the Lunch Bunch held on January 28th at China Garden Buffet. Who can resist a good Chinese Buffet, right? Thanks, Jim, WA8HUB, for setting this up. Now, here are some pictures!



Lunch Bunch 2024 List

Jim Totten, [WA8HUB](#)

Date	Restaurant	Address	City	Phone Number
12/10/24	Cherry House Cafe 7:00 am to 2:00 pm	1241 Meadow Bridge Dr	Beavercreek, OH 45434	(937) 320-6200
01/14/25	Another Broken Egg Cafe 7:00 am to 2:00 pm	2453 Esquire Dr.	Beavercreek, OH 45431	(937) 912-5074
01/28/25	China Garden Buffet	112 Woodman Dr. Airway Shopping Center	Dayton, OH 45431	(937) 781-9999
02/11/25	First Watch 7:00 am to 2:30 pm	5245 Cornerstone North Blvd	Sugarcreek Twp, OH 45440	(937) 732-9013
02/25/25	Submarine House	3195 Dayton-Xenia Rd.	Beavercreek, OH 45434	(937) 429-8650
03/11/25	Roosters Wings	2430 N. Fairfield <i>The Shoppes at FC</i>	Beavercreek, OH 45431	(937) 702-9500
03/25/25	Golden Corral Buffet and Grill	2490 Commons Blvd.	Beavercreek, OH 45431	(937) 613-5478
04/08/25	Yaffa Grill Mediterranean Food	2844 Colonel Glenn Hwy	Fairborn, OH 45324	(937) 429-4959
04/22/25	Chic-Fil-A	5301 Cornerstone N Blvd	Sugarcreek Township, OH 45440	(937) 439-1700
05/13/25	Culp's Cafeteria	1000 Carillon Blvd	Dayton, OH 45409	(937) 293-2841
05/27/25	City Barbecue	2001 E. Dorothy Lane	Kettering, OH 45420	(937) 200-1006
06/10/25	Marion's Piazza	1320 N Fairfield Rd.	Beavercreek, OH 45432	(937) 429-3393
07/08/25	Red Robin	2671 Fairfield Commons Blvd.	Beavercreek, OH 45431	(937) 320-9800
07/22/25	Beavercreek Pizza Dive	4021 Dayton-Xenia Rd.	Beavercreek, OH 45432	(937) 431-8669



BARC Members: Get your tickets to 2025 Hamvention before prices go up March 1st. Look for details on the BARC Booth in March and sign up to help out if you are able to. More details to follow. Save your money, and prepare to have fun!!!

The section below is grabbed from the [Dayton Hamvention Web Site](#) and their public [Facebook page](#).



Get your tickets for the show!

Tickets are available online or at our ticket sales locations only.

We do not accept checks or mail in orders.

So click below the link to purchase your 2025 Hamvention tickets.

[Buy Tickets Online](#)

Early Bird Discount \$26 thru Feb 28

\$30 March 1 and later

A ticket includes:

- Admission to the show for Friday, Saturday and Sunday
 - All forums and special speakers in the show
 - Prize Drawing

Once tickets are mailed, they are non-refundable.



Radio Independence means a great deal to us. In the age of POTA, SOTA, YouTube, and International Communications, radio is moving beyond its past limitations. In the course of history radio has been heavily regulated and, in some instances, banned altogether. We are fortunate to enjoy these freedoms and for us at Hamvention, we are proud of our Radio Independence. What does Radio Independence mean to you?



Another Utility Box Use

Jim Gifford [N8KET](#)

You may recall that last month I wrote about using a small Apache utility box for the head unit of my Yaesu FT891. Now let's examine a second Apache box use involving my TYT TH-8600 dual band radio. I have no room to mount a radio in my Honda Fit. In our Jeep, there may be room, but I will not be drilling any mounting holes anytime soon. So, what to do?

I used the small Apache box I purchased at Harbor Freight and mounted the radio inside so that the box will close and protect it, but I can also easily see and use the front panel and screen. The mounting bracket was attached to the bottom by drilling small holes for the short screws. I drilled three holes in the side using a Forstner bit to allow the power cable, coax, and mic cable access. As you can see in the photo, I installed the mic hanger clip on top. I connected a short coax to the back and used an adaptor (male on each end) when I attach the female ends of the radio coax to the antenna coax. Anderson power cable connectors were used for power connection.

Now I can carry my radio in either vehicle (or even a rental car) when needed.

73, Jim [N8KET](#)



Top View with Access Holes



Mic Hanger

America's Kansas City Wide Digital Network

Larry Baker [KBDEMD](#)

Don't miss John Westerkamp's talk on Yaesu YSF C4FM, WIRES-X and more at the February 20th BARC membership meeting. If like me you can't drive there, it will be on Zoom.

In the meantime here is one of the busiest rooms I've visited. Not only is it busy worldwide, they have 34 different nets.

A pdf [list of the nets](#) can be downloaded from their web site or viewed on Facebook [Kansas City Wide WIRES X](#).

I have checked in to a couple nets so far, "fishsticks" a net about fishing, and "hotspot raspberry-pi" net the pdf will list the time and days the nets are on. So those of you who have tried Yaesu WIRES-X and found it lacking, give this room a listen.

I think you will enjoy listening.

73, Larry [KB8EMD](#)



<https://www.kansascityroom-wide.com/>

Room Number 32453

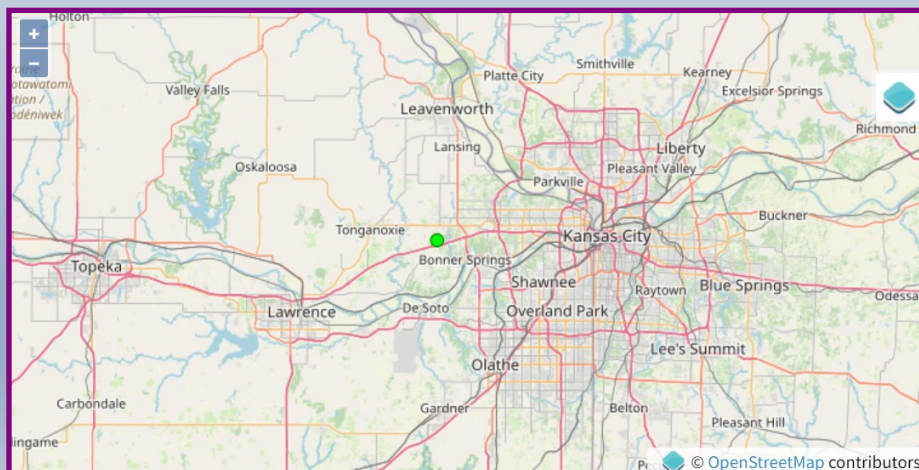
Wires-X users— connect via Room 28054 (AMERICA-KC-WIDE)

Yaesu System Fusion users—connect via YSF32453 (US-KCWIDE) or YSF28054 (XLX458)

DSTAR users—connect via XLX458/XRF458 Module A

DMR users— connect via [Brandmeister talk group 313136](#) which is the KCOKW repeater located in Basehor, KS on the west side of Kansas City.

