

# Ham Chatter



Volume 57 Issue 8

An Official BARC, W4AMC, Publication

August 2023

Editor, Mark, KG4GVJ

Email: [hamchatter@w4amc.com](mailto:hamchatter@w4amc.com)

## BARC Elections in November

Looking for Volunteers and nominations this September for the Board positions. Please consider it, goes a year and for most of them, you can go longer if you find you don't mind doing it.



**BARC General meeting Aug 8, 6:30pm in person and ZOOM All members, families and guests are invited to attend.**

Sheppard Memorial Library  
530 Evans Street, Greenville, NC.  
Access is at the parking lot.

*Speaker: Prentice Tyndall for Aug 8, he will do an electronics/ham radio repair Presentation. He is or was the electronics repair instructor at Pitt Community College.*

**September 12, BARC Picnic, Dave Woods 6pm**

**Oct 10, 2023 Speaker:**  
Dale Burmester  
About FT8 Digital mode.

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**BARC Board Meeting - Aug 29, 2023. The meeting will be on ZOOM at 7:00 PM. All members invited. See Zoom information.**

**2023 MS Bike Historic New Bern Ride Sept 9-10, 2023:**

## Speakers

October 10, 2023 Speaker Dale Burmester about FT8 Digital mode.

Dale Burmester, KA9SWE, has been a ham radio operator since 1985 and has held an Amateur Extra license for the last decade. Dale made his first digital mode HF contact using PSK31 in 2009 and continued on his HF digital mode journey using JT65 in 2010, JT9 in 2013, FT8 in 2017, and FT4 in 2019. The KA9SWE log-book contains over 28,000 entries with LOTW confirmed 5 Band Worked All States and 202 DXCC contacts. A Kenwood TS-480SAT running 25 Watts or less into a vertical multi-band antenna is responsible for the majority of those contacts. In 2015, Dale placed 1st in the CQ WW 160m DX contest "Single Operator - Low Power - WI" category. The KA9SWE shack runs Ham Radio Deluxe, WSJT-X, and JT-Alert on a Windows 11 PC. Dale is also a registered professional engineer in the state of Wisconsin and manages the Economic and Stakeholder Planning team at ATC (<https://atcllc.com>).

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## VE News

To find the next VE testing session please go to the ARRL web site: <http://www.arrl.org/find-an-amateur-radio-license-exam-session> and find one in your local area.

Practice taking the test on line with <https://www.hamradiolicenseexam.com>.  
[hamradioPrep.com](http://hamradioPrep.com)  
[HamStudy.org](http://HamStudy.org)

Study material at: <http://www.arrl.org/courses-training>.

The contents of this Newsletter doesn't necessarily express the opinion or views of Brightleaf Amateur Radio Club or it's members. No offence is intended.

## Happy Birthday

Brightleaf Amateur Radio Club members birthdays :

08-01	KG4GVJ	Mark
08-19	KS4YF	Paul
08-20	KV4CN	Dave
08-21	WA4AKB	Susan
08-25	K4GOE	Al
09-01	KG4NSC	Pat
09-01	KC4ROR	Rose
09-05	KQ2V	Bro. Simon
09-06	KD4MTT	Mike
09-14	WA4DAN	Murray
09-20	W4FA	John
09-26	KC4HHW	Billy

## Next VE Session

Please bring to the Test the following, required:

- Photo ID (drivers license)
- Original Amateur Radio License
- Copy of Amateur Radio License
- Original CSCE's
- Copy of CSCE
- Test fee (Cash) .
- ♦ FRN number is required. \*
- ♦ A valid Email address will need to be provided.

See this link for further information: <https://w4amc.com/get-your-license-ve/>

Gil Cartoons Courtesy of ARRL's 2021 Calendar(2020) and Gil, a Collection of Classic Cartoon from QST(1986-2007)

Articles in the Chatter may be from the ARRL Newsletters, ARES Newsletters and Section Managers. Others may be Material provided by others. Please respect possible copyrights.

## Well Wishes

Thoughts and Prayers go out to the following:

The family of Bobbie Parsons

*Please inform the Vice President and Ham Chatter of any changes or needs. This can be of death announcements, sickness or prayers requested.*

## Presentation Ideas Needed

Please send ideas of new presentation topics and presenters to our VP Judy W3JUU  
 Email: [info@w4amc.com](mailto:info@w4amc.com)

## BARC Needs YOU!

BARC needs to know where You think we should go as a Club.  
 Service the Community, Contesting, Teaching, Elmering, What? Give us your thoughts.

## In This Issue

Presidents Corner - KN4FZB	4
BARC Board meeting	5
Presidents Corner—NG9T	7
Greetings from High	16
Yabba and other Clubs	24
ARES/EmComm	31
Columns from the Past or new postings	28
W1AW Operating	
ARRL Emails, News and Radio in the News	38
NBARC Newsletter	9
<b>Hurricane Resources</b>	
Nets:	47
Ham AD's	49
BARC & PARC Calendar of Events	51

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## BARC's President's Corner, Beth, KN4FZB



Hello my ham friends.

Happy August. I hope you are beating the heat and maximizing the days as summer begins to wane.

There is interest in reviving our Skywatch program. I know that many have been certified in the past. We are in contact with our local representative from the National Weather Service, trying to get a class set up. Keep your ears open as we will put out details when we firm up the plan. I personally am very excited about this opportunity as I have not had the official training before.

The September membership meeting is a picnic at the home of Dave Wood, W4EJ. We are trying to put together a little foxhunt for the evening, so consider grabbing your heavy duty bug spray and joining us for the fun. There is also a swapfest and tons of good food every year.

And in October, we will meet up at Peter's farm one day for some antenna and analyzer fun, or something like that. We are still figuring out what to do, but we definitely want more opportunities to learn from each other and have some fun. We are aiming for this event to take place on the same day as our Saturday breakfast, so watch for updates as we figure out the details.

Keep an eye on the website or the Facebook page for details.

73s,

Beth

KN4FZB

## Brightleaf Amateur Radio Club Board Meeting on Zoom 7/25/23

### Voting Board members: (need 4)

- President: Beth KN4FZB,
- o V. Pres: Judy W3JUJ,
- Secretary: Peter N4PVH,
- o Treasurer: Dave W4EJ
  
- o Trustee #1: Bill W4SLC  
Trustee #2: Scott K9SPJ

### Non Voting Committee Members:

- Gerald KN4CKL, VE
- Webmaster: PVH,
- Ham Chatter Editor: Mark Raysin,
- o Susan Jones.  
Dave Langley W4YDY (OM)
  
- o NOT PRESENT:
- o Public Relations/Historian: Sherry
- o QSL/Equipment: Richard  
VE Liaison: -

### Items for discussion:

—  
Christmas Party is @11/23 at 6 pm at Immanuel Baptist Church, confirmed. Thank you **Mark**

—  
**Dave's** Treasurer report not available. At last Member meeting #3800.00 approx.

—  
Expenses, upcoming: Upgrade battery & solar to trailer. Need estimate.

—  
**Bill** W4SLC: FCC renewal for W4AMC. Working on renewal-PENDING, FCC web page broken.... FRN# 0001510130

In the future, documents should be kept in the BARC file box passed to the president when elected.

—  
**Judy** working on August meeting speaker. Possibly Bernie WA4MOK on Portable Antennas. Pending talks: Murray Adams, Sky warn talk... no dates

—  
**Scott** to do Local Repeater talk in November CONFIRMED: "Get The Most out of Local Repeaters"

—  
Could do a vertical antenna test vs dipole at picnic meeting.  
Or do a fox hunt. Possibly BARC buy a Fox for hunting.

**Beth** to borrow Al's Fox.

—  
**Beth** to search for liability insurance at FD (like tower climbing) and equipment coverage, AMA? Ask **Dave**.

—  
**Peter's Farm**: October after Saturday breakfast, Visit the farm and try out vertical antennas, Hexbeam, anten-

na analyzers etc. October 14th Sat right after breakfast at Great Harvest Bread Co.

—  
[Govdeals.com](http://Govdeals.com) for equipment deals.

—  
Need to get a speaker on use of IC7300 especially at FD.  
Contact Icom sales person Will Jourdain AA4WJ — **Beth** to contact him  
YouTube video on “**IC7300 Beginner’s Guide**”  
<https://www.youtube.com/watch?v=ZoZTxVpVqIw>  
Thank you **Dave** W4YDY

—  
[N4PRS.org](http://N4PRS.org) for fox hunting locally, **Beth** to contact them for advice on fox hunting.

—  
Respectfully submitted, Peter N4PVH



## Gary NG9T's PARC President's Corner



July 26, 2023

Hello Ham Friends!!

Well, we are deep into the dog days of summer and it's not even August quite yet. I hope that everyone is being careful and staying hydrated in what has turned out to be one of the hottest summers on record.

So, now that Field Day is over, what's next? I feel like we spent all of spring getting ready for what is American Hams' largest event. As I tried to figure out what to do next I found myself thinking of one of the most popular operating events that we can do every day of the year. Yes, it is POTA!! PARKS ON THE AIR has grown by leaps and bounds into one of the most fun things that a ham can do in the field or at home. And coming up on the second weekend of September is the annual North Carolina State Parks On The Air Event. This is meant to be a semi-casual contest for POTA activators and hunters alike. The rules are pretty straight forward and can be found on the [ncpota.org](http://ncpota.org) website. The hope is to activate all 107 North Carolina State Parks over the course of a weekend, September 9 - 10. All hams from North Carolina and beyond are invited to participate.

There is a list of the parks to activate on the website, most of which are NC State Parks and also includes some recreational areas and nature preserves. You do not have to sign up in advance but you can email the event coordinator at [info@ncpota.org](mailto:info@ncpota.org) and put your name or your club's name on one of the qualifying parks if you wish to do so.

The ultimate goal is to have fun and enjoy amateur radio in the great outdoors! You can activate a park alone or with a club, or you can stay home and be a hunter and give the activators the QSOs needed for the activations. Check out the rules to see the Modes, Bands, and the Exchange. Let's see if we can activate all of them!!

**NEXT MEETING PARC** now meets on the **SECOND THURSDAY** of every month instead of the third, and will be meeting on August 10th. Location stays the same:

Zion Episcopal Church @ 7:00pm local time

7302 HWY 264 E

Washington, NC 27889

**2m Net: EVERY THURSDAY** Except for the night of the monthly PARC Meeting. Time and frequency stays the same: Bath Repeater 146.955 PL131.8 at 8:00pm local time Alternate: Washington (Chocowinity) Repeater 147.255 PL 131.8

**80m Net:** Every Tuesday at 7:00pm local time on 3.807mhz If the frequency is in use, look for the net in between 3.800 and 3.820 Net Control for August will be Al Mullis, K4GOE.

**VE Exams:** Next exam date is Sept 9, 2023. Exams are given by appointment only. Our VE Coordinator is Tom Kottke WT4TK, assisted by Al Mullis K4GOE. You can contact Tom at [tkottke@centurylink.net](mailto:tkottke@centurylink.net) to schedule an exam.

I hope that everyone has a great summer!! See you on the air!!

73  
Gary Faust NG9T  
PARC President

**BE KIND TO  
EVERYONE YOU MEET.**



**THEY MAY BE  
STUDYING TO BECOME  
A HAM.**



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## [NBARC] August 2023 Club Newsletter - Updates!

*(Some parts of it)*

Hello [NBARC] New Bern Amateur Radio Club Members & SURROUNDING FRIENDS,

I hope all are doing well and staying cool in this Hot July weather! Remember to disconnect those antennas during these Summer Thunderstorms! We have got an "exciting" August Meeting coming up in a few days and I want to get the word out ASAP so you may *invite* others who you think will enjoy this month's exciting program! Please, feel free to bring your spouse, kids or neighbor, or anyone who you think will enjoy this very exciting and interesting program!

**August Program by Dr. Bill Michne, WM3X;**

***"The Role of Radio in the Disappearance of Amelia Earhart" (What Happened to Amelia Earhart)***

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### August Special Program:

Dr. Bill Michne, WM3X will be doing an excellent presentation at our August 7, 2023 meeting on "The Role of Radio in the Disappearance of Amelia Earhart" (What Happened to Amelia Earhart) this will be a 1-hour long "Exciting & Very Interesting" presentation complete with a movie and slides and even a working 1937 radio built with 1937 parts by Bill Michne, WM3X. Bill did this "legendary" unforgettable presentation at the Pamlico Club in Oriental recently and they are "STILL" talking about it! (I received several phone calls) That's when I got the phone call ..."You Gotta' Get Bill To Come Do His Presentation At Your Club Meeting!!! Even some of the teenage kids, husbands & wives of the club members said it was an Exciting Meeting!!! Everyone has been talking about it!!!!

Dr. Bill Michne, WM3X has been studying and researching Amelia Earhart (born in 1897) for YEARS!!! Amelia Earhart was an American aviation pioneer and writer. **Earhart** was the first female aviator to fly solo across the Atlantic Ocean. This will be an exciting Program you do NOT want to miss!! Invite your neighbor, Kids, Pastor, Friend, or work associate. Anyone who enjoys flying or History, or even building early model radio transmitters. You will see and even be able to see it operate an actual working 1937 radio transmitter with all 1937 parts built by Bill Mische, WM3X!!! Just like Amelia Earhart used on her airplane. Real Photo reels taken of Amelia Earhart while in her airplane, the history and mystery of her death, and her last words transmitted on July 2, 1937, some 85 years ago!

So to get your juices flowing and your feet wet and to spark up interest before the meeting you might want to watch these youtube videos in preparation for our August meeting! There are MANY more videos on YouTube, here are just a few. They ARE very interesting and you will want to bring a friend and share about this exciting program!!

[https://www.youtube.com/watch?v=w2H\\_acWAK5U](https://www.youtube.com/watch?v=w2H_acWAK5U)

<https://www.youtube.com/watch?v=7bvKCZlikaM>

<https://www.youtube.com/watch?v=IXGoO3d87M0>

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**Next [NBARC] Meeting:** August 7, 2023, @ 6:30 PM (always meet on the 1st Monday of the Month)

Location: Moore's Olde Tyme BBQ, Chicken & Seafood

Program by Bill Mische, WM3X - "The Role of Radio in the Disappearance of Amelia Earhart" (1937)

<https://www.mooresoldetymebbq.com/>

3621 Dr. M.L.K. Jr. Blvd. (Next to Harris Teeter of New Bern, NC)

New Bern, NC 28562

Ph: (252) 638-3937

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**Vice President Dave Warwick, K4DJW is moving to Durham, NC:**

It is with a sad heart that I make the following announcement. Our Vice President and former Club President for the past 11 years, Dave Warwick, K4DJW is moving effective the end of this month (August) to Durham, NC. Dave is moving to a town called Rougemont, NC which is about 10 miles north of Durham, so it is only about 20 minutes from his son's house instead of 2.5 hours from his current home in Pollocksville, NC. Dave commented that this move is happening faster than he thought it would! The house Dave has bought is on 5 acres and is smaller than the one he is in now, but he commented he does not need all this space. His new home in Rougemont, NC has a large carport, garage, and workshop so he can still play with all his radio toys. One of his first priorities is to get his radios set up. He will still be able to check in on the weekly 2-meter New Bern net on 146.610 MHz via the newly installed Echolink. He will probably move his furniture about the 3rd week in Aug. After he decides what he wants to keep and get moved, he may have some old tube-type radios, antenna parts, masts, wire, and hardware, that he will probably give away to clean out his shop.

