

Ham Chatter



Volume 58 Issue 4

An Official BARC, W4AMC, Publication

April 2024

Editor, Mark, KG4GVJ

Email: hamchatter@w4amc.com

Thirteen Time Award Winner

Hollis Thigpen, KC3X, Snow Hill, NC, former member of BARC, finished working all 3077 counties on February 24, 2024 for the 13th time. He is only the second person to complete the task. The other one was a net control a few years ago on the air up to 8 hours a day, 7 days a week. Congratulations Hollis for an outstanding accomplishment.

MS Walk Raleigh 2024

The MS Walk was Saturday, March 23. It was a rather cool and damp day with some sprinkles and a breeze. Over a Thousand walkers and their supporters arrived and walked the Event. Only one Medical event happen, with the person involved checked out by a EMT crew and released to the care of the folks walking for them that day.

One of the Ham Radio Volunteers came down with Covid before the Event and wasn't able to attend. All expected Hams arrived for a meeting before the walk was officially underway. There was a change on one of the folks we were to follow, but all went smoothly. Simplex was used on the course with good signal for all there. *(Mark Raysin KG4GVJ)*

Multi-Club Cookout

April 27, 11 am meet and lunch at Noon
See PARC President's corner for location.

Ideas Wanted!

Ideas of what YOU want to do as a Club. Trips, Events, Contest, projects, car pools to/from? Give all of us a chance to say THAT'S IT!

New calendar towards the back of these.

BARC General meeting April 9, 6:30pm in person and ZOOM All members, families and guests are invited to attend.

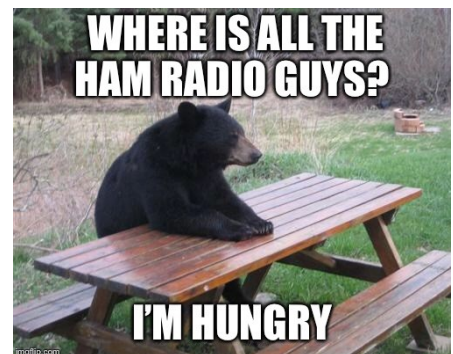
BARC April 9, 6pm
Oakwood School.
Daryl N4OHK
POTA Prep, bring your setup.
By Gary KN4JKM

BARC May 14, 2024, Library
6:30pm
Recent DXpedition experience

BARC June 11, 2024, Field Day
prep at Oakwood School
(Proposed TBA)

PARC April 11, 2024

PARC May 9, 2024



BARC Board Meeting - April 30, 2024. ZOOM

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 :

04-16 KJ4DMV Geraldine
 04-18 WB4PMQ Macon
 04-28 K4EEP Reggie

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

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.

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BARC's President's Corner, Beth, KN4FZB



Happy April, Happy Easter, Happy Spring, my friends,

I'm excited for the bustle of activity that comes with the longer days and warmer weather. Personally, I have family coming and going for visits and lots of events popping up. I'm sure that I'll see you at RARSFest and hopefully at the PARC/BARC/NBARC picnic later this month. Additionally, our April meeting will be in the style of a wandering show-and-tell with your POTA equipment. If you are active in POTA, please come and set up your gear at Oakwood and maybe be prepared to share some tips and tricks. We can rove from station to station and absorb the wisdom and experience from our local activators. This should be a great meeting.

Over the past few weeks, we have been discussing the format of the board meetings. It was suggested that we incorporate it into the regular meeting to make sure that all are included. Some want to keep it at a separate time, to allow for more thorough discussion, while managing the length of the general meeting. Let me know your thoughts and suggestions. In the meantime, we are keeping it separate, but remember that it is always open to anyone who wants to join in, and we welcome your involvement.

73,

Beth KN4FZB

BARC Board Meeting March 26, 2024

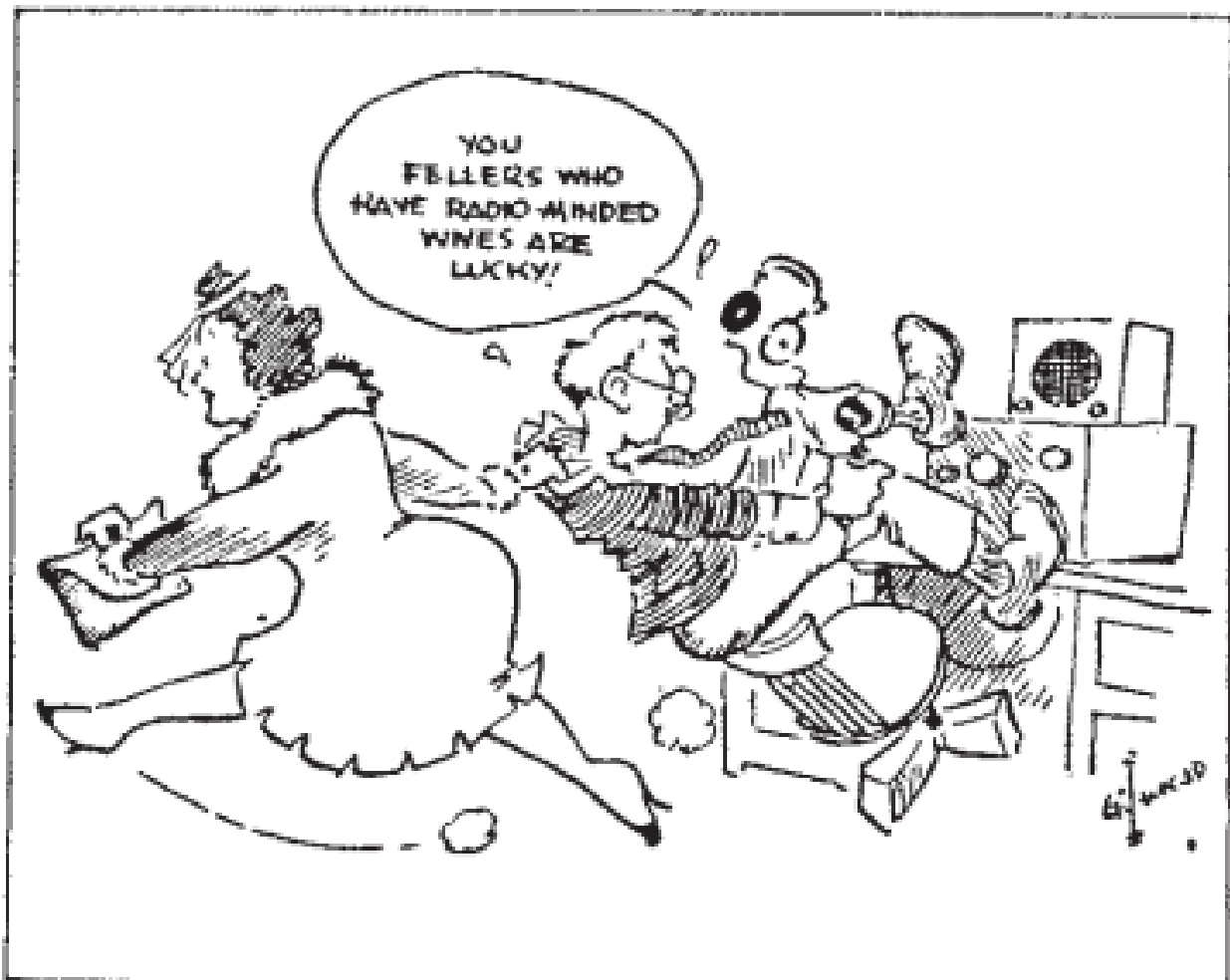
In Attendance: Bill Dawson WA4SLC, Beth González KN4FZB, Scott James K9SPJ, David Langley W4YDY, Susan Langley-Jones WA4AKB, Mark Raysin KG4GVJ, Peter Van Houten N4PVH

Treasurer's Report: Club account total is \$3329.75 with no expenditures for this month. Anticipating new tire for the storage trailer within the next few months

Summary of Discussion:

- BARC would like to support the Pitt County Repeater Association when they are ready to receive donations.
- Discussion of late has included the move to include the board meeting with the regular meeting. There was some opposition to this voiced at the regular meeting. We will leave them as separate meetings for now, but options mentioned included moving to alternate monthly meetings, limiting the meeting to 30 mins in order to facilitate a timely meeting.
- Meetings going forward will follow a more structured format, and board positions will be better defined, including a move to make the combination of the Vice President 1 and 2 positions permanent. This will require a change to the constitution.
- Request guest speaker from Batteries Plus
- Revise net script to reflect updated positions/agencies, include echolink check-ins, add trivia.

Submitted by Beth, KN4FZB





Gary NG9T's PARC President's Corner



Hi Everyone,

So, let's talk about some upcoming spring activities!

RARSFEST is always a sign of spring. This year RARSFEST is taking place on April 6, the Saturday following Easter weekend. PARC will have 3 tables this year with a lot of interesting items for sale including a lot of boat anchors. Look for our banners! Also there will be a group of hams from Franklin County and the area north of Raleigh to Mt Airy next to us. They have an 80m net just after our Tuesday night 80m net on 3.850. We are looking forward to meeting them in person. Those connections are part of ham radio that is so much fun.

The Second Annual PARC-BRIGHTLEAF spring cookout is scheduled for April 27. This year we have invited the members of the New Bern Amateur Radio Club to join us. Each year I am hoping to add another club to our cookouts until one day we can have a "Eastern NC Ham Club Spring Cookout" that includes all hams in Eastern NC.

Time and Location:

Clarks Neck Fire Department Station 2
3797 Wharton Station Rd
Washington NC 27889

Meet at 11:00am for socializing and Eat at noon.

April 8 2024 Great North American Eclipse On April 8 there will be a total solar eclipse that starts in Mexico and crosses the United States from Texas northeast across multiple states through Maine. There are many ways for Hams to be involved during the eclipse. HAMSCI.ORG has information for Ham involvement. Also the Case Amateur Radio Club W8EDU is asking for Ham input for a research project that they are conducting. And there is going to be an Eclipse QSO Party. Go to ARRL website and see what hams can do during the eclipse.

Recently I have realized that the time I spend doing Club planning and president duties has completely taken me away from what I find to be fun about Ham Radio, which is RADIO. I bought myself a Qrplabs QMX transceiver kit for Christmas and it's still in the box. I bought an excellent oscilloscope at 2022 JARSFEST and it sits under my desk. I have bought all the equipment to put together a Novice style Station with 1950s technology, a Knight Kit R100A receiver and T60 transmitter along with separate VFO plus matching SWR/Power meter. Yup. Sitting on top of my desk shelves collecting dust. And my Desktop is covered with papers, folders, club agendas, etc when it should be a kit in progress and logbook and my CW keys. What's the answer to my dilemma?? I have some extra time but like most of you I need to devote it to other things.

Hopefully I will find a way to do some of the fun radio activities that have brought me so much enjoyment over the years.

73 Gary Faust NG9T President, Pamlico Amateur Radio Club

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 now. \$24.00 and only \$1 for immediate family members.

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 Zoomed 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
3,850mhz 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: May 11, please contact to reserve an exam spot.

HPSNC Public Service Net

7:30 p.m. on the RARS 146.64 repeater for the new HPSNC Public Service Net. The net will have a short instructional followed by a rag chew discussion. The net will conclude promptly before the 8:00 p.m. nightly net.

The net will meet on the last Wednesday of each month and will feature brief training on various topics relating to ham radio's contributions to and involvement in public service.

If you are available, please check in to the net (in and out check-ins are welcome too!).

Thanks for your support.

73,

Jeremy Lindsley K2HJX
HPSNC Volunteer Coordinator
919-523-9631
K2HJX@att.net

E. N. C. Repeater Inc.

Eastern North Carolina Repeater Association

W4NBR Repeater 146.685 PL 88.5

Individual Membership (Annual Dues of \$15.00), Family Membership – All licensed individuals domiciled at same the address (Annual Dues of \$15.00)

Dues (cash or check made payable to E.N.C. Repeater Inc.) to any Club Officer, or mail to David Burt, 1425 Harris Ct., Cary, NC 27511 or email to enc@inner360.com

FCC to Require Two Factor Authentication for CORES Users

The Federal Communications Commission (FCC) has announced an upcoming change to the Commission Registration System (CORES) that licensees use to pay any application or regulatory fees, manage or reset a password on an existing FRN, or request a new FRN. Beginning March 29, 2024, multifactor authentication will be implemented. Users will be prompted to request a six-digit secondary verification code, which will be sent to the email address(es) associated with each username. The user will then need to enter the code into CORES before they can continue.

In a public notice, the FCC said this change will make the system more secure. "This additional layer of security will further safeguard against unauthorized access, thereby enhancing the overall integrity of information contained within the CORES system and improving the security of user data," it read.

The Public Notice can be found in [PDF format](#) .

The FCC recommends that users confirm they have access to their username account email and to add a secondary email address, if need be.

Resources are available for those who need assistance with the system. For inquiries or assistance regarding the implementation of multifactor authentication on CORES, [submit a help request](#) or call the FCC at 877-480-3201 (Monday through Friday, 8 AM to 6 PM ET).

GREETINGS FROM THE HIGH COUNTRY**March 1, 2024**

This is an abbreviated newsletter due to a variety of circumstances. A longer newsletter will be coming out in a few days but some of the information needs to be distributed now.

a. Amateur radio lost a highly skilled technical expert on Wednesday. Danny Hampton, K4ITL, died at home despite heroic efforts to revive him. Danny designed and built the PCRN analog linked repeater system in the 1970's and also created the PRN system that links 60 DMR repeaters in NC and SC. His efforts were recognized at the Dayton Hamvention in 2009 when he received the Ham of the Year Award. His funeral service will be at the McCullers Community Baptist Church, 133 Rand Road, Raleigh. Visitation is at noon and the funeral is at 1 p.m. on Wednesday, March 6th.

