

Ham Chatter



Volume 58 Issue 1

An Official BARC, W4AMC, Publication

January 2024

Editor, Mark, KG4GVJ

Email: hamchatter@w4amc.com

PARC changing Nets Frequency for VHF and HF

See the PARC Presidents corner for more.

ARRL Straight Key Night (SKN) is held on January 1, 2024, from 0000 UTC through 2359 UTC. Dec 31, 2023 7pm—Midnight East Coast Carolina

Winter Field Day 2024 this Month



BARC General meeting Jan 9, 6:00pm 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

BARC in January 9, 2024,
Scott James will be speaking on Repeaters.

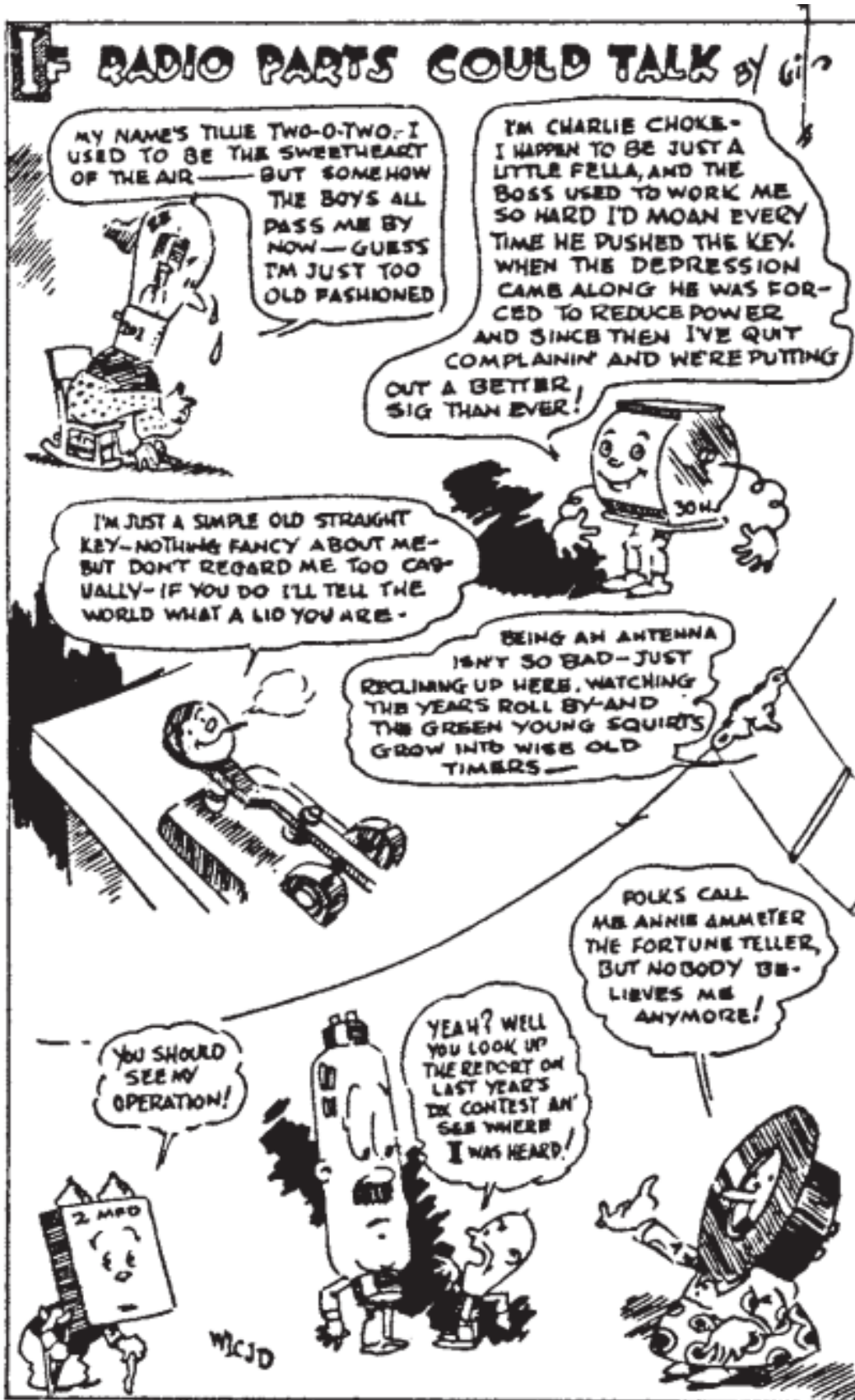
BARC in Feb 13, 2024
Ham YouTuber TheSmokinApe will present a beginners intro to NanoVNA Analyzers.

PARC Jan. 11, 2024

BARC Board Meeting - Jan. 30, 2024. ZOOM

Dues due January 2024 for BARC And PARC

January, 1936



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>.
www.hamradioPrep.com
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 :

01-06 W4ESO Frank

Please let me know of any additions or corrections. If yours is missing, I don't have it! Email hamchatter@w4amc.com

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

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:

BARC member Vashti Forrest's (W4DXJ) mother, Gwen Phelps, 100, passed away last night (12-18) in Tarboro.

Hollis KC3X, went to the Hospital 12/4. Passed out and was feeling unwell.

Father of Billy Elks, KC4HHW Has passed away.

Presentation Ideas Needed

Please send ideas of new presentation topics and presenters to our VP Judy W3JUJ

Email: 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

<i>Operating Tips</i>	14
Presidents Corner - KN4FZB	4
BARC Board meeting	
Presidents Corner—NG9T	6
Greetings from High	8
Yabba and other Clubs	13
ARES/EmComm	16
Columns from the Past or new postings	
W1AW Operating	
ARRL Emails, News and Radio in the News	23
License study and Test	15
Hurricane Resources	36
Nets:	37
Ham AD's	39
BARC & PARC Calendar of Events	41

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BARC's President's Corner, Beth, KN4FZB



Happy New Year Everyone!

Wow, 2023 has gone by quickly. In fact, my entire time with BARC has gone by quickly. When I first arrived in 2020, meetings were still primarily online. Thankfully, we are able to meet in-person now, and keep the option for Zooming in for those who still want it. I'd love to get more local speakers to come in, and get some building activities scheduled. We purchased a foxhunt transmitter and I'm hoping to get a hunt on the calendar.

Personally, I also would like to work on my digital skills and just get more radio time in general. Maybe I'll try to upgrade. I'm hoping that I can streamline my schedule to allow for better use of my time. Do you still make resolutions or set goals? Do you stick with it? What are your tips for being successful? If there was a resolution that was a smashing success one year, I'd love to hear about it. Come and tell us at the next meeting, or at the following breakfast.

**Winners of the Peer Awards, who were recognized at the
BARC 2023 Christmas dinner .**

Ham of the Year - Beth Gonzalez, KN4FZB
Elmer of the Year- Dave Wood, W4EJ
New Ham of the Year- Brandon Hollifield, KO4YJA
YL of the Year- Judy Taber, W3JUU
OM of the Year- Bernard Nobles, WA4MOK

Additionally, we extend our deepest appreciation to those who have served on the board or in various positions that keep the group running.

President- Beth Gonzalez, KN4FZB
Vice President- Judy Taber, W3JUU
Treasurer- Dave Wood, W4EJ
Secretary and Webmaster- Peter Van Houten, N4PVH
Editor of the Ham Chatter- Mark Raysin, KG4GVJ
Equipment and QSL manager, and Net caller- Richard Campbell, W4JNC
Trustees- Bill Dawson, WA4SLC and Scott James, K9SPJ

And a big thank you to Daryl Shaw, N4OHK who was elected to the position of Secretary. All other positions remain the same.



Gary NG9T's PARC President's Corner



Hi Everyone!!

Happy New Year!! I hope that you all had a wonderful Christmas. It sure seemed to me to fly right on by and now here we are looking at a whole new year. It's a leap year so we have an extra day to fill. Maybe we should plan ahead to do something fun on that day!

January is the beginning of my second year of my second term as the President of the Pamlico Amateur Radio Club PARC. and I hope that 2024 is a good year for the club. The first year of my term has flown by, and I hope that PARC will continue to grow and find ways to give to our community. Sharing this great hobby of ours is a worthy goal. We are always looking for ways to let others know more about Ham Radio and also looking for ways to reach the young people who are the future Ham Radio operators that will keep the hobby alive. Let's all look for ways to reach others this year!

Thanks, and 73!! Happy New Year!
Gary Faust, NG9T PARC President

2024 PARC Officers:

Gary Faust, NG9T President
Scott Pollard, K4WSP Vice President
Cheryl McGuire, KX4EC Secretary/Treasurer

PARC Club Dues:

Dues for 2024 are Due starting in January, \$24.00

PARC Meetings:

2nd Thursday of the month at 7:00pm at:
Zion Episcopal Church
7302 US-264 E
Washington, NC 27889

Note: GPS sometimes takes people to West side of Washington. The church is East of Washington, towards Bath. About 7 10ths of a mile past Hwy 32. Also: Meetings are ZOOM'ed for those who cannot attend in person.

Wednesday Breakfast:

Every Wednesday morning at 8:30am at:
Shep's Grill
129 N. Market St
Washington, NC 27889

Note: Park in rear lot, use back door.

PARC Nets:

Tuesday Nights: 80m sideband Net, at 7:00pm

3,807mhz unless frequency is occupied, then we move to closest open frequency.

Thursday Nights:

2m repeater Net.

Currently on the Washington Repeater (Chocowinity)

147.255mhz +.6mhz PL 131.8

Alternate: Bath Repeater 146.955 -.6mhz PL 131.8

Note: We do not have the net on Meeting nights.

VE Exams:

Odd months (Jan, Mar, May, July, Sept, Nov) on the Second Saturday of the month at 10am.

By appointment, we do not have walk-in exams.

Contact: Tom Kottke WT4TK Tkottke@centurylink.net

Location:

Beaufort County EOC

1420 Highland Dr

Washington NC 27889

Upcoming Exam: Jan 13, please contact to reserve an exam spot.