And other modes as well, check their home page — Editor



Tin Cans/String to Extra Class

Don Parker, [KB8PSL](#)

My career covered a variety of positions and assignments being involved in a medical career, police, fire, Emergency Medical Service (EMS), teaching, music, and photography. My favorite TV shows were Squad 51 and Adam 12.

Growing up I've been involved with communications and technology throughout my career. My brother Jack, W8ISH and I played with tin cans with strings moving on to walkie talkies, CB radios, and finally, ham radio. I grew up near a Kettering fire house and when the siren would activate to alert the volunteers of a call, I'd race my two volunteer fire fighter neighbors to the fire house on my bicycle. Back in the 1950's radio communications were only from fire apparatus, no pagers.

In high school my group of friends got into CB radios, it was a competition to see who could get the best CB radio and see how far we could be apart and talk. I had a Johnson 5 channel tube radio with an orange 102" whip antenna. Looked dumb on my Chevy Nova. My friends and I would help each other install the CB radios in our cars.

Having an interest in public safety and communications I joined React, we worked with the Dayton Police Department and patrolled evenings in the neighborhoods. We'd report accidents and other activity.

In 1969 I became a police cadet with Miami Township Police Department riding road patrol and on weekends dispatched police and fire units. Back in those days officers didn't have portable radios, once we arrived at a residence and left the car officers called the dispatcher to check in during the call.

My oldest brother Tom was sent to Vietnam. Tom had a shortwave radio I confiscated to monitor activity. This piqued my interest in radio even more. In 1993 I obtained my Novice license that was later upgraded to Technician class by the FCC. Over the years I obtained my Extra Class license.

In high school we were required to take shop classes of electronics, wood working, and drafting. My senior year in high school I co-op'ed with a TV repair service. My boss taught me how to check TVs for bad tubes and other reasons the TV wouldn't work. I ran service calls and did repairs in the shop. I learned a valuable lesson one day when replacing a TV picture tube — make sure the grounding wire stays connected to the TV chassis while discharging the TV tube. I covered several feet backwards in 0.1 second as I took the discharge.

For my first job out of high school I attended training at Miami Valley Hospital to be a Certified Operating Room Surgical Technician. I assisted doctors in the operating room passing instruments to them from my setup table for a variety of surgeries. I was assigned to the open-heart team and given a pager like the doctors carried being on call 24/7 hours. I was king cool to my buddies. The operating room I was assigned to overlooked the old emergency room entrance and I would sneak a peek of medics and police cars drive into the parking lot. I decided I wasn't an indoor person and pursued a police or fire career.



Tin Cans/String to Extra Class (continued)

I took the OPOTA (Ohio Peace Officers Training Academy) Private Security course offered at Box 21 Rescue headquarters. A friend who was an officer at Randolph Twp. Police Department (now Clayton) had me apply and I was hired having my Private Security certification. I attended the Montgomery County Sheriff's Office academy later that year to obtain the basic police officer certification.

One of the Randolph Township trustees would occasionally ride with me and got a thrill as we raced to medic calls. The township fire department was a volunteer department and we'd have to wait for a period of time on the medic to arrive. All officers had basic first aid training but we needed more. The trustee agreed with me and I arranged for all officers to receive EMT (Emergency Medical Technician) training. We were the only police department in the area to have all officers certified as EMTs and medical kits in cruisers.

In 1974 the first Para-Medic program was begun through Good Samaritan Hospital. I applied and graduated in 1975. I also obtained my American Red Cross First Aid and CPR instructor certification.

In 1975 I joined the Dayton Police Department and was required to attend the police academy. When First Aid and CPR class assignment was scheduled I spoke with the academy commander Lt. Jim Newby to skip the class. He denied my request and assigned me to teach the course to my fellow recruits. Being my first class to teach and being a fellow recruit, I was a little nervous.

After academy graduation I was assigned to road patrol. All officers had portable radios, this was not common with most police agencies. Having prior dispatch experience, I would sit on the dispatch position with 10 – 20 cars on the road. Some nights were wild and crazy.

I was assigned to road patrol and later to a temporary detective assignment to the Robbery/Homicide squad working with an experienced detective following up on homicides and robberies.

An opening for a CSI investigator (Crime Scene Investigator) with the Miami Valley Regional Crime Lab was posted for Dayton officers. I applied and was selected. My hobby of photography was an added plus for this position. As a CSI we collected or documented a variety of evidence on all crime scenes; photos, clothing, sexual assault kits, diagrams of the crime scenes, all types of weapons, and drugs. My high school drafting class allowed me to provide crime scene scale drawings, something the detectives and prosecutors never had.

I was appointed training officer for officers going through the crime lab certification course. I trained officers from area police agencies and each had the opportunity to investigate a homicide scene. My evidence collection solved several major homicide investigations. The homicide squad requested me to be available to process homicide crime scenes for them. My photography experience on crime scenes was noticed by now Major Jim Newby who requested I be the photographer for police departments special events and presentations.

In 1976 Major Jim Newby asked me to teach in the basic police officer training academy at Sinclair Community College beginning with First Aid. Over the 40 years I taught at Sinclair I taught 16 courses of special topics each quarter. Some of my classes were evidence collection/processing, fire safety, interview techniques, surveillance techniques, and ICS courses (Incident Command System). The



Tin Cans/String to Extra Class (continued)

state of Ohio Peace Officer Training Academy (OPOTA) certifies instructors. I have many certifications and taught courses at OPOTA, Sinclair Community College, U.D., Wright State, Clark Technical College, Private Security companies, and the Miami Valley Career Technology Center. At OPOTA I was certified as a Subject Matter Expert and was on the committee to review and update the training standards for police officers every three years. I'm listed in police instructors training manuals dating back before 2010.

In 1982 the City of Dayton began enforcing their city residency rule policy requiring all city employees must live in the city. The Supreme Court ruling made the residency rule retroactive to 1970, this ruling made several of us officers in violation. This rule wasn't being enforced for years and I had moved to Kettering. I decided I wasn't moving back to Dayton due to several reasons and resigned.

The week I resigned from the Dayton Police Department the chief deputy of Montgomery County Coroners Office contacted me offering a part time position as a deputy coroner investigator. I worked many crime scenes in my eight years before resigning due to work scheduling.

In 1975 I joined Box 21 Rescue Squad. The apparatus had radios but only a couple of portable radios. Each member was issued a VHF car radio to notify the sheriff dispatcher we were responding to Box 21 headquarters. Having experience installing CB radios in cars I assisted the new members with their radio and siren installations. Being a lieutenant, the club officers decided we would purchase our own portable radios for better on scene communications. Our home alert radio was a Plectron radio, too big to lug around, so several of us purchased Motorola pagers. In 1978, Box 21 command officers were ahead of many agencies in communications having our own portable radios and pagers. Each box 21 member had to be a sworn deputy and donate a set of hours each month for road patrol. Being a Dayton Police officer I was unable to work in a deputy uniform due to conflict of police certifications. I did my monthly volunteer time in the sheriff's dispatch with Gary Haines who later became sheriff.

