

Ham Chatter



Volume 56 Issue 4

An Official BARC, W4AMC, Publication

April 2022

Editor, Mark, KG4GVJ

Email: hamchatter@w4amc.com

BARC General Meetings, Mask Required

Vice-President and help needed this year for the Club!

With all that is happening this year, our Club President can use some help folks. It doesn't have to be permanent or long term. Also great training for President's Job next year.

New Amateur Radio License Applications Fee To Become Effective April 19, 2022

A Public Notice released by the Federal Communications Commission (FCC) on March 23, 2022, in [MD Docket No. 20-270](#), announced that new application fees for Wireless Telecommunications Bureau applications will become effective on April 19, 2022. The new fees, mandated by Congress, apply to applications for Amateur Radio licenses including those associated with filing Form 605, the Amateur Operator/Primary Station Licensee Application.

Effective April 19, 2022, a \$35 fee will apply to applications for a new Amateur Radio license, modification (upgrade and sequential call sign change), renewal, and vanity call signs.

See page 19 for more.

BARC's Next Meeting in Person and Zoom April 12, 2022 at 7PM

Location:

Oakwood School, in the Music Room.
4000 MacGregor Rd, Greenville, NC.

All members, families and guests are invited to attend.

Speaker: Pat Harris KI4SVM,
Subject: SOTA, Summits On The Air

Following Meeting is May 10, 2022.
Speaker: Carl Luetzelschwab K9LA
Sunspots and propagation

Reminder, Dues were due January 1,

Please send in your checks to the Treasurer or go to our W4AMC.com webpage and use PayPal. Thank you.

Board Meeting - April 26, 2022
The meeting will be on ZOOM at 7:00 PM. All members invited.

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. For local Hams, look up Gerald KN4CKL as he has been doing limited testing all through the pandemic. GO Gerald!!!!” You will need a reservation in order to be tested. Practice taking the test on line with <https://www.hamradiolicenseexam.com>. 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 hamchatter@w4amc.com

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:

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

Presentation Ideas Needed

Please send ideas of new presentation topics and presenters to our new 2nd VP Judy W3JUU
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.
Contact Peter or the Ham Chatter

In This Issue

Next Meetings	1
Presidents Corner - N4PVH	3
Board Minutes	5
Yabba-Dabba-Doo & other Clubs	6
VOA Event Photos	8
High Country	
ARES/Auxcomm	9
ARRL Learning	24
BARC Blogs and Dues	36
WinLink and Nets	38
Hurricane Resources	37
Ham AD's	40
BARC Calendar of Events	42-44

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President's Corner, Peter, N4PVH



Dear Members:

When it rains, sometimes it pours!

The last month has been the most trying time for my family and I. For those that have not heard, my wife of 35 years unexpectedly passed away from an accident. To make matters worse, a week later, I went for a routine medical test and wound up bleeding 1/3 of my blood volume in 24 hours and was admitted to the hospital. I am now back on my feet again (physically), sort of... These life experiences happen to all families eventually but hopefully not as sudden and unexpected as this was. This has reminded me as to how fragile life is and how quickly it is over. As I pour over old photo albums and reminisce of the good times and what experiences we had, I wish that I had done more to enjoy it. Time really flies fast and the older you get, it seem to accelerate towards the final destination for all of us. With that in mind, how about all of us hams committing to enjoy life, friendship and this hobby to the fullest? As a group, we have incredibly useful skills, intelligence and curiosity that has changed the world in so many ways. Our selfless devotion to emergency communications for the greater good of the community is one of our better traits. When I joined BARC, I noticed how many hams supported each other and the community. A more altruistic group I could not hope to find anywhere. I am proud to be a HAM!



SK 2022

President's Corner

Continued

The VOA site C project is on hold as I try to put the train wreck of my life back on track. It does not need to be on hold because of what happened to me if we come together and start volunteering to help run the project. How about volunteering for an unfilled officer positions like first VP and other positions that remain open. How about a Field Day chair person? Come on people, lets not loose our reason for being alive and a ham! Lets get together and help each other and have fun while doing it. There is a saying that states 10% of the members do 90% of the work. If those numbers hold true, then no one will volunteer and the organization is on life support. I refuse to accept this!

Thank you to all of you that have expressed your condolences and to those that have had the thoughts and not been able to express them.

73 Peter, N4PVH

BARC Board

March 29, 2022

In Attendance:

Bill Dawson WA4SLC, Beth Gonzalez KN4FZB, Susan Langley-Jones WA4AKB, Mark Raysin KG4GVJ, Peter Van Houten N4PVH, Dave Wood W4EJ

Reports:

None given

Business:

We need Field Day help, Beth will chair, but can't participate on Sunday.

Need bandpass filters for radios on FD, last year there was a great deal of cross talk. This was previously approved.

VOA project is on hold, Peter needs someone to take over, he will remain to assist.

Shall we continue attempting to restore rhombics or explore using the site's existing tower? Can it be made rotatable?

Can we get more interest from college or high school age people? Is there enough student interest to start a group at ECU? They would need an ECU faculty or staff member to serve as advisor.

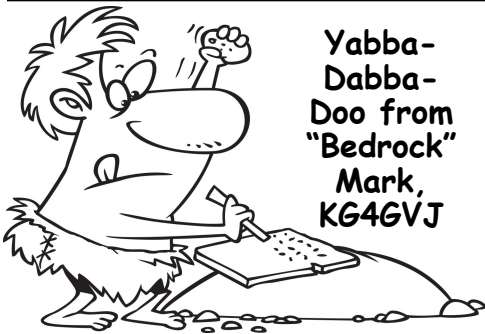
VOA 80th anniversary was a very successful event, worked all 50 states and every continent. Again, thanks to the operators and to those who reported results and distributed QSL cards.

We need group members to serve in positions as education, public relations, webmaster, historian, and 1st vice president. Beth will look into opportunities to work in education and PR with local youth. Susan will consider serving as historian.

Can we operate more in public environments? Do more local park activations, get out and be seen? Operate at a food truck rodeo at the fairgrounds?

The Washington club is doing a POTA from Goose Creek State Park on April 23. BARC members are welcome to stop by.