January Event(s):

Winter Field Day January 27-28 UTC

Operating Location:

VFW Post 6088

3375 River Rd

Washington, NC 27889



GREETINGS FROM THE (COLD) HIGH COUNTRY**Dec 20, 2023**

A dusting of snow covers my deck and front yard. The overnight low on Monday night-Tuesday morning was 14 degrees with a chill factor down around 3 degrees due to the high winds we had last night (gusts up to 25 mph overnight). The wind has calmed down somewhat but was still gusting at around 15 mph on Tuesday.

“Baby, it was cold and drafty last night” which is an approximation of how Sportscaster Dick Vitale would have described the conditions up this way overnight on Monday-Tuesday.

You can see the conditions on Beech at <https://www.beechmountainresort.com/mountain/webcams/> which carries continuous streaming video from the mountain top. On Wednesday (12/20) the wind subsided and the afternoon temperature (54 degrees) made for ideal ski conditions.

HAM RADIO MATTERS

A lot of news has come from the ARRL as well as other sources since the most recent NC Section Newsletter was distributed.

1. At long last, the FCC adopted rules that will permit the use of Pactor 4 on amateur HF bands. The FCC published the amended rules on December 8 which means that the rules will permit use of a number of digital modes as long as their bandwidth does not exceed 2.8 KHz which is the bandwidth of a properly operating HF single sideband transmitter.

The actual published rules appear in the Federal Register at <https://www.govinfo.gov/content/pkg/FR-2023-12-07/pdf/2023-26770.pdf> and <https://www.arrl.org/news/arrl-hails-fcc-action-to-remove-symbol-rate-restrictions>.

Please remember that Pactor 4 does not become legal until January 8, 2024.

2. Effective July 1, 2024, there will be a new question pool for the Extra Class license exam. Information from ARRL indicates that there are some new questions and some questions from the current exam pool are being dropped.

Personnel studying with the current license study guides and books are urged to take their test before the new exam comes into use. According to the ARRL, “82 new questions were created, and 101 questions were eliminated, resulting in a reduction [of] the number of questions from 622 to 603. Over 350 questions were modified.” New study guides and books focusing on the updated Extra class exam will be available in May.

For more information, go to <http://arrl.org/news/new-amateur-extra-class-question-pool-released-effective-july-1-2024>.

3. A World Radio Conference (WRC23) recently concluded in Dubai, UAE. During the month-long meeting, representatives of various spectrum users and other interested parties met to debate potential changes in the International radio spectrum allocations.

Amateur radio was represented and active in the proceedings in Dubai. A somewhat technical discussion of what was accomplished in Dubai (which resulted in no loss of amateur radio operating privileges or spectrum can be found at

<https://www.arrl.org/news/wrc-23-concludes-with-wins-for-amateur-radio-and-agenda-items-designated-for-the-next-to-events>.

Part of what was accomplished in Dubai involved setting the agenda for future WRC meetings which gives delegates sufficient time to formulate their positions and to prepare well-reasoned justifications for their proposals that will be presented in future WRC sessions that are scheduled in 2027 and 2031.

4. ARDC (the Amateur Radio Digital Council) has awarded the ARRL \$2.1 million that will be released to the League over two years.

Section Managers have been informed that \$500,000 has been allocated for the Club Grants program (grants to clubs amounting up to \$25,000). Details on how to apply for the 2024 Club Grant program will be posted soon but the ARRL press release announcing the ARDC grant can be found at

<http://arrl.org/news/ardc-and-arrl-announce-2-1-million-for-the-next-generation-of-amateur-radio>.

5. The North Carolina QSO party is held each year in February. The object of the NC QSO Party is to have stations outside NC to contact as many NC stations as possible while NC Stations seek to make contact with stations in each of North Carolina's 100 counties. Information on the NC QSO party can be found at <http://ncqsoparty.org/>. Mark your calendar for February 25 from 10 am to 8 pm. The NC ARRL Section proudly serves as a prize sponsor in one of the operator recognition categories.

6. The ARRL Board of Directors will meet in Connecticut on the third weekend in January 2024. At that meeting ARRL officers will be elected from among the Directors and official business of the League will be conducted. Typically, participants arrive on Wednesday, Committee meetings are held on Thursday, and the Board meets on Friday and Saturday. Also at the January meeting, members of the Executive Committee are elected; the Executive Committee is authorized to act in behalf of the ARRL Board between board meetings. The President and other officers are chosen for two year terms in the January meeting in even numbered years.

7. During a TEAMS meeting of Section Managers held on 12/19, ARRL Field Services Manager Mike Walters (W8ZY) asked that all SM's remind clubs in their respective sections to update the club information which is accessible at www.arrl.org , particularly since many clubs will be installing new officers annually in December or January.

ARRL members are also urged to sign up for the ARRL club news which is sent out electronically 12 times each year. There is no charge to receive the Club Newsletter and each issue contains useful suggestions concerning how to keep meetings interesting and clubs active. A sample issue of the ARRL Club Newsletter can be viewed at <http://www.arrl.org/club-news?issue=2023-12-19> .

8. A recent situation involved malicious interference on a Charlotte area repeater which continued despite the offender being warned by the repeater trustee as well as the FCC. The interference and ignoring the FCC and a written warning from the repeater trustee led to the matter being taken to a local court. The case is discussed on episode 509 of HamRadioNow which can be viewed at <https://www.hamradionow.tv/episodes>.

9. Information has been received that the WCARS (Western North Carolina Amateur Radio Society) VEC will waive the exam fee persons 18 years of age who take their first ham exam.

This information was received from WCARS VEC: "For applicants under 18 years of age (proof required), the exam fee shall be waived for the first examination each session. Provided the applicant passes the exam, subsequent exams for upgrade may be offered as for other applicants at no charge. Should the applicant fail the first attempt, retests during the same exam session will be granted at the usual fee."

10. Upcoming hamfests that are scheduled early in 2024 include:

A.- Orlando Hamcation, Central Florida Fairgrounds and Expo Park, February 9th - 11th, 2024. Info can be found at <https://www.hamcation.com/> .

B- Dalton Hamfest, North Georgia Fairgrounds, Dalton GA, February 24, 2024, sponsored by the Dalton Amateur Radio Club. Information can be found at <https://www.qrz.com/db/W4DRC> .

C- Charlotte Hamfest, Cabarrus County Arena and Event Center, Concord, NC, held on March 8-9 by the Mecklenburg Amateur Radio Society. . Info can be found at <https://charlottehamfest.org/> .

D- RARSfest, Jim Graham Building, NC State Fairgrounds, Saturday, April 6, 2024, sponsored by the Raleigh Amateur Radio Society. Info can be found at <https://www.rarsfest.org/> .

11. If you have neighbors concerned about health risks from amateur

radio stations, you will want to get a copy of the publication released in the past month by the ARRL. You can learn more by going to <http://arrl.org/news/arrl-rf-safety-committee-develops-new-guidelines-to-communicate-rf-safety>.

12. The previous Section newsletter omitted the October 2023 Traffic Report when I was rushed to get out a newsletter prior to the deadline for comments to the FCC concerning the Baud Rate proceeding. The October Section Traffic Report has been posted at ncarrl.org and can be viewed at your convenience.

The November 2023 Section Traffic Report prepared by Dave Roy (W4DNA) is set out below and an expanded version of the report can found at NC ARRL Section website. (ncarrl.org). Thanks go out to the Traffic handlers and to Dave Roy for their service to amateur radio.

EmCOMM MATTERS

1. Personnel with Position Task Books (Auxcomm, ComL, or ComT) will have an opportunity to work on their PTS's during a major communications exercise that has been scheduled for April 4-7 in Chatham County. Information can be found at <https://terms.ncem.gov>.

2. Persons who wish to complete the Auxcomm course may want to consider doing so on February 6-8 while at the Orlando Hamcation. Space is limited and there is a deadline for applying to take the course. Information can be found at <https://www.hamcation.com/events>.

THANK YOU

I began service as the North Carolina Section Manager on April 1, 2020. ARRL Section Managers serve two year terms and my second two-year term as Section Manager will end on March 31, 2024. QST contained information in the September and October issues to guide persons who want to seek office as Section Manager for a term beginning on April 1.

This is the 88th Newsletter that I have prepared for distribution to NC ARRL members as part of my job as Section Manager. Many of you know that I have visited club meetings and traveled a lot over three Field Day weekends. As Section Manager it was my privilege to participate in ARISS contacts with Astronauts talking to students at two public schools in North Carolina. On six special occasions I was able recognize hams and groups that have made a difference in keeping ham radio active and interesting. With respect but some sadness I notified ARRL of the passing of 205 hams for listing in QST as Silent Keys.

A number of persons urged me to seek a third two year term and offered to help and, with their help, we set out for a third two year term. On December 4, I heard from ARRL Headquarters that signed nominating petitions in my behalf were received from 134 persons.

Because the nominating petitions were in order and no other nominating petitions were submitted to ARRL for the position of NC Section Manager, the ARRL By-Laws provide that the sole nominee is automatically declared elected without sending ballots to members.

I very much appreciate the support that you have given me and will do my best to keep you informed and to continue doing everything I can to keep North Carolina ham radio active during my new term.

Thanks go out from me to the many personnel who keep the Section active (Emergency Manager, Traffic Manager, Government Liaison, Technical Coordinator, Youth Coordinator as well as Net Managers, Traffic Handlers, Technician Specialists and Susan Langley Jones, our faithful maintainer of the web page).

Early in 2024 I will be looking for persons who want to help out in keeping NC ARRL thriving.

CLOSING COMMENT

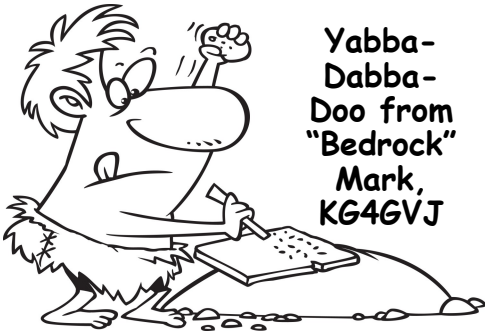
During this very special Holiday Season, many readers will be spending time with their extended families. Gifts will be exchanged and most likely there will be excellent food but probably too many sweets. Some readers will go to a midnight Mass or a special Christmas Service. Hopefully most of us will take time to reflect that Christmas is involves more than gifts and merchandising and binge tv watching.