Box 21 Rescue was a testing ground for the new county Para-Medic program. Several Box 21 members graduated from the first Para-Medic program and would be the first EMS group to have the "orange radio box" as see on Squad 51 show. Having some ham radio experience, I was assigned to train the other members on the use of this radio to communicate to the hospital. Box 21 rescue was a backup for medic calls for Dayton Fire Department, the orange box radio was utilized on many calls. Box 21 Rescue was the transport unit for Dayton Children's Hospital to transport premature babies from hospitals all over the greater Miami Valley area. In 1978, Box 21 transported 656 babies for Children's Hospital.

Box 21 Rescue was the premier rescue unit with two heavy rescue units, Para-Medic unit, and water rescue team. We had the only Jaws of Life (Hurst Rescue Tool) for extrication of victims in auto accidents. Several of us members were certified by the Hurst Rescue Company as extrication specialist. The Box 21 water rescue team were certified in scuba diving and we were requested for a variety of calls for drownings, evidence recovery, and boating rescues in the greater Miami Valley area. For several years my dive buddy and I set the floats at Eastwood Park for the Hydroglobe outboard boat races. Box 21 water team travels around the country providing water rescue for outboard boat races.



Tin Cans/String to Extra Class (continued)

Box 21 was active on SWAT call outs providing lighting and tools for the team. Deputy Pete Snyder and I developed response procedures and training for members.

In the '70's, Box 21 sponsored rodeos and Grand Ole Opry events for fund raising. Being a Dayton Police officer, I was assigned to be the protection officer for the stars. Some of the stars I worked with were Billy "Crash" Craddock, Penny DeHaven, Freddie Weller, Old Joe Clark, Herbie Smith, Guy Shannon, Leona Williams, and Doug Jones to name a few. You have to be a senior citizen to recognize these Grand Ole Opry stars.

My brother Jack being a radio and technology enthusiast got me into GPS as soon as it was released to the general public. I used my GPS for family trips and father daughter bonding. I got my daughters interested in Geocaching; we would use the GPS to locate trinkets left by others all over the south suburbs. My daughters took to using the GPS and would plot out their own locations and find trinkets of theirs to leave for the next person.

Around 1993 Bob Bruniga WB4APR released APRS, a new form of radio communications and tracking of vehicles on a DOS 3.2 map. My brother and I would send APRS messages from our homes in Kettering and Indianapolis using our Kenwood D-7 HT's. The messages would take 10-12 minutes for a reply. Thankfully, technology has improved.

One of the fun events my brother got me into was fox hunting. We'd load up my car with a laptop computer, GPS, HTs, and an array of antennas on the roof. The group releasing the balloon used Win-trex for the tracking. Our first event stayed in Indiana with the balloon being tracked high in a tree. Our next event we tracked the balloon from Indianapolis into Ohio landing in Findlay. Twice we were able to observe the balloon flying above us before landing.

Sometime around 2002, the Echo link program was released. My brother and I began using this to communicate since APRS messages were so time consuming. We met a Japanese ham named Yoshi who lived in Toyama Japan. Yoshi was a fascinating person who provided lots of information on Japan.

In July 2001, my brother and I traveled to Alaska, and my brother brought a handheld antenna. We worked the satellite hams on our Kenwood D-7 radios. Most of our contacts were military personnel stationed in Alaska. This was another new experience with my brother.



Tin Cans/String to Extra Class (continued)

In 1983 I was hired by Dayton Children's Hospital as a security supervisor and to assist with training on their new baby transport unit. Having experience with many premature baby transports with Box 21 Rescue I was able to provide recommendations on equipment set up in the back of the transport unit and placement for radio and cell phone for easy access.

The security department operated under hospital procedures that didn't list security responsibilities. I developed procedures and policies for the security department. The transport unit drivers were security officers who were certified EMT's. I was very busy my first year training nurses, respiratory therapists, and security officers how to function in a medic unit— the medic unit environment is much different than the hospital environment. I had to train the security officers driving the transport units, laws of Ohio driving emergency vehicles, judging back up distances for parking at area emergency room entrances.

In 1981 I left Box 21 Rescue Squad joining the Kettering Fire Department as a volunteer fire fighter, Para-Medic, and EMT fulfilling my child hood dream of being a Kettering fire fighter. I was a lieutenant at the Town and Country fire station. We were a very busy station averaging 700 calls per year. Some of my responsibilities were keeping the medic unit stocked, engine operator, driving instructor for new members on the engine and medic. I conducted in-service fire training for the fire department for various subjects. When the carry conceal law changed for Ohio, I trained the department on the law and how to secure a variety of hand guns. Having radio installation experience, I helped the new members install their emergency equipment in their cars.

I was on the water rescue team as a scuba diver and ice rescue. Our winter training was at the Kettering Rec Center cutting a hole in the ice then jumping in wearing specialized suits. We used an extension ladder platform as our base. In the photo I'm sitting on the platform providing instructions, I was next to jump in.



In 2001 I was promoted to Battalion Commander and assigned to fire headquarters with a command officer vehicle. I

and three other volunteer station captains covered the city over night and weekends when the chief and assistant chief were off duty. For unknown reasons I would have the working fires, fatal fires, and auto accidents with trapped victims. My Box 21 and Deputy Coroner experience was beneficial covering these incidents.



Tin Cans/String to Extra Class (continued)

When the blizzard of '78 hit Dayton, I was working Robbery/Homicide, I drove into work only to be told go home. I had my portable radio I used for Box 21 Rescue and monitoring the sheriff's channel when I heard deputy John Simmons also a Box 21 member on the radio. He told me the sheriff's office had put out a call to the public for anyone with a four-wheel drive vehicle to respond to the sheriff's office for assignments to pick up doctors and nurses from homes and transport to area hospitals. John had a four-wheel-drive pickup truck so I had him pick me up at home. We began picking up hospital personnel in Centerville/Washington Twp. area and pulled a couple vehicles stuck in snow.

John was contacted by the sheriff's office asking for Para-Medics to respond to the Philipsburg Fire Department to set up a first aid station. John and I both being Para-Medics picked up John's wife an Emergency Room nurse then went to Box 21 Rescue to grab our gear. The drive up to Philipsburg was a major challenge with the blowing snow, we'd follow a snowplow then lose sight of the truck, then wait for another plow truck to come by and follow. When we spotted a car off the highway we'd stop and check for occupants, fortunately none were occupied. Once we made it to the fire house, I set up my medical gear in the back of a medic unit and began treating patients for burns and cold exposure. We had snow mobiles bringing in injured victims with the operators telling us they drove up onto the roofs of farm houses removing people through windows due to the house being snowed in. Fortunately, no one needed transport to a hospital.

In late 1984 I decided to return to a police career joining Centerville Police Department. Many opportunities opened up for me. As an officer at Centerville Police Department, I covered many positions being an in-service instructor, field training officer, city special events photographer, and First Aid CPR instructor. I was certified to teach Red Cross First Aid CPR, American Heart CPR, American Health and Safety First Aid CPR, and First Responder Instructor. Each year I certified all Centerville officers, city employees, and volunteers in First Aid and CPR. One year, I certified officers as First Responders from all the south suburban departments.