Anyone who knew Danny knew that his wife, Rose, was a supreme caregiver who gave over much of her life caring for Danny. Please keep her in your prayers as she deals with Danny's passing.

b. Short notice on two events that are expected to occur on Saturday, March 2. First is the Clingman Hamfest which will be held at 8 a.m. in Wilkes County at the Clingman Community Center located north of US 421 and on the East side of US268.

Second is a launching of a High Altitude Balloon as part of the NC Community College Balloon project. The HAB program will be featured in a program held at Catawba Valley Community College in Hickory on Friday evening and Saturday. Here is the information I received late on Thursday evening:

March 1, 2024 – Catawba Valley Community College, Hickory, NC
5:30-9:15 pm

LOCATION:

Catawba Valley Community College
Alex Lee/MDI/Lowe's Foods Corporate Conference Center
Workforce Solutions Complex Multi-Purpose Room, WSC 1001
(number 19 on the [map](#))

HOTELS:

There are several hotels within close proximity (2-3 miles) to CVCC and offer state government rates. Those marked with ** offer complimentary breakfast.

Holiday Inn Express Hickory-Hickory Mart**

Fairfield Inn & Suites Hickory**

Best Western Hickory**

Hilton Garden Inn Hickory

AGENDA:

3:30-5:30 pm Payload check-in

5:30-6:30 pm Welcome and Dinner (catered)

Guest presentation (TBD)

6:30-6:45 pm
7:00-7:15 pm
7:15-7:30 pm
7:30-7:45 pm
7:45-8:00 pm
8:00-8:15 pm
8:15-8:30 pm
8:30-8:45 pm

Catawba Valley Community College
Caldwell Community College and TI
Rowan Cabarrus Community College
South Piedmont Community College
Central Carolina Community College
Wake Technical Community College
Durham Technical Community College
Edgecombe Community College

8:45-9:15 pm Competition Logistics and Safety

During check-in, teams will report to the program manager to oversee their payload, turn in their Constellation CubeSat payload with instruction, and other systems as described in their flight readiness review. Any significant changes since the flight readiness review are to be shown along with any required modifications from the flight readiness review feedback.

Teams will also discuss how they plan to do the rigging, tracking and fill of their balloons. Teams will give the latitude and longitude of their predicted landing site at check-in. Checklists for all tasks on flight day need to be available at check-in along with the lab notebook (lab notebook will be returned on Saturday morning to allow judges time to review). Check-in will last no longer than 15 minutes and preferably would be between 5 and 10 minutes. Be ready for a smooth check-in. Remember, check-in is not to determine if your payload will work but if it is safe and you have a reasonable chance for recovery.

Community College High-Altitude Balloon Challenge and Competition

March 1-2, 2024

Catawba Valley Community College, Hickory, NC

The presentation should be slide based and is to be a short explanation of your team's journey to launch day. Introduce the team, your individual payload, testing you did and what makes your team unique and special. But remember, you only have a maximum of 10 MINUTES for your presentation. Each team will be emailed a link to upload their slides via google in advance (this is to save time day-of event).

The judges will determine the Team Professionalism and Lab Notebook portion of the competition scoring. Judges are outside individuals with a technical background. Judges will be at both Friday and Saturday's events. Judges may ask your team questions but are not to help with your project.

Team check-in is between 3:30-5:30 pm. Check-ins will end promptly at 5:30 pm for dinner but may begin a little earlier than 3:30 pm if needed. If needed, check-ins will then begin again at 9:15 pm and continue until completed.

March 2, 2024 – Tarlton Complex, Catawba Valley Community College, Hickory, NC

7:30 am – 1:00 pm

LOCATION: CVCC Tarlton Complex – Event is from 7:30 am – 1:00 pm

Teams will be set up inside the Tarleton Complex in assigned “Lanes” on the gym floor. Lane assignments will be given once onsite.

LOGISTICS:

- Please eat breakfast at your hotel (or home); we will have coffee and donuts for teams as an “energy booster”
- NC Space Grant will provide one 600 gram balloon per team; there will be a few back up balloons on hand just in case.
- CVCC/NC Space Grant is providing one helium tank for each team.
- There may be people interested in what you are doing – your focus is to be on your team. We will not allow the public into the inflation area (we will have it roped off) but be prepared to show off and explain your payloads to people in attendance.

LAUNCH SCHEDULE:

We will have 8 launch windows that are staggered with at least 3 teams working in lanes at the same time. The purpose of the launch window is to prevent traffic buildup in the gym and for teams to have an idea of when their launch will/should occur. If you cannot launch during your window of time, you will, upon ready to launch, wait for any other teams in the queue to launch first. Once personnel are available, you will then be given the go ahead for launch. A go for launch by the project manager is required before you begin your launch procession out of the Tarlton Complex. All launches need to occur by 1:00 pm, even if you are past your launch window. Team assignment order was determined by school distance from event.

7:30 am Complex opens

8:00 to 8:30 am Edgecombe Community College

8:30 to 9:00 am Durham Technical Community College

9:00 to 9:30 am Wake Technical Community College

9:30 to 10:00 am Central Carolina Community College

10:00 to 10:30 am South Piedmont Community College

10:30 to 11:00 am Rowan Cabarrus Community College

Community College High-Altitude Balloon Challenge and Competition

March 1-2, 2024

Catawba Valley Community College, Hickory, NC

11:00 to 11:30 am Caldwell Community College & TI
11:30 to 12:00 pm Catawba Valley Community College
12:00 to 1:00 pm Clean up

Once you have launched your balloon, please pick up and clean up your preparation area and safely give chase to your balloon/payload. Do not wait around to chase your balloon. Try to stay within radio range of the APRS system and do not rely on the APRS network for positioning information. This information can be spotty at best. Be sure to be cognizant of where your balloon lands for safe retrieval. Be sure to politely ask to go retrieve your balloon. Ad Astra!

The third item that is coming up quickly is the Charlotte Hamfest which will be held next Friday and Saturday (March 8 and 9) at the Cabarrus Arena and Events Center near Concord. [Information can be found at.](#)

In a few days, a newsletter of regular length and content will be distributed.

Marv, WA4NC
NC Section Manager

GREETINGS FROM THE HIGH COUNTRY

March 17, 2024

Spring is teasing us every so often with blue skies and temperatures in the upper 50's. Don't be fooled! Monday is predicted to have a low of 22 and certainly some of the budding plants and trees will get zapped. A freeze warning has been issued for much of the High Country.

LOSS OF A FRIEND AND A GIANT IN HAM RADIO

Danny Hampton, K4ITL, passed away on February 28 while at his home near Raleigh. For those of you had met Danny, you know that he was blind for his entire life but that did not limit his technical achievements or his ability to install and maintain wide-area analog or DMR repeaters at locations around the state. Danny designed and built the PCRN system of analog linked repeaters in the 1970's. In the 1990, along with Shane Autrey (KI4M) and Ralph Bartlett (W4ZO), Danny put on the air the first DMR repeaters and started the PRN system which now includes 60 digital repeaters in NC and SC. At the time of his passing he was the NC Director and President of the Southeast Repeater Association. Danny was chosen as Ham of the Year in 2009 at the Dayton Hamvention. Thanks go out to his wife, Rose, who drove Danny to appointments and cared for him for 32 years. Rest in peace, Danny.

SECTION TRAFFIC REPORT

Set out below is an abbreviated Section Traffic Report as prepared by Dave Roy, W4DNA. Unfortunately the ARRL email system is quite limited in its ability to post tables, Word documents and photos. A complete report as developed by Dave can be [found at](#). Thanks go out to the traffic handlers.

W4DNA SECTION MANAGER REPORT

NET	NMGR	QNI	LISTED	PASSED	TIME	SESSIONS	TFC %
SECTION NETS							
CN	AA4MP	264	110	102	452	58	92.73%
CSN	KI4KZS	119	29	28	627	29	96.55%
NCEN	WK4WC	358	93	90	387	29	96.77%
NCMN	W3OJO	218	124	123	312	29	99.19%
THEN	K4SEH	325	NA	NA	439	18	N/A
LOCAL TRAFFIC NETS							
CWTN	N4CNX	370	99	99	420	29	100.00%
ENCTN	W4DNA	89	7	7	149	25	100.00%
PCTN	W4TTO	210	43	43	236	29	100.00%
SPECIAL INTEREST GROUP NETS							
C-MNN	KI4FAQ	330	NA	NA	307	29	
TOTAL		2283	505	492	3329	275	97.43%

PRN NETIQUETTE

Recently the PRN repeater operators have seen an increase in attempts to use improper talkgroups on the PRN system. These include attempts to access Brandmeister and other talkgroups which are not carried over the PRN.

Users who program radios to operate on the PRN system are reminded **that** the only talkgroups that work on the system are [listed at](#).

The PRN server does not connect to other networks and it is not possible to access World Wide 91, TAC310, TAC1 and other talkgroups over any of the PRN repeaters. I use a hotspot to connect to several Brandmeister talkgroups including the Saturday World Wide 91 net. A portable radio that talks to the hotspot gives me access to thousands of the talkgroups carried by Brandmeister and other networks but the traffic is not carried over PRN repeaters.

HAMFESTS

The Charlotte Hamfest on March 8 and 9 is history but the Mecklenburg Amateur Radio Society deserves congratulations for putting on a very successful event.

RARSfest will be held on April 6 in the Jim Graham Building at the NC State Fairgrounds in Raleigh. They have the largest indoor flea market in the state and will have several forums. License testing and satellite demonstrations are on the hamfest agenda. HRO is expected to be there for first time in several years. [Information can be found at.](#)

The Winston-Salem hamfest will be held at the Robinhood Road Baptist Church in Winston-Salem on April 13. Information can be [found at.](#)

HAM RADIO CLUBS

During 2024, ARRL is placing renewed emphasis on helping clubs recover from COVID (during which many clubs stopped meeting). This is based on a recognition that clubs are local resources for ham radio classes and activities designed to sustain operator interest.

ARRL has asked each club to update its information about meetings and officers which is posted on the ARRL webpage. Instructions on how to do this can be [found at.](#) This will help visitors and interested persons to find out about your club and how to participate.

ARRL is also encouraging clubs to place a supply of ham radio books in your local library. Eleven of the most popular ARRL books can be purchased by a club for donation to a school, college, or public library at a substantially reduced cost. Information on the Library Book Set program [can be found at](#)

Each ARRL Section is encouraged to have an Affiliated Club Coordinator whose job it to encourage activity among the clubs. Tim Slay, N4IB, has served well in this position but wishes to have more time for his interests in Astronomy and his local club.

I need an ARRL member who is willing to take on this job. Duties include:

- a. Determining which counties have active clubs and updating the club list for the Section;
- b. Developing an accurate mailing list of club presidents and club program chairpersons;
- c. Encouraging clubs to exchange their newsletters so successes in one club can be shared with other clubs in the Section;
- d. Holding a virtual meeting every two months with club leaders to exchange ideas and news;
- e. Attending local hamfests to meet with club officials;
- f. Participating in periodic virtual meetings held by ARRL staff in

order to exchange success stories across the 71 Sections that comprise ARRL;

g. Inform the Section Manager of successes or problems learned during the information exchanges.

If you are interested in becoming a part of the ARRL Field Organization by serving as the Affiliated Club Coordinator please contact me at wa4nc@arrl.org.

FIELD DAY

ARRL holds its annual Field Day each year during June. This year the dates will be June 22-23. It appears that there will be minimal, if any, changes in Field Day rules for this year. Clubs are particularly encouraged to use the event to interest members of the general public and youths in becoming licensed amateur radio operators. Information about the [2024 Field Day can be found at](#)

YOUTH INVOLVEMENT IN HAM RADIO

ARRL has placed considerable emphasis on increasing the number of young people who become amateur radio operators. Last weekend, I heard a statistic mentioned that the average ham in their mid-70's and unless younger people become hams, the average age in ten years will have ham's in their mid-80's and most likely less active than they are today.

The ARRL Board has voted to provide free ARRL memberships to students aged 21 or younger. This will be an Associate Membership but will provide for downloadable digital copies of QST. [Information can be](#)

A second initiative approved by the Board at the January 2024 board meeting involves a computer coding competition that will soon be announced. Students will be urged to take on ARRL projects and write computer programs that solve certain problems. Up to \$25,000 in prizes can be award for the most elegant computer solutions. Information can be [found at](#).

YANCEY COUNTY EmCOMM TRAILER TRAINING

Yancey County Emergency Management recently equipped an Emergency Communication trailer that will serve Yancey and neighboring counties upon request. On Saturday, March 23 in Burnsville, Bob Rodgers (KC4TVO) will lead a training session on how to use the various equipment installed in the trailer. Operators in the Western portion of the State may wish to participate in the training which is without state or federal travel and meals reimbursement. If interested in participating, contact Bob at 828—385-2452.

DAYLIGHT TIME MARCH 10 BATTERIES FOR SMOKE DETECTORS

By now we should have adapted to the change to Daylight Time even though some wish the US would choose Standard or Daylight Time and stick with it through the entire year. Regardless of your feelings as to EST versus EDT, take the time change as an opportunity to replace the batteries in your smoke detectors and your carbon monoxide detectors. It could save your life.

CoCoRAHS

You can help the Weather Service and our farmers if you choose to participate in the Community Collaborative Rain, Hail and Snow Network. Data that is gathered by volunteer observers is used by the US Department of Agriculture (and others) to provide information on the amount of moisture in the ground which is useful information in estimating future crop yields. Water supply planners use the data about droughts and snow pack information to estimate their impacts on reservoirs. CoCoRAHS involves numerous observers who make on-line reports about rain and precipitation to central website. Information about COCORAHHS [can be found at](#).