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**ECHOLINK is Now Installed & Working On The 146.610 MHz New Bern Repeater:**

You can now Get On The Air and Talk to the New Bern Repeater via ECHOLINK from your cell phone or Computer ANYWHERE in the WORLD!!! Download the ECHOLINK APP on your Smartphone, Computer, or iPad. Set it up the ECHOLINK APP and Look Under Locations > North America > United States > Area 4 > W4EWN-R New Bern, NC > (Set as a FAVORITE) and connect to The 146.610 MHz New Bern 2-Meter Repeater (Pollocksville, NC) from anywhere in the World!

Now You can Check-In on our Weekly 2-Meter Tuesday Night NET @ 7PM if you are unable to hit the Repeater with your current Transceiver. It has already been tested and working! THERE IS A DELAY when using ECHOLINK so give time in between calls and when you are talking to any ECHOLINK Station give ample time between calls. Go Try it now! Someone is always listening!

Jeff Bray, K4TNE is Hosting the Club's ECHOLINK at his home QTH only a few miles from the Repeater between Pollocksville and Riverbend. If there is ever an ECHOLINK problem or Issue you may contact Jeff via e-mail at [KD4AJF@hotmail.com](mailto:KD4AJF@hotmail.com) or [K4TNE.nc@gmail.com](mailto:K4TNE.nc@gmail.com) or via cell at (252) 468-7885.

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**Recent Ham Radio Class & Testing Results:**

Recent results from the free 7-Week 2023 Summer Ham Radio License Study Class <https://fillingstation1075.com/amateur-radio-license-class-summer-2023/> taught by Pete Wene, WA5T are; 13 candidates (total) PASSED, out of the 13, there were 9 class members and 4 walk-ins. Only 2 of the walk-ins did not pass. People as far away as Elizabeth City, NC drove down to take the test. Testing was held at the Filling Station in Pollocksville, NC where our 2-Meter New Bern Repeater tower is located.

Any questions about Ham Radio License testing or upcoming Ham Radio Classes you may contact: Pete Wene, WA5T @ (919) 440-2937 [pete@wene.net](mailto:pete@wene.net) -OR- Jim Scheer @ (252) 876-3733 [jim.scheer44@yahoo.com](mailto:jim.scheer44@yahoo.com)

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**(7-Week) Fall Ham Radio GENERAL License Study Classes:** (Tentative)

There are tentative plans being made for another free (7-Week Give or Take TBA) 2023 Fall Ham Radio GENERAL CLASS License Study Class, taught again by Pete Wene, WA5T. More details to be announced soon. The Class and testing session is open to all who wish to take the test and have an FRN # on hand and have contacted Pete or Jim ahead of time (see below) to participate in the test session. (You MUST Contact

Jim or Pete beforehand to take the test). (see all below)

What: Ham Radio GENERAL CLASS License Testing Session

Website: (OLD info) (To Be Updated) <https://fillingstation1075.com/amateur-radio-license-class-summer-2023/>

Where: The Filling Station, 221 Main St. Pollocksville, NC 28573

When: Saturdays, in October & November

Time: Class begins at 10 AM and ends @ 11:30 PM that Day.

Test: To be given on a Saturday just before Thanksgiving. (TBA)

License Testing info contacts: Jin Scheer, W4NLD @ 252-876-3733 jim.scheer44@yahoo.com AND Pete Wene, WA5T @ 919-440-2937 pete@wene.net

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**2023 MS Bike Historic New Bern Ride Sept 9-10, 2023:**

<https://events.nationalmssociety.org/index.cfm?fuseaction=cms.page&id=3756&eventID=976>

Bill Sanford, K4VHO is recruiting Ham Operators for the upcoming Bike MS event to be held in New Bern the second weekend of September. The 2023 Bike MS: Historic New Bern Ride is Saturday and Sunday, Sept. 9-10, 2023. Ham Radio Volunteer Opportunity: This two-day bike ride from New Bern, NC benefits the National Multiple Sclerosis Society. The event typically attracts around 2000 riders. Mobile stations ("Support and Gear", i.e, SAGs) and Rest Stop stations are needed to cover 30-, 50-, 75-, and 100-mile routes each day. A great group of HAMS from both Eastern and Central North Carolina support this event each year. We need many volunteers to ensure the success and safety of the ride. Please consider signing up now by Contacting: Bill Sanford, K4VHO, Bike MS New Bern Amateur Radio Support Team - Net Control Ph: (252) 671-7446 K\$VHO@arrl.net and K4VHO.nc@gmail.com

<https://nmss.galaxydigital.com/need/index?>

[dis-tance=50&zip=&q=Ham&age=&agency\\_id=&min\\_available\\_slots=&dateOn=&need\\_impact\\_area=&need\\_in\\_it\\_id=8444&qualification\\_id=&meta%5B%5D=&meta%5B%5D=&meta%5B%5D=&meta%5B%5D=&allowTeams=&ug\\_id=&s=1](https://nmss.galaxydigital.com/need/index?dis-tance=50&zip=&q=Ham&age=&agency_id=&min_available_slots=&dateOn=&need_impact_area=&need_in_it_id=8444&qualification_id=&meta%5B%5D=&meta%5B%5D=&meta%5B%5D=&meta%5B%5D=&allowTeams=&ug_id=&s=1)

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**ARRL Member Dues Increase:**

**A Message from ARRL President Rick Roderick, K5UR**

Dear ARRL members,

Yesterday, the ARRL Board of Directors completed their second annual meeting. I'm writing to let you know that they made the tough, but necessary, decision to increase the regular membership dues rate to \$59 a year starting January 1, 2024 (see [2024 Dues Rates](#)). Additionally, we have chosen to separate the printed, mailed magazine from regular membership. Members will be able to choose whether they want to add on a print subscription to any of our magazines including *QST*, *On the Air*, *QEX*, and *NCJ*. All members will continue to have online, digital access to each of these four magazines and the digital archive as part of their regular membership benefits.

This is only the second time in 22 years that ARRL has raised our dues. It is a necessary part of ensuring ARRL is supported so we can continue to promote and fight hard for our Amateur Radio Service while providing benefits and services for our members that increase your knowledge and enjoyment of ham radio.

To help us make this decision, we invited every ARRL member to participate in a survey in May. Over 20,000 members responded (you can view the survey results [here](#)). We know from the survey results that most of you will find the new rate reasonable, or even ask why we didn't set it higher. We also know that some may find the rate is too high. As I've shared with many of you during my visits to hamfests and conventions, each of us has a responsibility to be active participants, and to support ARRL if we want to increase our ranks and ensure a lasting legacy for amateur radio's future.

You told us that you value ARRL's advocacy efforts, including spectrum defense, standing up to regulators and policymakers, and our work in other areas that defend, promote, and grow amateur radio - including STEM outreach to schools, teachers, and youth. **There is no other organization that is working harder to advance a vision that allows any citizen to explore, develop, and practice radio communications and radio technology.**

Your feedback showed us the many benefits, services, and programs you use - from Logbook of The World to the work done by the ARRL Lab to test equipment for product reviews. While our magazines topped the list of benefits, many of you also shared that your reading preferences have changed. Some of you prefer print, and increasingly members prefer digital. As a result, for those who prefer print, you will be able to subscribe to *QST* and/or *On the Air* magazine. Again, all members will continue to have access to the digital editions of all four ARRL magazines.

Have you ever heard a Life Member say, "I got a good deal when I signed up for Life Membership 25 (or 30, or 40...) years ago." They're right! They got a good deal, but continuing to serve Life members is not sustainable without making some changes. So, we're going to freeze new applications for the program, not adding any new Life Memberships until we can price the offering to be revenue neutral over its term. And, again, as more members prefer digital, we'll be asking current Life Members to opt-in if they want to continue to receive *QST* by mail.

The cost of doing business goes up every year. During the last couple of years, the costs associated with printing and postage have increased significantly. We've cut and delayed hiring for some positions on our professional staff - one of the smallest teams we've had staffing our headquarters in Newington, Connecticut, in years. We are also continuing to examine other cost-saving measures, but we cannot go further without reducing or eliminating benefits and programs which our members have told us are important to them.

I can assure you that the ARRL Board exercises due diligence and oversight in making sure your association is a good steward of your membership dollars. The reality is that ARRL does a lot - in fact much more than dues cover.

ARRL shares your passion for amateur radio. We are committed to strengthening and growing our community and protecting our rights to use and experiment on our amateur radio spectrum. We have a 109-year track record that includes YOU as part of that ongoing legacy of support for amateur radio and ARRL.

73 - Rick Roderick, K5UR

**Statewide POTA Event:**

Activate all 107 NC State Parks in one weekend.

September 9-10.

Contact: Zack Thompson, KM4BLG

Email: [km4blg@gmail.com](mailto:km4blg@gmail.com)

NOTE: Same as MS Bike Ride.

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**[NBARC] Next Ham Radio License testing session:** The [NBARC] New Bern Amateur Radio Club sponsors a (VE) Ham Radio License Testing Exam on the 3rd Saturday of EVEN NUMBERED MONTHS, Testing begins at promptly @ 9:00 AM. So, the next exam is scheduled for Saturday, Aug 19, 2023.

The exam location is;

9:00 AM - 11:00 AM

Rheems Volunteer Fire Dept.

5860 Hwy 17 South

New Bern, NC 28562

Contact: Jim Scheer, W4NLD Ph: (252) 876-3733

As you face the building, enter from the left side.

Exam fees are \$15.00 but, it might go up in the future, so don't be surprised if the fee changes. Bring cash, or make personal checks or money orders out to; ARRL/VEC.

To obtain an Amateur Radio License and Call sign, *you must first obtain a Federal Communication Commission (FCC) Registration Number (FRN).*

Go to the FCC.GOV Website -

Select - FCC Commissions Registration System (CORES)

Select - UPDATED CORES

Select - LOG IN; and provide a username and password.

Follow the instructions to obtain an FRN.

After you have obtained your FRN, search the internet for: NCVEC QUICK-FORM-605-APPLICATION. This will take you to the AMATEUR RADIO RELAY LEAGUE (ARRL) website with the interactive form NCVEC605. Fill out SECTION 1. Be sure to enter your FRN in the appropriate block, print the form, and bring it to the test session.

Looking forward to meeting you at the exam session.

**How to Get your GMRS License in only 4 steps:**

[https://www.buywowayradios.com/blog/2023/06/how-to-get-a-gmrs-license-in-only-four-steps.html?utm\\_source=E20230612-5&utm\\_medium=email&utm\\_campaign=E20230612-5](https://www.buywowayradios.com/blog/2023/06/how-to-get-a-gmrs-license-in-only-four-steps.html?utm_source=E20230612-5&utm_medium=email&utm_campaign=E20230612-5)

**NC State Fair Booth and Special Event Station, N4C:**

Invites Radio Amateurs from all over North Carolina to participate.

October 12-22

Booth: Open every day Fair is running

Contact: Travis Russell, KN4WJL

email: [kn4wjl@proton.me](mailto:kn4wjl@proton.me)

Special Event Station Operation: operates only the two weekends of the fair, October 14-15 and 21-22.

Contact: Domingo Rogers, KE4NKY

email: [domingorogers@gmail.com](mailto:domingorogers@gmail.com)

or use: <https://forms.gle/p9gZ9ubNFRhq3GMu9>

A ham in JARS has reached out to us in regard to their N4C Special Event Station for the NC State Fair in October. They are trying to organize hams from all over the state to attend and help out. There are already about a half dozen clubs and organizations that are involved. I know it's a long way out, but they want to give folks time to plan .

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**Your NBARC Club officers for 2023 are:**

Danny Garris, WD4CQ - President

Dave Warwick, K4DJW - Vice President

Jim Scheer, W4NLD - Treasurer

Jeremy Leray, K4WPA - Webmaster

Danny Garris, WD4CQ - Newsletter/emails/Roster

John Cioccio, W3IYO - Secretary

Bill Sanford, K4VHO - ARES

Deana Harler, KO4YEP - Sunshine Lady

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**2023 Club Dues Are Still Due:**

2023 Club dues are still due. Bring your \$20 dues for 2023. Your dues help keep the Club going! We appreciate YOU! Special Thank you to ALL who have promptly mailed your Dues Checks in Already! We appreciate YOU!! Please make your checks payable to: *New Bern Amateur Radio Club*. (amount \$20) (NBARC 2022 Dues)

You may bring your check or cash to the meeting or mail them to:

New Bern Amateur Radio Club

c/o: Jim Sheer, W4NLD

639 Trent Farms Rd.

New Bern, NC 28562

*This [NBARC] e-mail newsletter was sent by:*

*Danny Garris, WD4CQ*

*NBARC President & Dish-washer!*

*Webpage: <https://nbarc.org/>*

*e-mail: GarrisTV@hotmail.com*

*Cell Ph: (252) 670-9955*

*Note from Editor of the Chatter: We will be doing a special Link Edition of the Links provided by Danny in his Newsletter. I think it will be handy for all but may be several pages long. Thank you Danny.*

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**GREETINGS FROM THE HIGH COUNTRY**

July 13, 2023

Despite some recent periods of poor weather, summer has come to the High Country. Temp at noon on Wednesday was 81 degrees with blue skies.

On Tuesday I drove over to give a talk at the Blue Ridge Amateur Radio Club in Hendersonville. The weather was great but the temps were about ten degrees higher during the portion of my trip that took me through Lenoir, Morganton and Marion. Hendersonville was great and there were about twenty-five members present and several more on Zoom. They were very hospitable and I hope to visit with them again soon.

Here in High Country during the afternoon on Thursday (7/13) we had a shower that dropped .81 inches of rain in about ninety minutes.

The local saying up here is that if you don't like the weather wait fifteen minutes and it will change.

The Waynesville Hamfest is on July 29 and I am betting that the weather up there will be great. I hope to see you there.

**ARRL BOARD MEETING NEXT WEEK**

ARRL Board to meet in Connecticut on July 21 and 22. A number of committees will meet on July 20 and make recommendations to the Board on a variety of topics. The agenda of the Board meeting can be found at <https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.arrl.org%2Ffiles%2Ffile%2FDoc%25201%2520Full%2520Agenda%2520July%25202023%2520-%2520final.pdf&data=05%7C01%7C%7Cbba58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940542983955%7CUnknown%7CTWFpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=Wa%2FpeJ3sT5TcVI%2B5BdFNJWkrugB2Fe8Y7CmkvijgSwE%3D&reserved=0>.

Numerous Committee Reports will be considered but they are not generally available to members for several weeks after Board meetings.