I hope that each of you and your families are blessed with good health both now and in the future.

Merry Christmas and Happy New Year.

Marv, WA4NC

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



Hi Folks,

HAPPY NEW YEAR!

It's hard to think another year has passed and here we are starting another. My wife and I decided to celebrate Christmas at home for 2023 with hopes of having both daughters joining us. With the distance needed to drive and work on Tuesday for one or both, resulted in only one coming down.

At this time, I'm waiting on a response from someone in hopes they will respond before I send this to Peter. It happens once in a while. We all get busy and forget about the end of the month. If all goes well, you will all get notice of this Newsletter before the 1st.

I'm looking out my window and thinking of some radio events happening soon. It's raining right now, so not a great time to finally get out there and try adjusting the SWR on the antenna. I'm stuck with 10 meters only right now on HF. It's my own fault. I get distracted for hours at times and forget to do something. The main reason I'm not volunteering as a Officer of the club. I won't be serving you well as that.

Meanwhile, my nephew is a Ham now WD4JOE. He's updated to General. Now if I can get myself off my butt and seriously study for Extra before he does

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 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/>.

FARC

FARC Newsletter is available at <http://www.dwepe.com/FARCNewsletters/y2023m11.pdf>
They also have great articles and along with want ads.

Operating Tip

We've traced the RFI! It's coming from inside the house! Have you checked your noise floor lately? RF interference can be horrific and negatively affect your contest scores. Performing a periodic noise audit can help you stay on top of things. Power a receiver from a noiseless source such as a battery and turn everything else off in your location at your circuit-breaker panel. Note the noise levels on each band, then turn everything on again. If you detect a difference, it could be time to do a thorough search for the offending radiator. Start by turning off each breaker again until the noise abates -- that's the circuit that has the device-making noise. Usually it's a switching power supply, but unusual sources have included arcing filaments inside incandescent or halogen bulbs, marginal or defective fluorescent bulbs or ballasts, arcing thermostats, space heaters, LED lights, wall dimmers, variable-frequency drives on furnace or A/C motors, damaged underground feeders to outbuildings, and marginal connections where arcing is occurring.

Technical Topics and Discussion

OM Power's new [OM2002W](#) is a water-cooled LDMOS amplifier for 2 meters. OM Power's website says it's rated at "1800 W CW, SSB, and 1600 W AM, FM, and digital modes, 50% duty cycle," though I doubt that means one day on, one day off. It's nice to see the application of water-cooling trickling down from computer applications. The OM Power website does not yet list details on US availability.

José Nunes, CT1BOH, tweeted an analysis of [propagation paths from Bouvet Island to various continents](#), based on the island's terrain-blocking just eight degrees above the horizon. The results are... not good for some directions, especially on higher bands. You can also [model your own location here](#).

Conversation

Out-of-Band Communications

Email spam. Text-message spam. Phone-call spam. We all get it to varying degrees, but how we handle it determines whether it gets the better of us. One

member of a group chat was recently considering removing their email address from a popular call sign lookup database after they started to get spam emails for a non-ham-related business. They suspected that their email was gleaned from that online listing. I was encouraging them not to remove their email address. Being reachable via email is worth the inconvenience of deleting some unwanted messages because:

- If you're active and do any type of DXing or contesting, operators can email you if there are any issues with QSLs, signal quality, or in response to a DX cluster spot.
- Members of DXing or contesting email groups may have to handle the communications for you, when everyone in the group gets a message like, "Anyone know how to contact N9ADG? He has no email listed on www.qrz.com..." Unfortunately, hundreds of people may have to read that message.

Furthermore, it was unlikely that the email address was actually gleaned from the ham-related database. It was more likely to have been released as part of a data breach (check to see if your email address has been part of a known breach at <https://haveibeenpwned.com/>).

Many email providers do a reasonable job at spam filtering (but yes, some do not). An example of such a provider is Google's Gmail, but there are others. I use a Gmail address for public group interactions and some ham contact databases, and [then use some techniques](#) to automatically direct email into different folders and track email address usage.

With this one simple trick, I keep the utility of email, and spam stays manageable.

That's all for this time. Remember to send contesting-related video links, stories, book reviews, tips, techniques, press releases, errata, schematics, club information, pictures, stories, blog links, and predictions to contest-update@arrl.org.

73 and Happy Holidays! Brian, N9ADG (filling in temporarily for Paul, N1SFE)

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 January 2024

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](#)

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

Find an ARRL Affiliated Club:
www.arrl.org/clubs

Find Your ARRL Section:
www.arrl.org/sections

Find a License Class in your area: www.arrl.org/class

Find a License Exam in your area: www.arrl.org/exam

Find a Hamfest or Convention:
www.arrl.org/hamfests

Email ARRL Clubs:
clubs@arrl.org

ARES® Briefs, Links

ARES® Briefs, Links

In The ARES Letter for November 15, 2023, the Winter Field Day dates are incorrectly listed as January 23-24, 2024. They are actually **January 27-28, 2024**. - Thanks, Jesse Brumm, AJ7F

FEMA released its [2023 National Preparedness Report](#), highlighting the state of the nation's preparedness at all levels of government while examining the risks the nation faces and the capabilities available to address them. With the cost and frequency of disasters increasing markedly over previous decades, emergency managers must continue to adapt, forge new partnerships, and anticipate challenges to help individuals and communities.

Climate change continues to increase the frequency and severity of weather, which compounds the challenges that emergency managers face in addressing an increasingly complex risk environment. The report highlights how to adapt and forge new partnerships to face those challenges and achieve a more prepared nation.

This year's report provides a data-driven picture of national preparedness and emergency management trends with focused discussions on four core capabilities:

- Fire Management and Suppression.
- Logistics and Supply Chain Management.
- Public Health, Healthcare, and Emergency Medical Services.
- Long-Term Vulnerability Reduction.

This year's report provides concrete recommendations that partners and stakeholders across the whole community can take to increase the nation's resilience.

Successful ShakeOut 2023 Exercise and Winlink DYFI Reports

The ShakeOut 2023 exercise was an extremely successful demonstration of worldwide amateur radio, CISA SHARES, and Air Force MARS operators providing "ground truth" reports to USGS during a simulated earthquake. Over 1,500 reports were submitted through the Winlink system using the "Did You Feel It" (DYFI) form developed by the Winlink team in cooperation with the United States Geological Survey (USGS.) Reports were received from the US, several European countries, Philippines, Australia, and New Zealand. The reports were sent directly to USGS and distributed to several other agencies including South Carolina Emergency Management Agency, which generated maps and reports for FEMA.

The DYFI reports were processed by the Winlink Express program, which has built-in capabilities for analyzing and mapping many types of reports. The reports were displayed on a map generated by Winlink Express with markers indicating the severity of the earthquake.

Winlink Express also wrote real-time updates to a comma separated value (CSV) file which was used by ArcGIS® and other third-party GIS programs to generate additional maps, charts, and reports.

The locations of reports shown on Winlink Express maps and passed to third-party GIS programs were very accurate. To achieve maximum accuracy, Winlink Express uses a hierarchy of methods for determining the position:

- The user explicitly specified latitude and longitude (not a default value)
- GPS position from form or message header (inserted automatically by Winlink Express)
- Google street address lookup to determine latitude and longitude
- If no user-specified or GPS location, and the street address is not valid (for example, street address but no city or state), then user's grid square.

Using the grid square is less accurate than GPS or address lookup, but it shows the neighborhood where the report was submitted, rather than discarding the report due to lack of location.

Some additional checks were applied to reported positions. If a user-specified location was provided by someone with a North American call sign (US, Canada, Mexico), and the longitude was positive indicating Eastern Hemisphere, an address lookup was used in preference to the submitted position, because there was a high likelihood that the user got the sign of the longitude wrong. This procedure corrected the location of approximately a dozen reports.

An analysis was done of the positions determined by the hierarchical processing to see how closely they compared to the street address location. This is a summary of the distance between positions derived by Winlink Express and the reported street address:

Distance \leq 33 feet: 93.70%

Distance \leq 50 feet: 95.19%

Distance \leq 100 feet: 96.32%

Distance \leq 200 feet: 97.95%

Distance \leq 500 feet: 98.66%

In 93.7% of the cases, the position was within 33 feet (10 meters) of the street address, and 98% of the time the difference was within 200 feet.

The location difference does not imply an error: The GPS position may be 50 feet from the street address location, but the GPS position may give a more precise location of the sender. A difference of 50 feet could be due to which room in a house the report was submitted from.

Some participants may have experienced the earthquake while away from home, but specified their home address on the report.

In conclusion, the ShakeOut 2023 exercise was a huge success. Several goals were accomplished:

- Many ham operators were motivated to submit DYFI reports, and there was exceptional cooperation between amateur radio organizations worldwide, CISA SHARES, Air Force MARS, state agencies, and FEMA.
- Hams learned about the DYFI form and practiced using it.
- The procedure for submitting reports via Winlink was successful using both Winlink Express and third-party Winlink client programs such as RadioMail and PAT.
- The processing and mapping of reports by Winlink Express and 3rd party GIS programs worked well as it has for previous FEMA and state-driven exercises.
- The hierarchical processing done by Winlink Express to derive the most precise location was successful. GPS positions gave greater accuracy than street address lookup, and several user entry errors were correct-

ed automatically.

- The ability of hams to submit timely ground truth information was demonstrated and noted by FEMA and state agencies.
- During an actual earthquake where the infrastructure is damaged, the ability to submit DYFI reports via Winlink using HF radio will be essential.

The Winlink Development Team is grateful for the cooperative effort of USGS, CISA SHARES, Air Force MARS, FEMA, their stakeholders, ARRL and the many other amateur radio organizations for the roles they played to make this exercise successful. An AAR will be forthcoming. -- *Winlink Development Team (WDT)*

SCARES Members Receive Awards for Tunnel 5 Fire Response

As previously reported in the [July edition of the ARES Letter](#), Skamania County Amateur Radio Emergency Service (SCARES) was activated for 4 intense days in July 2023 during the Tunnel 5 Fire along the Columbia River in Washington. Members augmented the EOC staff and also provided lifeline communications to a small isolated community west of Underwood, Washington, when landline phone lines were not operational. Eight SCARES members donated their knowledge, skills, and abilities for a total of 189.2 hours.