CLOSING COMMENT

Section Managers serve two year terms which begin on particular dates depending upon the Section (which prevents all the Section Manager terms coming due at the same time). The new two-year term of the North Carolina Section Manager will begin on April 1, 2024, in just a couple of weeks.

It has been my pleasure to serve you for the past four years and I will continue to expand opportunities for readers to learn about ham radio activities in North Carolina. I hope you feel that you have received accurate and useful information in the 100 newsletters that I have produced during the past four years. Each newsletter is archived at ncarrl.org and you can see for yourself the volume and quality of information available to members and non-members.

In my service as Section Manager, I traveled approximately 3000 miles visiting Field Day sites in 2021, 2022 and 2023 plus another thousand miles in travel to hamfests. Your dues are paying for that mileage.

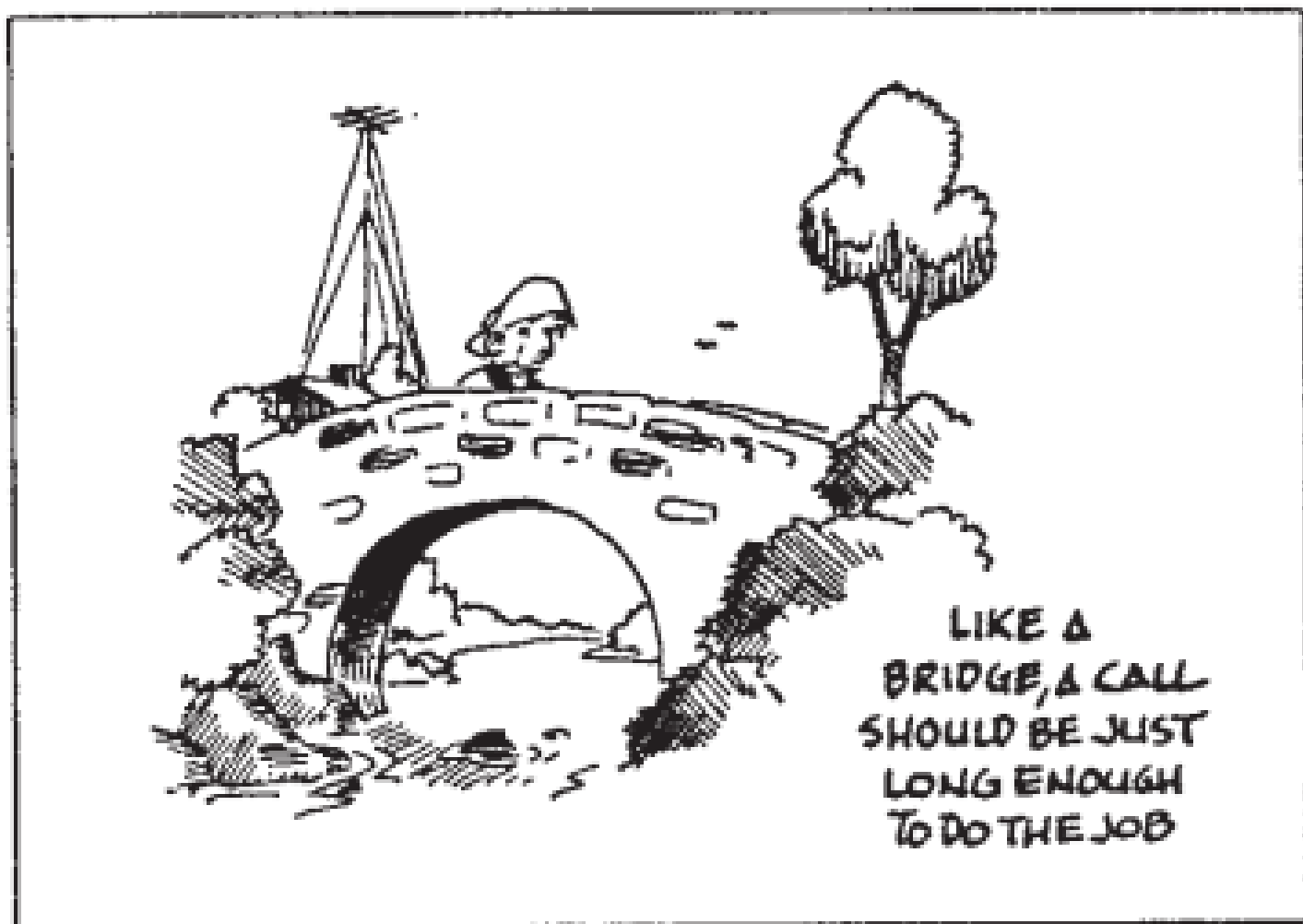
Section Managers do not receive a salary but the Section budget covers expenses for books given out at hamfests, plus mileage, a meal or two and a motel room. Sometimes I have someone stand in for me because of the distance involved from Boone or another commitment.

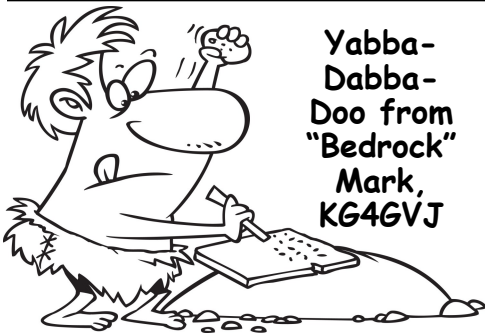
All these expenses come out of the \$4,045 budgeted to the North Carolina Section in 2024. Budgets are set by ARRL and depend upon the number of members in a section and the distances involved in traveling across a particular Section.

I plan to continue along the same lines we have followed over the past four years, emphasizing openness and a strong desire to get more persons actively involved in ham radio. However the future of amateur radio depends on your involvement and your club's efforts to recruit additional hams.

Marv, WA4NC

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





Hi Folks,

Time for me to wrap up another edition of the Ham Chatter. I hope there will be something of interest for all. I've tried to keep out the old coming up next notices involving the month of March. My assistant editor (One of our cats) says "Hi". I try to keep her away from the keyboard. She has 4 paws worth of things to say and know more Windows shortcuts than I will ever know. Our proof readers (Both dogs), haven't removed much material, just a reams worth. Please ignore the teeth and claw marks.

I hope your Easter weekend was a good one. Warm afternoons and sunny days is a great combination for us all. I hope Peter will get this out for April okay (Not an April fools Joke folks). Thank you Peter for your time in this.

June's coming up soon folks, are you ready? Time does fly at our age. Remember, if you want to use your own radio or antenna during Field Day, you can. Please try to help in the prep work, set-up and take-down for the weekend. Many hands make it go quicker and easier. Helping thru the day and night in operation also helps.

How's the Solar Electric? Well, we had shorter hours of daylight for the Winter of course, then plenty of cloudy days So production was less than the first 2 months of our start last year. I hope for more sunny days ahead. Mistakes made? I have room on my south facing roof for 4 to 6 more panels. They install a estimated 80% of our production needs. I was sold on a battery with them saying it can help with the On-Demand times. Err, wasn't sure quite how but went with it. Still awaiting the inspection of the work done. I feel I should have went with more panels but, the battery can be used with the Solar panels if lost of power.

Stay tune for more on this same Stone tablet, Same Cave time!

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? 2024 New events up!

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.

U.S. KFF Park-County Database Listing For World Wide Flora & Fauna (WWFF)

<https://countyhunter.com/Toplist/KFF-County.htm>

Word to the Wise

ways check that the spot you just clicked on is within your privileges.

Operating Tip

The ARRL website has a handy, printable [band plan](#) chart for those who wish to have one for quick reference.

Technical Topics and Discussion

The WSJT-X development team has announced that Release Candidate WSJT-X 2.7.0-rc4 is ready for download by beta testers. includes new features (especially for companion program QMAP) as well as bug fixes. A full list of enhancements can be found in the release notes at https://wsjt.sourceforge.io/wsjt-x-doc/Release_Notes_2.7.0-rc4.txt.

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, Paul, N1SFE

Release Candidates are intended for beta testers. If you download and use WSJT-X 2.7.0-rc4, please remember to provide the developers with feedback on the new features in version 2.7, and on anything that does not seem to work properly.

Field Day Countdown

Field Day is just about 2.5 months away, and now is the time for your club to plan for the event. Many of the details of this event should not be left to the last minute. With hopes of pointing clubs in the right direction, here are a few tips that may help.

Direct links to installation packages for Windows, Linux, and macOS can be found on the WSJT-X website at <https://wsjt.sourceforge.io/wsjt-x.html>.

1. Plan your location with a few questions in mind.

Thanks to Joe Taylor, K1JT

Conversation

With the CQ World Wide WPX SSB Contest this weekend, it's an appropriate time to remind contesters to pay attention to band edges. If you're operating near the upper or lower edges of the band (or of your operating privileges), be aware that your signal's bandwidth may extend beyond the frequency displayed on your radio. For example, if your radio reads 7.125 MHz on lower sideband phone, your signal extends outside of the US phone band (and into the CW portion of the band). With the quick pace and excitement of a contest, it's easy to lose track of upper and lower band edges, as well as of your license privileges.

a. Will you have public traffic around your site, and are the antennas you will be using mindful of safety?

b. Is your site on property that requires supplying an insurance certificate to the owners? Many public sites require this.

c. Are you planning to create signs telling the public what you are doing and inviting them to learn more?

d. Does the site have adequate parking and access? Remember, Field Day is a 24-hour operation. You don't want to get locked in or out of your location, especially once it's dark.

e. Have you reviewed the safety requirements for fueling and grounding your generator? Noise may be an issue if you are on a public site.

If you're using spotting assistance, be aware that some foreign amateurs have different frequency allocations and may be spotted operating on frequencies that are not allowed for US amateurs. Be sure to al-

f. How do you plan to keep the site clean and uncluttered for pictures?

2. Contact the local media to invite them to your site.

- a. Local newspapers
- b. Local television networks
- c. Plan to have someone that can serve as a guide, answer questions, and direct pictures.

3. Operator planning is essential. Create a schedule of operators.

- a. Think about whether you will operate for the full 24 hours or not.
- b. Invite new hams to learn by logging and operating.
- c. Don't forget to think about having relief operators.

4. Consider contacting your local served agencies to demonstrate the capabilities of hams in an emergency.

- a. Local emergency management
- b. American Red Cross
- c. Local police, fire, and ambulance companies
- d. Other local agencies that may be involved with shelter management

Field Day is what you want to make of it. Treat it like a contest and see how many contacts you can make, make it an emergency drill, use it for outreach to the public, or make it a social event for your club and include having fun on the radio. Field Day is all about having fun and showcasing the different aspects of amateur radio. Make your Field Day an event that the club will learn from, and, most importantly, have fun!

Find the complete list of Field Day resources at field-day.arrl.org.

Great Progress Made during Brief Period in Daleville, Alabama

2024 is looking to be an outstanding year for the Daleville Area Amateur Radio Service (DAARS)! The organization is fairly young, having been founded in 2022, but there has been much progress during that time. DAARS already offers text-



books and mentoring for those preparing to take the amateur radio license exam, VE sessions, ARES training, and more. The organization is active within the community and is constantly looking for ways to improve.

DAARS is excited about several upcoming events. The organization will be set up for ARRL Field Day on June 22 from 8 AM to 12 PM Central at Culpepper Park during the Second Annual AMVETS (American veterans) SummerFest, operating as K4D. The club will also be operating a special event station on December 22, in celebration of the Dale County Alabama USA Bicentennial. They'll operate as K4D on 10, 20, 40, and 80 meters via phone and FT8. QSL cards for the event will be sent to all successful contacts.

DAARS is proud to partner with other organizations within the community to foster a bright future for amateur radio and the community itself, through service, education, and enrichment. More information can be found at www.Daleville.US.

By Kevin Turley, K9ADE

Celebrating Radio Women on International Women's Day

On Friday, March 8, three women from the Ellsworth Amateur Wireless Association -- Joan Hildreth, W1DLC; Barbara

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 April 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

March 2024

2024 National Hurricane Conference Amateur Radio Workshop -- Amateur Radio will be represented at the 2024 National Hurricane Conference, which will be held this month in Orlando, Florida, at the Rosen Centre Hotel. The 2024 Amateur Radio Workshop - Tropical Systems and Disaster Communications - will focus on amateur radio involvement when tropical systems impact coastal areas of the Atlantic. The amateur radio community's response to significant hurricanes of the 2023 season and prior seasons will be discussed. A senior hurricane specialist from the National Hurricane Center will present on the importance of amateur radio surface reports to the hurricane forecasting process and meteorological impacts from the 2023 hurricane season. Also to be presented: an overview of WX4NHC -- The National Hurricane Center Amateur Radio station operations; the Hurricane Watch Net and how amateur operators maintain or harden their stations when hurricanes cause damage; the VoIP Hurricane Net and Best Practices in Amateur Radio SKYWARN operations during tropical system impacts; a presentation on SATERN, the Salvation Army Team Emergency Radio Network and how it supports communications during hurricanes; a presentation from the ARRL staff on national/international amateur radio hurricane response; a presenter on local hurricane response and personal impact; and a presentation and overview of the Canadian Hurricane Centre and Amateur Radio operations and initial forecasts for the 2024 Atlantic Hurricane Season.

Additional topics relating to amateur radio and communications will also be presented. A moderated Q & A session will be completed as part of this informative workshop. This workshop will also be livestreamed or offered over Zoom pending high-speed internet capability. If not available, a recording will be posted a few weeks after the workshop. Those details will be available on the National Hurricane Center Amateur Radio station website, the VoIP Hurricane Net site, and the Hurricane Watch Net site.