Several proposals may be offered at the meeting considering changes to the ARRL Bylaws which affect League operations and there will very likely be considerable discussion about League finances. Published reports indicate that the League is operating at a deficit that has necessitated transferring funds from the unrestricted portion of the Foundation's Endowment. A Revenue Enhancement Committee has been looking at ways to close the deficit.



## FINANCE ISSUES

The results of the dues survey have been compiled and shared with participants. League members who did not participate may go to (<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.arrl.org%2Fdues-survey&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=JRu%2Fb85LA5Vc204Ag%2BGA1gu9RqSaM1CKfldfX2mbqyo%3D&reserved=0>) and access a summary of respondent answers in the survey. Approximately 20,000 of the 150,000 ARRL members participated in survey but something like 82% of the members did not participate. According to the ARRL, about 15% of North Carolina Section members participated.

## ARRL BOARD TO CONSIDER REVENUE OPTIONS

Like most of us, ARRL pays more for postage, supplies, printing, salaries, travel. A key point of discussion in by how much the cost of QST will increase and whether members will pay a fee in addition to the expected dues increase. Opinions vary on how much Regular and Life Membership due should increase and whether there may be new fees to cover some of special services like the QSL Bureau and LOTW among other things. Some have suggest a \$5 dues increase, others think that \$10 should be implemented .

Roanoke Division members ( ARRL members residing in NC, SC, VA and WV) are represented on the Board by Division Director Jim Boehner, MD,( N2ZZ from Aiken SC) and Vice Director Bill Morine (N2COP who lives in Wilmington NC). If you wish to express an opinion to them, they may be contacted by email at [n2zz@arrl.org](mailto:n2zz@arrl.org) and [n2cop@arrl.org](mailto:n2cop@arrl.org),

## GENERAL CLASS EXAM QUESTION POOL UPDATED

ARRL is urging Technicians to upgrade to General in order to be able to enjoy HF spectrum that affords hams the opportunity to communicate around the world.

The National Conference on Volunteer Examiner Coordinators (NCVEC) on April 15, 2023 announced, as they do on a five year cycle, changes and updates in the General Class question pool (from which all VE tests are drawn).

All General Class exams taken on or after July 1, 2023 will be based on the revised General Class question pool. The updated General Class questions will be in use until June 30, 2027 at which time further updates to the General Exam will take place.

Bottom line: if you know your radio theory, you are already in good shape to take and pass the revised General Exam. However, if you want to practice taking sample exams, perhaps to refresh your memory about frequency bands and some newer operating practices, do so with the most recent sample tests that are based on the 2023 General Class exam question pool.

#### ARRL RENEWS PUSH TO CONVINCING THE FCC TO ACT ON LONG-STALLED RULES CHANGES

a. Primary among the League's legislative goals is the convincing Congress to direct the FCC to pre-empt certain Homeowner Association rules that prohibit amateur radio antennas and towers with regulated subdivisions. Several types of antennas are described in the proposed law and HOA's would be very limited in the regulation of these antennas. Information on the proposal law can be found at <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fforums.grz.com%2Findex.php%3Fthreads%2Fh-r-4006-finally-introduced-on-june-12th.868724%2F&data=05%7C01%7C%7Cbba58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=Y%2BzNR9dPU%2FLsol4TYpCpeeXA%2B9DxppN9p6r2Avlhil%3D&reserved=0>

b. ARRL is also seeking FCC action on repeal of the 300 baud symbol rate rule (which results in Factor 4 not being allowed on amateur bands). ARRL has for approximately six years been seeking a rule change to allow Technicians to use voice on 75 and 40 meters. Still another rule-making petition that has languished at the FCC for approximately six year is a proposal to establish sub-bands where digital modes could be used. These topics have been discussed quite often but the delay is at the FCC which remains unconvinced that the proposals will do as much good for amateur radio as some expect.

c. ARRL has worked on these issues with the FCC and friendly members of Congress for many years but thus far has not met with success.

On the Other Hand..

A group of financial firms very recently asked the FCC to quickly act of a petition that would allow two 20 Kilowatt transmitters with directional antennas to be put on the air near New York City and Chicago to transmit financial data about stock trades over frequencies ranging from 2-25 MHz which are close to the amateur bands.

The parties seeking the rules change point out that high power HF transmitters can deliver data over wide areas at less cost and faster than fiber or microwave. The two transmitters, would cover very large areas (depending upon band conditions) with less latency and at less cost than a multitude of microwave relay towers or active fiber.

Information on the commercial proposal can be found at

<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Farrl.org%2Fnews%2Fcommercial-interests-petition-fcc-for-high-power-allocation-on-shortwave-spectrum&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=JKEFFZhfDe%2BrWqSVvyu4gYrWu6waYgQkWG0IRaSVjpc%3D&reserved=0>

and in that article there are embedded links to the engineering studies filed with the FCC that predict no interference and stress the improvement in the speed that financial transactions can be completed. In our world, getting stock trade information milliseconds before the competition can generate millions of dollars each day.

#### Upcoming Hamfests

July 15

The annual Cary Swapfest will be held from 8 am to 1 pm at the Ritter Park, 301 W Lochmere Drive, Cary, NC. Information can be found at

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcaryarc.org%2Fevents%2Fswapfest%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=L2hsHpVrqQ20pLdTktYCNi29kr3H71a5eOkYs%2BdxVw%3D&reserved=0> .

July 29 – Escape the heat and visit the mountains!

The Western Carolina Amateur Radio Society Hamfest will be held near Waynesville at the Smoky Mountain Event Center and Fairgrounds. An informational flyer can be found at

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.wcars-club.org%2Fhamfest-annual%2Fdocs%2Fhfnnotice.pdf&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=L2hsHpVrqQ20pLdTktYCNi29kr3H71a5eOkYs%2BdxVw%3D&reserved=0>

[7C%7C%7C&sdata=HNSq0qXK8UbiK62DF0Ksu4ik4RaZucHoTyMLMAIVjXs%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fw4uhl.net%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=RI7nd4nA1UYT42wpC4%2BLFN8w3FMFr%2F8yoWXpyRDwlQs%3D&reserved=0)

August 12

Folks in Down East in North Carolina may want to travel over the State line and check out the Florence Hamfest, Florence SC that will be held at the West Florence Fire Department Annex, 3379 Pine Needles Road, Florence SC. The Hamfest will run from 8 a.m. to noon and there is NO ADMISSION CHARGE, according to their flyer. Additional info can be

found at <https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fw4uhl.net%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=RI7nd4nA1UYT42wpC4%2BLFN8w3FMFr%2F8yoWXpyRDwlQs%3D&reserved=0> .

August 12

The Cape Fear Amateur Radio Society's 24th Annual Hamfest will be held in Fayetteville at the Cumberland County Shrine Club, 7040 Ramsay Street from 8 a.m. to noon. Information can be found at

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcfarsnc.org%2Fswap-fest&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=n7%2Fjg0V%2BQgO6tyAUwyxN7ICSbJQr%2BFa6Ld6aPsLmbtY%3D&reserved=0>.

September 1-3,

Be at the Granddaddy of all hamfests by coming back to the Shelby Amateur Radio Club's 67th Annual Hamfest. Information can be found at

<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fshelbyhamfest.com%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=VlxEHcjLa4p%2FRjRCpFm6xpz8M2dQf6fYmp98G9PBGHo%3D&reserved=0> /

September 9

A great reason to head back to the North Carolina mountains is to take in the Vintage Radio Swapfest . Look over their collection antique radios and buy one of your own at the Swapfest. Head over to the Asheville Radio Museum located on the campus of A-B Tech Community College, 16 Fernhurst Drive, Asheville. The website for the Museum is

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.avr radiomuseum.org%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=TXqXeDfo7SfWqFYVpxdUd9xpC4MkUqC5k7Lv1eshEp0%3D&reserved=0>

Section Traffic Report for June 2023 from W4DNA

NET	NMGR	QNI	LISTED	PASSED	TIME	SESSIONS	TFC %
<b>SECTION NETS</b>							
CN	AA4MP	292	118	114	551	60	96.61%
CSN	KI4KZS	92	14	14	502	30	100.00%
NCEN	WK4WC	344	96	93	405	30	96.88%
NCMN	W3OJO	219	169	159	615	30	94.08%
THEN	K4SEH	165	0	0	276	15	
<b>LOCAL TRAFFIC NETS</b>							
CWTN	N4CNX	379	129	129	620	30	100.00%
ENCTN	W4DNA	117	21	21	248	29	100.00%
PCTN	W4TTO	245	70	70	296	30	100.00%
<b>SPECIAL INTEREST GROUP NETS</b>							
MNN	W4DNA	434	0	0	687	30	N/A
TOTAL		2287	617	600	4200	284	97.24%

W4DNA, Dave Roy, is the Section Traffic Manager and is charge of the various traffic nets that are held prepared by W4DNA can be found at <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncarrl.org%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=JqPRaq3oFWbGR1RPyhGQ2I12mPW8Pk7dBG7M1SXqD%2Bs%3D&reserved=0> .at various times across North Carolina. Set out above is a shortened version of his latest monthly report. The ARRL email system does not accommodate email attachments or most graphics. The entire report prepared by W4DNA can be found at <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ncarrl.org%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=JqPRaq3oFWbGR1RPyhGQ2I12mPW8Pk7dBG7M1SXqD%2Bs%3D&reserved=0> .at various times across North Carolina. Set out above is a shortened version of his latest monthly report.

OTHER EVENTS

- DX/CONTESTER MEETING COMING UP IN PIGEON FORGE, TN ON SEPTEMBER 29-30  
Attention Club Officials and Friends, please pass this announcement on to your club members and on to your friends!!! YOU DO NOT want to miss

this year's event!! Info can be found at <https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fw4dxcc.com%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=4Wg35r14LxUjmlDTGNcrTqtqm%2FjLi%2BFbyjSlhooTNEg%3D&reserved=0>.

My predecessor, W4CHX, Karl, advises that, In addition to the social events and various forums, those who want to learn more about DX'ing and Contesting will want to consider signing up for the Ham Radio Bootcamp that will be offered on Friday, September 29 as part of the W4DXCC meeting.

If the DX meeting were not enough to attract you, a side trip to Pigeon Forge will afford an opportunity to visit Dollywood and the Great Smoky Mountain National Park!

- July 29 Is the date for The Scream which is a half marathon beginning at Jonas Ridge in Avery Couty and involves a difficult run downhill to the finish line at Brown Mountain Beach near Collettesville in Caldwell County.

This is in an exquisite setting near Grandfather Mountain and takes runners along the Wilson Creek and through rugged but beautiful country.

Information about the event can be found at

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgloryhoudevents.com%2Fevent%2Fthe-scream-half-marathon%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IklhaWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=R0r7D9iKJcyVQkciagQ8fygceepcd6AhJAQujlf9S%2B8%3D&reserved=0>.

A half marathon, even on flat ground, can be a challenge. This event is a tough one with participants basically running downhill for 13 miles. The event title comes how some runners have pain in their legs after running downhill for 13 miles.

Public service /event communications will be provided by the ARES group out of Buncombe County. If you are a licensed amateur and are interested in being a communicator along the course, you should quickly contact Dwight Danner, W4DCD, Incident Commander. The event will operate under ICS and the Incident Action Plan can be requested from Dwight Danner at [w4dcd@arrl.net](mailto:w4dcd@arrl.net).

- September 9-10. NCARRL will be attempting to put on a statewide POTA event involving all 107 State Parks. Zach Thompson (KM4BLG) is heading up the massive special event. Details, rules and a listing of

the NC State Parks and Historic Sites can be found at

<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fncpot.org%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=XMBnlqFxUfVfn1oX1dIOCOzjYwUEI0KBasoxVOTnlp4%3D&reserved=0> .

Get on the air and see how many of the parks you can contact. Better yet, pick out a park and operate from that site.

#### CLOSING COMMENTS

As we can see on the news, there are disaster operations underway in several parts of the country.

At present, two water rescue teams (one from Charlotte and one from Buncombe County) are deployed to Vermont to assist rescuing people who are trapped by the flooding and terrified that more rain is expected before the rivers start receding. NC also sent Comms and IT experts to support the water rescue teams.

Vermont requested help, and, just as North Carolina had received assistance that came from Vermont during previous flooding situations, North Carolina EM immediately mobilized to assist Vermont. The North Carolina crews drove straight through to Vermont with their boats and other gear and began accepting assignments upon arrival.

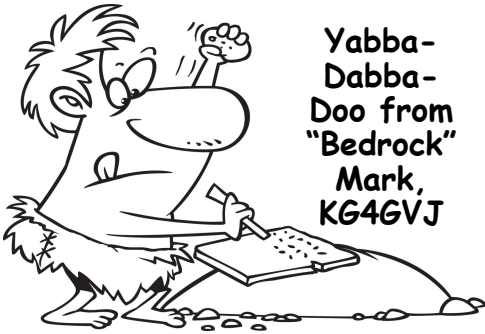
North Carolina is often looked upon as the Gold Standard in emergency preparedness.

Most of our responders, whether paid or volunteer, take very seriously the need to be well trained and ready to help others on a moment's notice. Trained in ICS, North Carolina responders know what to do and how to function in a complex command structure. The readiness posture is not an accident nor did it happen overnight.

ESSE QUAM VIDERI is the North Carolina State Motto—To Be Rather Than to Seem—and the North Carolina responders in Vermont tonight truly exemplify that motto.

Marv, WA4NC

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ARRL North Carolina Section  
Section Manager: Dr Marvin K Hoffman, WA4NC  
wa4nc@arrl.org



Hi Folks,

I'm working on a new computer now. I'm not sure if the software I'm using for this Newsletter will continue for the life of the computer, so future issues may be differently done. I'm also trying to get the copy and paste working better for the Hyper-links when copying articles.

Another crazy month for me. Still waiting for further work on the Solar electric system. Might(?) get finished this August. Supposedly not enough employees to do some of this work and some Office personal not aware of some requirements Greenville Utilities have.

## Interested in the Ham Chatter?

If you are not receiving *Ham Chatter* email notices and would like to receive them, please send an email to [hamchatter@w4amc.com](mailto:hamchatter@w4amc.com) so we can get your email address and put you on the list. You may miss some important BARC or PARC notices.  
- *KG4GVJ*

## Help the Editor.

Do you have something to say or post? Want to write an article? Any ideas? Comments and notice's of help needed (Personal or club needs or activities? Can be BARC related or other Club's) are welcomed. Have interesting photo's or articles? Done something related to radio? Please let us know and we may add them to the Ham Chatter and web page Blog.

Send it along to the [Editor at Ham Chatter](#). We will see if we can fit it in soon.

## Be a Net Control

Volunteer to help with the Weekly Net for BARC, or other nets. All are welcomed. It's great practice for if you need it for later, it's like First Aid training. A script is available to read off of to help in the progress on the web site.

## PUBLIC SERVICE?

**Website for NC hams** who are interested in public service, Check it out at <https://hpsnc.org/>.



**LICENSE STUDY SESSION VIA ZOOM  
Ham Radio Zoom Training Courses 2022-2023**

The following is our schedule of General and Technician class courses from November 2022 through September of 2023. (FARC) Note that we skip December after the 7th.