On December 5, 2023, SCARES and those eight participants were honored with awards from ARRL Western Washington (WWA) Section Manager Monte Simpson, W7FF. These were presented by WWAAS EC Mike Montfort, KB0SVF, with the assistance of the DEC for Washington District 4, Michael Barnhart, AE7GQ. Both Skamania County Sheriff Summer Scheyer and Undersheriff Tracy Wyckoff attended the presentations to honor the recipients.

Sheriff Scheyer said "The incredible, selfless efforts made by our ARES members provides a valued service to our community and to our Sheriff's Office. As both a community member and Sheriff of Skamania County, I am forever grateful for those who have donated their time to provide such an integral service."

The inscription on the plaque to the group reads "The Western Washington Section commends the exemplary performance of Skamania County Amateur Radio Emergency Service (ARES) for providing emergency communications to the Skamania County Sheriff's Office and the people of Skamania County during the Tunnel 5 fire July 2023. The actions of this team reflect highly upon the Amateur Radio Service, the Western Washington Section and ARES." In addition, each participating member received a mounted Emergency Communications Commendation certificate from the ARRL.

Recognition of outstanding efforts is a key tool in helping EmComm leaders retain their valued volunteers. -- Steve Aberle, WA7PTM, Assistant Director, ARRL Northwestern Division

Letters: Wilderness Heart Attack Emergency Handled by Winlink

A while ago my ham radio friend and I went camping along the Jemez River, New Mexico, in one of the many Jemez Campgrounds. It was a perfect place for ham radio operators to be, as there is absolutely no cell phone access there at all. There was no FM repeater reachable from that area either, which was fine by us. We busied ourselves with FT8 and FT4 as well as phone operation. We sent several Winlink messages earlier in the day utilizing stations in Wickenburg, Arizona and Framingham, Utah. We sent SMS text messages to our grandchildren, as they don't like email.

As the evening wore on, my friend started having symptoms of a heart attack. He was familiar with the symptoms, as he had several stents and previous heart problems. We needed an ambulance, but there was no cell service, and it was miles to another phone. It was late at night and, being unfamiliar with the area, we were at a

loss as to the best way to proceed.

I knew that Winlink has the ability to send SMS text messages, and my son was on call that week so he would answer a text message. I composed a message giving my location, including the GPS coordinates and the urgency of the situation. I sent the message via Winlink VARA HF to a station in Wickenburg. I waited for what seemed to be an eternity (in reality, only 10 minutes) and checked for a response. He had replied with a message that he had contacted the state police -- they would take care of the situation. In approximately 20 minutes, an ambulance arrived and my friend was on his way to the hospital. He is alive and well today.

Being a Technician licensee is a wonderful start to the world of emergency communication, but when real emergencies occur, having General- or Extra-class privileges and an HF radio is even better. -- *John Mocho, KC5QOC, Albuquerque, New Mexico (with thanks to Jay Miller, W5WHN)*

Neighborhood Radio Watch: Ideas

The purpose of a [Neighborhood Radio Watch](#) (NRW) program is to promote safety and cohesiveness of the neighborhoods of our community by using radios to communicate. When normal communications are lost, radio comms can save lives, or at least, reduce fears. When times are tough, the ability to communicate with others can be calming. In normal times, scheduled radio nets for the purpose of radio training and practice can help neighbors get to know one another. That tends to make life better for those involved. For neighborhood communications, CB, [General Mobile Radio Service](#) (GMRS) and [Family Radio Service](#) (FRS) radios are options.

We've tested out CB. I have a 4 W mobile CB radio used as a base (a President Walker III) and an Antron 99 antenna up about 18 feet. The other rig was a Midland 75-822 with an MXTA26 antenna. In spite of the excellent antennas, CB contact dropped off after about 2 miles. I did hear a friend once at about 2.5 miles, but he was so far down in the mud that he could have been a genuine mud duck. I had to open the squelch all the way, and still his voice could not have been more faint.

GMRS proved to be better. My base station is a Midland MXT400 (40 watts) with an N9TAX Labs Slim Jim up in a tree about 20 feet off the ground, fed by LMR-400 coax. The other rig is a Midland MXT115 (15 watts) with a tiny 7" mag mount on the hood of my Jeep. We communicated on channel 16, using maximum power. Coverage was about 3 miles, maximum. A better antenna on the MXT115 would more than likely mean better coverage. Plus, FM gives a good signal until it starts to die. First it starts to crackle, but still remains copyable, then nothing.

We'll be testing 5-watt Radioddity GM-30 handhelds as soon as they come in. For most neighborhoods, 1 mile of coverage would do it. We're hoping these handhelds can do the trick for us, even with just the rubber duck. At \$35, that's a pretty good price point.

The FRS radios we've tried are good for about half a mile. Since GMRS and FRS can talk on the same frequencies, FRS can be a decent option for those who don't want to spend the \$35 to get a GMRS license. -- [Reid Tillery, K9RFT, Alachua County \(Florida\) ARES](#)

Radio Room Dedicated to Veteran Emergency Coordinator

Oregon City, Oregon - The newly established Emergency Communication radio room was named in honor of long-serving Emergency Coordinator for Clackamas County, David Kidd, KA7OZO.

In a ceremony held on November 21, the emergency communications radio room in Clackamas County's Dis-

aster Management offices on the Red Soils Campus was named in honor of Kidd, a longtime amateur radio volunteer who stepped down as the county Emergency Coordinator for radio amateurs in May, after 20 years of service in the position.

Kidd became the Emergency Coordinator for the [Clackamas Amateur Radio Emergency Service](#) (CARES) in 2002. Under Kidd's leadership, CARES formally signed a memorandum of understanding with Clackamas County Disaster Management (then Emergency Management) in 2005, putting in place a strong working relationship between dedicated amateur radio volunteers and county disaster management.

Steve Jensen, Kidd's successor as Emergency Coordinator, said, "David built CARES from just a few people to one that has strong cooperation with Clackamas County, city subunits, and a large, active, trained and committed membership."

Jamie Poole, Interim Deputy Disaster Manager for Clackamas County, announced at Kidd's retirement that the newly established radio room for the county would be named in honor of Kidd and his service to the county.

CARES is a group of licensed amateur radio volunteers in Clackamas County who provide critical communication links during disasters and major events. CARES works closely with Disaster Management in the county. -- [Jeremy Tanzer](#), KI7BDP, Assistant Emergency Coordinator, Oregon City; Assistant Emergency Coordinator, Training, Clackamas Amateur Radio Emergency Service (CARES)

K1CE for a Final: "ASAP" - Short Feed Lines Feedback

The following are two responses I received on last month's item on keeping feed lines as short as possible:

Changing from 40 feet of RG-58 to RG-8 or -213 should not have made that much of a difference. Assuming these are HF dipoles and not a VHF or UHF antenna, the difference in loss should only be about 1.2 dB/100 feet, which is only a change of about 1/2 dB from removing 40 feet. (See the graph of loss vs. frequency for various cables in The ARRL Antenna Book). If you had a change of "epic proportions," then the RG-58 run (or the connectors) was seriously defective. I'd take a close look and test that old feed line! -- 73, Ward Silver, N0AX

I am the EC for Jones County, Iowa, and as such, I read the ARES Letter on a regular basis. Of particular interest to me was your "final" comments about keeping your antenna feed lines short. My comments:

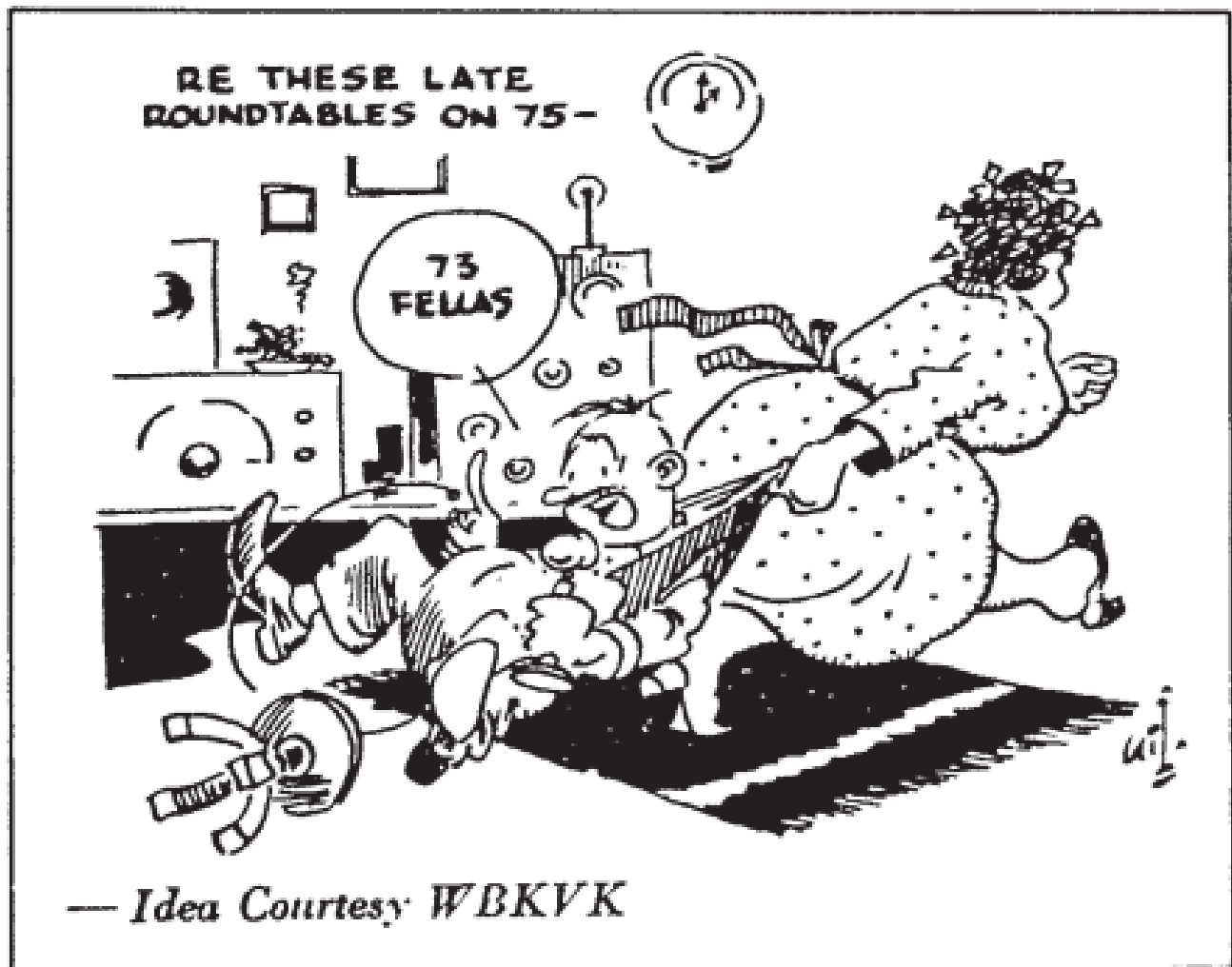
1. I was surprised that you had been using RG-58 to your HF dipole. Just changing to either RG-213 or LMR-400 would have automatically increased your received signal levels, especially on 20 meters and up, and given you a bit more output.
2. Moving antennas closer to the shack (house) can have the unintended effect of coupling more noise into your dipole from electronic devices in the house or radiated power line noise from the house wiring. You can also end up with your RF output coupling into devices in the house and causing RFI that was not noticeable before. That is an effect that too many hams with "postage stamp" lots get dragged into, especially when they have antennas (anything from simple dipoles to tri-band beams) located adjacent to or above the house.