Submitted by Beth, KN4FZB



Yabba-Dabba-Doo from "Bedrock"
Mark,
KG4GVJ

Howdy folks, I hope you all had a great month. I for one have been busy trying to get my wife's greenhouse up. Been delay's due to work, part missing, weather, etc. Should be finished early April, about a year since I ordered it.

I also bought a new DMR Radio and taking the BridgeCom courses on DMR. Hours worth out there although they do repeat a lot. Try YouTube for their videos, might be better although some courses will quiz you a bit on what you learn. They try to live shows on Wednesday and Thursday at 12 noon our time. Folks can type in their questions which they might see and try to answer.

For those who hasn't seen my Secretary and assistant Editor, this is Dazzle. A whiz at the keyboard and able to make your computer do things that you didn't know how to do. She'll once in a while come in and make suggestions. She also takes part in Neighborhood Watch. No, she hasn't tried using my hearing aids to listen in on the neighbors yet. She also enjoys keeping the radio and laptop warm.



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 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?

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

Other Club's Meetings and News

Forsyth Amateur Radio Club (FARC) W4NC

Like us, FARC is also having to deal with the Virus these days. They meet on the 2nd Monday of the month at 7:30 PM at the Red Cross Blood Center on Coliseum Drive in Winston-Salem. As this is a medical site, mask are required please.

ARES/Auxcomm training is on the 3rd Thursdays at 8:30 PM at 897-9792-5844.

Tech-Talk is on Wednesdays at 7:30 PM (informal) 549 621 524.

Password is their Call sign. From FARC website, <https://w4nc.com>

Repeaters: 145.47 (100), 146.64 (100), 444.275 (100)

New Bern Amateur Radio Club started Live Meetings

Next meeting @ 6:30 PM (Always 1st Monday of each month) at Moore's Old Tyme Chicken, BBQ & Seafood, 3621 Dr. M.L.K. Jr Blvd. New Bern, NC 28562 (next to Harris Tee-ter Shopping Center). Be sure to drop by and check out the New Bern Amateur Radio Webpage at <https://nbarc.org/> and check out the wealth of info on the LINKS page at <https://nbarc.org/ham-links/>
Repeater 146.610 T-100, Net every Tuesday at 7pm

CARTERET COUNTY AMATEUR RADIO SOCIETY W4YMI

Regular club meeting is normally held on the fourth Saturday of each month (except December) at Cox Family Restaurant on Highway 70 (4109 Arendell St.) in Morehead City. We meet for breakfast at 8:00 am, with the meeting getting underway promptly at 8:30. Please park your car in the parking lot behind the barber shop and enter through the door on the east side of the building.

IMPORTANT: Due to the corona virus, we ask that people attending are vaccinated. Also, please use your best efforts to maintain social distancing.

[Carteret County Amateur Radio Society \(w4ymi.com\)](http://www.w4ymi.com)

Repeaters:

W4YMI Digital (DMR) - 444.975+, Color code 1.
Analog Repeaters: K4GRW Newport 145.450-
W3ENK Newport 444.825+
KD4KTO Stacy 444.000+ temporary out of service

Feb 9, 2022 **2022 Public Service Events**

Greetings Volunteers,

The 2022 public service event season is just around the corner and I am happy to announce that I expect a full schedule of at least 9-10 events. As usual, the schedule is bike-event heavy but there is at least one event, the MS Walk on April 2nd, that will not need SAG vehicles and will be mostly stationary.

I am also happy to announce the creation of a new [Ham Public Service North Carolina \(HPSNC\) website](#) where you will find the new event list and other information about volunteering for public service events. You can [sign up via this new website](#). The [RARS website public service page](#) still has the schedule and other information posted and you can still sign up there as well. However, all sign-ups will move to the new website in the near

future. The HPSNC website includes a blog page where I plan to post articles of interest, photos, information about public service, etc., so keep an eye on that space.

As you are all aware, each event needs several volunteer radio operators to ensure the transmission of consistent, accurate, and timely information to the event organizers. I will be asking for volunteers throughout the season and relying on all of you to help make this year a success. I am also working hard to add new volunteers to the roster this year. There seems to be a lot of new hams getting their licenses lately. Perhaps I can lure some of them in with the promise of a free volunteer T-shirt! Seriously, I can't think of a better way for new hams to get over mic fright and to learn good radio and communication skills.

I thank all of you for your past participation and your continued commitment to supporting worthy causes while doing something we love – talking on the radio. I hope to see all of you at this year's events.

73,

Jeremy Lindsley – K2HJX
On behalf of HPSNC

Amateur operation in the 3.45 - 3.5 GHz of 9 centimeters must cease by April 14, 2022.

Secondary operations will be permitted to continue indefinitely in the remainder of the band, 3.3 - 3.45 GHz, pending future FCC proceedings. On January 14 the FCC [released](#) DA 22-39, which announces the results of Auction 110 for the 3.45 - 3.55 GHz band. Release of this notice triggered FCC rules adopted last year requiring that amateur radio operations between 3.45 GHz and 3.5 GHz cease within 90 days of the public notice. In October 2021, ARRL President Rick Roderick, K5UR, urged Congress to direct the FCC to preserve Amateur Radio's secondary use of the 3 GHz band in a written [statement](#) responding to H.R. 5378, the Spectrum Innovation Act of 2021, before the US House Commerce Communications and Technology Subcommittee. A [chronology of actions](#) responding to amateur access on the 3.5 GHz band can be found on the ARRL website.

Voice Of America Special Event Photos

Kaden KO4RXT with Dave Wood W4EJ operating together on SSB as W4A



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](#)

· [Emergency Communications Training](#)

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

How to Get Involved in ARES: Fill out the [ARES Registration form](#) and submit it to your local Emergency Coordinator.

AUXCOMM Training

REQUIRED TRAINING

The State of North Carolina has mandated that all personnel performing any functions within any Emergency Operations Center, forward Command Post, or any Incident where Incident Command System (ICS) is used have

completed basic ICS training. This training is available via the FEMA Learning Institute's on-line training system at <https://training.fema.gov/nims/>. Training required is ICS-100, ICS-200, ICS-700 and ICS-800.