I worked road patrol and evidence technician until being promoted to detective in 1991. Centerville Police Department was located in the lower level of the city building that we were outgrowing. A new police facility was being designed. My assignment was to design the property room and recommendations for dispatch center. I had a dual band ham radio antenna installed on the antenna tower with the antenna connection, 4 power outlet, and phone jack installed on the outside wall of dispatch center.

When you're a detective you type lots of reports. I set up my Packard Bell laptop and my NEC dot matrix printer to type and print my reports. The only other computer in the police department was in dispatch for running criminal record checks. I was appointed the computer guru and worked with a computer company to computerize the police department. The company technicians taught me a lot about computers, servers, and networking. I was sent to several Microsoft schools being certified on Microsoft servers and SQL server.

In 1991 computers were just beginning to become popular and officers and staff had no experience. I had to train everyone on how to use computers and not jam up printers hitting print button 20 times. I began with having everyone play Solitaire using a mouse then branched out with additional training.



Tin Cans/String to Extra Class (continued)

The computer company trained the dispatchers and I on their CAD program, this was never ending training and updates.

The 2000 Y2K event proved ham radio communications was a logical back up to VHF communications. I had the Centerville Area Amateur Radio Club (CAARC) members riding with officers and placed at the Washington Twp. Fire houses. The part time computer technician and I sat staring at the clock watching each minute tick by hoping I had downloaded all the critical updates to the server. No issues.

Around 1998 a new computer challenge was thrown at me by the chief, he wanted computers in each police vehicle to allow officers to run background checks, write reports on computer, and traffic citations. The south suburban police agencies of Centerville, Kettering, Oakwood, West Carrollton, Moraine, Miamisburg, Germantown, and Springboro all worked together on training, purchases, and technology. Centerville and Kettering Police Department worked closely on technology and investigations. The Kettering Police IT Andy Hittle and I worked together developing this project. I worked with P&R Communications on the design of installing laptop computers in the patrol vehicles. Most all south suburban agencies had the same style police vehicles. A major challenge was the type of modem to use for internet connection. Andy and I spent many hours driving around our cities with hills and valleys testing credit card type modems provided by the cellular companies. We found poor reception and many disconnects from these modem cards. A more powerful modem installed in the trunks was found to work best for all agencies with similar terrain.

In early 2000 Motorola sent me a letter stating they were ending support for our current VHF radio system and radios. I was appointed to work with Motorola and P&R Communications to upgrade our system to the 800MHz trunked-radio system. This project went well until officers were out of their cars on portable and couldn't reach the receive sites from the valleys of the city. I worked with P&R technician Bill Seaman KD8FOG, and we spent several days driving around the city doing signal analysis. The end result was placing an antenna on top of the water tower along I-675.

The primary repeater site was on top of the Bethany Lutheran Village tower building while the secondary receive site was behind the city building. The phone lines were antiquated running from the city building site to the Bethany site and would short out during heavy rain storms. Again, I worked with a P&R Communications technician Chip Haverstick W8VF and a microwave system was determined to work best. Chip taught me a lot about the microwave technology. A microwave antenna was installed on top of Bethany Lutheran Village tower building and the antenna tower at the police department. The antenna on the water tower was also replaced with a microwave antenna.

Unfortunately, auto accidents are too numerous with many being serious or fatal. The local police departments had to rely on OSP (Ohio State Patrol) to provide a Technical Accident Investigator (TAI) to investigate the crash scene and determine cause, photograph scene, and collecting skid mark data. The response time kept roads closed for extended time while waiting on an investigator to arrive. I was sent to the OSP academy to become a TIA and later returned to receive ATI (Advanced Technical Investigator) certification. These two certifications gave me the skills to reconstruct crash scenes.



Tin Cans/String to Extra Class (continued)

The south suburban police agencies provided detectives to work assignments through the T.C.S.U. (Tactical Crime Suppression Unit) when additional man power was needed for investigations. I would assist with photography, video, and evidence collection when I wasn't the lead investigator. I was trained in the processing of computer confiscations and the internal file investigations for the T.C.S.U. agencies.

I was president of the Montgomery County Law Enforcement Intelligence Committee and chaired monthly meetings for area detectives and police chiefs with Montgomery County Prosecutor Matt Heck. Major investigations were discussed in these meetings.

As a Centerville detective there were two memorable events. One was when the president of Uganda came to Centerville to have dinner with the minister of the Far Hills Church. I planned out the security details for the minister's dinner with Wright Patterson Air Force Base (WPAFB) security who provided specially trained dogs to search the house before the president and security detail arrived. The second memorable event was in November 1995, when I attended the Balkans Peace Accords held at WPAFB. It was an amazing event sitting in a room of dignitaries from Washington D.C., the presidents from Croatia, Bosnia, and Serbia and high-ranking military personnel. My assignment was to gather intelligence from area police agencies and was provided a portable radio with scrambled frequencies and special phone numbers to provide daily updates.

After eight years in the detective section, I was moved to accreditation officer position and accomplished getting the police department nationally accredited. Each year since the Centerville Police Department has met the standards for National Accreditation.

The Drug Abuse Resistance Education (D.A.R.E.) program was a very active program in schools. The Montgomery County Chiefs of Police sponsored Knight Blaze, a band of officers from various police and fire departments. Dayton Police had Copperz band that played in the Dayton school systems. Knight Blaze played the county area school systems providing a choreographed D.A.R.E. program at schools and police special events. Knight Blazed "toured" for 15 years playing about 45 shows per year. In 1995 Knight Blaze was the only police band in the nation to be invited to perform during National Police Week in Washington D.C. Pick a music venue except the Schuster Center and we played there. The band members were a Lieutenant from Huber Heights P.D on drums, lead vocalist secretary to Moraine police chief, second vocalist Montgomery County Deputy, rhythm guitar a Montgomery County Deputy, lead guitar and lead vocalist Washington Twp. Fire Department, and keyboards a detective from Trotwood P.D., and me on bass guitar.



Tin Cans/String to Extra Class (continued)



I also played with a band named Blue Light Special comprised of Kettering officers. The Kettering F.O.P. would sponsor fund raising shows at Memorial Hall in the spring and fall. The band would be the opening act for music stars like T.G. Shepard, Exile, Eric Heatherly, Johnny Rodriguez, Sonny Geraci and the Outsiders,

Juice Newton, and Lee Greenwood's Christmas show when God Bless the USA was a major hit. The back stage parties were fun hanging out with the stars.

In 1997 I was promoted to Staff Administrative Officer at Centerville P.D. Several responsibilities were spec'ing and purchasing police vehicles, having them painted and decaled with our unique design, purchasing any equipment for the police vehicles, designing a new police ID, property room, maintaining building security server, and dispatch.