All amateur radio sessions will be conducted on Tuesday, March 26, 2024 from 1:30-3:00 PM EDT and from 3:30-5:00 PM EDT. The session breakdown is as follows:

NHC Session #1 - 1:30 PM-3:00 PM EDT: John Cangialosi, Senior Hurricane Specialist from the National Hurricane Center will present on the importance of Amateur Radio surface reporting. Bob Robichaud, VE1MBR, from the Canadian Hurricane Centre will provide a video on a Canadian Hurricane Centre Overview and a few meteorological topics via a video recording. Julio Ripoll, WD4R, will present WX4NHC Operations and Bobby Graves, KB5HAV, will present an overview of the Hurricane Watch Net (HWN).

NHC Session #2 -- 3:30 PM-5:00 PM EDT: Rob Macedo, KD1CY, will present on the VoIP Hurricane Net and best practices in SKYWARN Tropical Systems presentation, and Joe Bassett, W1WCN, will provide a SATERN (Salvation Army Team Emergency Response Radio Network) overview video. ARRL Director of Emergency Management Josh Johnston, KE5MHV, will give an ARRL update and Rick Palm, K1CE, will present on his personal Hurricane Idalia experience.

This will be followed by a Q & A session and raffle prizes will be offered. Amateur radio presentations will be recorded and posted to YouTube after the workshop within the month of April.

ARRL Emergency Communications Training Courses Update -- ARRL Director of Emergency Management Josh Johnston, KE5MHV, reports that ARRL is discontinuing the ARRL Emergency Communications training courses EC-001 and EC-016, effective April 1. "We plan to launch the new Basic EmComm course on the 1st, as well as a new Intermediate EmComm course," Johnston said. "An Advanced EmComm course will be released by the end of June," he said. "We will also be releasing an ARES Leadership course in the near future." The update of courses will be enhanced by the release of an ARES position task book update as well. "Upgrading and refreshing our course offerings is important to keep the training relevant and in tune with cur-

rent EmComm topics and tasks," Johnston said.

Florida Governor's Hurricane Conference is May 12-17, 2024 -- The theme for this 38th edition of the Governor's Hurricane Conference, "From Forecast to Action", reflects a comprehensive training and workshop experience taking into consideration the diverse responsibilities that drive emergency responders to a shared goal. This year, sponsoring organizations have selected 34 Training Sessions, 56 Workshops, and an informative General Session to share lessons learned from the 2023 season and better prepare attendees for what the future holds. The conference will also offer networking opportunities to meet and reconnect with colleagues across the profession and develop lasting partnerships across the emergency management community. [Register here](#).

AccuWeather is sounding alarm bells for a supercharged 2024 Atlantic hurricane season (February 21, 2024). -- Months before the official start of the 2024 Atlantic Hurricane Season the news is not good. And that's even before the National Hurricane Center, AccuWeather and Colorado State University have issued their first, early predictions for what the season will hold. The reasons are twofold: the return of La Niña and record high ocean temperatures. "Neither are good news when it comes to hurricanes and especially not when they work together; ocean temperatures in February are already as warm as they historically have been in mid-July," said Jon Porter, AccuWeather chief meteorologist. "That's a big concern." -- *FEMA Disaster Emergency Communications News Clippings and Topics of Interest Vol. 14 Issue 4, February 16-29, 2024*

Former chairs of the FCC have expressed concern that the American 9-1-1 system, a vital part of the nation's emergency response infrastructure, is outdated and urgently requires a technological overhaul to enhance public safety. Since its inception in 1968, the 9-1-1 system has saved countless lives, but it currently relies on aging technologies not suited to the data-centric and multimedia communication methods prevalent today. The advancement to Next Generation 9-1-1 (NG9-1-1) is essential for improving emergency response capabilities, including better reliability, cybersecurity, accessibility for the disabled, and data sharing for effective emergency response. -- Donnie Monette, Regional Emergency Communications Coordinator, Response Division, FEMA Region 04

Amateur Radio as Educational Tool Represented to Policymakers in Washington DC (February 16, 2024) -- ARRL and [Amateur Radio Digital Communications](#) (ARDC) represented amateur radio at a symposium in Washington on February 1 at which the top domestic spectrum policymakers from across the federal government considered implementation of the National Spectrum Strategy (NSS). ARRL ensures that amateur radio is represented at sessions such as this so that decisionmakers understand amateur radio's roles when spectrum decisions are made, including its substantial contributions to student interest and education in STEM subjects at schools throughout the country and its role during emergencies and natural disasters. In the NSS, released by the White House in November, national policymakers identified some 2,790 megahertz of spectrum to be considered for future commercial needs.

Tri-State (Texas, Oklahoma, Arkansas) 2024 Eclipse Exercise Conducted Last Month

Because of the probable high-volume influx of non-residents into rural areas by observers of the upcoming total solar eclipse, Statewide Interoperability Coordinators (SWIC) Karla Jurens of Texas, Nikki Dallas of Oklahoma, and Penny Rubow of Arkansas, applied to the Cybersecurity and Infrastructure Security Agency (CISA) to fund an Interoperable Communications Technical Assistance Program (ICTAP) to support an exercise. This exercise would test the operability and interoperability of both Public Safety, CISA SHARES Winlink, and amateur radio in support of public safety for the April 8, 2024 eclipse. The request was granted to the three states, and exercise planning began in January.

The exercise was held on February 13, 2024. Each state separately tested their county-to-county and county-to-

state EOC communications capabilities, and the states were to test their EOC-to-EOC communications capabilities. One of the capabilities to be tested at all levels was Winlink through CISA SHARES and Winlink and SSB voice through Amateur Radio.

Arkansas uses a "hub and spoke" arrangement to relay messages to and from the State. The design incorporates Voice and Winlink. The counties use primarily VHF/UHF between themselves, and HF to reach the state. The Arkansas State EOC under the Arkansas Division of Emergency Management (ADEM) utilizes WebEOC, and therefore, prefers receiving messages electronically. This means that at some point a voice-originated message must be translated into an electronic form that may be imported into WebEOC. The design included net control operators from the Razorback Net, all experienced traffic handlers. These operators, stationed around the state, listened and assisted with messages from the other states and counties as needed. Stations from all three states were invited to attempt to overwhelm the Winlink system, which did not happen, nor did it even come close to taxing the system. Amateur radio volunteers were asked to pass voice messages, which included checking in as available.

Conditions proved to be only fair for voice on HF due to a solar flare. However, as far as the State of Arkansas EOC was concerned, Winlink performed flawlessly. Messages were passed normally, through Winlink's HF store-and-forward modes, using both VARA and PACTOR. Arkansas also has Winlink VARA FM VHF RMS gateways with digipeaters, and messages also arrived through that media. We intentionally recruited an amateur radio volunteer from the Operations Branch, provided him with just-in-time training, and he was using Winlink within minutes.

Very favorable comments were heard throughout the exercise about the ability of amateurs to adapt to changing conditions and challenges. Some challenges still exist, such as more counties need to be on HF to save a step in the message chain, and more operators need to be Winlink-proficient. All things considered, I feel amateur radio performed admirably in all three states, given the complexity and scale of the exercise. -- *J.M. Rowe, N5XFW, ARRL Arkansas Section Emergency Coordinator; Arkansas SHARES/RACES/ESF 2 Liaison Officer; COML; COML Instructor; AUXCOM Instructor; Chair, Arkansas COMU*

Letters: FirstNet

I don't know if you heard anything about this, but when parts of AT&T went down recently, parts of FirstNet went down as well. My FirstNet rep in western Ohio said it was for less than an hour, but that may be the official line. You might mention this if anyone tries to convince you that amateur radio isn't needed anymore. -- Michael Schulsinger, N8QHV

Ham Radio Science Citizen Investigation (HamSCI) Solar Eclipse-Focused Operating Events

A total solar eclipse that will be seen across North America will occur on Monday, April 8. It will be the last of its kind in the US for the next 20 years. Hams across North America are asked to participate in a study about how the ionosphere functions by getting on the air to help scientists in a series of ionospheric experiments. Ham Radio Science Citizen Investigation (HamSCI) will hold presentations for hams interested in participating on Wednesday, March 27 at 8:00 PM (Eastern) - 5:00 PM (Pacific), and that same day at 10:00 PM (Eastern) - 7:00 PM (Pacific). Both 30-minute presentations will be held on Zoom and they will feature HamSCI's Festivals of Eclipse Ionospheric Science (FoEIS). The presenters will take your questions during the presentations. The program will start by covering HamSCI's basis and purpose, and quickly move into why they are conducting experiments, how hams and shortwave listeners (SWLs) can participate, and what HamSCI hopes to learn from the event. Along the way, they will discuss why the science behind the event is important to users of the high-frequency radio spectrum -- including amateur radio operators! -- FEMA Disaster Emergency Communications News Clippings and Topics of Interest Vol. 14 Issue 5, March 1-15, 2024

<https://www.arrl.org/news/solar-eclipse-one-month-away>

[Solar Eclipse QSO Party \(SEQP\) - https://hamsci.org/seqp-faqs/](https://hamsci.org/seqp-faqs/)

[Gladstone Signal Spotting Challenge \(GSSC\) - https://hamsci.org/gssc-faqs/](https://hamsci.org/gssc-faqs/)

[Medium Wave Recording Event - https://hamsci.org/mw-recordings/](https://hamsci.org/mw-recordings/)

[Time Delay of Arrival \(TDOA\) Event - https://hamsci.org/tdoa-event-2024/](https://hamsci.org/tdoa-event-2024/)

[Grape 1 Doppler Receiver Project - https://hamsci.org/grape1/](https://hamsci.org/grape1/)

All-Ham Technical Leadership and Mesh at the 2024 Stifel Loppet Cup, Minneapolis

For some years hams have volunteered for the Loppet Foundation, which runs outdoor recreation programs for inner city youth in a large Minneapolis, Minnesota area park. They built a good Nordic ski course which, in winter, overlays the city-run golf course. A few times a year, larger events cover more of the city, and we are called in to help with aid stations.

Back in 2018, the small Foundation applied for and won a bid to host a World Cup race. These events, held mostly in Europe, last a weekend and are about the size of Dayton Hamvention®, i.e., up to 35,000 attendees. The 2020 race was cancelled by COVID five days before the start. A bid was accepted for 2024.

Hams were first asked to run the rented radio operation. Dwight Gibson, KQ0RS, stepped up to lead it. We walked the hilly park and did some testing as I was skeptical of UHF handheld simplex range. We were requested to order 165 radios and insisted on adding a repeater channel or two for backup.

We ended up leading the entire technology operation. The internet/Wi-Fi situation was challenging. We had seven different groups -- about 1,200 people -- needing internet. Fortunately we did not require public Wi-Fi. There is no internet fiber in or near the park and fiber bids were over \$50,000. Cable internet was available, limited to 30 megabits upstream. Media/TV partners helped pay the bills and upload was at a premium. (A 1080 video stream needs around six dedicated megabits. UDP streaming protocol is not "best effort.")

There were no hardwired network links between venues. The previous Internet Manager had a good mesh network. He insisted that anyone taking over should have "large event experience" -- we did after a decade with mesh at the Medtronic Twin Cities Marathon, which is 10 times bigger. We decided to build a whole new network just for the event and leave the current network untouched to minimize disruption, security risks, etc. Over 30 temporary office containers were brought in.

The finish line and media interview area were unique. Olympian Jesse Diggins wanted the finish moved farther away (600 feet) from the main building -- it made for a thrilling runout for the grandstand and TV viewers. We "adapted" a light pole there with 115V power and I ordered a pair of Ubiquiti 60 GHz radios. These, after fussy aiming adjustment, were rock solid and provided 1 Gigabit, and backed up the tactical fiber network. (The week before the race, fiber conduits filled with water and froze.)

Failure Mode Analysis

My leadership insisted on failure mode analysis. We ended up renting a Starlink High Performance dish for the streaming backup. This needs unobstructed full sky and on a home-made mount with 20 feet of pipe was good

for about 190 M down, 19 M up. Given all the upload and "dedicated" requests, I ordered seven new Comcast 900 M/30 M ports. At the last minute, Comcast announced we could order "Gigabit Extra" 1.25 G down, 250 M up, which was huge.

We ended up with five separate physical and seven logical networks. I wanted no single point failures. We used Ubiquiti UniFi hardware in five instances. Doug Reed, N0NAS, suggested we use on-hand HP thin clients and load Linux ourselves for these to save funds. Network visibility and the ability to handle hundreds of wireless clients was key.

Peter Corbett, KD8GBL, was our offsite race day system manager as is our custom. I saw long faces when I refused to issue more "read write" network manager credentials. Production network changes in the heat of the moment can be catastrophic.

Race Weekend

On race weekend, we had 7.5 Gigabits of internet online and almost 30 new access points and 10 switches.

Actual Wi-Fi demand was 10% of what I expected -- I did see most athletes sign on -- they were on international cell roaming. The cellular/5G networks such as AT&T were rock solid. I warned the carriers sternly we would have 18,000 fans per day -- they did not seem worried. Indoors, on my phone, the network was still providing 250-350 megabits all weekend.

Even Swiss Television, who flew in a large team and expected 1 million viewers race days said their LTE/5G air cards were fine for livestreaming.



Eric Westgard, NY9D

Lessons Learned

- Wi-Fi access points have a real-world range of about 300 feet. Divide the published hardware performance numbers exactly in half.
- Cable modems may not be able to handle hundreds of clients each for DHCP (High-bandwidth Digital Content Protection) services
- 5G cellular requires fiber to the towers and scales well under heavy loads.
- Phone company pro tip - start early. 120 days is a bare minimum for circuit orders.
- We forgot to put an access point in the metal Jury office -- a window mesh unit deployed in five minutes (one hop -- in view of our Finish Line light pole) saved the day.
- Rented radios have been popular but we only handed out three-quarters of our pre-ordered supply.
- Power outages should be planned for. I added large UPS units to all network nodes for an hour of backup at least.
- Older 24 V and newer 48 V Power over Ethernet (POE) equipment works poorly together. POE is handy for places with no 115 V outlets.
- Make sure outdoor networking gear and cable is commercial grade and temperature rated. Tactical fiber (we used single mode and LC connectors) is a new thing for us. One Gigabit is not much these days. Ubiquiti makes a single fiber full duplex adapter that conserved strands for us. For a future event I would use 10 Gigabit adapters.