It is recommended taking the courses in the following order: ICS-700, ICS-800, ICS-100 and ICS-200. You will be asked to register for the courses and a certificate of training will be issued upon successful completion. Team members are requested to forward an electronic copy of their certificate's to the AuxComm - ARES EC at the email address below. Completion of these courses will permit AuxComm - ARES team members to perform Radio Operator at duties an EOC or other ICS Command location. Each course is self-paced and should take approximately 3 hours to complete on-line.

We suggest keeping clear of the Frequencies use by Hurricane nets during the Hurricane season along with posted frequencies during other Emergencies.

Editor

Staying Flexible and Adaptable: Planning for Communications Continuity

Achieving secure and resilient voice and data communications across the Emergency Communications Ecosystem is essential for public safety agencies to execute their missions. However, as emergency communications systems and functions become more interconnected, they also become more vulnerable to impacts from physical and cyber-based threats and hazards. The [National Emergency Communication Plan](#) (NECP) highlights the critical need for public safety organizations to plan for continuity and recovery of critical communications. Despite its importance, the [SAFECOM Nationwide Survey](#) found that less than half of public safety organizations build processes into their plans to ensure continuity of communications during out-of-the ordinary emergencies or disasters.

A webinar hosted by the Cybersecurity and Infrastructure Security Agency highlighted the importance of continuity capabilities in the emergency communications ecosystem and provided participants with best practices for ensuring limited loss of critical communications during incidents. Speakers discussed specific communications elements that should be considered; explained how existing capabilities should be updated or upgraded to ensure continuity based on lessons learned; and provided real-world experiences on how jurisdictions have adapted to mitigate mission impacts from communications vulnerabilities.

Continuity capabilities-building principles, practices, and resources are available at the FEMA [National Continuity Resource Toolkit](#) and other sites. It's important to periodically review and update or upgrade capabilities and leverage the NECP to understand and build emergency communications resilience. [Get additional information on the webinar series](#).--*Cyber Security and Infrastructure Security Agency (CISA), US Department of Homeland Security*

Operating Tips: Simplex and Programming Channels

Many opine that simplex is the ultimate mode of communication during a major emergency. Bob Pickering, KB4RSY, communications tech for the large EOC in Flagler County, Florida, conducted an all-simplex exercise annually. Recently while reprogramming my radios I devised a method to incorporate simplex frequencies to make "retuning to simplex" easy and fast. All of my local repeaters are programmed to the uneven channel numbers and the simplex frequencies to the even channels. One rotational click and I can check a simplex channel for use. - *Lou Mecseri, KE1F, Palm Coast, Florida*

A Case for Not Programming Repeaters into the Memories of your Radios

If you are like me and most other operators, you have programmed your area repeater frequencies into the memory channels of your radios. Recently, when I needed to switch to a new repeater frequency, I could not remember how to enter the PL tone and offset - an aggravating factor may be that I'm almost 70 years old with a slowly eroding memory! I resorted to reading the radio's operating manual. Now, I forego using the memory channels and instead enter the repeater frequency, offset, and PL tone manually each and every time so that I'll have the muscle memory needed to select repeater parameters on the fly in the field. Think about it - it only takes a second to enter the parameters. - *K1CE*

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

The ARES Letter for March 16, 2022

ARES® Briefs, Links

Over the weekend of February 19-20, 2022, San Diego (California) ARES joined with local Auxiliary Communications Service (ACS) and other AUXCOMM groups to participate in the quarterly Military Auxiliary Radio Service (MARS) national exercise, which tested interoperability across amateur and AUXCOMM services. During the 2-day exercise, San Diego amateurs used the 60-meter band and other amateur frequencies to send simulated reports of critical infrastructure damage to local MARS station AAM9S/W6RDF located at Naval Base Point Loma, which, in turn, forwarded the reports to Department of Defense (DoD) contacts.

At the commencement of the exercise, MARS initially reached out to the amateur community requesting damage reports on 60-meter Channel 1, which was followed by change of frequencies to other bands to test connectivity. The exercise introduced hams to a variety of MARS forms, including the [MARS SWEAT-MSO](#) infrastructure report -- SWEAT-MSO is a memory aid referring to infrastructure categories in an assessment. -- [Dave Kaltenborn, N8KBC](#), Section Manager, ARRL San Diego Section

On February 18, at 0100 UTC (the evening of Thursday, February 17, in North American time zones), the [US Army Network Enterprise Technology Command](#) (NETCOM) hosted a Zoom call to discuss amateur radio and AUXCOMM support to the US Department of Defense. During this presentation, the NETCOM representative discussed: the authorities for these operations; upcoming DOD exercise opportunities for 2022, where outreach to the amateur radio/AUXCOMM community will be a primary training objective; use of the five 60-meter channels; and the concept for the types of amateur/AUXCOMM outreach. There was an opportunity for Q&A throughout the presentation.

[Slides from the February 17 US Department of Defense NETCOM Amateur Radio Zoominar can be reviewed on YouTube.](#)

The 5 MHz Newsletter Celebrates its 10th Birthday -- The latest edition of *The 5 MHz Newsletter* (No. 28 Autumn/Winter 2022) - its 10th anniversary issue -- is available for free pdf download from the [External Links section of the Wikipedia 60m Band page](#) and the [RSGB 5 MHz page](#). This edition includes 5 MHz news from six countries, Malaysia Emcomm Response, 10 Years of *The 5 MHz Newsletter*, Exercise Blue Ham 22 - 1, World of 5 MHz Autumn-Winter 2022 and the Wiki 60-meter band page. -- [Paul Gaskell, G4MWO](#), Editor, *The 5 MHz Newsletter*

The US [Cybersecurity and Infrastructure Security Agency](#) (CISA) ESF #2 [Communications Emergency Support Function] Emergency Response Operations Branch Training and Exercise Section hosts an annual spring training workshop to promote the interagency coordination and communication with federal, state, local, tribal, and territorial government agencies/organizations and private sector communication and infrastructure partners. The dates for this year are March 28-April 1. This year, the State of North Carolina Department of Public Safety Office of Emergency Management and New Hanover County Office of Emergency Management are co-hosts.