I retired from the police department in January 2006 after 35 years of service, I now had time to devote to ham radio. Since retiring, I joined Dayton SkyWarn along with Lou Long KB8TCK; the existing coordinators decided to retire. Lou and I were appointed as the third coordinators since Dayton SkyWarn began after the 1974 Xenia tornado. I have responded to Xenia tornados in 1974 and 2000 as a first responder. During the 2019 Memorial Day nighttime tornado outbreak I was at Dayton SkyWarn in the hot seat taking ham radio spotter reports on the south repeater for the first hour and a half. When the spotter reports slowed down Dave Crawford KF4KWW jumped into the hot seat only to get busy with more spotter reports. The spotter reports were outstanding. Gary Clark KC8TND covered the NWS radio and NWS Chat we use to communicate with the Wilmington NWS office. Les Dershem K9CAV covered the north repeater. When NWS activates Dayton SkyWarn, three members are activated to cover the severe weather events.



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Tin Cans/String to Extra Class (continued)

For a number of years Dayton SkyWarn was located in a Butler Twp. Fire house and I was notified they were selling the fire house property. I met with Jamie Simpson Meteorologist and Caryn Golden Communications director and the general manager at channel 7 TV who agreed to move Dayton SkyWarn into an office at Cox Media building. Our current radio equipment was old and needed to be replaced. I wrote a grant to D.A.R.A. who approved funding for new radio equipment. Greatly appreciated.

I joined Montgomery County ARES as assistant Emergency Coordinator for Logistics and PIO. Montgomery County ARES needed a location for a comm center. I arranged a meeting with the command staff at Montgomery County Regional Dispatch Center with Rob Flory KA5RUC, ARES Emergency Coordinator and Mike Carter W8BSI Operations to discuss providing space for ARES. The sheriff agreed and Mike Carter and I moved our radio gear into our office space. Again, ARES radio equipment needed to be replaced. I wrote a grant to D.A.R.A. and received funding to replace our radio equipment. I purchased the same radios for both Dayton SkyWarn and ARES to allow members of both groups to be able to operate when at either comm center. The members from Dayton SkyWarn and ARES have been cross trained for both comm centers should a comm center becomes unavailable.

I'm also a team coordinator for Montgomery County Emergency Management Agency (EMA) EM-COMM team. Should there be a major incident I have specific Dayton SkyWarn members, ARES members, and EMCOMM members assigned to each group for activation response with additional members responding when available.

D.A.R.A. contacted me needing a security coordinator for Hamvention. I recruited Mike Carter to assist with this new challenge for the years of 2015 to 2016 and John Lombardo KD8EMV for 2017. Mike and I developed a security plan for Hara Arena thinking when done we'd use the plan the following year. Nope. Hamvention was being moved to the Greene County Fairgrounds and Expo Center. Lots of new challenges for security plan. Ron Cramer KD8ENJ General chair of Hamvention, Mike Carter, and I attended many meetings with police, fire, ODOT, OSP, and road department personnel to plan out traffic control, parking, and many other issues. Those who attended our first year of Hamvention should remember the monsoon rain that sunk many vehicles into the mud. The next year event was better, we just had a tornado warning.

In 2012 I was nominated for Kettering Holiday at Home Grand Marshal. After the parade and festival was completed, I was asked to become a committee member. In 2016 I was president and 2017 Chairman. Over the years of being a committee member I worked with P&R Communications to obtain radios for our staff members. My position now is past president who organizes a committee to nominate a Grand Marshal, trustee, and photographer for all the events leading up to and including the parade.

I joined BARC around 2010 and have held the positions of Junior Director, Senior Director, Vice President and in 2015 president. At that time BARC needed the club constitution updated and job descriptions for officer positions. A committee was formed and accomplished the updates. I'm currently the Public Service Coordinator.



Tin Cans/String to Extra Class (continued)

In 2020 Fred Stone W8LLY (SK) and club founder decided to step down as ARES West Central Ohio District 3 Emergency Coordinator and asked me to apply for the position. I was selected filling this position until resigning due to health issues.

Being a Kettering volunteer fire fighter, I've always taken photos of fire department events, I'm now the designated photographer for many of the city of Kettering events. Radio communications and time scheduling has been an important part of my career, I retired because work got in the way of my activities.

I'm a member of the Sinclair Emergency Medical System Advisory Board, each December we meet to review updates and make recommendations of procedures for the following year for Para-Medics and EMT's. The committee met and approved the updates for year 2025.

My hobbies since retirement have been:

White water rafting class five rapids on the New River,



Photographing lighthouses,



Tin Cans/String to Extra Class (continued)

Flown in Wright B Flyer plane,



Flown in a sail plane,

Scuba diving/photography,



Tin Cans/String to Extra Class (continued)

Next on my bucket list is hot air balloon and Waco plane ride.

On a dive trip to the Cayman Islands I experienced diving on a research submarine, we dove 850 feet to the Kirk Pride ship wreck.



The most memorable dive trip was diving the Red Sea in Egypt. I learned about the history of Egypt while traveling to many locations including the Pyramids. Our tour guide taught us how to read Hieroglyphics writings on the walls of the temples. We rode camels into the mountains to view the sun set shining through the valley illuminating the Red Sea. Egypt was a very educational dive trip.

My motto is: keep moving forward and don't be afraid to try new challenges.

73, Don [KB8PSL](#)

BARC Public Service Coordinator

Review of Pironman 5 Case

Ray Hitt, [N8VMX](#)

Most of you regular readers know by now that I use Raspberry Pi computers a lot as part of my amateur radio hobby, so it should come as no surprise that I have another Raspberry Pi article here. In this article, I describe the [Pironman 5 nVME](#) case from [SunFounder](#). It is compatible only with the Pi5. I have purchased many Pi cases over the years. This case is unique because it not only protects the Pi5, but it enhances its operation in many ways that I'll talk about. I purchased one recently and have been using it in my amateur radio station for a few months. And I really like it!



Here are the major features that the Pironman 5 case brings to the table (refer to the [online manual](#)):

- Raspberry Pi 5 mini PC (not included)
- 0.96" OLED Display showing Raspberry Pi's CPU usage, temperature, disk usage, IP address, and RAM usage
- Tower cooler can cool a 100% CPU load Pi to 39°C at 25°C room temperature
- 2 RGB Fans with GPIO control
- 1 PWM Fan on the Tower Cooler is controlled by the Raspberry Pi system.
- Supports four (PCIe Gen 2.0 / PCIe Gen 3.0) NVMe M.2 SSD sizes: 2230, 2242, 2260, and 2280.
- 4 WS2812 Addressable RGB LEDs light up the whole case with cool light effect
- IR Receiver for multi-media center like Kodi or Volumio
- Retro metal power button for safe shutdown
- External GPIO extender with pin name labels, for easy access
- Equipped with a spring-loaded socket for easy microSD card removal
- Aluminum main body with clear acrylic side panel
- Features two standard HDMI ports
- Price: \$79.99 from SunFounder.com [link](#)



Now, that's a lot of features, so let me pick a few that are the most important to me.

Cooling: This case contains two RGB-lighted fans on the rear of the case, plus a large heat-sink mounted tower cooler fan that clamps to the Raspberry Pi5 circuit card making contact with three heat-producing chips. These fans always keep things cool. I've run stress testing at 100% load for



Review of Pironman 5 Case (continued)

minutes on end and the temperature never gets close to the 80° C throttling threshold, in fact it stays below 60° C. Normal processing at 25% or less has a CPU temperature of around 50° C. And the fans are not only functional, but they also light up with programmable patterns and colors. You can set this up through command line parameters or the Dashboard web page. You can set the temperature that kicks on the case fans (on all the time, 50° C, 60° C, 67.5° C, and 70° C. I set mine to 50° C and the CPU never gets above 54° C even at full load. I've never had another case cool a Raspberry Pi as effectively as the Pironman 5.