Conclusion

If you venture away from "that's not ham radio" and into what the FCC Part 97 calls "technical experts," you can expand your scope and impact. Word from athletes and organizers is they want us to come back next time. -- [Erik Westgard, NY9D](#), Head of Technology, Stifel Loppet Cup 2024

K1CE for a Final

Donate your used, no-longer needed gear to your local EOC's ARES team! I recently donated a Bird 43 wattmeter, slugs and three ASTRON power supplies to the Gilchrist (Florida) County EOC's ARES team and its radio room. I saved some space in my shack and felt good about donating to a good cause. Think about doing the same - you'll be glad you did! - 73, Rick, K1CE



From left to right, Mike Shaffer, KD4INH; Fred Lewis, KO4YOL, and Rick Palm, K1CE, at the Gilchrist County, Florida, EOC.



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](#)

Contribute to Science While You Operate

The Solar Eclipse QSO Party (or SEQP), is an on-air event coming up on April 8, the same day as the next total solar eclipse. The SEQP is a great opportunity for hams to contribute data to studies of Earth's ionosphere, the part of our atmosphere that makes radio communications possible, and all you have to do is get on the air and operate as you normally would. The lead

organizer of Ham Radio Science Citizen Investigation (HamSCI), Dr. Nathaniel Frissell, W2NAF, joins us in this episode to explain how to get involved.

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

["Lilburn Elementary School students speak with Astronauts on the International Space Station"](#) / WANF (Atlanta) February 11, 2024 --The North Fulton Amateur Radio League is an ARRL Affiliated Club.

["Unveiling the Mysteries of Solar Eclipses Through 'Eclipse Radio' Projects"](#) / The United Business Journal (Pennsylvania) February 21, 2024 --The University of Scranton Amateur Radio Club is an ARRL Affiliated Club.

["Exploring the world of ham radio: An educational event by Pine State Amateur Radio Club"](#) / Bangor Daily News (Maine) February 23, 2024 -- The Pine State Amateur Radio Club is an ARRL Affiliated Club.

["HAMFEST" IN CAVE CITY MAKES WAVES THROUGH THE COMMUNITY"](#) / WCLU (Kentucky) March 2, 2024 -- Mammoth Cave Amateur Radio Club.

"[America's Last Morse Code Station](#)" / The Atlantic March 2, 2024

"[Amateurs of Action - The Women of Radio](#)" / Domestic Preparedness March 6, 2024 -- Desiree Bacchus, N3DEZ, is a member of the ARRL Public Relations Committee

"[Ham Radio Club Revives Alternative Communication](#)" / The Parthenon (West Virginia) March 2, 2024 -- Thundering Herd Amateur Radio Club.

"[Ham Radio Enthusiasts Dial In To 2024 Crossroads Hamfest & Radio Swap - Search News \(bing.com\)](#)" / WWMT (Michigan) March 10, 2024 -- The Southern Michigan Amateur Radio Society is an ARRL Affiliated Club.

"[Peoria Radio Club hosts Storm Spotter Training](#)" / WMBD (Illinois) March 12, 2024 -- The Peoria Area Amateur Radio Club is an ARRL Affiliated Club.

"["L.A. Hogs" Ham Radio Group Broadcasts From Jonquil Festival](#)" / HopePrescott.com (Arkansas) March 19, 2024 -- The Lower Arkansas Ham Operators Group.

"[Hamateur Hour: Radio operators prepare for total solar eclipse what-ifs](#)" / WFIE (Indiana) March 21, 2024

"[Fulton County Amateur Radio Club ready to assist during April 8 total solar eclipse](#)" / WTOL (Ohio) March 25, 2024 -- The Fulton County Amateur Radio Club is an ARRL Affiliated Club.

"[GEARS promotes radio use for emergencies in Butte County, preparing for future events](#)" / KRCR (California) March 27, 2024 -- The Golden Empire Amateur Radio Society is an ARRL Affiliated Club.

Announcements

Preparation Underway for Severe

Spring Weather

The severe weather season (March through May) is fast approaching, and [National Weather Service](#) (NWS) offices across the country are getting ready.

Warning Coordination Meteorologist Brandon Pelouquin at the Wilmington, Ohio, NWS office said many of the NWS offices across the country meet with partner organizations in the spring to make plans for the weather ahead.

"Amateur radio operators and weather spotters are extremely important, and we could not do what we do without them," he said. "In fact, many of the watches and warnings issued are made because weather spotters provided critical information."

Pelouquin said that Doppler radar is a great tool for tracking storms, but weather spotters have a different vantage point and can see things that radar can't.

Severe Weather Awareness Weeks are scheduled by each state and usually occur during March to remind and educate communities about severe weather seasonal threats and how to avoid them. The NWS [SKYWARN](#)® Storm Spotter Program is a volunteer program with almost 400,000 trained severe weather spotters. Spotter training is available at the state level and is offered several times each year, and classes can be found at [this link](#). Every December, NWS and ARRL hold [SKYWARN Recognition Day](#) to honor all SKYWARN storm spotters and amateur radio operators for their contributions during severe weather.

Amateur radio is a strong tool for community resilience during times of severe weather and other emergencies and is useful for public service throughout the year. Those interested in using their license privileges to serve others are encouraged to participate in their local Amateur Radio Emergency Service® (ARES®) groups. Find out how at www.arrl.org/ares .

The results from HamSCI's first Festi-

vals of Eclipse Ionospheric Science event have been released.

[HamSCI](#) has announced the results from the inaugural running of the [Gladstone Signal Spotting Challenge](#). Held during the October 14, 2023, North American annular solar eclipse, the challenge was designed to recognize operators of digital mode stations who contribute valuable data to ionospheric research. Receiving stations uploaded their records to sites such as [PSKreporter.info](#), [WSPRnet.org](#), and [reversebeacon.net](#) Transmitting stations were received by stations worldwide who uploaded their results to the same databases, creating records of the transmitting stations' activities. Here is the [link to the full results](#), including participant scores and a sampling of station design details and station photographs. The next event will be held on April 8, 2024, during the North American total solar eclipse.

Bob Heil, K9EID, Silent Key

The man who defined the sound of live rock 'n' roll music and brought audio engineering principals into mainstream amateur radio use, Dr. Bob Heil, K9EID, has passed away at the age of 83.

He was an ARRL Life Member and in the ARRL Maxim Society. A Facebook post from Heil Ham



Bob Heil, K9EID.

Radio paid tribute to their founder: "Bob fought a valiant, yearlong battle with cancer, and passed peacefully surrounded by his family."

Heil founded Heil Sound in 1966, through which he created the template for modern concert sound systems for musicians like the Grateful Dead,

The Who, Joe Walsh, and Peter Frampton.

"RIP, man. I love you and miss you already. Sending love to Sarah and to the world of audio-heads you leave behind," said rocker Joe Walsh, WB6ACU, in a Facebook post. [Joe Walsh, WB6ACU, photo]

The talk box used on iconic live record Frampton



Heil with his grandson, Charlie Hartley, KF0OOP, at the ARRL Midwest Convention Winterfest.

Comes Alive! was Heil's design. His audio engineering products have been featured in the Rock & Roll Hall of Fame, and he was honored in 2007 with the Parnelli Audio Innovator Award for his impact on the live sound industry. "My life has been about achieving great sound, whether on the concert stage or in the amateur radio world," Bob Heil recounted in 2022. "I've watched Heil Sound go from a regional sound company to a world-class microphone manufacturer. This company has been my passion," he said.

Parallel to his commercial and artistic success in live music, was his passion for amateur radio. He was active in ham radio from a young age, and he merged his expertise in audio engineering with his love for radio. Heil Ham Radio was founded to produce microphones, headsets, and other gear for radio amateurs with an emphasis on high-quality audio.

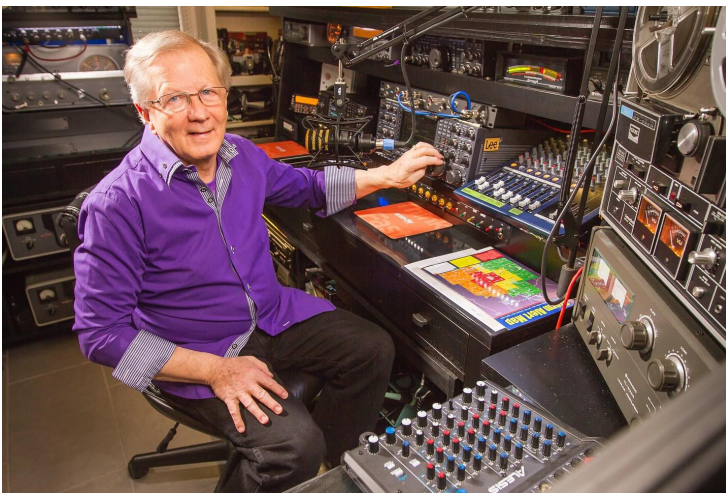
Heil was known as a mentor who enjoyed helping others find success in ham radio.

Recently, his grandson Charlie Hartley, KF0OOP, became a licensed ham to surprise Heil for his birthday. The pair attended the ARRL Midwest Convention/Winterfest in St. Louis, Missouri, on January 27, 2024.

Heil was a generous donor to amateur radio organizations, including ARRL. Recently, he donated a host of new audio gear to the Hiram Percy Maxim Memorial Station, W1AW.

His generosity and kind nature will be missed by many, including ARRL Director of Development Kevin Beal, K8EAL. "Bob was a titan in many areas. He was generous with his time, offered keen insights, and had the heart of a philanthropist in the ARRL Maxim Society," Beal said. "He was a gentleman to his core, making friends easily and everywhere he went, from rock stars to captains of industry. I consider it a real privilege to have become a friend to him, too, all because of amateur radio."

Heil was known for his passion for AM opera-



Bob Heil, K9EID, 1940 - 2024. [Heil Ham Radio, photo]

tions. He served for many years as an on-camera host of the Ham Nation podcast. Tributes to Heil have been flooding social media, including from his co-hosts.

ARRL President Rick Roderick, K5UR, said Heil's passing is a significant loss. "Bob Heil's technical achievements that brought high-quality audio to amateur radio pale in comparison to his generosity and willingness to help his fellow ham. He's long been known as someone eager to help mentor and teach. His legacy on our hobby will be long-lasting. Our thoughts are with his loved ones."

An obituary for Heil may be viewed [at this link](#).

FCC Job Opportunity for Recent Engineering Graduates

The Federal Communications Commission (FCC) has a job opening that might be a good opportunity for recently graduated amateur radio operators who have knowledge of the spectrum and RF.

This is a Recent Graduates position in the FCC's Pathways Program, and it will be located in the FCC Office of Engineering and Technology (OET) in Washington, DC. Applications are being accepted for engineering graduates who earned their degree in 2022 or later. For veteran applicants, earlier graduates qualify based upon their military service, including students expecting to graduate in May 2024.

There will be on-the-job training for the position. Some of the duties range from performing propagation analysis of terrestrial, satellite, and/or airborne systems, to evaluating the emission characteristics of various transmitters to validate co-existence with neighboring systems. Projects may involve various computer software engineering and scientific applications. Applications are being accepted through July 2, 2024, and a complete job description and required qualifications can be found at <https://www.usajobs.gov/job/767902700>.

Solar Eclipse This Month

A total solar eclipse that will be seen across

North America will occur on Monday, April 8th. It will be the last of its kind in the US for the next 20 years.

Hams across North America are asked to participate in a study about how the ionosphere functions by getting on the air to help scientists in a series of ionospheric experiments.

Ham Radio Science Citizen Investigation (HamSCI) has presentations for hams interested in participating on Wednesday, March 27 at 8:00 PM (Eastern) - 5:00 PM (Pacific)*, and that same day at 10:00 PM (Eastern) - 7:00 PM (Pacific)*. Both 30-minute presentations will held on Zoom and they will feature HamSCI's Festivals of Eclipse Ionospheric Science (FoEIS). The presenters will take your questions during the presentations.

[Here is the link to the presentations.](#)

The program will start by covering HamSCI's basis and purpose, and quickly move into why they are conducting experiments, how hams and shortwave listeners (SWLS) can participate, and



The second "diamond ring" phase of the 2017 Great American Eclipse, as seen in Madras, Oregon. [Sierra Harrop, W5DX, photo]

what they hope to learn from the event. Along the way, they will discuss why the science behind the event is important to users of the high-frequency radio spectrum - including amateur radio operators!

Learn about the HamSCI's eclipse-focused operating events:

[Solar Eclipse QSO Party \(SEQP\)](#)
[Gladstone Signal Spotting Challenge \(GSSC\)](#)
[Medium Wave Recording Event](#)
[Time Delay of Arrival \(TDOA\) Event](#)
[Grape 1 Doppler Receiver Project](#)

Maritime Mobile Planned

During the solar eclipse, John Landrigan, KA4RXP, will be operating in the SEQP as a maritime mobile off the coast of Mazatlán, Mexico, at the beginning of the total solar eclipse as it transits the Maritime provinces of Canada. Look for KA4RXP/MM around 14.265 MHz.

Amateur Radio Stands Ready to Support Eclipse Operations

The upcoming April 8, 2024, solar eclipse has many excited about the opportunity to witness the darkness of totality. Spectators from across the country are traveling to the path of total darkness that will stretch from South Texas to North-eastern Maine.

Some states are anticipating more than a million travelers for the event. In the impacted areas, schools will be letting students out early for the day, and residents are being encouraged to avoid driving on the day of the event. Emergency response organizations are adding staff for the event in many areas. The eclipse is expected to directly impact parts of 14 states as it moves across the country. The travel impact alone could be substantial.