General:

August 9, 16, 23, 30  
November 9, 16, 30  
Dec 7

Technician:

August 2  
September. 6, 13, 20, 27

Classes are held on Wednesday evenings from 6:30 - 9:30 pm.

The Gordon West Technician class or General class license manual is recommended in conjunction with online hamstudy.org.

Instructors:

KK4RR, AJ4TF, KA4JAH, AE4TI, K4AX. No charge for the classes.

**Preregistration required:** contact Richard Weinbaum at [KK4RR@mac.com](mailto:KK4RR@mac.com).

Thanks and 73,  
Keith - KA4JAH

*John S Carson*

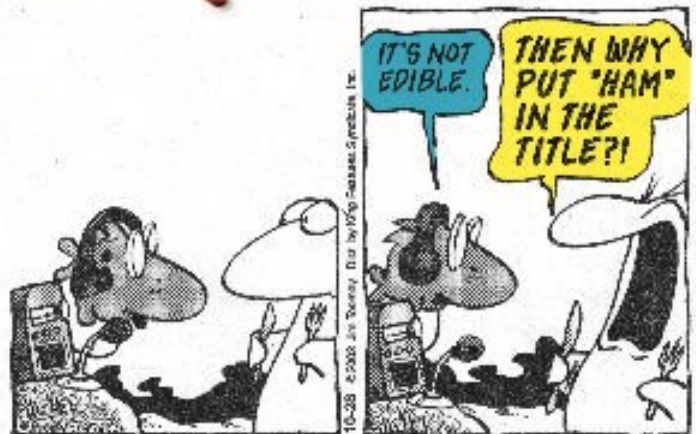
**SHERMAN'S LAGOON**



**WB5Q**

*Norman, OK U.S.A*

**By J.P. Toomey**



**All Local Area FCC Exams:****WINSTON-SALEM NC**

2023

**2ND Monday, 6PM at Red Cross on Coliseum Drive**

No Exams are scheduled in December, the Club has its Christmas party. Sponsored by the Forsyth Amateur Radio Club (FARC), Red Cross Chapter House, 690 Coliseum Drive. Pre-Registration Only. Exams start at 6:00 PM. Bring 2 forms of identification (one with picture). Pre-registration, FRN number, are required before test session date. NOTE: COVID-19 protocols still in effect. Please bring the ORIGINAL, COPY of any CSCE's and signed license to the test session. Exam fee is \$12.00. For more information, contact: Dale Mierisch-WB9SZL, [Email](mailto:DMierisch@w4amc.com), [Phone 336-766-9675](tel:336-766-9675)

The following testing dates and sites are from:

<https://www.w4vec.org/ar.html>

**GREENSBORO NC****TESTING 2ND SATURDAYS**

All sessions begin at 9:00 AM Hinshaw United Methodist Church, 4501 Gate City Blvd, Greensboro, NC 27407 ([MAP](#)) [For more information contact: David Macchiarolo- AJ4TF EMAIL](#)

[336-420-9424](tel:336-420-9424)

**HIGH POINT NC****TESTING LAST SATURDAYS**

All sessions start at 10:00 AM. Location: Hickory Chapel Wesleyan Church, 301 Hickory Chapel Road (off MLK Jr Drive) High Point, NC 27262 [MAP](#) [Pre-registration is required. Contact: David Macchiarolo Email 336-420-9424](#)

**KERNERSVILLE (?)****King/Rural Hall, NC**

Piedmont Triad VE offers free of charge testing, at the King Public Library, 101 Pilot View Drive, King, NC. This is a free of charge exam session for

subject to the \$35.00 fee to be paid to the FCC. Contact Jeff Webset at webstej <at? windstream <dot> net for next exam.

**SALISBURY NC**

PRE-REGISTRATION ONLY

Bostian Heights Fire Dept. Community Room

[\(MAP\)](#)

8211 Old Concord Road Salisbury, NC 28146

For more information contact:

Fred - WB4QOC [EMAIL phone 704-534-1031](mailto:WB4QOC@w4amc.com)

Last updated 1/26/22

**THOMASVILLE NC**

Tri-County Amateur Radio Club

Test Session at 9:30am, Davidson-Davie Community College, 297 DCC Rd. Thomasville, NC 27360 ([MAP](#)) Building: Finch \*Building marked with RED arrow), room 221, Preregistration and FRN number is required before test session date. NOTE: COVID19 protocols still in effect. For more information contactL Rick Weinbaum, KK4RR, cell: 446-687-8001 email: weinbaum <at> mac <dot> com. Last updated 6/1/22

**New Ham? New Upgrade?****Live in Forsyth County?****Or just want to join FARC?**

For new hams, or upgrades, who have taken an exam, please complete the information on the FARC application (usually the next-to-last page of the Newsletter), if you have not already done so, for a free membership to the Forsyth Amateur Radio Club (FARC). Mark the form "New Ham - Exam date". Even if this is not an FARC exam session, since we are limited in exam offerings at this time. Once the form is completed, bring to the next club meeting, or please scan and email to secretary <at> w4nc <dot> com [and an email to newsletter <at> w4nc <dot> com].

Exams usually will be offered before the FARC meeting (2nd Monday at the Red Cross) and start at 6:30 PM in room 109 at the Red Cross building **see above to make sure a session is offered**. You are encouraged to arrive early at 6:20 PM Preregistration is required at info <at> w4nc <dot> com.

[From the FARC Newsletter](#)

## Pamlico Amateur Radio Club, K4BCH

### Club Meeting Location:

Zion Episcopal Church  
7302 US Highway 264 East  
Washington, NC 27889

### Contact info:

Pamlico Amateur Radio Club  
C/O Cheryl McGuire KX4EC  
530 Jamaka Rd  
Washington NC 27889

### Club President:

Gary Faust NG9T  
[gfaust.parc@gmail.com](mailto:gfaust.parc@gmail.com)  
(252)531-4982



PARC is a 501c3 non-profit organization legally form under the laws of North Carolina.

The club meets at 7pm on the **Second** Thursday of each month. The Club Net weekly at 8pm (EST) every Thursday except when having the meeting.

These monthly Nets offer practice in Message-handling procedures in the event of actual emergencies. The formal portion last about 20 minutes, followed by informal comments from Net check-ins.

The Net VHF frequency is 146.955 MHz, minus 600 offset, PL tone 131.8 operated through the Bath, NC repeater. A new club repeater is at 147.255 MHz, plus 600 offset, PL tone 131.8.

PARC 80M Net every Tuesday at 7pm (EST) on 3.807Mhz or close by if frequency is in use.

**Weekly Wednesday Breakfast:** All are invited for breakfast every Wednesday morning at 9:00am EST at Shep's Grill at 129 N. Market St, Washington NC 27889. Parking is in the rear and rear door entry is best.

# Stalking the Fox

Become a radio fox hunter and test your skills against a clever opponent!

By Jim Kearman, KR1S  
Assistant Technical Editor

**T**he chase is on! There's a transmitter out there somewhere and it's teasing you, taunting you, daring you to find it! You stop to get your bearings. Where is the signal strongest? Yes, it's almost due east, but how far?

Another hunter appears at the top of the next ridge. She turns her antenna slowly and then, suddenly, she stops. Does she have the fix, too? You'd better get moving or you'll come in second place...or worse! Your heart is pumping like a jackhammer as you hurry down the hill. Where is the fox? WHERE IS IT?

## Getting Started

Most sport transmitter hunting (sometimes abbreviated "T-hunting") is done on the 2-meter FM band. You can get started with just a portable 2-meter receiver that has a signal strength meter, or *S-meter*. You can use a receiver without a meter, but you'll have to rely on your ears to tell you whether the signal is getting stronger or weaker. A meter is a more precise indicator.

One item you'll definitely need is an *attenuator* between the antenna and rig. You can build a simple attenuator from plans in *The ARRL Handbook*. An attenuator is used to deliberately reduce the received signal strength as you get closer to the transmitter. If the signal becomes too strong, you won't be able to pinpoint the source.

You'll also need a directional antenna, but you can build one easily, from plans in

*The ARRL Antenna Book*. Like any sport, serious players have more exotic equipment. Like you, most of them started out with simple receivers and antennas.

## Sport Hunting

Recreational transmitter hunts are usually organized by clubs. While the participants gather at a local landmark, the transmitter operator—otherwise known as the *fox*—is heading into the field to hide. A favorite trick of transmitter hidiers is to plant a low-power transmitter near the starting location. They position the antenna so the signal reflects off hills or mountains, making it *seem* as though it's many miles away!

The transmitter comes on the air at a pre-arranged time. Hunters swing their antennas to take their first bearing. Within a few minutes, everyone jumps into their cars and the chase is on. (Of course, the entire hunt can take place on foot. This type of hunt is an ideal activity for a club picnic.) Hunting is easier and more fun when done with another person. While one drives, the other checks the maps and swings the antenna.

Once you have a rough idea of the area in which the transmitter is operating, you get as close as you can and take more bearings. (For example, is the fox south or southeast from your present position? Check and make sure!) Each set of bearings should bring you closer to the transmitter. Here's where having two or more people on your team pays off. As you get closer to the transmitter, a real traffic jam of hunters will develop.

When you're very close to the transmitter (it takes lots of attenuation to keep the signal from overwhelming your receiver at this point), taking a bearing from a second location lets you *triangulate* to get a better idea of the transmitter's location (Fig 1). If the transmitter is fairly close, the two initial locations from which you take bearings need be only a few hundred yards apart. If the transmitter is far away, it's better to take the initial bearings from more distant locations. The terrain over which the hunt takes place determines the necessary separation, as does the type of antenna you're using.

## The Game's Afoot!

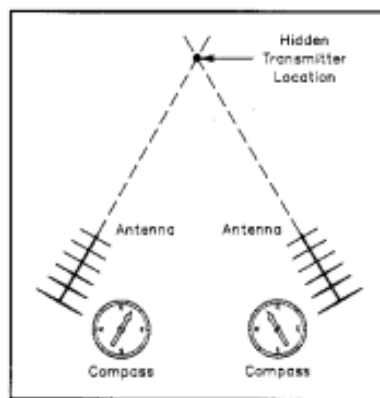
Foxes aren't known for making life easy for hunters. You can bet the terrain will be challenging. As you get closer to the transmitter, you may find the signal gets so strong that it's hard to determine its peak strength. Using the null off the sides or back of your beam may help. Here's where having an attenuator between the antenna and receiver

really comes in handy. You'll probably want to make a smaller antenna for hand-held use.

When you finally close in on your target, don't be surprised to find that several others have already beaten you to the spot. Transmitter hunting is like running a marathon: at the beginning, it's important to finish, not win. With experience you'll develop techniques to help you finish sooner.

## Games Transmitters Play

If the world was perfectly flat it would be relatively simple to find any hidden transmitter. Hills, mountains and buildings are good reflectors of VHF signals; so transmitter hunting becomes a real challenge when they're in the vicinity! Fig 2 shows a typical case. The hidden transmitter is down in the valley, connected to a highly directive beam antenna pointed at the mountain. From our observation point we detect only the reflection off the mountain. Carefully swinging our antenna may detect the direct signal from the back of the beam—if our antenna is directive enough.



**Fig 1—**When you're close to a hidden transmitter, you can use *triangulation* to pinpoint its location. Take two bearings from locations a few hundred feet apart and draw lines representing the bearings on your map. The transmitter is located very near the point that corresponds to the intersection of the two lines.

64 QST

## T-Hunting Equipment Suppliers

BMG Engineering, 9935 Garibaldi, Temple City, CA 91780

Doppler Systems, PO Box 2780, Carefree, AZ 85377; tel 602-488-9755

L-Tronics, 5546 Cathedral Oaks Rd, Santa Barbara, CA 93111; tel 805-967-4859

Radio Engineers, 3941 Mt Brundage, San Diego, CA 92111; tel 619-565-1319

Douglas RF Devices, PO Box 246925, Sacramento, CA 95824-6925; tel 916-688-5647

### Books

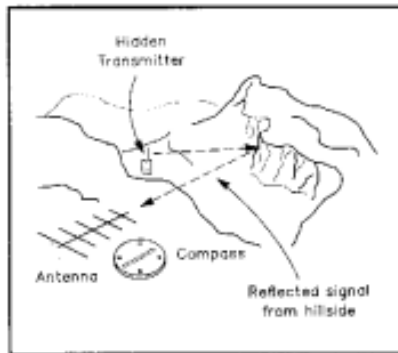
*Transmitter Hunting*—by Joseph Moell, K0OV, and Thomas Curlee, WB6UZZ. Available from your favorite dealer or the ARRL, \$19.

### QST Articles

J. Moell, "Transmitter Hunting: Tracking Down the Fun—Part 1," April 1993, pp 48-51.

J. Moell, "Transmitter Hunting: Tracking Down the Fun—Part 2," May 1993, pp 56-58.

B. Leskovec, "Build the HANDI-Finder," May 1993, pp 35-38. Additional information: Oct 1993 QST, pp 78-79.



**Fig 2—A transmitter hidden in a valley can cause misleading beam headings. In this example, the transmitter antenna is a beam, pointed at the hillside. The strongest signal is coming from the hill. With experience you'll be able to detect and identify the weaker signal coming from the transmitter itself. A similar effect occurs when the transmitter is hidden among buildings or other reflective surfaces, like railroad cars or truck trailers.**

Before we started climbing that bramble-covered mountain, we'd want to take a few bearings from its foot, just to be sure.

Urban transmitter hunts are equally challenging, as a cluster of steel-framed buildings can scatter the transmitter's signal in dozens of directions. The problem gets worse at higher frequencies. If you're hunting in the city, remember that the transmitter need not be at ground level. When you're close to a transmitter hidden a few floors up, in a building sandwiched between others, dogged persistence pays off. Use your best directive antenna to "paint" across and up and down the buildings around you, looking for the peak from the transmitter itself.

**Practicing Your Skills**

It only takes two to T-hunt. You and a friend can take turns hiding and seeking. If no one else is available, try hunting local repeaters or their users. Hunting a user is particularly challenging because the signal isn't constant. In fact, it may leave the air at any minute. Of course, you'll ask permission before going onto private property. Be sure you have your amateur license with you, in case you have to prove you're not a crook plotting a heist! When you get some experience and are ready for a real challenge, try hunting mobiles!

**Practical Hunting**

Using FM repeaters is not without certain aggravations. Microphone push-to-talk buttons sometimes stick closed. Some hams leave their rigs turned on when they leave their cars. The combination may result in unintentional jamming of a repeater. Also, Amateur Radio has its own collection of loose nuts, who sometimes feel compelled to jam repeaters or simplex frequencies. Repeater clubs often have interference committees. Committee members are probably

among those who find the hidden transmitter first at the monthly T-hunt. Otherwise, they go about their committee business in secret. Only those unfortunate enough to receive a visit from the committee know how efficiently they can track down an "open mike" or a malicious jammer.