Fast NVMe SSD: Most of you boot a Raspberry Pi off a microSD Card. I do in some limited cases but have been getting away from that habit. One reason is that the card wears out – it's not designed to be a hard drive replacement. Another reason is that it boots up slowly when compared to SSD drives or M.2 [NVMe](#) SSD memory cards. I have used a USB memory stick SSD Drive and it boots up 6 times faster than a microSD card. The Pironman 5 case contains a NVMe PIP (PCIe Peripheral Board) that allows you to mount an M.2 NVMe SSD inside the case. I put a [1 TB M.2 NVMe SSD card](#) inside the case (now around \$60) and it boots up in under 10 seconds. The NVMe SSD card is faster than a USB SSD because it connects straight to the PCIe bus which has 4 “lanes” for data rather than one data “lane” with USB.

Power Button: Now your Pi5 can join the ranks of other PCs by providing an actual power on/off button. The Pi5 circuit card itself has a small power on/off push button that can be used but is awkward and impossible to reach if the Pi5 is in a case. The Pironman 5 uses a real push button connected to a pair of spring-loaded pogo pins that contact the two circuit traces on the Pi5 designed to connect to an external switch. You can tap the power button to bring up the shutdown/reboot/logout menu, double-tap the button to shut the computer down gracefully, or hold the button in for 5 seconds to perform a hard shutdown if your Pi5 locks up (use this last option very sparingly since it might corrupt your SSD).



NVMe PCIe Peripheral (PIP) card



M.2 NVMe SSD, 1 TB, size 2280



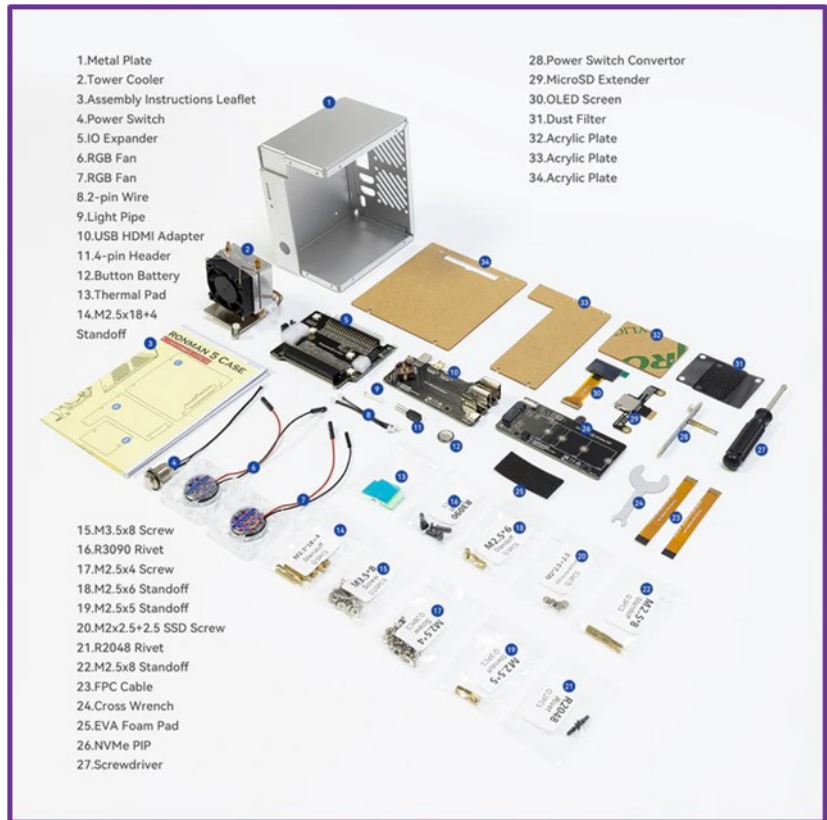
Pironman5 Case, Rear Panel View

Review of Pironman 5 Case (continued)

Standard HDMI Connections: The Pi5 normally attaches to your monitor(s) with micro-HDMI connectors. These are very small and fragile connectors. The Pironman 5 case comes with a breakout board that converts the two micro-HDMI Pi5 connectors to two standard full-sized HDMI connectors. This lets you use a standard HDMI cable to connect your Pi5 to your monitor(s). This same breakout board brings the USB-C power and HDMI connectors all to the back of the computer case, along with the USB 2.0, USB 3.0, and Ethernet where you would expect them to be on a desktop computer.

There are other features that I consider to be niceties rather than absolute requirements, such as: front panel OLED Display showing many useful pieces of information, breakout board for the GPIO connectors (I don't use GPIO now), an IR receiver for an optional remote control I don't have.

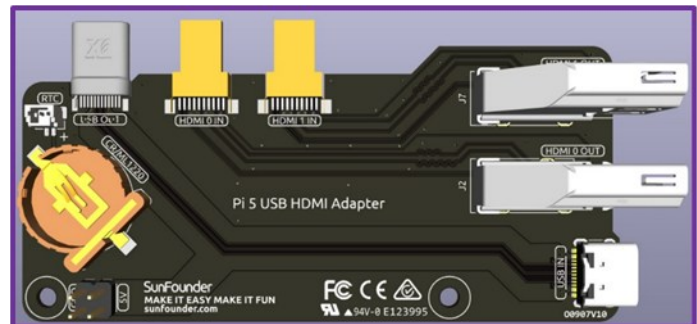
Here's an exploded parts view of what you get with the Pironman 5 case. It looks a little overwhelming, but be assured, this is not as hard to assemble as you would think. The instructions included are pretty good. I actually put it together while sitting at my ham station listening to our weekday 1130 DMR Net. While I didn't have the NVMe memory yet, I booted up with a normal microSD card and was up and running within an hour.



Pironman 5 Exploded Parts View

Here are some of the more interesting pieces:

Pi5 USD HDMI Adapter: This brings the Pi-5 USB-C power, the HDMI 0 and HDMI 1 connectors out to the back panel. The micro-HDMI connectors are converted to normal full-sized HDMI connectors. It also has an RTC battery socket. For more information, go to this [link](#).