The workshop will provide an overview of ESF #2 roles and responsibilities during disaster response and recovery operations, as well as cybersecurity and infrastructure issues across all levels of government. Topics on this year's agenda include: Hurricane Ida Lessons Learned; DIRS 101; Review of Cyber Threats and the Geo-Political Landscape; Nashville Bombing AAR Follow Up; ESF #2 Annex Updates; ESF #2 Deployment Teams: How NC Manages COMMs Issues in the Field; IPAWS 101; NC Joint Cyber Task Force Update; ESF #14 Updates and Information; How Severe Weather Impacts ESF #2 Operations; and Power Sector on Disaster Operations in the Mid-Atlantic Region.

Training will be delivered virtually through HSIN Adobe Connect. The link for the workshop will be emailed to registrants prior to the event at the email address used for registration. This workshop is not open to the public, and those wishing to participate must [register in advance](#) to receive the event link.

[FEMA offers Exercise Assistance through the National Exercise Program](#) -- The Federal Emergency Management Agency (FEMA) is accepting requests for exercise support through the National Exercise Program. State, local, tribal, and territorial partners can request no-cost assistance for exercise design, development, conduct and evaluation to validate capabilities across all mission areas. FEMA is hosting webinars for all interested government and other community partners on the exercise support process. Spring 2022 requests for support are due no later than April 1. To submit a request for exercise support, follow the [instructions](#) and email the completed form with supporting documentation to NEP@fema.dhs.gov.

[IWCE Expo](#), March 21 - 24, 2022 -- This year's comprehensive conference program will focus on industry trends, executive discussions, regulatory reviews, technical instruction, cybersecurity checks and other discussions in various formats from informal roundtables to in-depth training classes. With 12 tracks, IWCE 2022 will cover all the major industry progressions as the technology changes every day. From updates to push-to-talk technologies, to in-building wireless, to smart and safe cities, the program offers plenty of opportunities to expand knowledge and discover emerging technologies in critical communications.

The State of Illinois has produced the [Illinois Interoperability Field Operations Guide](#) (IIFOG), which contains a good amount of information on the amateur radio service as an interoperability resource. - Thanks, [Duane Mariotti, WB9RER](#), Kaiser Permanente Amateur Radio Network (KPARN)

Santa Cruz ARES Runs Another Successful S.A.F.E. Event

By [Allison Hershey, KM6RMN](#)

Santa Cruz (California) area ARES organizers ran their fourth SAFE (Scavenge Around Field Exercise) on January 9, 2022. Designed in the early days of the pandemic with social distancing in mind, this event allowed participants to get outdoors and communicate with a multi-location incident com-

mand team while honing their emergency radio skills.

The first three SAFE events were run in 2020 and early 2021. Any local licensed radio operators interested in emergency preparedness were invited to participate. At event start time, participants checked in to a resource net. Once checked in they were directed to one of two tactical nets to receive a series of assignments to drive to locations and report specific information about them. The observation questions were simple, such as, "what color is the welcome sign at this particular address," and the assessment could be done without leaving the vehicle. Upon completion of their assignments, participants returned to the resource net to demobilize, drove home, and contacted the resource net one more time to report safe arrival. A few field operators' locations were tracked through APRS, bringing a new dimension to the event. This aspect of the exercise will be covered next time, as more participants will learn this technology in the coming year.

Preparation for SAFE IV was started in the fall of 2021. After Santa Cruz ARES members expressed interest in repeating the exercise, Santa Cruz County DEC John Gerhardt, N6QX, recruited volunteers to form a core organizing committee that met online and exchanged emails. Many of the materials were already created in previous events and kept in a shared Google Drive folder: ICS (Incident Command System) Forms 202, 205, 214 for instruction and reporting, vetted participant assignments, scripts, radio protocol pointers, and the all-important Exercise Location and Tracking Sheet. This shared Google spreadsheet was created by JoMarie Faulkerson, KM6URE, to be the "whiteboard" of central operations, displaying the progress of every participant to the core team in their virtual incident command center. Entries made by any team scribe (spreadsheet editor) would be displayed instantly.

There were a dozen planners involved, but the core Incident Command team during the event involved six people. Alex Hays, AJ6QY, and John Kienitz, NS6K, ran the resource net on the WB6ECE 70 cm repeater.

The resource net opened the exercise, checked in radio operators, and directed them to the tactical nets for assignments. At the close of the exercise, they received check-outs and home-safe communications. Bill Tyler, AJ6CQ, and Stephen Betita, KM6NEP, ran Tactical Net A on the K6BJ/KJ6FFP repeater. Bruce Hull, KN6DBR, and JoMarie Faulkerson, KM6URE, ran Tactical Net B on the WR6AOK repeater. Tactical nets fielded subsequent communications with radio operators, gave and tracked assignments, received and logged reports, transmitted periodic reminders, and solicited wellness reports. Each net partnership consisted of a radio operator and a scribe. It was up to each team as to whether the players stayed in assigned roles or switched roles part way through the exercise. All three teams opted to take turns for a more rounded experience. DEC Gerhardt was present as observer and advisor during the operation, while Allison Hershey, KM6RMN, observed and took notes.

Several features of the event would seem counter to good planning. But in this case, net control operators were being trained to set up emergency nets and field all the problems that might occur in an emergency situation and circumstances. So, there was no prior registration for field participants. (Net traffic and operators being unpredictable in a disruptive event.) Also, any amateur radio operators, not just ARES members, were allowed to take part, simulating the untrained operators rushing to their radios during an emergency.

Field participants were instructed to check in as soon as they could sense an opening at start time. (Net control operators needed to sort out pileups as efficiently as possible.) The secondary tactical

nets were not assigned, but chosen at the field operator's discretion, risking crowding on one channel and inactivity on the other. (A one-off experiment to see how the distribution would fall.)

The event was highly organized in other ways, with scripts and instructions honed over the last 2 years. All field assignments were grouped by general location, codified, numbered, had reference photographs, and were easily accessed by the team online. The Exercise Location and Tracking Sheet (a Google spreadsheet refined over several exercises) was technically in two sections: one side filled out by the resource net team, the other by the tactical net teams. Yet its information was instantly available to everyone on the command team. It was constructed in such a way as to require all participant field operators to check-in through the proper channels before they could receive an assignment. Standard ICS forms were also used so that all participants would gain experience in gathering and disseminating information in a way most useful to emergency services.