Transmitter hunting is a necessary part of high-altitude ATV (Amateur TV) balloon flights. Depending on the winds aloft, the balloon can drift a hundred miles or more before it finally bursts. From the moment of launch, the hunters track the balloon, trying to position themselves directly beneath it. When the balloon pops and the payload falls earthward on its parachute, the hunters have to be ready to track the package and recover it. Thanks to the skills of transmitter hunters, most payloads are recovered successfully.

Transmitter hunting is also a skill practiced by rescue organizations, especially in the Western mountains. Many private airplanes carry emergency locator transmitters (ELTs), operating a few megahertz below the 2-meter band. ELTs emit a distinctive tone and have built-in batteries that will keep them going for several hours. Many search-and-rescue volunteers are hams.

**On With the Hunt!**

The best way to find out about T-hunting in your area is to ask other users of your local repeaters. If nobody's doing it yet, why not get the ball rolling?

Participants will need adequate equipment. If you don't have enough rigs to go around, form teams. Building some T-hunting antennas and attenuators would be another good club project. Imagine the pleasure you'll get from tracking down the hidden transmitter with an antenna you built yourself!

The first hunts should be easy, to give everyone a chance to find the transmitter. Arrange a meeting place and time and spread the word through club meetings and the local repeaters. Depending on the local terrain, you may want to distribute photocopied street maps of the area in which the transmitter may be located.

The winners of *sprint* hunts within the boundary of a town or small city are often determined by how long it takes them to find the transmitter. The team that finds the transmitter first wins. This method is common when the hunt is held on a repeater input frequency, to reduce the time the repeater is tied up. Wide-area and other advanced hunts are generally scored by mileage, much like a sports-car rally. Scoring by mileage recognizes skill in taking bearings, and discourages high-speed driving during the hunt. These hunts are usually held on simplex frequencies to avoid tying up a repeater.

If you wish, you can collect a small entry fee from each hunter and use the proceeds to buy a plaque or an ARRL book for the winner. The best prize might be to let the winner be the transmitter operator next time. If the winner can't operate a transmitter on the band you use for your hunts, ask some-



one who can to go along as control operator.

If you're looking for an exciting Amateur Radio activity, transmitter hunting is an excellent choice. It's hard to top the thrill of chasing down a fox and savoring the satisfaction of finally finding it! **OST**

**Radio Tips:**

**Using an Autopatch to Report an Accident**

Repeater *autopatches* allow hams to use their radios to place telephone calls from virtually any location. Autopatches are common throughout the US and they are extremely valuable in cases where there is an immediate threat to life or property. If you come upon the scene of an accident, by all means use the autopatch.

Remain calm and get as much information as you can prior to placing your call. When it's time to use the patch, don't worry about breaking into someone's conversation. You have priority! Here's a typical emergency autopatch procedure:

- Give your call sign and say "emergency patch."
- Dial the access code followed by 911.
- When the dispatcher answers, say that you are an Amateur Radio operator reporting an accident.
- Give the highway number and direction of travel. If the accident site is near a mile marker or exit, provide this information.
- State whether traffic is blocked, or if the accident is out of traffic.
- List any apparent injuries along with the number of persons involved.
- If a fuel or chemical spill has occurred, say so. If there is a fire, let the dispatcher know.

For example, "This is KR1S. I am an Amateur Radio operator reporting a two-car accident on I-94 northbound, about 1 mile south of exit 24. The right hand lane is blocked. Property damage only."

Keep your details very brief and to the point. Don't waste time adding superfluous information such as the makes and models of the vehicles. If the dispatcher needs to know, he or she will ask. When you've finished your call, deactivate the autopatch and remain on the frequency. If you've stopped at the accident scene, try to stay until help arrives.—Richard Regent, K9GDF



[Ham Radio Fox Hunting 101 - YouTube](#)

## ARES/AUXCOMM News



The five USB channelized 60-meter frequencies are available for interoperability (communication between services). By convention, Channel 1 is designated the calling channel. This convention is established to train the amateur radio community to reach out on Channel 1 in times of national emergency, for information from the federal government. The amateur radio community uses 60 meters on a secondary basis with federal agencies. This and similar 60-meter interoperability exercises are conducted during the first full week of each month. More information [here](#). - *ARRL News*

## ARES Resources

- [Download the ARES Manual \[PDF\]](#)
- [ARES Field Resources Manual \[PDF\]](#)
- [ARES Standardized Training Plan Task Book \[Fillable PDF\]](#)
- [ARES Standardized Training Plan Task Book \[Word\]](#)
- [ARES Plan](#)
- [ARES Group Registration](#)

Note from Editor: This section is added for information for those interested in Emergency services. Pitt County doesn't have a active ARES Presence. But the practices and lessons available can be useful if working for or helping pass traffic in times of need.

## Important Links

ARRL Home: [www.arrl.org](http://www.arrl.org)

Find an ARRL Affiliated Club:  
[www.arrl.org/clubs](http://www.arrl.org/clubs)

Find Your ARRL Section:  
[www.arrl.org/sections](http://www.arrl.org/sections)

Find a License Class in your area: [www.arrl.org/class](http://www.arrl.org/class)

Find a License Exam in your area: [www.arrl.org/exam](http://www.arrl.org/exam)

Find a Hamfest or Convention:  
[www.arrl.org/hamfests](http://www.arrl.org/hamfests)

Email ARRL Clubs:  
[clubs@arrl.org](mailto:clubs@arrl.org)

## The ARES Letter

### ARES<sup>®</sup> Briefs, Links

#### **Skamania County (Washington) ARES<sup>®</sup> Responds to Tunnel 5 Fire**

On the morning of July 2, Skamania County (WA) ARES Emergency Coordinator Kevin Widener, KE7IN, was on his deck and noticed smoke blowing above the Columbia River. He drove a quarter of a mile to investigate and saw that flames from burning trees were already above the bluff 1,200 feet above the river. Almost immediately, the small community of Underwood, Washington, was under Level 3 "GO NOW!" evacuation orders. The threat was real, and the community's safety became the top priority. The fire became known as the Tunnel 5 fire. By July 4, a Type 2 Incident Management Team was deployed to manage firefighting land and air resources that came from all over the Pacific Northwest.

Recognizing the gravity of the situation, the Skamania County Sheriff, Summer Scheyer, called upon ARES to staff two positions to lend their support at the Emergency Operations Center (EOC). Their crucial responsibilities included fielding phone calls from concerned residents and ensuring Sheriff Scheyer remained informed by closely monitoring social media and firefighting efforts. For 4 intense days, ARES members dutifully manned the EOC, providing vital assistance during a time of crisis. By the time the fire was contained, five residences were lost, several more sustained significant damage, and several other structures were destroyed. Quick response from the local volunteer fire department and firefighting aircraft prevented scores of other homes from being destroyed.

Meanwhile, another ARES member received a request on the morning of July 3 to deploy to a small community located west of Underwood. The area had suffered significant damage to telephone landlines, leaving some residents without any means of communication. To address this urgent need, a radio station was swiftly established at the local school. This improvised solution ensured emergency access to dispatch services, should the need arise. ARES operators showcased their resourcefulness, stepping up to provide citizens with a lifeline during this time when telephone landline access was unavailable. Once the landline was repaired, the radio station was deactivated, marking the successful conclusion of this deployment.

Skamania County ARES comprises a dedicated team of 11 amateur radio operators, all united by their unwavering commitment to the community's safety. Many of these operators had previously been activated during the devastating 2017 Eagle Creek fire, which ravaged over 50,000 acres of the pristine Columbia River Gorge. Their tireless efforts did not go unnoticed, as the Sheriff and other community leaders expressed their gratitude and appreciation for our ARES team's invaluable contributions during the Tunnel 5 fire. -- Kevin Widener, KE7IN/WQWI878, Emergency Coordinator, Skamania County, Washington ARES (W6TQF)

#### **Amateur Radio Supports Oregon Disaster Airlift Response Team**

Combine 2,850 pounds of donated food, 20 cargo flights by 17 general aviation pilots flying over 8,800 air miles, eight airfields, and 44 amateur radio operators, and one can have an effective full-



scale exercise. On July 8, and 9, 2023, the Oregon Disaster Airlift Response Team (ODART), a 501 (c)(3) non-profit organization, activated volunteer pilots from Oregon, Washington, and California to simulate what a response effort might be like when the next full-length megathrust rupture of the Cascadia Subduction Zone (CSZ) off the west coast takes place.

The impact of that CSZ earthquake and tsunami incident will be severe, with widespread failures of electricity, cellular and landline phone systems, commercial radio, Internet services, and (yes, even) amateur radio repeaters. Remote coastal communities will be cut off from food and medical supplies. However, general aviation pilots can utilize small landing strips to deliver cargo of 150 to ~400 pounds per flight, and are expected to be a valuable resource for local and tribal emergency managers.

ODART planners understand the value that amateur radio communications bring to assist them with their disaster response mission. Amateur radio volunteers practice with the pilots' group by transmitting airfield conditions, sea state (for amphibious aircraft pilots), current weather and fuel supplies on hand at airfields, relaying roadway and bridge conditions gathered by aircraft during overflights of impacted areas, and tracking each aircraft (arrival time, cargo quantity, departure time, destination, etc.).

The July 2023 exercise involved ARES, AuxComm, and ACS groups from 10 different counties across a 300-mile footprint, each standing up a Winlink station which, per the exercise scenario, could only connect to an RMS located east of the Cascade Mountain range.

We know that real-world events can affect exercises, and this event encountered three. Cargo flights between Walla Walla, Washington, and Aurora, Oregon, had to fly around smoke from the Tunnel 5 fire [See the related story in this issue -- Ed.] burning in Skamania County, Washington. One ODART aircraft experienced avionics problems and returned to its home base at Hillsboro, Oregon, without cargo (or a working aviation radio in controlled airspace). Another ODART aircraft was en-route from Bend, Oregon, to La Grande, Oregon, when a Winlink message was received from Tyson Brooks, W7BL, who was staffing the radio station at the La Grande airport, notifying the ODART "Air Boss" of the closure of both runways due to the crash landing of a World War II vintage T6 aircraft. This information was quickly relayed to the amateur radio station at the Bend Airport, and the pilot was successfully recalled using aviation radio frequencies.

According to the "Air Boss" for the exercise, commercial pilot Jim Origliosso, KK7ILC, both the pilots and communications volunteers did an excellent job. The food delivered via the ODART cargo flights went to food banks close to the delivery airports. Food bank supplies are sparse this time of year, so the food bank directors were thrilled to receive the airlifted cargo.

Lessons learned in this exercise included the need for a better structure for VHF/UHF radio communications between the airfield flight line and the Winlink radio station, additional resiliency and testing of airport antenna options, establishing Winlink tactical call signs based on the unique FAA ID of the airfields, and the need for developing several custom Winlink forms.

In an exercise scheduled as part of the International ShakeOut Day on October 19, 2023, ODART will practice coordinated overflights of roadways and bridges in the impact areas to gather situational awareness of simulated damage. Amateur radio will again be used to relay these reports via Winlink to transportation officials.

Volunteer general aviation groups with missions similar to ODART exist in most areas of the country, so if your Emcomm group isn't currently helping one with their communications, you may want to reach out. -- Steve Aberle, WA7PTM, Assistant Director, ARRL Northwestern Division.

### **ARRL Simulated Emergency Test Ahead: Montgomery County (Pennsylvania) Prepares for Nuclear Drill**

Every 2 years, the Limerick Nuclear Generating Station (LGS) conducts a drill in coordination with the Montgomery County, Pennsylvania Department of Public Safety. The drill is evaluated by representatives from the Federal Emergency Management Agency (FEMA) and the Pennsylvania Emergency Management Agency (PEMA). Montgomery County activates its Emergency Operations Center (EOC) in Eagleville, Pennsylvania, as well as the 20 Municipal EOCs that lie within the LGS 10 Mile Radius Emergency Protection Zone (EPZ). Since the 1980s, Montgomery County ARES RACES (MCAR) has consistently deployed its operators to the County and Municipal EOCs and provided primary, confirming or When All Else Fails communications between the County and Municipal EOCs. The presence of an Amateur Radio operator in each EOC appears to be a "checklist" item for the FEMA and PEMA evaluators. MCAR contemplates utilizing its AA3E 2-meter and 70-centimeter repeaters and with permission, the Pottstown Amateur Radio Club's 2-meter repeater for FM and digital modes, an evolving local MESH RF and tunnel network as well as HF voice communications. This year's Drill is scheduled to take place on September 26th and will serve as MCAR's Simulated Emergency Test (the ARRL SET).

At MCAR's July meeting, Emergency Coordinator (EC) Chuck Farrell, W3AFV, initiated the drill location assignment process and Assistant EC Rocky Pistilli, N3FKR, conducted a presentation reviewing Fldigi setup and operations. The meeting was conducted in person at the County EOC and via Zoom. Attendees updated and tested MCAR go-kits as well as their own laptops and handhelds. For more information about MCAR, visit AA3E.org. -- Robert Alan Griffiths, NE3I, MCAR PIO

### **Notes from the Minnesota MS-150 Comms Support Effort**

We received lots of compliments from staff, leadership and more than 1,000 riders regarding our support for the MS-150, a 150-mile, 2-day bike event in Minnesota on June 10-11, 2023. Peter Corbet, KD8GBL, and I were assigned as part of the SAG (Support and Gear) van operation at or near the information tents on two of the routes. In between radio calls we tried out a paper version of using tickets for missing helmets and cell phones. We collected backstory and phone numbers for these. We were 4/4 on lost cell phones and 1/2 on helmets--this was good practice for family reunification. I am promoting an application, OSTicket, for this in software. One of our big events in 2022 had nine missing spectator/family member reports.

Our close partnership with volunteer motorcycle riders paid a lot of dividends. They could manage tricky intersections and hidden road crossings and be "first on scene" for crashes. This is one area in which hams can bring value to Public Safety and Emergency Managers -- we work well with other volunteer groups; better than anyone else. Failure Mode and Effects Analysis (FMEA) keeps strongly hinting at this in training courses and on calls.

Matt Genelin, N0YNT, gets credit for an instant best practice on SAG vehicle door marking. Logging (AKA medical records) of all medical incidents/interactions, even at smaller events is critical. There may be a need for follow-up.

On our 75-mile stages, nobody cares tactically what is happening 50 miles away. As an example -- if you have a bike crash that is local, one needs to decide which assets are responding, etc. If there is a shortage of aspirin 50 miles away, for those working the crash, that ties up the radio channel and is really a distraction. I keep missing the memo on the power of out-of-area internet repeater linking in emergencies.

The event organizers concluded the business band UHF rented radios had coverage issues in rural areas. So, they switched to Zello, an internet voice chat application. Between various cellular carriers, coverage was decent. The ability to include non-hams and event leaders in the situational awareness function was key. Our largest area EMS operation was also suggesting Zello for this use case.