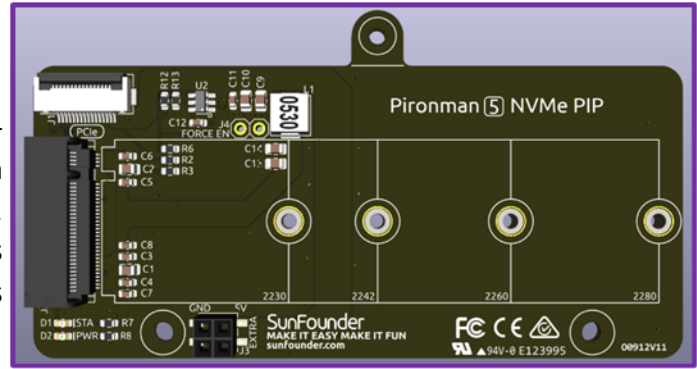


Pironman 5 USB, HDMI Adapter

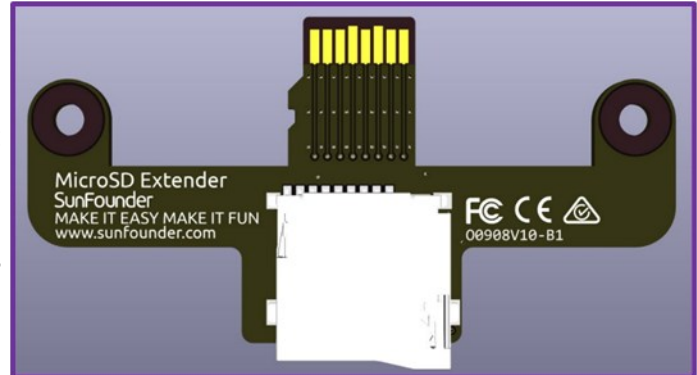


Review of Pironman 5 Case (continued)

NVMe PIP (PCIe Peripheral): This board connects to a PCIe connector on the Pi5 with a ribbon cable and provides a socket compatible with 4 lengths (2230, 2242, 2260 or 2280) of M.2 NVMe SSDs. This enables ultrafast SSD speeds on your Pi5. For more information, go to this NVMe PIP [link](#).



MicroSD Extender: This mounts inside the case and brings out the Pi5's microSD card reader out to the front panel with a spring-loaded microSD card reader. It's very easy to extract the card from this reader, much easier than the Pi5's reader. Go [here](#) for more information.



Power Switch Converter: This contains two pogo pins that will push down on the two pc board solder pads on the Pi5 that allow for a remote on/off power switch. The 2-pin header connector on this converter goes directly to the power switch on the front panel. [Here's the info page](#).



OLED Screen: This is an 0.96" OLED screen showing the CPU temperature, the IP address, the amount of disk space used, and the amount of RAM used. This screen will remain blank until the *pironman5* module is loaded and activated (see below).

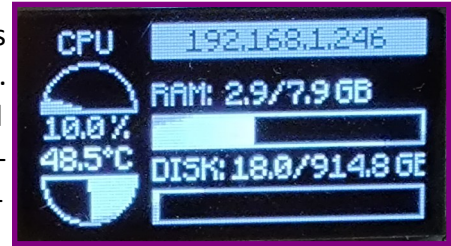
[Here's the info page for the OLED Screen.](#)

[Here's the info page for the pironman5 module](#)



Review of Pironman 5 Case (continued)

The OLED display on my Pironman 5 looks like this (right). It shows my CPU usage, IP address, RAM usage, temperature, and disk usage. It's nice to know I can see CPU loading, IP address, disk space, and temperature, just by glancing at the front panel OLED display. Normally I have to run several command-line programs to get this information.



OLED Front Panel Display



Pironman 5 Front View

Here's what my fully assembled Pironman 5 looks like (left). To get a sense on how small this case is, the garbage truck on top of it is a Hot Wheels-sized vehicle. The case measures 4.4" (depth) x 3" (width) x 4.6" (height)

Software Utilities: SunFounder provides a *pironman5* module written in Python. This module, when loaded, provides access to the new features in Pironman, such as the fan LEDs, setting the temperature where the case fans turn on, enabling the OLED display, and the new web page dashboard. Excellent directions are in Chapter 4 of the [online manual](#) or [PDF Manual](#).

Dashboard: When you install and activate the *pironman5* module, it sets up a dashboard accessible from your web browser. Go to your Pi5's ip address *xx.xx.xx.xx:34001* to get to this dashboard (in my case it is <http://192.168.1.246:34001>). You can access it from any computer on your network. The dashboard lets you monitor 5 parameters: fan state, SSD storage, RAM, Network throughput, and CPU loading (4 cores). Here's a sample of my dashboard (below).



Pironman 5 Dashboard



Review of Pironman 5 Case (continued)

Summary: The Pironman 5 is a very good case that solves a lot of nuisance issues with the bare Pi5 and enhances its performance. I've given you my impressions of this case and really enjoy having this Pi5 desktop on my ham desk. If you want to check out the full online manual, the YouTube assembly videos, the PDF manual, or the Facebook Group Forum, here are the links.

- [Online Manual](#)
- [Assembly videos \(YouTube\)](#)
- [PDF Manual](#)
- [SunFounder's Facebook Public Group](#)

The one thing I noticed is that SunFounder tech support monitors the Facebook group. Occasionally, someone will have an issue with a component that was not fitting properly, or didn't work. SunFounder would come online and offer to send a replacement part, no questions asked. This was comforting to see.

If you're interested in getting one of these cases, browse through these links, look at the videos and you'll be armed with all the information you need to go forward. If you have any questions for me, just drop me an email.



Pironman 5 Side View

73, Ray [N8VMX](#)



Answers to Amateur Radio Test Questions on pages 39-41

[Technician \(pg 39\)](#)

T8C06 (B)

T9A10 (D)

T1F05 (B) [97.119(b)(2)]

T3B02 (A)

[General \(pg 40\)](#)

G7A02 (C)

G2D06 (C)

G5B13 (B)

G8B01 (B)

[Amateur Extra \(pg 41\)](#)

E9B02 (D)

E4A03 (B)

E6E02 (A)

E5B12 (A)



Special Event Stations for February

Paul Sharp, [WS8R](#)

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

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

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

Here is my pick of the litter of SES that I think will be of interest to my fellow BARC members. Once again, something for everyone! This month there are SES for commemorating: the discovery of Pluto, USS Midway departure from Viet Nam, operating portable on a frozen lake in Minnesota in an attempt to warm the lake, George Washington's birthday and for you CW operators - the 21st Annual Freeze Your Keys winter operating event.

02/05/2025 | Pluto Discovery Anniversary Special Event. Feb 15-Feb 23, 0000Z-1259Z, W7P, Flagstaff, AZ. Northern Arizona DX Association. 7.290 14.090 14.290 21.290; all bands, all modes. Certificate & QSL. W7P c/o NADXA, 6315 Townsend Winona Rd, Flagstaff, AZ 86004-1493. Operating from the Lowell Observatory, and club member's home QTHs. www.qrz.com/db/w7p or www.nadxa.com

02/08/2025 | USS Midway's final departure from Viet Nam in 1973. Feb 8, 1700Z-2359Z, NI6IW, San Diego, CA. USS Midway Museum Ship. 14.320 7.250 14.070 PSK31 DSTAR on Papa System Repeaters. QSL. USS Midway Museum Ship COMEDTRA, 910 N Harbor Drive, San Diego, CA 92101. www.qrz.com/db/ni6iw

02/14/2025 | Arizona Statehood Day SES. Feb 14-Feb 15, 1500Z-0000Z, K7A, Prescott, AZ. Yavapai Amateur Radio Club. 28.313 21.313 14.313 7.213. Certificate. Mike Belanger, W1DGL, 219 W Leroux St, Apt. 202, Prescott, AZ 86303. We will be self-spotting to let you know where we are in case the above frequencies are either in use already or QRM/N is too high there. We will start on or as close to the 10m frequency listed and work from there as the day goes on. Happy 113th birthday, Arizona! www.w7yrc.org/club-station.