Check-in time was 1:00 PM. Twenty minutes prior to check-in, the net operators connected from their homes via Zoom in their virtual command center. Exercise frequencies were monitored on home radios.

Though an operator's Zoom mic was muted during transmissions, Gerhardt and the net control operators talked freely between transmissions to correct or instruct as the exercise went on. They practiced using clear language conventions learned in ARES meetings and nets, such as phonetic spelling of names when requested, careful parsing of numbers, keeping messages brief, and using efficient call and response methods with field operators.

The expected pileup was sorted out in the first 20 or 30 minutes, but straggling check-ins continued to the end of the first hour of the two-hour event. Field operations went fairly smoothly, with a few minor mishaps in execution as expected. After all, it was a training exercise. Eighteen participants checked in, completed tasks, and checked out. Almost all of them remembered to notify the resource net when they arrived home safely, an improvement over previous SAFE events.

The core team learned a few lessons as well. One was that allowing participants to pick their own tactical net without guidance caused extremely lopsided distribution. Net controls on K6BJ fielded most of the calls, while those on WB6AOK had very few. This was due to participants being more confident in one repeater than the other, as well as some reception issues in the area's mountainous terrain.

There were a few cases of perceptual disconnect between apparent map distances and travel time. Tactical net controls had been instructed to make a participant's later assignments close to their initial ones to reduce driving distances. But some locations that appeared close together were difficult to traverse -- the maps did not show uncrossable canyons and gated roads. There was also an APRS issue during the exercise.

The biggest learning opportunity occurred when two radio operators checked in separately while riding in the same vehicle. The tactical net control operator didn't realize this and gave them separate assignments far apart. Not immediately informed of the issue, the command team experienced some confusion about the companion's whereabouts until one net control operator recognized the two were connected. This was discussed afterwards, and suggestions taken how to prevent this kind of misunderstanding in the future.

Two problems they prepared for didn't happen. The net operators kept paper versions of all forms

and a hard copy of the Exercise Location and Tracking Sheet, instructed to "use them as best they could" if internet connections were interrupted. In an emergency event, lack of internet access would be a real possibility. Similarly, if a repeater went down, operators were instructed to move to one of the other repeaters and carry on. Neither glitch occurred, which Gerhardt seemed to find mildly disappointing--a lost learning opportunity.

Frank Torres, WP4QNQ, net control station, Caribe Wave tsunami exercise. [Photo courtesy of Angel Santana, WP3GW]

Was the exercise a success? Yes. Was it fun? Yeah! Those in the field enjoyed their adventures exploring Santa Cruz County. Net control operators were pleased to master a few more radio wrangling skills. Organizers improved their lesson plans and added another feather to their collective cap. It looks like SAFE will be a regular event going forward, even as pandemic restrictions ease. [*The author is Santa Cruz County, California Public Information Officer and Assistant Emergency Coordinator*]

Puerto Rico ARES, Radio Amateurs Take Part in 2022 Caribbean Tsunami Exercise

As they have done in past years, radio amateurs in Puerto Rico took part in the [Caribe Wave](#) tsunami exercise, conducted this year on March 10. Caribe Wave is the annual tsunami exercise of the UNESCO Tsunami and Other Coastal Hazards Warning System for the Caribbean and Adjacent Regions ([CARIBE-EWS](#)). Its major objective is for countries, emergency managers, and communities at risk to test, validate, and update their tsunami response plans.

In Puerto Rico, Caribe Wave is conducted in coordination with the Puerto Rico Seismic Network (Red Sísmica de Puerto Rico - PRSN), UNESCO, NOAA, and the Puerto Rico Emergency Management Bureau (PREMB). This year's scenario was an 8.0 magnitude earthquake, with an epicenter at the Western Muer-tos Trough south of the Dominican Republic, generating a tsunami incident for the entire Caribbean. Exercise information can be found on the [Tsunami Zone](#) website.



During a Zoom meeting the day before the event, Section Emergency Coordinator William Planas, NP3WP, with PRSN Director Victor Huerfano, WP4VH, and others, devised a plan that included using various radio systems, first creating a message in Radiogram form and then converting it to IC-213 format for use with the other radio services to be disseminated.

Planas planned with the Puerto Rico Seismic Network and ARES Zone 5 Emergency Coordinators to pass the messages sent from the PRSN via Winlink on HF and to GMRS systems of various Municipal Emergency Management Agencies of the Zone. Later, it included sending the messages to US Army MARS and the National Guard via Automatic Link Establishment (ALE). They were also sent on 40 meters so other EC's around the island could receive and process the messages.

The special activation was started via the WP4CPV repeater with Frank Torres, WP4QNQ, as Net Controller, and Maria Torres, WP4QZM, Juan Lugo, NP4QF, and Alberto Lopez, NP3AL, serving the PRSN as backup. Calls for welfare and emergency traffic were made, and other

stations signed in. Radiograms were read and ready to be sent via Winlink. All activity was logged on an IC-214 form. Messages were sent and received island wide up to the island of Vieques. Some messages were also sent via an AREDN Mesh Post Office RF connection.

Other participants included Emmanuel Cruz, NP4D, Section Traffic Manager and ECs Hector Morales, NP3IR, and Alberic Medina, NP3MR. Later that night, the monthly ARRL Puerto Rico Section Net was held, and a summary of the exercise was delivered by SEC Planas.

The exercise commenced at precisely 10:07 AM on March 10 with an Emergency Alert System (EAS) activation over radio and television media on the island and with cellular companies sending severe alert messages, all with caveats that this was a test. Sirens were tested in all of Puerto Rico's coastal cities and towns. Many government and community administrations co-conducted evacuation drills in public schools and housing projects.