In preparation for the event, many state emergency management organizations have called on local hams to provide communication services via HF nets and locally on VHF/UHF frequencies. There have been numerous planning meetings, exercises, and preparations across the country. The [ARRL Emergency Management department](#) has worked with ARRL Section Emergency Coordinators and Section Managers in the directly affected areas to collect the frequencies each Section plans to utilize, and to assist in any frequency conflicts. Hams across multiple states and ARRL Sections have been practicing their communications capabilities via Winlink, SSB, and CW. "It is great to see Sections along the path working together to be prepared to assist in any emergency, should it occur during the event," said ARRL Director of Emergency Management Josh Johnston, KE5MHV. "Heavy traffic is the major concern,

but [anything can happen] during such a large event," he added.

Johnston went on to say, "There will be several on-air operating events on the day of the eclipse, but please give some space for any emergency traffic that may be taking place as well."

Ham Radio Science Citizen Investigation (HamSCI) is leading the [Solar Eclipse QSO Party](#) which will allow radio amateurs to participate in propagation research by operating during the eclipse and submitting their logs. Much of that activity will be focused on the FT8 frequencies of the non-World Administrative Radio Conference (WARC) HF bands, but all modes will be welcome during the event.

On February 27, 2024, five amateur radio clubs in the Dominican Republic activated special event station HI180RD to celebrate the 180th anniversary of the country's independence from Haiti.

Until 2359 UTC on April 30, more than 25 HI180RD amateur radio operators will be on the air daily. Activations are on all HF bands, SSB, and digital modes on 14.326 +/- 20 KHz, 21.325 +/- 20 KHz, 24.980 +/- 20 KHz, and 28.380 +/- 20 KHz, including VHF/UHF frequencies for local stations. QSL certificates are available via QRZ.com. For additional information, contact Mejico Angeles-Lithgow, HI8MA/KQ4IPX, at angeles.m@claro.net.do. The announcement of the Dominican Republic's separation from Haiti took place at the Gate of Mercy in Santo Domingo on February 27, 1844, which is also where the country's tricolor flag was hoisted for the first time.

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

The QPC of the NCVEC has deleted question G1E09 from the General-class pool because they have determined the question is defective and must be withdrawn. They discovered that, as worded, the question is showing the wrong correct

answer. Question G1E09 must be 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 <https://www.ncvec.org/index.php/2023-2027-general-question-pool-release>. 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.

2024 ARRL Field Day Theme: Be Radio Active

The theme for 2024 ARRL Field Day is "Be Radio Active." The event will run on June 22 - 23, and it will be one-part contest, one-part emergency communications exercise, and one-part open house -- and a great time. The theme encourages radio amateurs to take advantage of the peak of Solar Cycle 25, which we are nearing. Activity this year is likely to be extremely high thanks to favorable solar conditions. The upper HF bands, such as 15 and 10 meters, should benefit most from the Cycle's peak.

There are resources available already for clubs and individuals to make their Field Day plans. ARRL will publish more information and tools so that hams can make the most of the event as it draws near. Amateurs interested in learning more are invited to join the [Field Day Facebook](#) group to connect with others who are planning for the big weekend.

Find links to all of the resources on the ARRL Field Day web page at www.arrl.org/field-day.

Dayton Hamvention® 2024 Award Winners Announced

The recipients of the 2024 Hamvention Awards were announced on March 8, 2024.

Special Achievement Award: Anthony Luscre, K8ZT



Anthony Luscre, K8ZT. [Photo courtesy of Hamvention®]

Luscre is from near Akron, Ohio, and he was first licensed in 1981. He has been a low-power operator, contester, and teacher throughout his amateur radio career.

He received his Amateur Extra-class license in 2000. Luscre is active on HF and VHF/UHF, and he operates on CW, phone, and digital modes. His low-power contacts now top 115,000. Between licensing classes, club programs, webinars, hamfests, conferences, youth and school radio demonstrations, and other in-person and online talks, Luscre has presented more than 500 sessions since the beginning of the COVID-19 pandemic. He has presented multiple times for Contest University, the QSO Today Virtual Ham Expo, and Dayton Hamvention®. He holds a weekly class, "The Joy of Operating," for the Long Island CW Club. Anthony serves as the ARRL Ohio Section Youth Coordinator and he is an officer in the [Cuyahoga Falls Amateur Radio Club](#).

Technical Achievement Award: Ward Silver, N0AX

Ward Silver, N0AX [Photo courtesy of Hamven-



tion®]

For the past 15 years, Silver has been the Lead Editor of The ARRL Handbook and The ARRL Antenna Book, and he was a primary author of all three ARRL license manuals and study guides from 2004 until his retirement in 2023.

As an electrical engineer, he designed microprocessor-based products and medical devices for 20 years before beginning a second career as a teacher and writer. Licensed since 1972, he is a co-founder of the World Radiosport Team Championships and was inducted into the CQ Contest Hall of Fame in 2015, with numerous top scores and records. He is President of the [Yasme Foundation](#), and he is also a board member of the Ham Radio Science Citizen Investigation ([HamSCI](#)) collaborative research group. Silver's primary interests in amateur radio include radiosport, antenna design, and supporting his local emergency response team.

Club of the Year Award: The Young Ladies' Radio League (YLRL)

The [Young Ladies' Radio League](#), Inc. (YLRL), is proud to be celebrating its 85th anniversary this year. With members from all over the world, the organization has been involved in everything from contests, to emergency events, to helping new hams get licensed and on the air, as well as everything in between.



The Young Ladies' Radio League at their

Convention in Washington state in 2014. [Photo courtesy of Hamvention®]

Established in 1939, YLRL has been found at hamfests and conventions all over the world.

The club is proud to have had a booth at Hamvention® every year since the 1950s and a YL Forum since the 1960s. "Women helping women in amateur radio" is a mission statement for this organization, but there are also contest and award opportunities for the OMs who support their YLs. YLRL has the motto "QRV -- I am ready," as they are always ready to assist in the radio community.

Amateur of The Year Award: Edward Engleman, KG8CX

Edward Engleman, KG8CX. [Photo courtesy of Hamvention®]



Engleman, KG8CX, is from Menominee, Michigan. He is the co-founder of the [Young Amateurs Communications Ham Team](#) (YACHT). He was first licensed in 1991 and received his Amateur Extra-class license in 2000. He has been a member of ARRL since 1991. Engleman serves his home club, the Marinette & Menominee Amateur Radio Club, as a volunteer examiner. Engleman's 33-year background as an elementary educator and principal was instrumental in developing the talents he now uses in his work with young amateurs.

ARRL The National Association for Amateur Radio® and Hamvention® have announced that Hamvention will host the 2024 ARRL National Convention on May 17, 18, and 19 at the Greene County Fairgrounds in Xenia, Ohio. ARRL has an exciting lineup of forums and presentations for the ARRL National Convention. For information about the 2024 ARRL National Convention, go to www.arrl.org/expo. For tickets to Hamvention and further information, head to www.hamvention.org.

You can read more about the 2024 Hamvention award winners and the 2024 ARRL National Convention at ARRL.org.

Get Ready for the 2024 ARRL National Convention and Youth Rally

A full slate of programming has been committed for the 2024 ARRL National Convention, which will be hosted by Dayton Hamvention®, May 17 - 19, in Xenia, Ohio. Hamvention is the largest annual gathering of radio amateurs in the world. Coupled with the National Convention, this year promises to be a Hamvention not to miss. Building on a yearlong theme to "Be Radio Active," ARRL has planned exhibits, forums, panels, and activities that promise to engage and inspire attendees in a wide range of amateur radio interests.

Hamvention has committed one of its four forum rooms to a track of ARRL National Convention presentations with topics that span public service, technology, on-air activities, instruction, and youth outreach.

- In the Amateur Radio Emergency Service® (ARES®) forum, ARRL Director of Emergency Management Josh Johnston, KE5MHV, will discuss the role of SAFECOM in supporting the public safety community to improve the emergency communications ecosystem, as well as the importance of building mutually beneficial relationships with local emergency management officials.
- ARRL National Instructor Gordon West, WB6NOA, will lead an Instructor Academy, showing off many new training tools to help lead lively ham radio license classes.
- ARRL Education and Learning Manager Steve Goodgame, K5ATA, will cover Youth Outreach through Amateur Radio STEM Education, covering ways to inspire students to pursue higher education and careers in technological fields.
- Enhancing Transmitter Performance will examine the ARRL Clean Signal Initiative, and presenters include ARRL Second Vice President Mike Ritz, W7VO; Rob Sherwood, NC0B, of Sherwood Engineering Inc., and ARRL Laboratory Manager George Spatta, W1GKS.

- Kyle Krieg, AA0Z, will present, How to Control Your Ham Shack with A Node-RED Dashboard, offering a tutorial for this easy-to-learn flow-based programming language that ham radio operators can use to build simple web-based dashboards that provide command, control, and automation in their ham shack.
- ARRL First Vice President Kristen McIntyre, K6WX, will examine the theory of ground, discussing dc grounds, RF grounds, and even talking about gravity, in her presentation, Ground is a Myth!
- ARRL CEO David A. Minster, NA2AA, will delve into the world of Gaming the Amateur Radio Modes, offering tips and tricks covering station design, operating, instruction, and mastering the art of amateur radio modes, including FT8.
- Five Steps to a Successful POTA (Parks on the Air®) Activation will be presented by Michael Martens, KB9VBR, of KB9VBR Antennas on YouTube.
- ARRL Regulatory Information Manager Bart Jahnke, W9JJ, will moderate a panel on Good Operators and Interference that includes Lark Hadley, KA4A, Director, Region Three, FCC Enforcement Bureau; ARRL Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH, and ARRL Laboratory Manager George Spatta, W1GKS.
- ARRL Field Services Manager Mike Walters, W8ZY, will present, Tips for Successful Radio Clubs.
- ARRL Radiosport Manager Bart Jahnke, W9JJ, and Contest Program Manager Paul Bourque, N1SFE, will provide an ARRL Contest Program Update.
- Explore the full scope of operating privileges and ham radio activities that can be done with a Technician - class license, in the forum Beyond Repeaters: See How Far Your

Tech License Will Take You, presented by ARRL Laboratory Digital RF Engineer John McAuliffe, KD2ZWN.

Additionally, an ARRL Membership Forum will be held on Saturday, May 18, covering several key areas of membership interest. The forum will be moderated by ARRL Great Lakes Division Director Scott Yonally, N8SY, and panelists include ARRL President Rick Roderick, K5UR; First Vice President Kristen McIntyre, K6WX, and CEO David A. Minster, NA2AA.

On Saturday, May 18, a 2024 ARRL Youth Rally will be a special feature of the National Convention at Hamvention. The Youth Rally is intended for students who are 11 to 21 years of age. While Hamvention offers free tickets for youth aged 12 through 18, advance registration for the Youth Rally is recommended. A preliminary Youth Rally agenda and registration instructions are on the ARRL website, at www.arrl.org/expo. The Youth Rally registration fee is \$20 and includes a tee shirt (to wear on Saturday), badge, lanyard, and reusable tote bag.

Youth Rally participants will enjoy a full day of activities, discovery, sharing, and fun. Rally day begins at 9:15 AM on Saturday with the annual Dayton Youth Forum -- open to all Hamvention attendees -- moderated by well-known amateur radio educator Carole Perry, WB2MGP. The forum includes presentations from young hams covering a variety of amateur radio activities, topics, and technology. After lunch (on your own) Youth Rally registrants will gather in Forum Room 3 to get know each other and to explore a variety of amateur radio interests and activities. Learn about satellite communications, participate in a short sprint contest, contact a parachute mobile station, and participate in other fun! Bring a 2-meter handheld radio if you have one.

The Youth Rally will wrap up on Saturday with a presentation from the ARRL Collegiate Amateur Radio Program (CARP).

Learn more about the 2024 ARRL National Convention at www.arrl.org/expo, where you can find the full listing of ARRL-sponsored forums, exhibits,

and activities.

Hamvention is held in Xenia, Ohio, on the sprawling grounds of the Greene County Fairgrounds and Expo Center. Visit the event's website at www.hamvention.org, where you can also purchase tickets, find the complete list of Hamvention forums, and learn more about the event.

International Marconi Day 2024

This year, International Marconi Day (IMD) is on April 27. Italian inventor and electrical engineer Guglielmo Giovanni Maria Marconi was born on April 25, 1874, and is credited for inventing the radiotelegraph system, creating Marconi's law, and sending the first wireless transmission over the open sea.

IMD was created to honor Marconi and is hosted annually by the [Cornish Radio Amateur Club](#), GX4CRC. The purpose of the day is for amateur radio enthusiasts around the world to contact historic Marconi sites using communication techniques similar to those that he would have used.



The 24-hour event will operate from 0000 UTC to 2359 UTC, and registration is required. Participants can register at [GX4CRC's registration web page](#).

Stations in the United States, including Marconi Cape Cod Radio Club, KM1CC, in Massachusetts, are already registering for the event. KM1CC hosts several on-air events each year to keep the accomplishments and story of Marconi and his wireless station site in South Wellfleet alive. In 1975, the Wellfleet station was listed as a National Historic Landmark on



the National Register of Historic Places and is now part of Cape Cod National Seashore, a unit of the National Park Service. When possible, KM1CC sets up a temporary radio station inside the park. More information about KM1CC is available on their [Facebook](#) page.