In my installation, which is on acreage, all HF antennas are located at least 50 feet away from the shack, with my main HF antennas fed through about 250 feet of LMR-400 to their support tower that is a bit over 200 feet from the shack. The main HF wire antenna is a 160-meter OCF and it works very well on several HF bands with just 100 watts applied. (I do have a Collins 30L-1 amp to increase the power to 500 watts when necessary.) I realize that all too many hams do not have the luxury of having that much space to allocate for antennas, but they do need to consider the consequences of trying too hard to pack too much into too little space.

Note: I lived on a "postage stamp" lot until I moved to Iowa in 2000.

Rick, I am a retired EMC engineer who has had the opportunity to review and contribute to both editions of the Bonding and Grounding for the Radio Amateur book by Ward Silver, N0AX. I have three towers, the tallest of which is 77 feet and which has taken two direct lightning hits. I have had several antennas blown apart and RF relays on the tower with welded contacts, but zero damage to anything in the house or shack because I applied the principles covered in the book.

Keep up the great work on EmComms and how various groups handle their emergencies and simulated event tests. Thank you. -- Dale Sventanoff, WA9ENA



Chuckle, me on my first Field Day. Wife
calls me at 2 am Sunday complaining I'm
not home.— Editor



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](#)

December 2023 episode of the On the Air podcast ties into a feature in the November/December issue called "Bits and Baud," which discussed important elements of digital communication, namely the quantity of information a transmission delivers -- known as bit rate -- and the rate of speed at which the information is delivered, which is known as baud rate. In this podcast episode, we're joined by the article's author, former QST Editor Steve Ford,

WB8IMY, who explains more about the differences between bit rate and baud rate, as well as why hams are concerned with these measurements in the first place.

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

"[Edmonds Woodway Amateur Radio Club celebrates five years of connecting](#)" / My Edmonds News (Washington) November 22, 2023 - The Edmonds Woodway Amateur Radio Club is an ARRL Affiliated Club.

"[Longmont's Santa on the Air radio call-in program starts next week](#)" / Daily Times - Call (Colorado) November 24, 2023 -- The Longmont Amateur Radio Club and the Northern Colorado Amateur Radio Club.

"[Amateur Radio Association expands N6SBC repeater coverage](#)" / BenitoLink (California) November 28, 2023 -- The San Benito County Amateur Radio Association.

"[Ham Radio in Space: Engaging with Students Worldwide for 40 Years](#)" / NASA November 29, 2023

["CERTs from across the region will hold emergency rescue training in Eugene this Saturday"](#) / KLCC (Oregon) November 30, 2023 -- Community Emergency Response Teams (CERTs).

["All hands on deck for Emergency Alert and Ham Radio teams"](#) / Vashon-Maury Island Beachcomber (Washington) December 6, 2023 -- Voice of Vashon Emergency Alert Team.

["Local students build antennas, communicate with astronaut aboard the International Space Station via radio"](#) / WJET (Pennsylvania) December 11, 2023

["Harborcreek Students Chat with International Space Station"](#) / Erie News Now (Pennsylvania) December 11, 2023

["Dialed in: Harbor Creek Students complete years-long task of livestreaming with space station"](#) / Erie News-Times (Pennsylvania) December 14, 2023

Technical Topics and Discussion

Unshielded twisted pairs liberated from Cat5 or Cat6 cable can be used for RF signal transmission at low power levels. With the cable's 100 Ω nominal characteristic impedance, one could arrange the 2:1 impedance match by using parallel pairs, or by use of a transformer. One hundred watts at 14 MHz might be considered the highest power at the highest frequency for this type of cable. More than a year after it occurred, scientists have determined that the [ionosphere was affected by the largest-ever \(so far\) recorded gamma ray burst](#) on October 22, 2022.

This burst originated from the direction of the constellation Sagitta, and affected the ionosphere's D, E, and F layers between 60 and 350 kilometers above the Earth's surface. RF energy coupled to USB computer cables can produce a wide spectrum of problems. For example, keyboard keys may stick when a signal is being sent, or mice may be unresponsive. CAT connections may be lost, or software may crash because data is scrambled. When encountering

weird computer/rig problems, one of the first things to try is turning the power output to 0 during operation. The disappearance of the problem indicates that it is RF related.

Conversation

Cross-Training

I'm writing this while on the way back from an 18-day DXpedition as part of team H44WA. A DXpedition is similar to a marathon contest, in that the goal is to get as many unique band and mode contacts in the log as possible. Even in the final hours of the operation, callers were clamoring to get in the log, especially to fill open band and mode slots. Pileups were available approximately 22 hours a day; there were lulls during the local midday hours due to the equatorial latitude. It was great practice for contests, using all of the same tools as in a contest situation: computer logging with N1MM Logger+, K3 radios, and antennas. It was also an opportunity to learn best practices with other operators and discover obscure but useful radio or logger functions. Consider traveling to a DX location and operating for a weekend or a week to improve your skills and have a ton of fun. You might even find a rental QTH to make it an arrive-and-operate-style operation.

That's all for this time. Remember to send contesting-related stories, book reviews, tips, techniques, press releases, errata, schematics, club information, pictures, stories, blog links, and predictions to contest-update@arrl.org.

73, Brian, N9ADG (filling in temporarily for Paul, N1SFE)

Announcements

Amateur Radio on the International Space Station (ARISS) is planning

their 40th anniversary celebration conference for February 22 - 24, 2024. The Positive Impact of Amateur Radio on Human Spaceflight: 40th Anniversary Conference will be held at the Center for Space Education: Astronauts Memorial Foundation, located adjacent to the NASA Kennedy Space Center Visitors Center in Florida. Organizers hope to gather volunteer teams, astronauts, space agency officials, educators, and space and amateur radio enthusiasts to attend the event. For registration information and special event pricing at local hotels, visit the event website at <https://www.ariss.org/>, and choose the drop-down menu tab labeled 40th Anniversary. ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA's Space Communications and Navigation program (SCaN), the ISS National Laboratory -- Space Station Explorers, [ARRL](http://www.arrl.org), and AMSAT.

The ARRL Foundation is accepting applications for scholarships through January 10, 2024.

The ARRL Foundation Scholarship Program supports eligible amateur radio operators pursuing higher education. The ARRL Foundation manages more than 100 scholarships established by generous donors ranging from \$500 to \$25,000. Scholarships will be awarded for the academic year that will begin no earlier than June 2024 following the application deadline. The scholarships vary in eligibility requirements.

ARRL Director of Development Kevin Beal, K8EAL, said the scholarships pave the way for amateur radio being a hands-on pathway to STEM careers. "We are so thankful to donors who give to ARRL education programs because they are investing the future of amateur radio. The ARRL Foundation Scholarship Program provides financial support at a critical time for students pursuing a college degree and keeps these young radio amateurs active in the hobby."

Additional information and a link to the application can be found at www.arrl.org/scholarship-program.

The [ARRL Foundation](http://www.arrl.org), celebrating its 50th year, administers programs to support the amateur radio community, and was established in 1973 by ARRL.

Here is a direct link to the application: <http://www.arrl.org/scholarship-application>

ARRL RF Safety Committee Develops New Guidelines to Communicate RF Safety

Radio amateurs now have a new tool from ARRL to help answer questions about their stations. Neighbors of amateur radio operators are sometimes concerned about transmissions and radio frequency exposure from amateur stations.

The [ARRL RF Safety Committee](http://www.arrl.org), with their international counterparts at the Radio Society of Great Britain (RSGB), the Irish Radio Transmitters Society (IRTS), and the Swedish Society of Radio Amateurs (SSA), has developed a new set of guidelines to help amateurs interact with and talk to their neighbors about RF exposure.

Chairman of the ARRL RF Safety Committee Greg Lapin, N9GL, said the new informational PDF found on the ARRL RF Exposure page, [Helping Amateurs Interact with Neighbors Asking About Radio Transmissions](http://www.arrl.org), was developed after a year of discussions about RF safety.

"Neighbors may be alarmed by some of the misinformation about RF safety that is available from a variety of sources. By following the exposure regulations from the Federal Communications Commission, we can be confident that our families and neighbors are safe," Lapin said.

Lapin added that RF exposure regulations are based on decades of trustworthy research. He also encouraged all amateur radio operators to perform exposure assessments for their stations to make sure they meet those regulations.