The Federación de Radio Aficionados de Puerto Rico (FRA) conducted a special VHF/UHF net to collect information from amateur stations on how they received the alert, and conveyed a special electronic certificate of participation. -- *Angel Santana, WP3GW, ARRL Puerto Rico Section Public Information Coordinator*

Southeast Amateurs Support South Carolina's Sandblast Rally

The 2022 [Sandblast Rally](#) wrapped up with much amateur radio support for the March 5 event. Held outside of Cheraw, South Carolina, with the central rally point of Patrick, many ham operators were there to help provide coverage of the large area of off-road rally courses in the sandhills of the state. Nine stages of the rally are spread out across roughly 50 square miles, sharing three linked repeaters on the PALSNET (Palmetto Amateur Linked System NET) to help cover the area of the Sandhills State Forest. Leaders of the totally forested rally used ham operators from around the state, with others traveling from outside the state, to be able to connect the rally courses to the central Net Control in Patrick.

Mary Hunt, N4MH, and husband Tom, KA3VVJ, served as the net control operators for the day, keeping order among the 55 amateur radio operators who volunteered 12-hours for this event. Hams provided the necessary safety functions including blocking roads and limiting access to the rally course, monitoring any safety concerns with the track, keeping up with rally cars and motorcycles as they passed, and ensuring spectators were safely out of the way while enjoying the event.

It all started with two pre-race online meetings earlier in the week. The first was for just radio operators and the second was for all volunteers including radio operators. On Friday, March 4, the volunteers signed in and confirmed their involvement. Saturday morning started early, with report time for the caravan out to the course at 6:20 AM. Once there, the operator set up a roadblock to ensure no one passed to get on the course. The operator held their spot until released by net control or the Rally Officials released the course back to public use.

The York County Amateur Radio Society (YCARS) provided eight hams to support Sandblast. They met the night before, and discussed the plans for those who were new to the rally. The group was excited and ready for Saturday morning.

This year's rally was full of exciting moments. One of the course cars -- the "Zero" Car that makes a pre-run of the track before racers -- wrecked and rolled on to its top. All were okay, and the Heavy Sweep truck was able to come to get it off the course before that stage got started. A competitor's

car caught fire on a different stage, causing some excitement for the team, the rally sponsors, and the other competitors trying to get past it. The car was a total loss, but the driver and navigator got out safely and were okay.

Without the hams communicating in this remote area with limited (or no) cell service at given points, it would have made this event nearly impossible to operate. The radio amateurs were able to assist the rally sponsors in bringing off an event that was safe and fun for all. The experience gleaned from being part of the event left the hams with a better understanding of the complexity of a race logistics. On a social level, old friends reunited and new friends were made, enjoying the fun of watching a live race. Racers passed the ham operators at speeds up to 80 MPH. -- [E. Gordon Mooneyhan, W4EGM](#), Public Information Coordinator, ARRL South Carolina Section; photo by Steve Czaikowski, W3SPC

Emergency Communications Trailers Aren't Just for Emergencies

In 2021, the Rural Radio Preparedness Association, an ARRL affiliated club and sponsoring organization of Santa Rosa County (Florida) ARES, was donated funds to purchase a cargo trailer for use in emergency communications. Several members of the ARES team donated time and money to outfit the trailer.

In addition to emergency communications, one of the main goals was to use the trailer for public education of amateur radio and on February 18-20, operators had that opportunity at Pensacon. Founded in 2013, Pensacon is the premiere comic book and pop culture convention serving Pensacola and the Gulf Coast. The event draws 10,000 or more people each year with guests lining up for hours for a chance to meet their favorite writer or celebrity.

Recently the ARES group was donated a 50' pneumatic mast that was installed on the trailer to get height for antennas. Operators attached a dual-band J-pole antenna as well as a 60' end-fed long-wire antenna for HF operations. Inside the trailer is an Icom IC-7100 transceiver connected to a laptop. Over the course of the 3-day event, operators had the opportunity to show visitors how email can be sent without a local internet connection by utilizing Winlink. Visitors were amazed that this capability existed, and many were interested in learning more.

Setting up at conventions, festivals, and other events is a great way to help promote amateur radio in your community as an avocation and for emergency communications. If your club or ARES team has resources available, reach out to event organizers to see if you could set up a booth or your team's communications trailer. Most events allow volunteer organizations to set up for free. While you're at it, see if their event could benefit from volunteer communicators. Before committing, be sure that you have enough volunteers to support the event.

The easiest way to find opportunities is to get in touch with your local area chamber of commerce. Many chambers have event calendars and some even have monthly meetings you can attend to connect with organizations having events. Not only is this a great way to connect with other local organizations but it also might connect you with opportunities to help other served agencies in your area. -- [Arc J. Thames, W4CPD](#), ARRL Northern Florida Section Emergency Coordinator

Letters: Clubs Need to Work Together

Several area radio clubs are small and lack critical mass to adequately do much more than their ARES-related tasks, which many of them accomplish in a role-model way. One club president noted

that the clubs need to work together for larger activities and so a channel for dialogue was created to foster communications about activities, projects and questions. Also, there are many active area hams that are looking for avenues of dialogue even though they are not members of any club. Bringing them into the information loop can be good for all concerned.

groups.io/g/GGAR is the Gulf Gateway Amateur Radio channel for communication about amateur radio. Clubs and individuals everywhere are welcome to participate. The group would gladly add others as moderators. -- [Gordon Beattie, W2TTT](#), Live Oak, Florida

Passages: Kyle Pugh, KA7CSP, Section Manager and Friend; Joe Ames, W3JY, Section Manager and ARES/RACES/NTS Leader

Kyle Pugh, KA7CSP, my friend, and former ARRL Eastern Washington Section Manager from Spokane, passed away February 13. Kyle was SM for the 11 years prior to me assuming the job. He continued to be active and involved in amateur radio right up to the end. RIP Kyle, you will be missed. - [Mark Tharp, KB7HDX](#), ARRL Northwestern Division Vice Director

Former ARRL Eastern Pennsylvania Section Manager Joseph A. "Joe" Ames, W3JY, of Paoli, Pennsylvania, died on March 5. An ARRL Life Member, he was 57. Ames served as EPA SM from 2014 until 2016. He was one of the founders of Radio Relay International, an independent traffic-handling organization.

A ham since 1977, Ames devoted many years to amateur radio public service organizations including Delaware County and Chester County ARES/RACES, and as an emergency communications instructor and Volunteer Examiner. -- ARRL

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](#)
- [Emergency Communications Training](#)

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are

eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

How to Get Involved in ARES: Fill out the [ARES Registration form](#) and submit it to your local Emergency Coordinator.