The 2024 Society of Amateur Radio Astronomers (SARA) Western Conference will be held in Dallas, Texas, at the University of Texas on April 8 - 9. One of the main events of the conference will be the April 8 solar eclipse, which will be visible over the Dallas area in the afternoon. The conference will include presentations by SARA members and a keynote address by University of Texas Associate Professor of Physics Dr. Lindsay King. Registration to attend the conference in person is \$75 and on Zoom is \$15. Participants must be SARA members to register. Visit the SARA website for additional information. Payment can be made through [PayPal](#) by sending your payment via email to treas@radio-astronomy.org. The 2024 SARA Eastern Conference and Global Radio Astronomy Symposium will be held at the Green Bank Observatory in West Virginia, from August 4 - 7.

The third annual Lewis and Clark Trail on the Air will be active from June 1 - 16. This special event is an on-air activity that commemorates the historic [Lewis and Clark National Historic Trail](#), which covers 4,900 miles through 16 states, including the disembarkation from Camp Dubois and what is referred to as the [Eastern Legacy](#). The event is sponsored by the [Clark County Amateur Radio Club](#) (CCARC), W7AIA, with support and participation from various clubs in all 16 states along the historic trail. Each day of the event runs for 24 hours and the start time is 0000 UTC through 2400 UTC. Operating modes include SSB phone, FM phone, CW, and FT8. Any combination of modes toward working all 16 states is allowed. A schedule for planned operations for each participating state will be posted on the CCARC website. Certificates can be requested for two classes of participation: the Expedition Partner Certificate (awarded to any station working all 16 states) and the Trail Companion Certificate (awarded to any station working one or more

states). Clubs interested in activating this event for one of the 16 states of the Lewis and Clark National Historic Trail should send an email of interest to info@LCTOTA.org.

Amateur Radio Importance Highlighted at National Hurricane Conference

The [National Hurricane Conference](#) was held March 25 - 28, 2024, in Orlando, Florida. Amateur radio was well represented at the event. A series of workshops were held that focused on amateur radio's involvement in hurricane tracking, coverage, and recovery.

Among the presenters was the Assistant Amateur Radio Coordinator of [WX4NHC at the National Hurricane Center](#) (NHC) Julio Ripoll, WD4R.

Julio Ripoll, WD4R, serves as the Assistant Amateur Radio Coordinator for WX4NHC

Ripoll gave a history of amateur radio's involvement in NHC, including the use of tube radios in the 1980s and the Yaesu FTDX-1200 used today. WX4NHC is also equipped with VHF/UHF radios to access the Florida Statewide Amateur Radio Network (SARnet), as well as digital equipment to communicate with [the VoIP Hurricane Net](#), IRLP, and Winlink to receive emails via amateur radio.

"We were the only means of communication between the National Hurricane Center and the National Weather Service Field Office in Slidell, Louisiana, during Hurricane Katrina," Ripoll said. He went on to highlight other instances of reports given by ham radio that provided mission-critical information that had a major impact on the way NHC handled a storm.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, gave a presentation to the crowd of hurricane experts, meteorologists, and emergency managers about the Amateur Radio Emergency Service® (ARES®).

ARRL Director of Emergency Management Josh Johnston, KE5MHV. [Jim Palmer, KB1KQW, photo.]

He spoke of ARRL's role on the board of SAFECOM, a program managed by the Cybersecurity and Infrastructure Security Agency (CISA) that sets the standards of interoperability procedures. Being a part of the group solidifies the Amateur Radio Service as a robust resource before and during times of crisis.

Johnston shared that in 2023, ARES volunteers contributed at least \$21.8 million in volunteer hours to their local communities. "Is amateur radio still relevant? Absolutely! Are we still involved in the places that are doing things the right way? Amateur radio absolutely is," he said.

Johnston highlighted [the relationship between ARRL and the Federal Emergency Management Agency \(FEMA\)](#), as well as ARRL's position as a net control station within the SHARED RESources High Frequency Radio Program (SHARES) managed by CISA.

Among other presenters was ARRL's [The ARES Letter](#) Editor Rick Palm, K1CE.

He shared a harrowing tale of his family riding out a direct hit from Hurricane Idalia in August 2023. The damage and impact he felt gave him a new perspective on emergency communications, as he went from a volunteer communicator to a storm victim. Read more about his experience in the "Public Service" column in the January 2024 issue of QST.

Watch a [video of the amateur radio workshops](#) at the 2024 National Hurricane Conference on YouTube, courtesy of Jim Palmer, KB1KQW.

World Amateur Radio Day is April 18, 2024

[World Amateur Radio Day](#) (WARD) is celebrated each year on April 18.

The theme for 2024 is, "A Century of Connections: Celebrating 100 Years of Amateur Radio"

Innovation, Community, and Advocacy." The global event covers all of the [International Amateur Radio Union](#) (IARU) regions and spans 2 days: Thursday, April 18, 2024, 0000 UTC to Friday, April 19, 2024, 0000 UTC.

On April 18, 1925, the IARU was formed in Paris and will celebrate its centenary in 2025. American Radio Relay League (ARRL) Co-Founder Hiram Percy Maxim was the organization's first president.

All radio amateurs are invited to take to the airwaves to enjoy the global friendship with other amateurs and to show their skills and capabilities to the public. WARD is not a contest but rather an opportunity to talk about the value of amateur radio to the public and fellow amateur colleagues. It is also a great opportunity to talk about local radio clubs and amateur radio in local media as a lead-up to [ARRL Field Day](#), which is held each year during the fourth full weekend in June. You can also promote your personal WARD activities on social media platforms like X and Facebook by using the hashtag #WorldAmateurRadioDay.

For more ideas and information, visit [World Amateur Radio Day \(arrl.org\)](#).

Reminder: Solar Eclipse April 8

Amateur radio will play many roles in the upcoming solar eclipse that will cross much of North America. Radio amateurs are welcome to participate in ionospheric research that is being conducted. Find information about the [Solar Eclipse QSO Party on the HamSCI web site](#).

Many emergency communications groups, including those affiliated with the [Amateur Radio Emergency Service® \(ARES®\)](#) in the areas near totality are planning to be active surrounding the event. Hams will provide communications to served agencies, such as local governments, relief organizations, and other groups that could benefit from resilient communications during a time when millions are expected

to travel.

New Training Course Offered by the ARRL Puerto Rico Section

The ARRL Puerto Rico Section has a new online training course for prospective amateur radio operators. Fifty-three students have enrolled in the course, taught by ARRL Technical Coordinator and Instructor Carlos Roig, WP4AOH, who draws from the ARRL License Manual and the National Conference of Volunteer Examiner Coordinators pool of questions for the Spanish Zoom course. The course is open to anyone who is interested in becoming an amateur radio operator. In advance of the course, on March 16, 2024, Assistant Section Manager (ASM) Leyda Rios, WP4RBK, offered a Technician training demonstration to 10 registered students at the University of Puerto Rico, Mayaguez Campus.

The session was an overview of amateur radio and its various activities. Students were most interested in the band plan, the phonetic alphabet, and how to communicate with others. The instruction session also included an introduction to amateur radio equipment and antennas, including how to operate and set up the equipment. There was also a demonstration of a VHF/UHF radio to establish a simple repeater contact. "The range of amateur communication and the capabilities astounded the students," Rios said.

Several students were also interested in learning more about how to utilize the radio equipment and how to establish their first contact, while others have an interest in emergency communications for this year's hurricane season.

For additional information about the training course, contact Leyda Rios, WP4RBK, at wp4rbk@gmail.com.

For information on how to become an amateur radio operator, visit ARRL | [Licensing, Education & Training](#) | [Getting on the Air](#).

If you're a Parks on the Air activator or

hunter, there are two events occurring the first week of April that might be of interest. [Georgia State Parks on the Air](#) begins at 1200 UTC on Saturday, April 6, and concludes at 2359 UTC on Sunday, April 7. Also, [Florida State Parks on the Air](#) begins at 1400 UTC on Saturday, April 6, and concludes at 2200 UTC on Sunday, April 7. For more information, visit the individual sponsors' websites.

Blind amateur radio operator, tower climber, and [Southeastern Repeater Association \(SERA\) President Wade "Danny" Hampton Jr., K4ITL, passed away February 28, 2024.](#)

While attending the North Carolina State School for the Blind (now known as Governor Morehead School for the Blind) in Raleigh, Hampton met several sighted friends involved in the amateur radio community and began attending radio club meetings with them. As a result, he became a licensed amateur radio operator at the age of 12, despite the requirement that an operator must be able to read, copy, and send Morse code, all of which he learned by ear. After graduation from Wake Technical Community College, Hampton founded a company that maintained commercial two-way radio systems across the southeastern US. For many years, he was a broadcast engineer for WRAL-TV in Raleigh, often working at the top of the station's 2,000-foot tower. Hampton made his last climb in 2023 at the age of 79. He was named Hamvention® Amateur of the Year in 2009 for his design of the Piedmont Coastal Repeater Network, which links more than 40 repeaters. He was also awarded North Carolina's highest civilian award, The Order of the Long Leaf Pine, in recognition for adding broadcast translators to the fringe service area of the Raleigh National Weather Service office. He leaves behind his wife Rose, six children, 11 grandchildren, and five great grandchildren.

The NTS™ Letter

National Traffic System®



From the Editor

March 5, 2024

Thank you all who have opted to receive The NTS Letter. We hope you are enjoying it. We would like to hear more from you about what is going on in your areas - experiences in training, experiences in traffic deliveries, recruiting efforts, exercises and work with ARES, work with clubs, special recognition, etc. As we go into our second year, we, the NTS 2.0 working groups, are looking forward to hearing from anyone interested in the improvement and enhancement of NTS and traffic handling. If you would like to contribute to this project, please contact Fred Kemmerer, AB1OC, at ab1oc@arrl.org. It has been a great group to work with, especially knowing we have the support of ARRL.

NTS 2.0 Update - Training Videos

In last month's NTS Letter, we recapped some of the accomplishments of the NTS 2.0 working groups during 2023. There are other projects we continue to work on, but none so important as training videos. It is essential that we get more licensed amateurs to have the skill set to reliably relay message traffic. Because it appears that many today look to videos to learn about a variety of topics, we are currently creating a series of videos that we hope will be useful, particularly for the beginning traffic handler. There is much one can learn about successful message relay, and it can be somewhat daunting to check into a traffic net for the first time. We plan to start with the basics in short 5- to 15-minute videos on such subjects as the radiogram, checking into a net, and sending, receiving, and delivering traffic, which one can view in any order at any time. Once one gets the confidence to check in and handle traffic, they can go on to more advanced topics such as net controlling, net managing, and participation in emergency nets.

We would like to hear from any amateur radio operators who have experience in creating and editing videos. If you can help us in this way, please contact Fred Kemmerer, AB1OC, at abloc@arrl.org.

Treasure Hunt Update

Hello, treasure hunters! Fifteen stations participated in the February NTS Treasure Hunt. The following stations successfully completed all three rounds:

2/11/24	2124Z	N1CVO	Shawn
2/12/24	2125Z	VE1IJ	Glenn
2/15/24	0001Z	KY2D	Jim
2/16/24	2100Z	KE2BBS	Ryan
2/16/24	2358Z	WB8SIQ	Don
2/25/24	2138Z	N0JAR	Joe

The first three Treasure Hunt finishers in the inaugural NTS 2.0 Treasure Hunt will receive a specially designed mug courtesy of the NTS 2.0 planning committee.

If you missed the official treasure hunt announcement in the December 2023 issue of The NTS Letter, here is a recap: This is a fun, on-air, multi-step competition in which you will respond to a "judge" with your answer to an initial clue or question via radiogram. The judge will reply via radiogram with the identity of the next judge, along with the next question or clue in the hunt.

Are you ready? Here is the first question for our March 2024 contest:

What are the four parts of the radiogram called?

Send your answer via NTS radiogram to Jon W. McCombie, N1ILZ, Eastham, MA 02642.

The text of the radiogram should consist of the words "TREASURE HUNT ROUND 1," followed by your answer. Be sure to form the NTS message properly, with the message number, the station of origin, and the correct check.

You will receive a confirmation radiogram back with the next clue or question and addressee; or a message explaining that your answer is incorrect and to please try again.

Please check out our survey to let us know how we are doing. [Survey Link](#)

Good luck!

Radiogram Portal Update

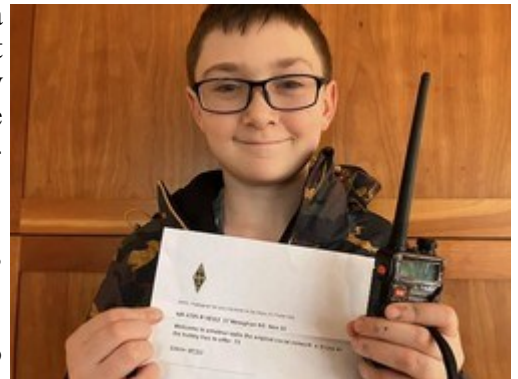
Testing has been completed and the Radiogram Portal has gone live! We are now seeking traffic handlers from across the country to apply to be appointed as official "Radiogrammers." A video that explains the process is now available on the nts2.arrl.org website, under the tab "Training and Documentation. Once an applicant has been approved, they will be given access to the portal to retrieve messages for formatting radiograms and entering into the traffic system via any of the various modes available. It is a fun activity, a way to originate third-party radiograms and introduce amateur radio and message handling to the public and fellow amateurs who have not heard of this activity. Check out the video on the website and follow the instructions.

The Importance of Bulk Greeting Messages

In December 2023, I attended a meeting at New England Sci-Tech, a STEM/Makerspace in Natick, MA. Also attending were: ARRL First Vice President Mike Raisbeck, K1TWF; Western MA ACC Larry Krainson, W1AST; and Eastern MA ACC Bruce Blain, K1GB. We were involved in planning the 2024 ARRL New England Division Convention.

A young ham, Francesco Tron, KC1TTJ, of Wellesley, Massachusetts, also happened to be at New England Sci-Tech that morning.

The Makerspace leader interrupted us briefly and asked if Francesco could come in and show us something.