ARRL Advocacy Win: FCC Approves Request for Pearl Harbor Day Cross-

band Operations

ARRL sought a waiver on behalf of the activators, and the Federal Communications Commission (FCC) has granted it. The [waiver](#) allows amateur radio operators to participate in a special event commemorating the 82nd annual National Pearl Harbor Remembrance Day.

[The Battleship Iowa Amateur Radio Association \(BIARA\)](#), with authority from the US Navy and Southwest Marine Corps Spectrum Office, will honor the sailors and ships previously homeported in San Pedro, California, who were attacked on December 7, 1941. There will be special crossband activations of NEPM, Battleship Iowa's original call sign, on December 6, 7, 8, and 9, 2023.

Using the call sign NEPM, the club will transmit on assigned military frequencies and listen for calls from the amateur radio community on their adjacent bands. NEPM will transmit on 14.375, 18.1625, and/or 21.856 MHz on J3E/USB and/or A1A/CW. (Note: 18.1625 MHz is within US amateur allocations for 17 meters) The club operator will tell participating hams where BIARA will be listening, which will be 10 KHz below the top of each adjacent band when working J3E/USB, or 10 KHz above the bottom of each adjacent band when working A1A/CW. Amateur participants are reminded not to transmit on the NEPM military frequencies. Operations on all 4 days are expected to be from 0700 to 1600 PST (1500 to 2400 UTC).

The FCC stated the grant of the waiver meets the second prong of the waiver standard in section 1.925(b)(3)(ii) in that the event presents a unique opportunity for the amateur and military communities to practice communication skills under the guidance of military officials, which may be useful in the future and serves the public interest.

In addition to the skills gained by amateur operators participating in the test, National Pearl Harbor Remembrance Day has historical significance. It emphasizes the importance of reliable communications and the need to be vigilant in

national defense.

If amateur radio operators who wish to participate are licensed in a country outside the US, BIARA advises to check the terms and conditions that govern their respective licenses.

QSL procedures can be found at <https://biara.org>. For specific questions before the operation, email w6hb@biara.org.

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has removed two General-class license questions.

Pursuant to the November 13, 2023, FCC rule change to remove symbol rate restrictions on amateur radio digital emissions (<http://www.arrl.org/news/arrl-hails-fcc-action-to-remove-symbol-rate-restrictions>), the QPC of the NCVEC has deleted two questions from the General-class question pool because they are no longer correct. General-class questions G1C08 and G1C10 are withdrawn from the pool effective immediately and should be removed from examinations as soon as possible. Updated question pool files, including the errata and new information, have been posted on the NCVEC General-class question pool web page at <http://www.ncvec.org/page.php?id=369>. The current Element 3 General question pool became effective on July 1, 2023, and it is valid through June 30, 2027. The [ARRL VEC](#) advises the community to regularly check the NCVEC website at <http://www.ncvec.org/> for updates to the question pools, which may include errata and withdrawn questions.

In a ceremony held on November 21, 2023, in Oregon City, Oregon, the Emergency Communications Radio Room in Clackamas County's Disaster Management offices was named in honor of former Section Manager of the ARRL Oregon Section David Kidd, KA7OZO.

Kidd is a longtime amateur radio volunteer who stepped down from his role as the County Emergency Coordinator for radio amateurs after 20 years of service. Kidd became the Emergency Coordinator for the Clackamas Amateur Radio

Emergency Services® (CARES®) in 2002. Under his leadership, CARES signed a memorandum of understanding with Clackamas County Disaster Management in 2005 that established a strong working relationship between amateur radio volunteers and county disaster management. Kidd's successor, Steve Jensen, KE7GXC, explained, "David built CARES from just a few people to one that has strong cooperation with Clackamas County, city subunits, and a large, active, trained, and committed membership." Interim Deputy Disaster Manager for Clackamas County Jamie Poole announced at Kidd's retirement that the newly established radio room would be named in his honor to recognize his service to the county. CARES is a group of licensed amateur radio volunteers who provide critical communication links during disasters and other major events. For more information about CARES, visit www.clackamasares.org.

Summits on the Air (SOTA) is offering a 10-meter Challenge in 2024.

The challenge will run from 0000 UTC on January 1, 2024, to 2359 UTC on December 31, 2024. Solar Cycle 25 is beginning to create regular favorable DX conditions on the higher bands, and early predictions indicate the cycle peak may occur during the summer of 2024. SOTA held a 12-meter Challenge in 2013, and since then, more than 90 associations have been added to the SOTA program, including many in South America, the Caribbean, and Asia. There is excellent potential for DX SOTA activity, and activators are encouraged to consider 28 MHz for their summit operations in 2024. Scoring will be done automatically by the database software. Activations and chases should be entered as normal. The software will note 10-meter QSOs and score them according to the rules. Usual SOTA rules will apply. Multi-band activations can also be entered as normal, and all results will be updated. Qualifying 10-meter QSOs will be scored separately from other SOTA activity. There will be a special 10-meter Challenge results page, and electronic certificates will be issued for all participants with their name, call sign, association, and score. For more information, including the rules for the challenge, visit the Summits on the Air website.

Bandwidth Limits Replace Symbol Rates on the HF Bands, Other Bands Open for Comment

The Federal Communications Commission (FCC) [published new rules](#) adopted last month that replace the symbol rate restrictions on the HF bands with a bandwidth limit of 2.8 kHz. The new rules go into effect January 8, 2024.

The bands and band segments affected by the rules change are those authorized for data transmission between 160 and 10 meters, exclusive of 60 meters (where no change was made).

In adopting a bandwidth limit in place of the baud rate limit the FCC agreed with ARRL that some limitation is necessary because "without a baud rate or bandwidth limit, data stations using a large amount of spectrum for a single emission could do so to the detriment of simultaneous use by other stations using narrowband emission modes."

ARRL has advocated for this change for a long time. The move opens amateur data communications to faster and more modern modes and restores the incentive for amateurs to experiment with and develop faster and more efficient data methods. Previously, ARRL obtained waivers to the symbol rate rules on a case-by-case basis to facilitate communications during situations like hurricane responses. These delays will now be removed, permitting drills to be conducted with the faster modes and more timely responses when needed.

The FCC also requested comment on removing similar symbol rate restrictions in the rules governing 135.7 - 137.8 kHz (2200-meter band), 472 - 479 kHz (630-meter band), and the very high-frequency (VHF) and ultra-high frequency (UHF) bands.

The VHF bands with baud rates are the 6-meter band, 2-meter band, and the 1.25-meter band. The single UHF band with a baud rate is the 70-centimeter band (420 - 450 MHz). The [Further Notice of Proposed Rule Making](#) (FNPRM) pro-

poses to maintain the existing bandwidth limits in the Commission's rules for these VHF and UHF bands but seeks comment on whether they should be kept, and if so, whether the bandwidths should be changed. The Commission also sought comment on whether bandwidth limits should be adopted for application to the 2200 and 630-meter bands, and if so, what an appropriate bandwidth limit would be.

Public comments on these additional issues are sought in the FNPRM. The comment period is open until January 8, 2024. Replies to comments are due no later than January 22, 2024. If changes are later adopted, the rules will go into effect in the same manner as they did for the other bands - after notice and publication in the Federal Register.

40 Years of Amateur Radio in Space

Melissa Gaskill, a science author from Austin, Texas, has written a comprehensive review about the 40-year history of amateur radio in space. In her article, "[Ham Radio in Space: Engaging with Students Worldwide for 40 Years](#)," Gaskill explores the Shuttle Amateur Radio Experiment (SAREX), which is now known as Amateur Radio on the International Space Station (ARISS).

Gaskill said that while she wrote the article, she is not an expert on the subject but there are many who are including Kenneth Ransom, N5VHO, International Space Station (ISS) Ham Project Coordinator since 2004.

Ransom said that amateur radio in space was a possibility even before 1983, when Astronaut Owen Garriott, W5LFL (SK), made history during the STS-9 Space Shuttle Columbia mission with the first amateur radio contact from space. NASA had been looking for ways to bring amateur radio to Skylab (a space station designed as an orbiting workshop for scientific research) and even the moon.

"Having amateur radio in space has added a heightened level of interest, not only for hams, but for the overall program as well," said Ransom. "Just being able to talk to a crew member on board a spacecraft is an amazing accomplish-

ment."

Garriott's son, Richard Garriott, who operated amateur radio during a short-term mission on the ISS in 2008, will present a special webinar on December 7, 2023, at 1800 UTC to discuss his father's first historic mission. The presentation will be available to watch on [ARISS - YouTube](#). The event is hosted by ARISS International Chair Frank Bauer, KA3HDO.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA's Space Communications and Navigation (SCaN) program, the ISS National Laboratory -- Space Station Explorers, [ARRL](#), and AMSAT.

2023 SKYWARN™ Recognition Day participants can now obtain an electronic QSL card by visiting the [NOAA SKYWARN website](#).

Step-by-step instructions are available to those who've submitted their log(s) to help them construct and print a 2023 QSL participation certificate. The deadline for submitting logs is January 31, 2024. Additional information is available on the [SKYWARN Facebook page](#).

The New Amateur Extra-Class Question Pool has been released and is effective July 1, 2024.

The National Conference of Volunteer Examiner Coordinators (NCVEC) Question Pool Committee (QPC) has released the 2024 - 2028 Extra-Class FCC Element 4 Question Pool and Syllabus to the public. The new [Extra-Class Question Pool is effective from July 1, 2024, through June 30, 2028](#). The 2024 - 2028 pool is available as a Microsoft Word document and as a PDF. The 10 graphics required for the new Extra-Class Question Pool are available within the documents or separately in PDF and JPG file formats. Extra-class examination candidates preparing for their exams using the 12th edition of The ARRL Extra Class License Manual or the 5th edition of ARRL's Extra Q & A are en-

couraged to test on or before June 30, 2024. New editions of ARRL licensing publications will be available in May for exams taken on or after July 1, 2024. Read more on ARRL News.

WRC-23 Reaches Acceptable Conclusion on 23-centimeter Issue

The International Telecommunication Union (ITU) World Radiocommunication Conference 2023 (WRC-23) continues through December 15, 2023, in Dubai, United Arab Emirates (UAE).