New Amateur Radio License Applications Fee To Become Effective April 19, 2022

A Public Notice released by the Federal Communications Commission (FCC) on March 23, 2022, in [MD Docket No. 20-270](#), announced that new application fees for Wireless Telecommunications Bureau applications will become effective on April 19, 2022. The new fees, mandated by Congress, apply to applications for Amateur Radio licenses including those associated with filing Form 605, the Amateur Operator/Primary Station Licensee Application.

Effective April 19, 2022, a \$35 fee will apply to applications for a new Amateur Radio license, modification (upgrade and sequential call sign change), renewal, and vanity call signs.

Anticipating the implementation of the fee in 2022, the ARRL Board of Directors, at its July 2021 meeting, approved the "ARRL [Youth Licensing Grant Program](#)." Under the program, ARRL will cover a one-time \$35 application fee for license candidates younger than 18 years old for tests administered under the auspices of the ARRL Volunteer Examiner Coordinator (ARRL VEC). Qualified candidates also would pay a reduced exam session fee of \$5 to the ARRL VEC. ARRL is finalizing details for administering the program.

ARRL had filed comments in opposition to imposing a fee on Amateur Radio license applications. The FCC initially proposed a higher, \$50 fee. In a Report and Order (R&O), released on December 29, 2020, the amount was reduced - the FCC agreeing with ARRL and other com-

menters that its proposed \$50 fee for certain amateur radio applications was "too high to account for the minimal staff involvement in these applications."

ARRL Volunteer Examiner Coordinator (ARRL VEC) Manager Maria Somma, AB1FM, explained that all fees are per application. "There will be no fee for administrative updates, such as a change of mailing or email address. The fees will be the responsibility of the applicant regardless of filing method and must be paid within 10 calendar days of FCC's receipt of the application. For applications filed by a VEC, the period does not begin until the application is received by the Commission, a ULS file number assigned, and an email sent by the FCC directly to the applicant."

VECs and Volunteer Examiner (VE) teams will not collect the \$35 fee at license exam sessions. New and upgrade candidates at an exam session will continue to pay the \$15 exam session fee to the ARRL VE team as usual, and pay the new, \$35 application fee directly to the FCC by using the CORES FRN Registration system ([CORES - Login](#)).

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 calendar days from the date of the email to pay. After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license or explanation of other action. The link will be good for 30 days.

Somma also explained that applications that are processed and dismissed will not be entitled to a refund. This includes vanity call sign requests where the applicant does not receive the requested call sign. "The FCC staff has suggested that applicants for vanity call signs should first ensure the call signs requested are available and eligible for their operator class and area, and then request as many call signs as the form allows to maximize their chances of receiving a call sign."

Further information and instructions about the FCC Application Fee are available from the ARRL

VEC at www.arrl.org/fcc-application-fee. Details for the ARRL Youth Licensing Grant Program will be similarly posted there, when available.

Ham Payload Going to the Chinese Space Station

The International Amateur Radio Union (IARU) satellite frequency coordination panel reports that an application has been submitted for an amateur radio payload to be hosted on the Chinese Tiangong space station. The coordination request states:

"CSSARC is the amateur radio payload for Chinese Space Station, proposed by Chinese Radio Amateurs Club (CRAC), Aerospace System Engineering Research Institute of Shanghai (ASES) and Harbin Institute of Technology (HIT)."

The first phase of the payload is capable of providing the following functions utilizing the VHF/UHF amateur radio band:

- 1) V/V or U/U crew voice
- 2) V/U or U/V FM repeater
- 3) V/V or U/U 1k2 AFSK digipeater
- 4) V/V or U/U SSTV or digital image

The payload will provide resources for radio amateurs worldwide to make contacts with onboard astronauts or communicate with each other. It will also play a role to inspire students to pursue interests and careers in science, technology, engineering, and math, and to encourage more people to get interested in amateur radio.

The planned launch from Wenchang is scheduled for the third quarter of this years. - *Thanks to AMSAT UK*

HAARP On The Air

The [High-frequency Active Auroral Research Program](#) (HAARP) will be supporting the NASA

[Sounding Rockets](#)

[Program Office](#) (SRPO) Ion-Neutral during Active Aurora (INCAA) mission by providing an additional non-co-located ground-based sensor. HAARP will concurrently be conducting an HF ocean scatter experiment. Actual transmit days and times are highly variable based on real-time ionospheric conditions and the Poker Flat Research Range launch window. The following schedule is subject to change, and all transmissions will take place on 6.8 MHz.

INCAA Launch Support Window

0500-0700 UTC, 24 March through 02 April inclusive

1230-1430 UTC, 03 April through 07 April inclusive

Ocean Scatter Window

0732-0742 UTC, 31 March

0656-0706 UTC, 01 April

0620-0630 UTC, 02 April

0802-0812 UTC, 02 April

To request a HAARP QSL card, send reception reports to:

HAARP
P.O. Box 271
Gakona, Alaska 99586



The High-frequency Active Auroral Research Program (HAARP) facility in Alaska.

Some New Rules Going into Effect this Year for ARRL Field Day

After taking a few detours over the past couple of years due to the COVID-19 pandemic, [ARRL Field Day](#) rules are being updated on a permanent basis starting this summer. ARRL conducted a Field Day community survey with invitations propagated far and wide, and direct emails sent to more than 15,000 individuals and ARRL-affiliated clubs. After sorting through, reviewing, and discussing the survey results, the ARRL Programs and Services Committee recommended a number of rule changes for ARRL Field Day, which will take place this year over the June 25 - 26 weekend.



Starting this year, the maximum PEP output for a transmitter used by anyone submitting a Field Day log will be 100 W. The power multiplier of 2 will remain in place, and the high-power category will be removed from the rules. Until this year, the maximum low-power limit had been 150 W for most ARRL-sponsored operating events. The power multiplier will remain at 5 for QRP participants running a maximum of 5 W or less. As previously announced, 100 W is now the low-power category limit for all ARRL and IARU HF Contests, effective January 1, 2022.