Francesco Tron, KC1TTJ

Francesco walked in and proudly displayed a paper that he received via the US Mail from a local traffic handler. It was a "Welcome to Amateur Radio" message originated by Glenn Killam, VE1IJ, from Saint Alphonse, Nova Scotia. Francesco was beaming, excited to have received this simple message affirming his entry into the world of amateur radio.

So, before you dismiss "Welcome to Amateur Radio" messages as unworthy of relay or delivery, please consider the impact that receiving this simple greeting had for this young amateur. I have no doubt that Francesco will treasure that piece of paper for a long time! -- Phil Temples, K9HI, Vice Director, New England

From the E-Mailbox: Station ID - K9LGU WI STM

Wisconsin Section Traffic Manager (STM) Denny Rybicke, K9LGU, includes a series of FAQs in his monthly reports. The following FAQ addresses something we don't often talk about, and yet it pertains to basic FCC regulations, namely Station ID. How does this apply to traffic nets? Denny writes the following:

What's required for identification in nets? The FCC is clear about identification of amateur stations. Part 97.119 states *"Each amateur station. . .must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every 10 minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station."*

So, what does that mean for traffic handling and net operation? It means during a net, a check-in identifies when first calling in, and at the end of a "second go," if any. When an NCS asks check-ins to say the NCS call first, that helps avoid doubling - but the FCC requirement is just to give yours at the end. Luckily, it doesn't mean each station must identify every 10 minutes during the net. If an operator establishes communication with another station off frequency to pass traffic, it's the same procedure - every 10 minutes and at the end of the communication.

How about the net control? The net control station only needs to identify every 10 minutes and at the end of a series of transmissions with the net. True, it may help to identify the net and net control more frequently during the net operation, but it is only "required" every 10 minutes and at the "end of the communication" with the net. For example, at the end of a "second go," the net control does not have to say both the net member's call and their own although that is a polite recognition. The "goer" already should have identified.

It may be nice to begin a transmission with our call sign, but it's not necessary as it is at the end. Technically, we do not need to say the call of the other station - just identify ours. If we spend too much time repeating call signs, we limit time for other content. We do not need the to become the "Department of Redundancy Department" with calls.

Finally, we certainly don't have to say "For ID." Why else would we identify? -- 73, K9LGU, STM, Wisconsin Section

Spotlight: The Twins - Betsey, K1EIC, and Barb, K1EIR

Twin Hams Light Up the Airwaves: Meet Barb Lombardi, K1EIR, and Betsey Doane, K1EIC

Twins Barb and Betsey were introduced to ham radio by their uncle Art, W1VGP, and got their Novice-class licenses in 1958.

Around 1960, they were introduced to traffic through the Mohawk Hudson Training Net. The first message they sent had a check count of 85! Barb and Betsey still laugh about that. One of their local ham friends, Bill, K1AQB, now in Nevada, mentored them in traffic handling. They soon became involved in the Connecticut Phone Net (CPN) and the Connecticut CW net (CN). Both receive traffic using Braille writing equipment.



Barb, K1EIR

Barb became Route Manager for CN (that is what it was called then) and they held meetings in the fall on Friday nights. At one such gathering, it was noticed that Barb had her hands on the table as a CW op would, and Betsey's were in her lap. Both nets held a dinner each spring. Over 60 people would attend.

The twins' biggest adventure occurred when in conjunction with the 1985 Mexico City earthquake. ARRL gave a local TV station their phone numbers, leading to local phone circuits being tied up with many calls from the public. The twins handled a tremendous number of health and welfare messages.

Betsey, K1EIC, served as Connecticut Section Manager for over 20 years and helped coordinate ham radio activities at the Eastern States Expo for several years.

She was also involved in coordinating the Special Olympics in New Haven. Betsey and Barb handled lots of traffic and helped with the training exercise through Red Cross and FEMA in New London.

For 25 years, Betsey ran the K1EIC and W1HAD NTS packet nodes consisting of eight nodes at two different physical locations. During the Gulf War, Betsey handled traffic from the USS Kennedy on AMTOR. Betsey served in Navy-Marine Corps MARS as NNN0EBP. She earned the Chief's Commendation for the proper formatting of an emergency message.



Betsey, K1EIC

Professionally, Barb and Betsey both hold two master's degrees. Betsey is a retired math and computer science professor, and Barb is a retired substance abuse counselor.

While traffic has slowed down, both still enjoy it very much. Barb and Betsey are active in local, Section, and area nets, as well as Transcontinental Corps. As Barb says, "CW forever!"

NTS Resources

The National Traffic System® (NTS) is a network of amateur radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help amateur radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

[NTS 2.0](#)

[NTS Manual](#)

[NTS Methods and Practices Guidelines Table of Contents](#)

[Handling Instructions](#)

[Numbered Texts](#)

[Form Encoding Rules for Form](#)

Sign up to Receive The NTS Letter

The NTS Letter is published monthly and is free of charge to ARRL members. Subscribe: arrl.org/opt-in-out

Editor: Marcia Forde, KW1U, Section Traffic Manager -- Eastern Massachusetts, Western Massachusetts, and Rhode Island

ARRL Director of Emergency Management: Josh Johnston, KE5MHV

**BARC Website, some Blog
page Titles**[Hex Beam in the Air!](#)

Even more than this on the
website.

Feel free to view, comment and
add.

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

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

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*

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

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

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

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

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

NETS

VHF/UHF

- ◆**BARC Net**, Mondays, 2000 on 147.09 MHz, W4GDF Repeater.
- ◆**Down East Hospital Net**, 2nd Tuesday of each month at noon
Greenville 444.725 MHz, 91.5 tone
N4HAJ, Traffic Net 2030 local
Fountain 444.425 MHz, 88.5 Tone
N4HAJ
- ◆Newport-145.450..... IRLP 8561 links to Columbia
- ◆Jacksonville-147.000- 88.5 tone
- ◆Oriental-147.210-151.4 tone
- ◆444 Newport-444.825- 88.5 tone
- ◆Swansboro-146.760- 88.5 tone
- ◆Grantsboro-145 230 - 85.4 tone.
- ◆Kinston Amateur Radio Society Net, 1,3,4 Tuesdays, 2000 hrs. on 145.47 MHz., W4OIX repeater in Kinston.
- ◆Eastern North Carolina Traffic Net, Every night, 2030 on 444.725-91.5 tone.
- ◆Wilson Amateur Radio Club Net, Thursdays @ 2000 on 146.76 MHz.
- ◆ Piedmont Coastal Traffic Net, Nightly 2030 on 444.725MHz, 91.5 tone
- ◆Carteret County ARS (CCARS) Emergency Net, Tuesdays, 1930 on the Newport 145.45 (-) MHz, tone 100
- ◆Coastal Emergency Linking Net, Wednesday, 2100 ET on Ahoskie 145.13, Buxton 145.15, Columbia 146.835 & 443.30, Elizabeth City 146.655, Greenville, 145.35, Hertford 147.33, Williamston 145.41 & 444.25
- ◆ 220 Net, Wednesday 2000hrs, 224.840 MHz -1.6, PL 91.5
- ◆ PARC 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)
- PARC Tuesday 7pm, 3807mHz or closes open freq.
- 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:

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)
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 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

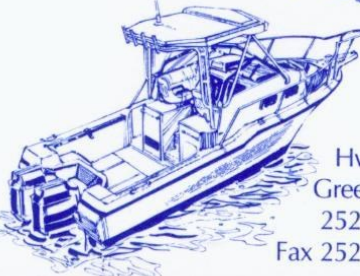
<http://www.pcra.us/>

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MARK'S MARINE, INC.



Mark Langley
 Mike Langley
KD4MTT

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 Greenville, NC
 252 758-3309
 Fax 252 758-1396



East Carolina Retina
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 2501a Stantonsburg Road
 Greenville, NC 27834
 252-758-2402
<https://ECRetina.com>

CALENDAR OF EVENTS

Contest, Events and Meetings

2024 Starts Here:

April 6 RARSfest <https://www.rarsfest.org/>
 April 8 Solar Eclipse, Anyone to go see the FULL Eclipse?
 April 9 BARC Meeting 6:00pm Oakwood School POTA Prep, bring your setup
 April 11 PARC Meeting 7pm
 April 27 Picnic with BARC and PARC, 11am greet, noon lunch ***
 April 30 BARC Board Meeting 7pm Zoom
 May 9 PARC Meeting 7pm
 May 11 VE exams at Beaufort County EOC, Contact Tom Kottke for appointment
 May 14 BARC Meeting 6:30pm Murray Adams, Recent Dxpediton Experience
 May 28 BARC Board meeting 7pm Zoom
 June 11 BARC Meeting 6:30pm FIELD Day Prep
 June 13 PARC Meeting 7pm
 June 22-23 **ARRL Field Day**
 June 25 BARC Board meeting 7pm Zoom
 July 9 BARC Meeting 6:30pm
 July 11 PARC Meeting 7pm
 July 30 BARC Board meeting 7pm Zoom
 Aug 8 PARC Meeting 7pm
 Aug 13 BARC Meeting 6:30pm
 Aug 27 BARC Board meeting 7pm
 Sept. 7-8 **Bike MS New Bern**

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 Breakfast - Saturday after General meeting

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

~~**Pamlico Meetings** - 2nd Thursday @ 7pm~~

**** Club Activities, Events, Ideas and Dates to do together. ****

1. Get a list from folks of what they want to do.
2. Dayton trip, car pool and Hotel?
3. April 8, Solar Eclipse, Car pool to where full eclipse is expected.
4. RARSfest
5. ~~GET MORE IDEAS!~~

VHF/UHF Spring Sprints

Of interest to weak-signal VHF/UHF amateur radio operators, the 144 MHz Spring Sprints, sponsored by the Central States VHF Society, begin on Monday, April 1, at 1900 local time, and concluding at 2300 local time. The 144 MHz Spring Sprints are the first of a series of five events, each focusing on specific bands. The remaining dates are as follows:

- 222 MHz - Tuesday April 16, 1900 - 2300 Local
- 432 MHz - Wednesday April 24, 1900 - 2300 Local
- Microwave - Saturday May 4, 0800 - 1400 Local
- 50 MHz - Saturday May 11, 2300z through Sunday May 12 2024 0300z

For rules and more information, visit <https://sites.google.com/site/springvhfupsprints/2024-information>.

Georgia and Florida State Parks on the Air Events

If you're a Parks on the Air activator or hunter, there are two events occurring the first week of April that might be of interest. [Georgia State Parks on the Air](#) begins at 1200 UTC on Saturday, April 6, and concludes at 2359 UTC on Sunday, April 7. Also, [Florida State Parks on the Air](#) begins at 1400 UTC on Saturday, April 6, and concludes at 2200 UTC on Sunday, April 7. For more information, visit the individual sponsors' websites

Upcoming State QSO Parties

For those of you who enjoy state QSO parties, here are three events coming up on the first weekend of April that might be of interest to you. You can also find more details in the Contests section.

April 6 -7:

- [Louisiana QSO Party](#)
- [Mississippi QSO Party](#)
- [Missouri QSO Party](#)

Contest

April 1

[K1USN Slow Speed Test](#)
[ICWC Medium Speed Test](#)
[IRTS 70cm Counties Contest](#)
[IRTS 2m Counties Contest](#)
[DARC Easter Contest](#)
[OK1WC Memorial \(MWC\)](#)
[144 MHz Spring Sprint](#)

April 2

[ARS Spartan Sprint](#)
[Worldwide Sideband Activity Contest](#)
[ICWC Medium Speed Test](#)
[ZL Sprint](#)

April 3

QRP Fox Hunt
Phone Weekly Test
A1Club AWT
CWops Test (CWT)
VHF-UHF FT8 Activity Contest
Mini-Test 40
Mini-Test 80
UKEICC 80m Contest

April 4

Walk for the Bacon QRP Contest
CWops Test (CWT)
SARL 80m QSO Party
NRAU 10m Activity Contest
SKCC Sprint Europe

April 5

QRP Fox Hunt
NCCC FT4 Sprint
Weekly RTTY Test
NCCC Sprint
K1USN Slow Speed Test

April 6

PODXS 070 Club PSK 31 Flavors Contest
EA RTTY Contest
Georgia State Parks on the Air
RSGB FT4 International Activity Day
Louisiana QSO Party
Mississippi QSO Party
Missouri QSO Party
Florida State Parks on the Air
SP DX Contest

April 7

WAB 3.5/7/14 MHz Data Modes

April 8

K1USN Slow Speed Test
ICWC Medium Speed Test
[Solar Eclipse QSO Party](#)
OK1WC Memorial (MWC)
RSGB 80m Club Championship, CW



April 9

Worldwide Sideband Activity Contest
ICWC Medium Speed Test
ZL Sprint
DARC RTTY Sprint

April 10

NAQCC CW Sprint
Phone Weekly Test
A1Club AWT
CWops Test (CWT)
VHF-UHF FT8 Activity Contest
Mini-Test 40
Mini-Test 80

CALENDAR OF EVENTS

Upcoming Section, State, Division Conventions and Hamfest

2024:

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/>.

April 12 - 13 [Green Country Hamfest 2024](#), hosting the ARRL Oklahoma State Convention, Claremore, Oklahoma

April 20 [Delmarva Amateur Radio and Electronics Expo](#), hosting the ARRL Delaware State Convention, Georgetown, Delaware

May 11 [ARRL Nebraska State Convention](#), Lincoln, Nebraska

May 17 - 19 [Dayton Hamvention](#), hosting the ARRL National Convention, Xenia, Ohio

May 31 - June 2 [SEA-PAC](#), hosting the ARRL North-western Division Convention, Seaside, Oregon

June 1 [Atlanta Hamfest](#), hosting the ARRL Georgia Section Convention, Marietta, Georgia

The [ARRL Hamfest and Convention Database](#) to find events in your area.