If you mix hams, directed nets and events, our channel occupancy "PTT Duration," for better or worse, is very high. This changes the basic engineering behind trunking for business and public safety -- the assumption that average offered traffic load is low and time slots can be shared across lots of potential users. The PTT Duration "H" example is 5 seconds -- for hams that is probably closer to 45 seconds or a minute. For medical dispatch traffic, a very high grade of service is mandatory. So, dedicated repeaters or unpopularly time slots are the best. -- Erik Westgard, NY9D, St. Paul, Minnesota

## Part 2: Current Hospital Nets

[The first part of this series appeared in last month's issue -- Ed.]

Although some hospital nets strictly use analog voice to keep things simple, data modes avoid many of the oral communication errors that occur in noisy environments under stressful conditions. Data communication is now ubiquitous in amateur radio. Winlink Global Radio Email supports both HF and VHF/UHF operation, and is widely used. Some hospital nets have started to use Fldigi modem software in combination with FMsg messaging software. In a pinch, no special interface is needed: data can be exchanged merely by positioning a laptop PC so that its microphone is near the radio's speaker, and the radio's microphone is near the laptop's speaker.

Not enough can be said about the amateur radio leaders who have invested much time and effort in convincing hospitals to install amateur radio stations and antennas, recruiting and training volunteer operators (an ongoing need), coordinating tests of the hospitals' amateur radio equipment to ensure it works, and conducting practice drills.

Many hospital nets were forced to hibernate during the pandemic, as hospitals limited access to their buildings. Most are finally getting back to normal.

All in all, the amateur radio community has built a solid foundation for supporting healthcare providers, and is well positioned to take hospital nets to the next level.

## Hospital Net Challenges

Installing amateur radio stations in most of America's more than 6,000 hospitals is an ambitious goal. Some hospitals, especially those with licensed amateur radio operators on their staffs, wel-

come the use of amateur radio in emergencies. Others require convincing. According to Bret Smith, W4HBS, Assistant Section Emergency Coordinator, Georgia ARES, the latest CMS 2 rules require that hospitals have reliable backup communication for emergencies, and amateur radio has demonstrated it's the best option.

Still, some hospital personnel believe that their commercial backup communication solutions -- primarily satellite phones and land mobile radios -- are adequate. However, as Smith points out, "Satellite phones often don't work indoors, and it's neither practical nor safe to go outdoors during a storm." Land mobile radios used to communicate with ambulances may also be able to reach other hospitals, but ambulance traffic is often urgent, so their use would depend on the availability of spare radios and channels.

While commercial backup systems have their strengths, amateur radio is exceptionally versatile. Nor is it necessarily an either/or question: Amateur radio can provide extra capacity when other communication resources are stretched to their limits. "Amateur radio offers hospitals unique backup communications capabilities. When the disaster is at its worst, communications must be at its best," said Jack Tsujimura, KH6DQ, Statewide HealthComm Coordinator for Hawaii.

What steps can be taken to convince hospitals to include amateur radio in their emergency communication plans? First, make the hospital aware that the Federal Emergency Management Agency (FEMA) sees amateur radio as a valuable emergency communication tool. In my region, the St. Louis Area Regional Response System (STARRS) works closely with FEMA and included amateur radio in its 110-page 2009 Regional Healthcare Coordination Plan. Second, direct the hospital to grants that pay for amateur radio equipment (such as those available from the Administration for Strategic Preparedness and Response, ASPR). Third, set up a meeting between local Amateur Radio Emergency Service (ARES) leaders and the hospital's emergency communication manager, facilities manager, and preferably an executive who can approve the project. Use the meeting to describe amateur radio's capabilities, present examples of how amateur radio provided vital communication during previous disasters, and reassure hospital management that amateur radio volunteers will be there solely to send and receive messages at their direction.

Ensuring that there are enough volunteer operators can be a challenge. Licensed operators are needed to test the amateur radio equipment in hospitals on a regular basis, participate in practice drills, and operate the stations during disasters.

How many volunteer operators are necessary? One volunteer can cover three locations tested quarterly. More volunteers will be needed during emergencies. The volunteer's first concern, however, should be the well-being of his or her family. A volunteer who is worried about loved ones cannot be effective.

Ideally, there should be enough operators to enable working in shifts, but hospital nets report that in practice two operators can handle the busy first day or so, with one operator working while the other rests.

Training is essential for volunteer operators. Most hospital nets recommend the ARRL's Introduction to Emergency Communication course and FEMA's online Incident Command System (ICS) courses (specifically, ICS-100, ICS-200, and ICS-700). Volunteer operators should also be familiar with the hospital's amateur radio equipment and any hospital-specific procedures.

Most importantly, volunteer operators must understand what their role isn't. They are not first responders, health care providers, or decision makers. Their job is to send and receive messages exactly as given, and do it in a businesslike manner.

### **Amateur Radio Hospital Net Opportunities**

One of the best things that the amateur radio community can do to enhance its reputation as an emergency communication service is to create and expand hospital nets around the country. Hospital nets help build relationships with healthcare providers and government agencies. And they demonstrate to the public that amateur radio is ready and able to assist during any disaster, no matter how severe.

Hospital nets can help attract young people, who are encouraged to serve their local communities. Earning an amateur radio license and participating in a hospital net are powerful résumé enhancements. Amateur radio must evolve to meet hospitals' future emergency communication needs and appeal to today's youth, who grew up with the internet. Hospitals need reliable coverage over a wide area, ample capacity, and support for both voice and data. Today's young people are accustomed to high-speed access; many are proficient at producing and uploading videos. How can amateur radio better serve these two constituencies? By building broadband mesh networks covering major cities and large rural areas. Networks consisting of nodes (many equipped with backup power) operated by clubs, sponsors, and individual hams, that are self-healing, and that are readily expandable, would help

### **Conclusion**

Amateur radio has earned praise for providing emergency communication in response to disasters. But it should not be taken for granted. A strategy is needed to meet tomorrow's emergency communication needs. That strategy should guide regulatory policy and technology development to make amateur radio hospitals' go-to emergency communication solution and give young people an exciting new outlet for their technical skills and eagerness to serve their local communities. -- Ira Brodsky, KC9TC, St. Louis, Missouri



**ARRL** The National Association for  
Amateur Radio®

## Emails



### ARRL on the Purpose of Amateur

For over 100 years amateur radio and ARRL — the National Association for Amateur Radio® — have stood for the development of the science and art of communications, public service, and the enhancement of international goodwill. Amateur Radio's long history and service to the public has solidified the well-earned reputation that "Amateur Radio saves lives."

Amateur Radio Operators, due to their history of public service, their training, and the requirement that they be licensed by the FCC have earned their status as a component of critical communications infrastructure and as a reliable resource "when all else fails."

Amateur Radio is about development of communications and responsible public service. Its misuse is inconsistent with its history of service and its statutory charter. ARRL does not support its misuse for purposes inconsistent with these values and purposes.

### ARRL Podcasts

Listen to [ARRL Audio News](#), available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.



ARRL Audio News is distributed through [Blubrry.com](#). You can subscribe to the podcast via your IOS or Android mobile device with your favorite podcast app, or you can listen and download episodes directly from the Audio News page at Blubrry. Each week, the current edition is available at [ARRL Audio News](#).

### ARRL Podcasts Schedule

#### On the Air Sponsored by [Icom](#)

#### When Messages Matter: Passing Traffic

Passing traffic is a ham radio activity that's nearly as old as ham radio itself, and getting accurate messages to their destination in a timely manner takes training and skill. In addition to participating in nets, hams also have the opportunity to take on ARRL Field Organization positions that are responsible for traffic. In this episode, we talk to Ethan Hansen, KC1OIP, who

fulfills one such position, Official Relay Station, in ARRL's National Traffic System. Listen in to learn about what it takes to become an Official Relay Station, how the position makes a difference in the community, and how it benefits your amateur radio skills and experience.

The *On the Air* and *Eclectic Tech* podcasts are sponsored by Icom. Both podcasts are available on iTunes (iOS) and Stitcher (Android) as well as on Blubrry - [On the Air](#) | [Eclectic Tech](#)

### Amateur Radio in the News

["Kingsport Amateur Radio Club hosts summer field days at Warriors Path"](#) / WJHL-TV (Tennessee) June 25, 2023 -- *The Kingsport Amateur Radio Club is an ARRL Affiliated Club.*

["ROARS Amateur Radio Field Day lonely but rewarding for solo operator."](#) / Ramona Sentinel (California) June 28, 2023 -- *The Ramona Outback Amateur Radio Society is an ARRL Affiliated Club.*

["Amateur Radio Association meets for a Field Day between Caledonia and Eitzen."](#) / The Caledonia Argus (Minnesota) June 30, 2023 -- *The Mississippi Valley Amateur Radio Association is an ARRL Affiliated Club.*

["In the age of smartphones, what keeps Durango Amateur Radio Club going strong?"](#) / The Durango Herald (Colorado) July 2, 2023 -- *The Durango Amateur Radio Club is an ARRL Affiliated Club.*

["Making connections: Ashe County Amateur Radio Club makes over 340 contacts in 24 hours"](#) / Mountain Times.com (North Carolina) July 2, 2023 -- *The Ashe County Amateur Radio Club is an ARRL Affiliated Club.*

["Poway ham radio operators host demonstrations during national Field Day"](#) / San Diego Union Tribune (California), July 4, 2023 --*The Poway Amateur Radio Society.*

["Tampa Amateur Radio Club prepares for this hurricane season"](#) / WTOG-TV/CW-44 (Florida), July 10, 2023 -- *The Tampa Amateur Radio Club is an ARRL Affiliated Club.*

["CT ham radio enthusiasts use old-time skills to reach out to the world"](#) / CHRON.com (Connecticut), July 11, 2023 -- *The Wireless Operators of Winsted and the CQ Radio Club are ARRL Affiliated Clubs.*

["Amateur radio operators in Butts County put their skills to test during annual Ham Radio Field Day"](#) / Jackson Progress - Argus (Georgia) July 17, 2023 -- *The Amateur Radio Club of Butts County.*

["Bathtub society salutes Nanaimo Amateur Radio Association"](#) / Nanaimo News Bulletin (British Columbia) July 20, 2023 -- *The Nanaimo Amateur Radio Association.*

["Nonprofit uses Shavano Park event to educate public on amateur radio"](#) / Community Impact (Texas) July 20, 2023 -- *The San Antonio Radio Club is an ARRL Affiliated Club.*

["Amateur HAM Radio Operators Serve as Vital Link in Times of Crisis"](#) / Mountain Lake PBS (New York) July 21, 2023 --*The Champlain Valley Amateur Radio Club is an ARRL Affiliated Club.*

["Teaching a new generation: Amateur radio group holds summer class"](#) The Paducah Sun (Kentucky) July 22, 2023 -- *The Paducah Amateur Radio Association is an ARRL Affiliated Club.*

["Demonstration of Ham Radio and its modern capabilities, July 25"](#) / The Loop (California) July 26, 2023 -- *The Tehachapi Amateur Radio Association is an ARRL Affiliated Club.*

["Teachers in Newington build antennas to decode message from International Space Station"](#) / WTNH-TV (Connecticut) July 26, 2023 -- *ARRL® The National Association for Amateur Radio.*

## W1VCM Receives Grant for the Vintage Radio and Communications Museum

The amateur radio club of the [Vintage Radio and Communications Museum of Connecticut](#), W1VCM, has received a grant to design and implement new antennas that cover frequency ranges available to US radio amateurs and add Earth-space capabilities to their shack.

"These new capabilities will allow club members to show the full range of technologies that make amateur radio the unique lifetime hobby it is," said club President Bob Allison, WB1GCM. "Over the years, these demonstrations have encouraged more than a few visitors to pursue their amateur radio licenses. These improvements will allow our visitors to better engage with technologies that impact their everyday lives," he added.

The museum is run by volunteers and it opened in September 1990. It is dedicated to the preservation of old-time communications equipment and to educating the public about communication systems of the past.

The new functionality will include computer-controlled tracking, a high-gain antenna system, and a new satellite transceiver that allows communications to the International Space Station and several low-Earth orbit amateur satellites.

Vintage Radio and Communications Museum of Connecticut Director John Ellsworth emphasized the importance of the amateur radio club as part of the story of communications, stating, "During our docent-led tours, we discuss the history and development of radio and television. Having a working radio station available reinforces many of the topics discussed."

The grant was awarded by [Amateur Radio Digital Communications](#).

**Full ARRL members in the Atlantic, Dakota, Delta, Great Lakes, and Midwest Divisions have the opportunity to choose a Director and a Vice Director to represent them for a 3-year term beginning January 1, 2024.** [ARRL The National Association for Amateur Radio®](#) is governed by its Board of Directors. A voting Director is chosen by ballot by the full (licensed) ARRL members in each of its 15 Divisions. Vice Directors, who serve in the absence of the Director at a Board meeting and succeed to the position of Director should a vacancy occur, are chosen at the same time. Elections are held in five Divisions per year. It takes only 10 full members in a Division to nominate a candidate for either office. Learn more about the process in the [Call for Nominations](#) on the ARRL website.

**NASA has announced the earliest targeted launch date of Tuesday, August 15, for their seventh rotational mission of sending a SpaceX Dragon crew spacecraft and Falcon 9 rocket to the International Space Station.** The launch of Dragon, named Endurance, will take place from Launch Complex 39A at Kennedy Space Center in Florida and will carry NASA astronaut and mission commander Jasmin Moghbeli, KI5WSL, and European Space Agency astronaut and pilot Andreas Mogensen, KG5GCZ. Japan Aerospace Exploration Agency astronaut Satoshi Furukawa and Roscosmos cosmonaut Konstantin Borisov will also be on-board as mission specialists. This is the first spaceflight for Moghbeli and Borisov, and it is Mogensen and Furukawa's second flight.

Following a handover period, crew members from [NASA's SpaceX Crew-6 mission](#) are scheduled to return to Earth aboard their SpaceX Dragon spacecraft named Endeavour. For launch coverage and more information about the mission, visit <https://www.nasa.gov/commercialcrew>.

### **Morse Code is still thriving in amateur radio, 24 years after its last commercial use.**

On July 12, 1999, the original dot/dash system, invented by Samuel F. B. Morse in 1837, gave way to the rapid development of analog and digital communications. The final message sent in Morse code for commercial use was the same one that Morse hammered out on his telegraph key 155 years earlier in 1844, which was, "What hath God wrought?" But this time the message was followed by SK, meaning silent key, or deceased. The International Maritime Organization replaced Morse code with the Global Maritime Distress and Safety System -- an automated ship-to-shore and ship-to-ship system that use satellites and/or terrestrial radio systems with digital selective calling technology. Morse Code is also still used in aviation. Pilots listen to a Morse code identifier to verify that their navigation receivers are tuned to the correct radio aid, such as a VHF Omni-Directional Range (VOR) or Instrument Landing System (ILS) approach guidance system. Railroads stopped using Morse code in the mid-1970s. While Morse code is no longer used commercially, it is still an integral part of amateur radio. Amateur radio operators are no longer required to learn Morse code to obtain their license, but many learn the code on their own or by using study guides and taking classes. Every day, amateurs around the world use Morse code to communicate with each other, test their radio equipment, or pass along friendly information. Morse code is essential in helping people communicate during disasters and emergencies because of its signal ability to penetrate adverse weather issues and propagation disturbance. ARRL offers a variety of resources for those interested in learning Morse code. Visit <http://www.arrl.org/learning-morse-code> for more information.