The International Amateur Radio Union (IARU)'s primary effort focused on Agenda Item 9.1 topic b to address amateur use of the 23-centimeter band and co-frequency use by several radionavigation satellite service (RNSS) systems in the 1240 - 1300 MHz band.

IARU's work that began 4 years ago with a preparatory study in the ITU Radiocommunication Sector (ITU-R) to address this agenda item has finally come to a close. Our concerted engagement in the ITU-R working parties, study groups, and WRC preparatory meetings ensured that the amateur services were properly represented during the development of two published ITU-R reports: M.2513 and M.2532. An ITU-R Recommendation, M.2164, followed these, which formed the basis for the discussions at WRC-23.

During the WRC-23 deliberations, strong positions were expressed by all parties involved.

The result is a well-supported compromise for a footnote in the Radio Regulations regarding amateur and amateur satellite service operation in the 1240 -1300 MHz range. The footnote reminds administrations and amateurs of the need to protect the primary RNSS from interference, and it provides guidance for administrations to allow both services to continue to operate in this portion of the spectrum.

Administrations are the bodies that govern amateur radio in their respective countries, such as the Federal Communications Commission

(FCC) in the United States.

The Conference Plenary compromise was formally adopted on December 8 and is not subject to further consideration during the final week of WRC-23. The IARU team continues its work on other WRC issues, including developing agendas for future conferences.

IARU President Tim Ellam, VE6SH, noted, "This is a very good result for the amateur services. The decision reached at WRC-23 on this agenda item makes no change to the table of allocations nor incorporates by reference M.2164 into the Radio Regulations. The addition of a footnote that provides guidance to administrations in the event of interference to the RNSS is a good regulatory outcome for amateurs and the primary users of this band."

The WRC also agreed to suppress Resolution 774, which closes the issue and satisfies the agenda item. Read more in ARRL News.

Student-Led ARISS Contact a Success

A student-led contact with astronauts through the Amateur Radio on the International Space Station (ARISS) program was a great success that earned significant media attention. On Monday, December 11, students at Harbor Creek High School in Harborcreek, Pennsylvania, used amateur radio to talk with Astronaut Andreas Mogensen, KG5GCZ.

The students are part of the Advanced Technologies Group, KC3SGV, an after-school club at Harbor Creek. Fifteen of the students are licensed radio amateurs. As [ARRL News reported last week](#), their faculty advisor, Assistant Principal Drew Mortensen, AC3DS, is a graduate of the ARRL Teachers Institute on Wireless Technology. He utilized what he learned in the program and brought it back to the school. The ARISS contact is just one of the many successes the program has had.

ARRL Education and Learning Manager Steve Goodgame, K5ATA, was on hand for the contact, and he was impressed by the skills demon-

strated by the students.

Goodgame recalled, "From antenna assembly and installation to the actual control operator function of the radio during the contact itself, students were at the helm. Every student who asked a question of Commander Mogensen was a licensed amateur radio operator. When I asked what they had planned next, the response was, 'Well, the logical step would be to build and get a CubeSat launched.' This is exactly the type of program we hope to help create as an outcome of the Teachers Institute," said Goodgame.

Local, regional, and national media took note of the students' success. Local television news-casts (see [Amateur Radio in the News](#) below) featured the event, and NBC Journalist Harry Smith and a crew from NBC's TODAY were at the event to tell the story about the young hams.

This type of exposure for amateur radio is key to growing the hobby, according to ARRL Public Relations and Outreach Manager Sierra Harrop, W5DX. "The passion of these teenage operators led to this success story. Who doesn't love the story of young minds doing extraordinary things in STEM through amateur radio?" she exclaimed. ARRL Director of Development Kevin Beal, K8EAL, mentioned that the media coverage demonstrates the impact that the donors who have funded the Teachers Institute have on the future of amateur radio. Beal said, "The reach goes far beyond the one-week training institute and ripples out farther than we can see."

The ARRL Teachers Institute on Wireless Technology is funded by the ARRL Education and Technology Fund. If you are interested in supporting STEM education through the Teachers Institute on Wireless Technology, visit www.arrl.org/GiveToSTEM.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating or-

ganizations include NASA's Space Communications and Navigation (SCaN) program, the ISS National Laboratory -- Space

2024 ARRL National Convention to be at Hamvention

ARRL and Hamvention® have announced that Hamvention will host the 2024 ARRL National Convention, May 17, 18, and 19 at the Greene County Fairgrounds in Xenia, Ohio. Hamvention is the world's largest annual gathering of radio amateurs and has been sponsored by the Dayton Amateur Radio Association (DARA) since 1952.



"We are pleased to unveil our 2024 logo and theme," announced 2024 Hamvention General Chair Jim Storms, AB8YK, and the Hamvention team. "The theme is 'Expanding our Community'. This is in support of the growth of amateur radio worldwide."

Hamvention Awards Chair Michael Kalter, W8CI, also shared a reminder that the nomination period is open to submit nominations for 2024 Hamvention Awards, including the Amateur of the Year, Technical Achievement, Special Achievement, and Club of the Year awards. More information about the awards can be found on the Hamvention website, and nominations will close on February 15, 2024.

ARRL is building a program for its National Convention that will include presentations and forums, more than a dozen exhibits, and activities for young hams. Once finalized, the National Convention program will be published at www.arrl.org/expo.

Hamvention urged "everyone to purchase their tickets and make their room reservations early to avoid the rush." Visit the Hamvention website for more information and to order tickets at www.hamvention.org.

Youth on the Air (YOTA) Summer Camp

in the Americas will be held July 7 - 12, 2024, in Halifax, Nova Scotia, Canada, at Mount Saint Vincent University. Online applications for licensed amateur radio operators aged 15 - 25 in North, Central, and South America are now being accepted at YouthOnTheAir.org. The goal of the 2024 camp is to enrich the campers' amateur radio experience. They can refine their skills; participate in unique experiences with radio-related technologies, including kit builds, contesting, satellite operations, and a special event station, and meet other young hams through workshops and social events. The 2024 YOTA Americas Camp is hosted by [Radio Amateurs of Canada](http://RadioAmateursofCanada.com).

Amateur radio operators helped a California radio station get back on the air after their equipment sustained heavy storm damage.

In early 2023, KNYO-LP, a low-power FM radio station in Fort Bragg, California, lost their antenna that was unconventionally mounted atop a 70-foot pine tree. Then, in late October, heavy storms damaged their backup antenna, and the station went off the air. President of the [Mendocino County Amateur Radio Communications Service \(McARCS\)](http://MendocinoCountyAmateurRadioCommunicationsService.com) Derek Hoyle, KE6EBZ, and several McARCS members volunteered to help KNYO-LP get back on the air. Their investigation found that several connectors and a lightning arrester were damaged and needed to be replaced. A short time later, the antenna and supporting mast were fixed, and the station went back on the air. KNYO-LP thanked the amateur radio volunteers and the entire Fort Bragg community and said they would not have been able to continue without their support.

UHF Simplex Net in Puerto Rico

The Bayman Radio Club, KP4NM, in Sabana Seca, Puerto Rico, has been conducting a weekly FM simplex net since May 2023. The net is run at 439.000 MHz, on our local simplex sub-band option, every Wednesday night at 8:00 PM AST (Thursday 0000 UTC). Originating from the town of Toa Alta, the net covers an area of approximately 15 miles, depending on

weather, band conditions, and the topography between the stations.

It's main purpose is to maintain a regular simplex presence on the 70-centimeter band by getting to know our simplex neighbors. At the same time, it provides an opportunity to determine a station's capabilities in a line-of-sight ground-wave propagation environment. The testing of upgraded antennas, radio equipment, and coaxial cables are done on a regular basis with reliable reports from the stations.

This also serves as emergency communications and disaster preparedness when repeaters and regular communications fail, like in the 2017 Hurricanes Irma and Maria, and the 2019-2020 series of earthquakes here in Puerto Rico.

After reporting the stations and listening to traffic, net control provides technical capsules of topics related to the 70-centimeter band. Upon closing, the stations are encouraged to stay in the frequency to chat or check their coverage area for future reference.

By Jimmy Drowne, KP3BR

ARRL's Year of the Volunteers Success

2023 has been a remarkable year for amateur radio. There were many noteworthy opportunities for hams to use their license privileges for the greater good. An annular solar eclipse [saw radio amateurs engaging in projects of scientific research](http://sawradioamateursengaginginprojects.com) about our ionosphere, devastating firestorms gutted entire cities and saw [Amateur Radio Emergency Service member-volunteers rise to activate](http://AmateurRadioEmergencyService.com), hurricanes threatened life and property, bicycle races [spread across the desert](http://spreadacrossthe.com) necessitating robust communications provided by hams, and high school students [led and executed contacts with the International Space Station](http://ledandexecuted.com). Many amateur radio operators stood to serve in ways that made headlines, and all of them were volunteers.

Still, tens of thousands of others did work that never made the pages of [QST](http://QST.com), didn't become the

lead story on the local news, and didn't become fodder for online forums. Perhaps it was the ARRL VE who administered tests, welcoming the next generation of hams into the hobby, or the National Traffic System net manager who handled traffic from hams checking in. It could've even been the mentor who took the time to show a learner how to solder. These are the unsung heroes of the Amateur Radio Service -- these are the volunteers.

ARRL has nearly 60,000 volunteers within its membership, without whom it could not function. They are the lifeblood of this hobby. ARRL designated 2023 as the [Year of the Volunteers](#) to recognize their efforts, encourage new prospective volunteers to follow their lead, and call existing volunteers to reach one rung higher on the ladder of service. The [Volunteers On the Air \(VOTA\)](#) operating event has been popular among hams, with some operators making nearly 30,000 QSOs throughout the yearlong activation.

A young man from north Texas emerged as a leader.

Sam Lovett, KI5RSV, is just a teenager but has been awarded the 2023 Hiram Percy Maxim Memorial Award for his success with developing interest in amateur radio among his peers. He leads a youth net and has been instrumental in building a strong ham culture in his Trail Life USA troop. A video interview with Sam will be featured in the February 2023 digital edition of QST.

Lyn Alfman, N8IMW, of Norwich, Ohio, was honored for her volunteer work in the public information space.