02/15/2025 | Ice Station WOJH - Frozen Minnesota Lake Portable. Feb 15-Feb 17, 1600Z-2300Z, WOJH, Stillwater, MN. Stillwater (MN) Amateur Radio Association - SARA. 21.360 14.260 7.260 3.860. Certificate. E-certificate only, send QSL info , to, WOJHrequest@gmail.com. WOJH will operate portable from a frozen lake in Washington County, Minnesota (Grid Square EN34). In a meager attempt to drive away the remainder of Minnesota winter, the Stillwater Amateur Radio Association will be generating as much RF as possible over the President's Day weekend (Please help us!!). Certificates will ONLY be sent via email in PDF format (Send requests with standard QSL confirmation info to: WOJHrequest@gmail.com). There is no need to send a QSL card. www.Radioham.org



Special Event Stations for January (continued)

02/15/2025 | K4US - George Washington's Birthday at Mount Vernon. Feb 15-Feb 16, 1500Z-1600Z, K4US, Alexandria, VA. Mount Vernon Amateur Radio Club. 7.042 7.242 14.042 14.242. QSL. MVARC, P.O. Box 7234, Alexandria, VA 22307. MVARC will host a special event station to commemorate our first president's 293rd birthday. Members will be at the Mount Vernon greenhouse on the original grounds of the former plantation of George Washington and his wife, Martha Washington. mvarc.org , K4US@mvarc.org.

02/16/2025 | The White House Communications Agency Amateur Radio Club Presidents Day 2025 Commemoration. Feb 16-Feb 18, 0000Z-0000Z, W0H, Jackson, OH. White House Communications Agency Amateur Radio Club. 3.875 MHz 7.275 MHz 14.250 MHz 28.550. Certificate. Lowell Yates, 6809 Four Mile Rd, Jackson, OH 45640. The White House Communications Agency Amateur Radio Club is excited to honor all of our Presidents this Presidents Day. We would like to especially recognize the Presidents for whom the White House Communications Agency (WHCA) has provided communications support since its founding in 1942. A WHCA-ARC Special Event certificate will be awarded to commemorate this special occasion. For more information, please visit our events page. <https://whitehousecomms-arc.org/events/whca-arc-presidents-day-special-event/>. <https://whitehousecomms-arc.org>.

02/17/2025 | Celebrating Engineer's Week at Collins Aerospace. Feb 17-Feb 21, 1700Z-1900Z, W0CXX, Cedar Rapids, IA. Collins Amateur Radio Club. 14.263 MHz. QSL. Brice Anton Jensen, 1110 Lyndhurst Dr, Hiawatha, IA 52233. There may be club members that operate outside of the specified time above. There might also be some club members that will operate on Sunday, Feb 16 or Saturday, Feb 22. www.qrz.com/db/W0CXX.

02/19/2025 | Merci Train Boxcar Anniversary. Feb 19-Feb 24, 0000Z-0000Z, NV7AL, Las Vegas, NV. American Legion Paradise Post 149 and 40&8 Voiture 306. 7.074 7.250 14.074 14.250. QSL. Robert Bencsko, 2548 Fort Lauderdale Dr, Las Vegas, NV 89156. This special event station is set up to raise awareness of the Anniversary of 40&8 "MERCY Train Boxcar" located in Boulder City, NV. Please check out the QRZ page. Watch for us on DX Summit QSL with SASE to AD7J. <https://www.qrz.com/db/NV7AL>.

02/21/2025 | George Washington's Birthday. Feb 21-Feb 23, 1700Z-2100Z, WS7G, George, WA. COLUMBIA BASIN DX CLUB. 14.322 14.255 7.222 7.260. Certificate & QSL. BRIAN NIELSON, 11650 Road 1 Southeast, Moses Lake, WA 98837. <https://cbn.homestead.com/ws7g.html> .

02/22/2025 | 21st Annual Freeze Your Keys winter operating event. Feb 22, 1400Z-2200Z, W0EBB, Leavenworth, KS. Kickapoo QRP Amateur Radio Club. 7.035 CW 7.240 SSB 14.058 CW 14.325 SSB. QSL. Gary Auchard, 34058 167th Street, Leavenworth, KS 66048. Please send a SASE for a return QSL card. w0mna74@gmail.com.



Amateur License Test Questions

[Answers are on page 36.](#)

Technician

T8C06

How is over the air access to IRLP nodes accomplished?

- A. By obtaining a password that is sent via voice to the node
- B. By using DTMF signals
- C. By entering the proper internet password
- D. By using CTCSS tone codes

T9A10

In which direction does a half-wave dipole antenna radiate the strongest signal?

- A. Equally in all directions
- B. Off the ends of the antenna
- C. In the direction of the feed line
- D. Broadside to the antenna

T1F05

What method of call sign identification is required for a station transmitting phone signals?

- A. Send the call sign followed by the indicator RPT
- B. Send the call sign using a CW or phone emission
- C. Send the call sign followed by the indicator R
- D. Send the call sign using only a phone emission

T3B02

What property of a radio wave defines its polarization?

- A. The orientation of the electric field
- B. The orientation of the magnetic field
- C. The ratio of the energy in the magnetic field to the energy in the electric field
- D. The ratio of the velocity to the wavelength



Amateur License Test Questions (continued)

[Answers are on page 36.](#)

General

G7A02

Which of the following components are used in a power supply filter network?

- A. Diodes
- B. Transformers and transducers
- C. Capacitors and inductors
- D. All these choices are correct

G2D06

How is a directional antenna pointed when making a “long-path” contact with another station?

- A. Toward the rising sun
- B. Along the gray line
- C. 180 degrees from the station’s short-path heading
- D. Toward the north

G5B13

What is the output PEP of an unmodulated carrier if the average power is 1060 watts?

- A. 530 watts
- B. 1060 watts
- C. 1500 watts
- D. 2120 watts

G8B01

Which mixer input is varied or tuned to convert signals of different frequencies to an intermediate frequency (IF)?

- A. Image frequency
- B. Local oscillator
- C. RF input
- D. Beat frequency oscillator



Amateur License Test Questions (continued)

[Answers are on page 36.](#)

Amateur Extra

E9B02

What is the front-to-back ratio of the antenna radiation pattern shown in Figure E9-1?

- A. 36 dB
- B. 14 dB
- C. 24 dB
- D. 18 dB

E4A03

Which of the following test instruments is used to display spurious signals and/or intermodulation distortion products generated by an SSB transmitter?

- A. Differential resolver
- B. Spectrum analyzer
- C. Logic analyzer
- D. Network analyzer

E6E02

Which of the following device packages is a through-hole type?

- A. DIP
- B. PLCC
- C. BGA
- D. SOT

E5B12

What is admittance?

- A. The inverse of impedance
- B. The term for the gain of a field effect transistor
- C. The inverse of reactance
- D. The term for the on-impedance of a field effect transistor



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.