**[ARRL The National Association for Amateur Radio®](#) is on Threads, the new social media platform from Meta.** Connect with your association via our handle [@arrlhq](#). Find all of our social channels and ways to connect at [www.arrl.org/arrl-social-media](http://www.arrl.org/arrl-social-media)

## Commercial Interests Petition FCC for High Power Allocation on Shortwave Spectrum

The ad hoc group Shortwave Modernization Coalition petitioned the Federal Communications Commission (FCC) to allow data communications on multiple bands within the HF 2 - 25 MHz range with up to 20 kW, including on bands immediately adjacent to spectrums allocated to the Amateur Radio Service. This group appears to represent high-speed stock trading interests. The FCC has assigned the public notice as docket number RM-11953. Comments are due by July 31, 2023, and comment replies are due by August 15, 2023. While the petitioners exclude the amateur bands, high-power operations on immediately adjacent bands are proposed. ARRL is reviewing the petition.

A PDF of the petition is available at: <https://www.fcc.gov/ecfs/document/1042840187330/1>.

## Teachers Gather for STEM Training at ARRL

A group of educators were at ARRL Headquarters in Newington, Connecticut, the week of July 13, 2023, for the ARRL Teachers Institute on Wireless Technology. The 13 teachers were from all over the country, and they were in town to learn hands-on STEM activities through amateur radio. "They liked foxhunting and satellite contacts the best," said ARRL Education and Learning Manager Steve Goodgame, K5ATA.

ARRL holds five sessions each year, and each session is 5 days in length. The [Teachers Institute](#) is an expenses-paid professional development program filled with lectures, hands-on activities, and demonstrations that are intended to provide teachers with tools and strategies to in-

roduce basic electronics, radio science, satellite communications, amateur radio, weather science, microcontrollers, and electronic sensors to their students. "The whole idea is to inspire teachers to go back and inspire their students to be excited about amateur radio," said Goodgame.

Support for the institute is provided by donations from amateurs like you to the [ARRL Education & Technology Fund](#).



## ARRL Laboratory Study of HF Petition Ongoing, Filed Comments to Follow

ARRL is treating a petition before the Federal Communications Commission (FCC) to allow data communications on multiple bands within the HF 2 - 25 MHz range with up to 20 KW as a subject of concern for its members and the greater Amateur Radio Service. ARRL Laboratory staff are studying the matter from a technical standpoint, including analysis of transmitted signals potentially interfering with Amateur Radio communications on Amateur Radio spectrum. The results from this expert review are being finalized and will inform ARRL's filed comments on the matter.

ARRL has heard from many members and other licensed radio amateurs who share interest and concern about this petition. Read more about our efforts here.

## Summits on the Air 2023: North America

**Summits on the Air (SOTA) in North America** has three events scheduled between August 4 - 7, 2023. The Colorado 14er annual event will run from August 4 - 7, the SoCal SOTAFest in Southern California will run from August 4 - 6, and the Pacific Northwest Not-Quite-Fourteener event will run from August 5 - 6, and includes climbers in Washington and Oregon.

SOTA is an award scheme for radio amateurs that encourages portable operation in mountain-

ous areas. It provides opportunities for summit climbers (known as activators) to scale some of the highest peaks in North America and contact amateur radio stations locally and around the world.

Many different frequencies and modes will be used during the August events, but the recommended 2-meter FM frequencies have been changed to 146.58, 146.55, and 146.49 MHz to align with the use of the North America Adventure Frequency for SOTA (146.58 MHz). Operation is also permitted on select HF frequencies. The National Simplex Frequency (146.52 MHz) may also be used. Each event website provides a list of operating frequencies. All amateur radio operators and shortwave listeners are invited to participate.

Read more about SOTA at their website.

**National Sunflower Day is August 15, 2023,** and the ARRL Kansas Section will be hosting a Sunflower Net. The Sunflower Linked System is a multimode linked system in Kansas and the special event call sign will be W0S. Stations are encouraged to check into the Sunflower Net by using one of the connectors listed at [www.sunflownet.us](http://www.sunflownet.us). Those connections are available on Allstar, Hamshack Hotline, EchoLink, digital mobile radio (DMR), Digital Smart Technology for Amateur Radio (D-STAR), System Fusion, Project 25 (P25), or open-source amateur radio M17. Lloyd Colston, KC5FM, one of the event managers, said the sunflower is the state flower of Kansas, and more information about its observance and history is available at the National Sunflower Day web page or at State Symbols USA.

**Amateur radio operators are needed for a real-world science experiment during upcoming solar eclipse events.** Members of the Ham Radio Science Citizen Investigation (HamSCI) will be making radio contacts during the 2023 and 2024 North American eclipses and probing the Earth's ionosphere. The Solar Eclipse QSO Parties (SEQPs) are set to be fun and friendly with a competitive element, and all amateur radio operators and shortwave listeners are invited to partici-

pate. The upcoming eclipses (October 14, 2023, and April 8, 2024) provide unique opportunities to study interactions between the sun and the ionosphere. As participants and HamSCI members transmit, receive, and record signals across the radio spectrum during both eclipse events, valuable data will be created to test computer models of the ionosphere. Learn more at <https://hamsci.org/projects>. ARRL is a partner with HamSCI for the SEQP.

### ARRL and NASA Team Up to Help Teachers

A radio experiment held on July 26, 2023, to decode a slow-scan TV (SSTV) message sent via the ham radio station on the International Space Station (ISS) was successful.

The image transmitted from NASA Goddard Space Flight Center to the ARRL Teachers Institute on Wireless Technology participants via the ISS repeater.



The image was received by a group of educators at ARRL Headquarters in Newington, Connecticut through the voice repeater on the ISS. Teachers from around the United States were on hand for the ARRL Teachers Institute on Wireless Technology, a program that empowers educators to incorporate amateur radio into their science, technology, engineering, and mathematics (STEM) curriculum. As part of the professional development program, the group received and decoded the image sent by volunteers with Amateur Radio on the International Space Station (ARISS). The transmitted image said, "ARRL Teachers Institute: ensuring a space for radio in the next generation."

The teachers made tape measure Yagi antennas for the experiment. [Sierra Harrop, W5DX, photo]



The teachers thought it was cool. "Amateur radio is so important to the future of engineering and STEM in our country," said Kristen

Kucko, KQ4ECP, one of the institute participants. The group gathered outside ARRL Headquarters with antennas they had made earlier in the day. As the pass happened, the educators tracked the ISS by hand. A warble of SSTV transmission filled the air, and the group was excited. After the pass, they used laptops to decode the audio stream into an image, while they sat on picnic tables and enjoyed pizza and wings.

Teachers decode the SSTV image over a picnic of pizza and wings while a photojournalist from WFSB-TV shot video of them. [Sierra Harrop, W5DX, photo]

For ARRL Education and Learning Manager Steve Goodgame, K5ATA, the experiment was a way to allow teachers to engage with the power of radio. "When teachers can pull an image off the ISS via amateur radio, it gives a sense of accomplishment that gets them excited. We want to get them fired up about radio, so they can carry that energy back to their classrooms and do the same thing with their students," said Goodgame.

Each of the teachers on hand for the second phase of the institute, -- "TI-2: Remote Sensing and Data Analysis," -- have already been through the introductory course and they are all licensed radio amateurs. The institute costs teachers nothing to attend, thanks to funding from the ARRL Education & Technology Program.

Several local television stations from the Hartford-New Haven market covered the event. See coverage from WTNH News 8 (ABC) and WFSB Eyewitness News 3 (CBS).

## **Hurricane Watch Net Seeks Bilingual Net Control Operators**

The Hurricane Watch Net (HWN) is looking for new members who are willing to train to become Net Control Operators. HWN is especially interested in recruiting bilingual operators who are fluent in Spanish and English or French/Creole and English. Net Control responsibilities can entail hours of duty to ensure all received ground-truth weather reports are forwarded directly to the National Hurricane Center in Miami.

The net generally activates whenever a system has achieved hurricane status and is within 300 statute miles of a populated landmass. This can vary, however, due to the forward speed and intensity of a storm, or at the request of the forecasters at the National Hurricane Center. Once activated, the HWN continuously operates until a storm is no longer a threat to life and property.

The mission of the net is to disseminate the latest advisories issued by the National Hurricane Center, and to obtain real-time, ground-level weather conditions and initial damage assessments from amateur radio operators in the affected areas. The net then relays that information to the National Hurricane Center by way of WX4NHC, and when required, the Canadian Hurricane Centre. It also functions as a backup communication link for the National Hurricane Center, National Weather Service Forecast Offices, the Canadian Hurricane Centre, Emergency Operations Centers, emergency management agencies, non-governmental organizations, and other vital interests that can involve military relief operations. Such operations can be involved in the protection of life and property before, during, and after a hurricane event.

HWN Manager Bobby Graves, KB5HAV, says training will be provided and each candidate will go through a probationary period with a mentor. Graves, an ARRL member, says an applicant's station must be reliable. "While having a tower, beam, and/or amplifier is not a requirement, your station must allow you to hear and be heard. Therefore, directional antennas and amplifiers are preferred," he said.

The net coverage area includes the hurricane-prone areas of eastern Canada, the US East Coast, the Gulf of Mexico, Central America, and the Caribbean. The net specifically seeks applicants in the middle-to-western sections of the US, Canada, Central America, and the Caribbean. "As always, the HWN is hoping for a quiet season, yet [we are] prepared for the worst," said Graves.

Those interested in learning more can visit the HWN Net Control Information web page at [https://hwn.org/about-us/ncs\\_info.html](https://hwn.org/about-us/ncs_info.html)

**The San Max Patronal Celebration 2023** will take place on August 1 - 31. This is an annual event that radio amateurs in Mexico participate in to celebrate San Maximilian Maria Kolbe, patron saint of radio amateurs. The special event call sign, 4A2MAX, will be activated on August 1 at 00:00 XE Central Time, and it will stay active through August 31 at 23:59 XE Central Time. All amateur radio operators are invited to participate. Official rules and additional information are available at [QRZ.com](http://QRZ.com), on the 4A2MAX web page.

**The New Jersey QRP Club will hold their 12th annual Skeeter Hunt on August 27, 2023.** The objective is to get QRP operators out of their shacks and into the fresh air encouraging them to spread their wings and fill the airwaves with "Skeeters." While commercial equipment can be utilized, bonus points will be awarded to those who homebrewed or kit-built their own transceiver or separate transmitter/receiver. Equipment not built by the operator will not qualify for bonus points, as it will be considered commercial equipment. The event will be a 4-hour sprint beginning at 17:00 UTC and running until 21:00 UTC (1:00 to 5:00 PM EDT). The next event will be held on the third Sunday of August 2024. QRP operators who wish to be designated Skeeters can request a Skeeter number by sending an email with their name, call sign, and state/province from which they will be operating to [w2lj@arrl.net](mailto:w2lj@arrl.net). You do not have to operate portable to be a Skeeter. Please indicate if you intend to operate from a

state other than your home state listed on QRZ. Skeeter numbers are being issued now, and will be issued until the day before the event. For more information and the official rules, visit the [Official NJQRP Skeeter Hunt web page](#).

**BARC Website, some Blog  
page Titles****\*\*\* Membership Dues\*\*\***

Even more than this on the  
website.

Feel free to view, comment and  
add.

Membership dues for BARC are due **January 1** every year. Membership dues are as follows and are almost the same as 2020: • Regular Member \$20.00 • Family Member \$2.00 • Associate Member (Non-Licensed) \$5.00 • Honoree Members \$0.00 • New Hams: Free first calendar year (Jan. to Dec.)

We are requesting that you send the application form in, so that we can have your correct information on file. The form can be downloaded at:

<https://n4pvh.files.wordpress.com/2020/11/application-for-membership.pdf>

Please give the application and dues to the Treasurer at the meeting or mail your dues, along with the member application form to:

Brightleaf Amateur Radio Club, P.O. Box 8387, Greenville, NC 27835

Or go to <https://w4amc.com/membership/> to use PayPal at the page bottom.

If there are any questions concerning membership status or dues, please contact [Treasurer@w4amc.com](mailto:Treasurer@w4amc.com).

Thank you for your continued support and participation in BARC.

**\*\*Renew/Join Now\*\***  
Help Support BARC.

## HURRICANE AND EMERGENCY INFORMATION RESOURCES

**National Hurricane Center**  
<https://www.nhc.noaa.gov/>

**Tropical Tidbits (current forecast models)**  
<https://www.tropicaltidbits.com/>

**Active Red Cross Shelters**  
[maps.redcross.org/website/maps/ARC\\_Shelters.html](https://maps.redcross.org/website/maps/ARC_Shelters.html)

**Red Cross Safe and Well**  
[www.redcross.org/get-help/disaster-relief-and-recovery-services/contact-and-locate-loved-ones.html](https://www.redcross.org/get-help/disaster-relief-and-recovery-services/contact-and-locate-loved-ones.html)

**Facebook Safety Check**  
[www.facebook.com/about/safetycheck](https://www.facebook.com/about/safetycheck)

**Hurricane Watch Net**  
[hwn.org](http://hwn.org)

**VOIP Hurricane Net**  
[voipwx.net](http://voipwx.net)

**Amateur Radio at the National Hurricane Center**  
[www.WX4NHC.org](http://www.WX4NHC.org)

**FEMA - Federal Emergency Management Agency**  
[www.fema.gov](http://www.fema.gov)

**Ready.gov - Plan ahead for disasters**  
[www.ready.gov](http://www.ready.gov)

**Hurricane Central - The Weather Channel**  
<https://weather.com/storms/hurricane>

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## Nets to Know

[Caribbean Emergency Weather Net](#) - Meets daily at 1030Z and 2230Z on 3815 kHz.

[Hurricane Watch Net](#) -- 14.325 MHz, 7.268 MHz -- Activated whenever a hurricane is within 300 nautical miles of expected landfall. Dis-

seminates storm information and relays meteorological data to National Hurricane Center via embedded NHC station WX4NHC. Also relays post-storm damage reports and other relevant information.

[Intercontinental Net](#) operates from 7 AM to noon US Eastern Time on 14.300 MHz, providing a means of emergency communications to any location where normal communications are disrupted.

[Marine Maritime Services Net](#) -- 14.300 MHz -  
- The network acts as a weather beacon for ships during periods of severe weather and regularly repeats high seas and tropical weather warnings and bulletins from the National Weather Service and the National Hurricane Center.