She received the 2023 ARRL Philip J. McGan Memorial Silver Antenna Award. The proclamation issued by the ARRL Board of Directors says that Lyn "exemplifies the skills and depth of understanding [needed] to convey to media outlets the fascinating world of amateur radio."

ARRL's George Hart Distinguished Service

Award honors the work member-volunteers put in to use their license privileges to serve others. Jo Ann Keith, KA5AZK, of Diana, Texas, is the 2023 recipient.

Jo Ann is the net manager of the 7290 Traffic Net, a public service traffic net that has been in operation since 1953. She has a long history of volunteer work, dating back to her youth when she served as a candy striper. Like tens of thousands of others, Jo Ann uses amateur radio in the spirit of service.

These are just a few stories that can be told from the Year of the Volunteers. There are so many other stories out there, and we encourage you to tell your own.

While the Volunteers on the Air event closes on December 31, 2023 at 2359 UTC, the spirit of this year will continue as long as there are hams standing to serve others through amateur radio.

From all of us at ARRL, thank you!

VOTA: Badges on the Air

Join all of ARRL's volunteers on December 31, 2023, from 0000 - 2359 UTC, for the last day of the yearlong Volunteers On the Air (VOTA) operating event for your final chance to get some VOTA points. Last week's [Red Badges on the Air for VOTA](#) was a hit, and ARRL wants to do one final push to cap off the year of operating that acknowledged and honored the service of volunteers to the amateur radio community.

There are no more W1AW/ portable operations scheduled for the year, but operators at ARRL Headquarters have the [Hiram Percy Maxim Memorial Station](#) active on weekdays, so there is still a chance to earn 100 points per band-mode for contacting ham radio's most famous call sign. Plus, listen for W1AW during VOTA: Badges on the Air, as it will be active in the event. Remember to download your certificate after the event is over. The link to generate it can be found [here](#).

The VOTA leaderboard is quite impressive. As of December 21, 2023, the top-20 scores were as follows:

Overall Rank	Call Sign	Country Rank	State Rank	QSOs	Points
1	K1RH	1 (USA)	1 (MD)	23981	183641
2	PJ2T			28435	178939
3	W1AW/0			27552	169065
4	W1AW/4			24324	155209
5	ZF1A			23542	149860
6	W1AW/1			22444	146662
7	W1AW/7			21562	139277
8	N8HRZ	2 (USA)	1 (OH)	18354	136396
9	NE3R	3 (USA)	1 (PA)	22609	132402
10	TN8K			23171	129226
11	W6MSU	4 (USA)	1 (CA)	26687	128631
12	N6PE	5 (USA)	2 (CA)	18980	125682
13	8P5A			20083	125556
14	UB3PEP			25914	123901
15	A1QY	6 (USA)	1 (ND)	13446	120434
16	KC5TI	7 (USA)	1 (TX)	16020	120024
17	KRJH	8 (USA)	1 (MI)	6644	118466
18	KBBL	9 (USA)	2 (OH)	20426	118047
19	AC0W	10 (USA)	1 (MN)	14256	114453
20	K7BG	11 (USA)	1 (SD)	12741	114403

ARRL Straight Key Night 2024

The moment VOTA: Badges on the Air ends, another popular event gets started:

ARRL Straight Key Night (SKN) is held on January 1, 2024, from 0000 UTC through 2359 UTC.

Many hams look forward to SKN as one of the highlights of their operating year.

ARRL Straight Key Night (SKN) is January 1, 2024, from 0000 UTC through 2359 UTC.

Operators participate using Morse code (CW). All you need is your favorite straight key or bug. Many participants dust off vintage radios and keys and put them back into service each year just for this event.

SKN is not a contest, so there's no need for

quick exchanges. However, all hand keys, regardless of age, are welcome. The number of contacts you make is not important. The reward is meeting new friends as you get together on the air.

Send a list of stations contacted, SKN stories and photos, and your votes for Best Fist and Most Interesting QSO to straightkey@arrl.org by January 31, 2024.

More information is available at www.arrl.org/straight-key-night.

The US Islands (USI) Awards Program is an amateur radio award program centered around chasing and activating river, lake, and ocean shore islands within the US and its territories and protectorates. USI is offering a special 30th Anniversary Award for hunters and activators from January 1 to December 31, 2024. As a club or as individuals, hunters can work toward confirming 30 different US islands during 2024. The award will be issued in five island increments. Activators can work toward activating or qualifying 30 different US islands, any combination of expeditions, or fixed locations. Activators and island expeditions can also work toward operating from 30 different US islands in any combination of activations or qualifications. A minimum of 15 QSOs must be made for a new island qualification and an island activation to be considered for the award. The award can be issued to a club call sign, multiple members under one call sign, or an individual. There are also bonuses for qualifying new islands. More information and a detailed list of rules are available on the [USI website](#).

The 10-year amateur radio special event and countdown to the 100th anniversary of the discovery of Pluto will continue on February 11 - 19, 2024 (UTC), and celebrate Clyde Tombaugh's discovery from the Lowell Observatory in Flagstaff, Arizona. Members of the [Northern Arizona DX Association](#) will operate from Lowell Observatory and their home stations using the special event call sign W7P. The annual QSL cards, the event certificate, and

more information about the event can be found
at [W7P 2030 \(nadxa.com\)](http://www.nadxa.com).



January, 1950

**BARC Website, some Blog
page Titles**

***** Membership Dues*****

[Hex Beam in the Air!](#)

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.

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

Red Cross Safe and Well
www.redcross.org/get-help/disaster-relief-and-recovery-services/contact-and-locate-loved-ones.html

Facebook Safety Check
www.facebook.com/about/safetycheck

Hurricane Watch Net
hwn.org

VOIP Hurricane Net
voipwx.net

Amateur Radio at the National Hurricane Center
www.WX4NHC.org

FEMA - Federal Emergency Management Agency
www.fema.gov

Ready.gov - Plan ahead for disasters
www.ready.gov

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

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*

SKYWARN

To learn how to become a trained NOAA storm spotter visit [Spotter Training \(weather.gov\)](#).

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 Simples 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 147.255+ PL Tone 131.8 Thursday at 2000 hours Except day of meeting

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),

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 (search for Ten-Tec Legacy nets).

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:

I have a houseful of ham radio equipment for sale at reasonable prices if any of your members are looking for something. Photos available on FB marketplace currently or I could email to anyone who might want to see what's available. Had 3 Rigols, only 1 sold currently. LOTS of other equipment!

Dede Carney
12523479678
dedecarney@kw.com

12/2023

I have a "never been used" **Hexbeam** that I built for someone that backed out at the last minute. The antenna is 6 bands, 6,10,12,15,17, and 20 meters.....it also comes with the optional Ice Cords. I am asking \$500 A new commercial Hexbeam cost \$1000 to \$1200 new. I will also deliver, set it up, and test it on site if you are not too far away. I also will stand behind my work as long as you own it.

I have made about 12 of these antennas and as of today I have had no complaints. If you ever thought about a Hexbeam now is the time.....you will not find one at a lower price.

Also, I will soon have a 40' tower w/rotor if anyone is interested in making a package deal.

I can be contacted at:
pete@wene.net
919-440-2937

11/2023

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

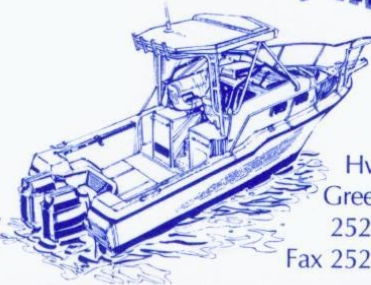
Certified Public Accountants

TERRY A. MONDAY, CPA, CVA, EA
K4ZYD

105-D East Victoria Ct.
 Greenville, NC 27858

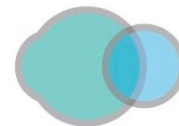
Phone (252) 321-6007
 Fax (252) 321-2991

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

2024 Starts Here:

- Jan 9 BARC Meeting 6:30pm
- Jan 11 Pamlico Meeting 7pm
- Jan 27-28 [Winter Field Day WFD2024](#) UTC
- Jan 30 BARC Board meeting 7pm Zoom
- Feb 8 Pamlico Meeting 7pm
- Feb 13 BARC Meeting 6:30pm
- Feb 25 NC QSO Party 10 am-8 pm <http://ncqsoparty.org/>
- Feb 27 BARC Board meeting 7pm Zoom
- March 12 BARC Meeting 6:30pm
- March 14 Pamlico Meeting 7pm
- March 23 Walk MS: Raleigh
- March 26 BARC Board meeting 7pm, Zoom



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.

Pamlico Meetings—2nd Thursday @ 7pm

CALENDAR OF EVENTS

Upcoming Section, State, Division Conventions and Hamfest

2024:

January 6 [Ham Radio University](#), hosting the ARRL New York City-Long Island Section Convention, Brookville, New York

January 12 - 14 [ARRL Puerto Rico State Convention](#), Hatillo, Puerto Rico

January 19 - 20 [Cowtown Hamfest](#), hosting the ARRL North Texas Section Convention, Forest Hill, Texas

January 27 [Winterfest](#), hosting the ARRL Midwest Division Convention, Collinsville, Illinois

February 2 - 3 [Capital City Hamfest 2024](#), hosting the ARRL Mississippi State Convention, Jackson, Mississippi

February 9 - 11 [Orlando HamCation](#), hosting the ARRL Florida State Convention, Orlando, Florida

February 24 [Central Dakota Amateur Radio Club](#), hosting the ARRL North Dakota State Convention, Bismarck, North Dakota

February 24 [HAM-CON](#), hosting the ARRL Vermont State Convention, Colchester, Vermont

March 1 - 2 [Greater Houston HamFest](#), sponsoring the ARRL West Gulf Division Convention, Rosenberg, Texas

March 8-9 Charlotte Hamfest, Cabarrus County Arena and Event Center, Concord, NC <https://charlottehamfest.org/>

April 6 RARSfest, Jim Graham Building, NC State Fairgrounds, Saturday, April 6, 2024, sponsored by the Raleigh Amateur Radio Society. Info can be found at <https://www.rarsfest.org/> .