[Salvation Army Team Emergency Radio Network](#) (SATERN) -- 14.260 MHz -- The purpose of the SATERN net is to support the Salvation Army operations in local, regional and international disaster situations. - *ARRL US Virgin Islands Section News*

## WinLink Nets and Practice

### Great Lakes Area Winlink Net

March 2021 Newsletter (Editors Note:  
Great way to learn and practice)

A new Great Lakes Winlink Net to promote the use of Winlink and training on the various facets of the hybrid amateur radio data/internet system. The net is open primarily to those states that border any of the Great Lakes: Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York, and the Canadian province of Ontario. However, radio amateurs wishing to check in from other states or provinces anywhere are welcomed to participate. This net is modeled on the [Wisconsin ARES Winlink net](#).

The net check-in process is as follows: Send either a basic, plain text message, or use any of the forms templates on the Winlink Express platform available that will allow you to include the following line of text in the body of the message or in an appropriate part on the form you choose to send: FIRST NAME, CALLSIGN, CITY, COUNTY, STATE, COUNTRY. For example: RYAN, KB8RCR, REMUS, MECOSTA, MICHIGAN, USA.

The net is on each Wednesday, amateurs may send their messages or forms any time during the day using Winlink in any mode available, RF or via Telnet. Send your message to KB8RCR as the recipient on Winlink. - *Ryan Lughermo, KB8RCR, ARRL Assistant Section Emergency Coordinator for Data Management/Special Projects, Michigan Section; and Official Relay Station From ARES*

The EmComm Training Organization (ETO) will continue the popular Winlink Thursday exercises to foster Winlink-knowledgeable operators across the country. Procedures will include a weekly exercise for routine practice with a fourth Thursday exercise of a more challenging nature. Exercises will almost always include a Winlink Express Check-in form. Please [send questions about Winlink Thursdays](#). Questions about the ETO group can be sent [here](#).

The Canadian American Net ([CANAM](#)) aims to unite hams in the Eastern US and Canada. Some 40 amateurs from Canada and the US typically check in for each session, and the net accommodates CW and SSB. The Canadian-American Net operates 7 days a week on 7.153 MHz, with check-in starting at 1300 UTC.

**Recommend:** Programming your local Emergency Simplex frequency's into your Radio's. It's easier now than when you need them. Brightleaf Amateur Radio Club uses the Repeater frequency in Simplex in case of Repeater failure.

**National Hurricane Center**  
[Voice over Internet Protocol \(VoIP\) Hurricane Net](#), Nets:  
14.325MHz, 7.268MHz

## NETS

### VHF/UHF

- ◆**BARC Net**, Mondays, 2000 on 147.09 MHz, W4GDF Repeater.
- ◆**Down East Hospital Net**, 2nd Tuesday of each month at noon  
Greenville 444.725 MHz, 91.5 tone  
N4HAJ, Traffic Net 2030 local  
Fountain 444.425 MHz, 88.5 Tone  
N4HAJ
- ◆Newport-145.450..... IRLP 8561 links to Columbia
- ◆Jacksonville-147.000- 88.5 tone
- ◆Oriental-147.210-151.4 tone
- ◆444 Newport-444.825- 88.5 tone
- ◆Swansboro-146.760- 88.5 tone
- ◆Grantsboro-145 230 - 85.4 tone.
- ◆Kinston Amateur Radio Society Net, 1,3,4 Tuesdays, 2000 hrs. on 145.47 MHz., W4OIX repeater in Kinston.
- ◆Eastern North Carolina Traffic Net, Every night, 2030 on 444.725-91.5 tone.
- ◆Wilson Amateur Radio Club Net, Thursdays @ 2000 on 146.76 MHz.
- ◆ Piedmont Coastal Traffic Net, Nightly 2030 on 444.725MHz, 91.5 tone
- ◆Carteret County ARS (CCARS) Emergency Net, Tuesdays, 1930 on the Newport 145.45 (-) MHz, tone 100
- ◆Coastal Emergency Linking Net, Wednesday, 2100 ET on Ahoskie 145.13, Buxton 145.15, Columbia 146.835 & 443.30, Elizabeth City 146.655, Greenville, 145.35, Hertford 147.33, Williamston 145.41 & 444.25
- ◆ 220 Net, Wednesday 2000hrs, 224.840 MHz -1.6, PL 91.5
- ◆ PARC Bath Repeater 146.955 PL Tone 131.8 1st Thursday of month at 2000 hours

### HF

- Tar Heel Emergency Communications Net on 3923 kHz Nightly 1930.
- PARC Tuesday net 3.807Mhz SSB 1900 hours(EST)
- NTS CW Nets**
- ◆3.571 2000 hours, slow speed (5-8 wpm) Carolinas Slow Net
- ◆3.573 1900 hours, high speed (20wpm)
- ◆3.573 2200 hours, slow speed (12-14 wpm), South Carolina/North Carolina
- National Traffic System**
- Eastern North Carolina Traffic Net (ENCTN)  
146.685 (146.085 in) MHz (PL 88.5)  
2030E

**More Nets:**

New Swap and Trade Net - There will be a new swap and trade net starting up on 6 meters 53.25 N4YR repeater -1.0 MHz, tone is 100 Hz at 8PM.

Thursdays: 8:30 PM Forsyth County Auxcomm net on 145.47 MHz. 3rd Thursdays are training programs on Zoom at 8:00PM.

Thursdays: 9:00 PM 2 Meter SSB on 144.200 MHz

Sundays: 8:30 PM 6 meter SSB net on 50.155 MHz

Sundays: CW Legacy Net every Sunday from 12:30-1:45 p.m. every Sunday afternoon on 7.060. All speeds and brands of rigs welcome. Net control: Rick, WO8L

Tar Heel Emergency Communications Net on 3923 kHz Nightly 1930.

South Carolina/North Carolina National Traffic System CW Nets 3.571 2000 hours, slow speed (5-8 wpm) Carolinas Slow Net 3.573 1900 hours, high speed (20wpm) 3.573 2200 hours, slow speed (12-14 wpm),

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**Ten-Tec Legacy**

The nets operate on: Ten-Tec Legacy SSB 3.927 MHz on Saturday morning from 6:00 am until 9:30 am

7.195 MHz on Sunday afternoon from 1:30 pm until 3:30 pm

Any radio type is welcome. Netlogger is the preferred check-in method but CQ calls are made for those that don't have access to Netlogger. More information can be found at [www.groups.io](http://www.groups.io) (search for Ten-Tec Legacy nets).

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**Virginia EmComm ( A Winlink practice group)**

This is a Facebook Group that practices Winlink and other related modes every Wednesday. Many Hams

all over involved. All are invited to take part in it.



# Ham Ads



**Ham Ads** will be run, free of charge in Ham Chatter for three months for each renewal. Ads must be received by the last week of the month to be included in the following issue. Send ads to: **Ham Chatter, PO Box 8387, Greenville, NC 27835. Or Email the Ham Chatter.**

## Used Radios and equipment for Sale, Buy or Find:

### Looking for tower sections

Ham looking for a tower or pieces of Rohn 25 tower. If you have something to sell or to get rid of, please email:

Scott Pollard K4SWP at [deputyscoot@gmail.com](mailto:deputyscoot@gmail.com).

Aug 2023

### Cushcraft R-7 vertical antenna,

In very good condition, works very well, covers 10-40m.

I want to give it to a new ham who is working to get onto the HF bands. Will help install. Free to a good home.

Gary Faust NG9T in Blounts Creek.

[gfaust1963@gmail.com](mailto:gfaust1963@gmail.com)

March 2023

### Roof Tower for sale

I have a nine foot Glen Martin roof tower in storage at Advance Moving in Winterville. Rather than move it I'll take any reasonable offer for it. No shipping. Pick up at the warehouse. Payment via PayPal only.

Thanks.

Harry  
K8HP

(Sorry folks, Contact info was not passed on to the Chatter)

June 2023

# Ham Ads

## Commercial Ad Rates

1/8 page, Business Card Size  
 \$10 per Month - \$100 per Year  
 Send ads to: **Ham Chatter,**  
**PO Box 8387, Greenville, NC 27835**  
 Help support *Ham Chatter* and the club.  
**Donations accepted!**

No Charge for Ham's selling or looking for items.

## How to print a copy of your FCC License

by Jim, KV4SJ

To access an official copy of your license:

1. Go to: [HTTPS://wireless2.fcc.gov/UlsEntry/licManager/login.jsp](https://wireless2.fcc.gov/UlsEntry/licManager/login.jsp)
2. Log in with your FRN and password. (Also has links to find or get your FRN.)
3. Click on "Download Electronic Authorizations" in the links on the left hand side.
4. Select your call sign in the box labeled "My Authorizations" and click on the Add button to copy it into the "Authorizations to Download" box.
5. Click on the Download button to download an official copy of your license in PDF format.  
 via *Forsyth ARC Newsletter, August 2020*

## BARC on FACEBOOK

<https://www.facebook.com/w4amc/>

## Facebook and Group details

<http://www.w4amc.com/barcnews.html#BARC>

## Pitt County Repeater Association

<http://www.pcra.us/>

## Monday & Monday, CPA's, PA

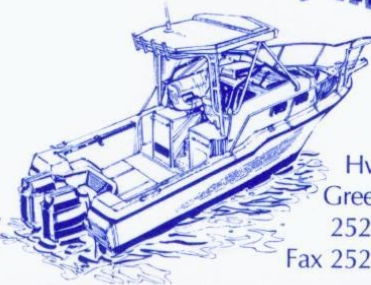
Certified Public Accountants

TERRY A. MONDAY, CPA, CVA, EA  
**K4ZYD**

105-D East Victoria Ct.  
 Greenville, NC 27858

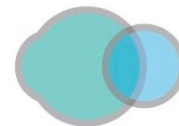
Phone (252) 321-6007  
 Fax (252) 321-2991

## MARK'S MARINE, INC.



Mark Langley  
 Mike Langley  
**KD4MTT**

Hwy. 33 East  
 Greenville, NC  
 252 758-3309  
 Fax 252 758-1396



## East Carolina Retina CONSULTANTS

**Peter Van Houten, M.D.**

2501a Stantonsburg Road  
 Greenville, NC 27834

252-758-2402

<https://ECRetina.com>

# CALENDAR OF EVENTS

## Contest, Events and Meetings

### 2023 Starts Here: Just some of the MANY contests and Events

Aug 5-6 . . . . . [222 MHz and Up Distance Contest](#)  
 Aug 8 . . . . . BARC Meeting 6:30pm  
 Aug 12 . . . . . BARC Breakfast 9am  
 Aug 12-13 . . . . . [EME - 2.3 GHz & Up](#)  
 Aug 10 . . . . . **Pamlico** Meeting 7pm  
 Aug 19-20 . . . . . [10 GHz & Up – Round 1](#)  
 Aug 20 . . . . . [Rookie Roundup – RTTY](#)  
 Aug 29 . . . . . BARC Board 7pm Zoom  
 Sept 9-10 . . . . . **Bike MS: New Bern**  
 Sept 12 . . . . . BARC **Picnic, Dave Woods** 6pm  
 Sept 16 . . . . . BARC Breakfast 9am  
 Sept 14 . . . . . **Pamlico** Meeting 7pm  
 Sept 26 . . . . . BARC Board 7pm Zoom  
 Oct 10 . . . . . BARC Meeting 6:30pm, **Speaker:** Dale Burmester, About FT8 Digital mode.  
 Oct 14 . . . . . BARC Breakfast 9am  
 Oct 12 . . . . . **Pamlico** Meeting 7pm  
 Oct 20 - 23 . . . . . Scouting Jamboree on the Air  
 Oct 31 . . . . . BARC Board 7pm Zoom Reports please for the Chatter  
 Nov 14 . . . . . **BARC Meeting and Elections for Board, 6:30 pm**  
 Nov 9 . . . . . **Pamlico** Meeting 7pm  
 Nov 18 . . . . . BARC Breakfast 9am  
 Nov 28 . . . . . BARC Board meeting 7pm  
 Dec 14 . . . . . **Pamlico** Meeting 7pm  
 Dec 11 . . . . . BARC **Christmas Party, 6 pm**, Emmanuel Baptist Church  
 Dec 26 . . . . . BARC—No Board Meeting

### 2024 Starts Here:

Contest Calendar: For more Contest and all the rules:

<https://www.contestcalendar.com/weeklycont.php>

Visit the [ARRL Contest Calendar](#) for more events and information.

Bruce Horn, WA7BNM, [Contest Calendar](#) website. The site now includes a [5-Week Calendar](#). There's more than I could post available.

**BARC Meetings are open to all.**

**BARC Regular Meeting** - 2nd Tuesday @ 6:30 PM Live and Zoom

**BARC Board Meeting** - Last Tuesday @ 7:00 PM ZOOM Except in December.

**Year-long -- [ARRL Volunteers On the Air \(VOTA\)](#). See also the State Activations Schedule for weekly [W1AW Portable Operations](#) including these:**

# CALENDAR OF EVENTS

## Upcoming Section, State, Division Conventions and Hamfest

**2023:**

**August 12**, Cape Fear Amateur Radio Society Swapfest, Cumberland County Shrine Club, Fayetteville. Info can be found at <https://cfarsnc.org/swap-fest>.

**August 12 - 13**, [2023 ARRL Rocky Mountain Division Convention](#), Albuquerque, New Mexico

**August 19 - 20**, [Huntsville Hamfest](#), hosting the ARRL Alabama State Convention, Huntsville, Alabama

**August 25 - 27**, [Northeast HamXposition](#), hosting the ARRL New England Division Convention, Marlborough, Massachusetts

**September 1-3**, Shelby Hamfest, Cleveland County Fairgrounds. Info posted at <http://www.shelbyhamfest.org/>.

**September 9-10**, during which we will attempt to activate all 107 state parks cross North Carolina. Zach Thompson (KM4BLG) is the event leader. Information on the event can be found at <https://ncpota.org/>. A listing of the various state parks in North Carolina can be found at <https://ncpota.org/park-list/>. This will be a great event that gets hams on the air across the State and give operators an opportunity to visit and operate from our beautiful parks.

**September 10**, [ARRL Southern New Jersey Section Convention and Hamfest](#), Mullica Hill, New Jersey

**September 22 - 23**, [HRO Superfest](#), hosting the ARRL Wisconsin State Convention, Milwaukee, Wisconsin

**September 23**, [Red River Radio Amateur's 2023 Hamfest](#), sponsoring the ARRL Dakota Division Convention, West Fargo, North Dakota

**September 23**, [Spokane HAMFEST](#), sponsoring the ARRL Washington State Convention, Spokane Valley, Washington

**SEPTEMBER 29-30**, DX/CONTESTER MEETING IN PIGEON FORGE, TN.

Info can be found at <https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fw4amc.com%2F&data=05%7C01%7C%7Cbaa58549153e4a8239f808db8407a1d4%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C638248940543140172%7CUnknown%7CTWFpbGZsb3d8eyJWljoimC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6I1haWwiLCJXVCi6Mn0%3D%7C3000%7C%7C%7C&sdata=4Wg35r14LxUjmlDTGNcrTqtqm%2FjLj%2BFbyjSlhootNEg%3D&reserved=0>