A couple of changes instituted initially as accommodations for the COVID-19 pandemic will remain. Class D (Home) stations will continue to be able to earn points for contacts with other Class D stations. The club aggregate scoring change initiated in 2020 as a temporary measure will become part of the permanent rules. In the aggregate scoring plan, the scores of individual stations are combined under the score of a single club.

Another change, involving Rule 7.3.2 Media Publicity, has been modified. Rules to date have offered 100 bonus points for attempting to obtain publicity and demonstrating same. With the ease of posting via Facebook, Twitter, Instagram, and various other media websites, Field Day participants will now be required to obtain publicity, not just try to do so. Any combination of bona fide media hits would qualify for the bonus points. For example, posting the details of your upcoming or ongoing Field Day activity, or your Field Day results, on a club or news media site, on Facebook, or via Twitter and Instagram would meet the bonus criteria. Photos and videos are encouraged as part of media posts.

QST de W1AW
ARRL Bulletin 9 ARLB009
From ARRL Headquarters
Newington CT March 14, 2022
To all radio amateurs

SB QST ARL ARLB009
ARLB009 W1AW 2022 Spring/Summer Operating Schedule

Morning Schedule:

Time	Mode	Days
1300 UTC (9 AM ET)	CWs	Wed, Fri
1300 UTC (9 AM ET)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1400 UTC to 1600 UTC - (10 AM to 12 PM ET)
1700 UTC to 1945 UTC - (1 PM to 3:45 PM ET)

(Station closed 1600 to 1700 UTC (12 PM to 1 PM ET))

Afternoon/Evening Schedule:

2000 UTC (4 PM ET)	CWf	Mon, Wed, Fri
2000 "	"	Tue, Thu
2100 " (5 PM ET)	CWb	Daily
2200 " (6 PM ET)	DIGITAL	Daily
2300 " (7 PM ET)	CWs	Mon, Wed, Fri
2300 "	"	Tue, Thu
0000 " (8 PM ET)	CWb	Daily
0100 " (9 PM ET)	DIGITAL	Daily
0145 " (9:45 PM ET)	VOICE	Daily
0200 " (10 PM ET)	CWf	Mon, Wed, Fri
0200 "	"	Tue, Thu
0300 " (11 PM ET)	CWb	Daily

Frequencies (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675
28.0675 50.350 147.555
DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095 28.095
50.350 147.555

VOICE: 1.855 3.990 7.290 14.290 18.160
21.390 28.590 50.350 147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM
CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM
CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2230 UTC (6:30 PM ET), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0000 UTC (8 PM ET) Thursdays and 0000 UTC (8 PM ET) Fridays.

Audio from W1AW's CW code practices, and CW/digital/phone bulletins is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The CW/digital/phone audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to w1aw@arrl.org.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1400 UTC to 1600 UTC (10 AM to 12 PM ET), and then from 1700 UTC to 1945 UTC (1 PM to 3:45 PM ET) Monday through Friday. Be sure to bring a reference copy of your current FCC amateur radio license.

The weekly W1AW and monthly West Coast Qualifying Runs are sent on the normal CW frequencies used for both code practice and bulletin transmissions. West Coast Qualifying Run stations may also use 3590 kHz.

The complete W1AW Operating Schedule may be found on page 77 in the March 2022 issue of QST or on the web at, <http://www.arrl.org/w1aw-operating-schedule> .

In Brief

CQ to Limit Contest Participation by Stations in Russia, Belarus, and Donbas. In a March 17 news release, CQ Communications, Inc. announced, "It will not accept competitive entries in any of its sponsored contests by amateur radio stations in Russia, Belarus, or the separatist Donbas region of Ukraine (unofficial D1 prefix). Logs submitted by these stations will be accepted only as check logs. In addition, contacts with these stations by other participants will have zero point value and will not count as multipliers." The policy will take effect with the CQ WPX SSB Contest on March 26 and 27, 2022, and future events will be considered on a case-by-case basis, depending on the situation at that time.

Military Exercise Will Use 50 MHz Band. Belgium's communications regulator BIPT has

said 50.200 MHz and 51.075 MHz will be used from May 30 to June 18 during a military exercise. A translation of the post by Belgium's national amateur radio society UBA said, "BIPT informs us that in the period from May 30 to June 18, 2022, a military exercise will be held in Elsenborn in which two frequencies in the 6-meter band will be used - 50.200 MHz and 51.075 MHz. The amateur radio service has a secondary status in this band; the military services a primary status." Radio amateurs are called upon to pay particular attention to this during this period, to avoid the use of these frequencies if possible, and certainly to listen carefully to whether the frequency is in use if they still wish to use the frequencies concerned. --
Thanks to Southgate Amateur Radio News

ARRL on the Purpose of Amateur Radio



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 Learning Network Webinars

Visit the [ARRL Learning Network](#) (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.

More webinars are coming soon!

ARRL members may register for upcoming presentations and view previously recorded [Learning Network](#) webinars. ARRL-affiliated radio clubs may also use the recordings as presentations for club meetings, mentoring new and current hams, and discussing amateur radio topics.

The ARRL Learning Network schedule is subject to change.

ARRL Podcasts Schedule

On the Air podcast: (Episode 26) features a conversation with two YouTube veterans -- Dave Casler, KE0OG, and Steve Goodgame, K5ATA. YouTube is increasingly becoming the "go-to" resource for information on a variety of amateur radio topics.

(Episode 27) features a guided tour of 10 meters.

Eclectic Tech podcast Tech (Episode 53) features a discussion about the 222 MHz band with ARRL Radiosport Manager Bart Jahnke, W9JJ.

(Episode 54) features a chat with Barry Feierman, K3EUI, concerning the use of the VARA digital mode with handheld FM

transceivers. Also, the end of Google's "Project Loon."

(Episode 55) of the *Eclectic Tech* podcast will feature a conversation with Dave Slotter, W3DJS, about *HamPi* -- a free suite of amateur radio software for the Raspberry Pi microcomputer.

(Episode 56) of the *Eclectic Tech* podcast features a conversation with Steve Allen, KC1SA, about circuit simulation software.

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

ARRL Public Information Officers, Coordinators, and many other member-volunteers help keep amateur radio and ARRL [in the news](#).

[New proposed \\$1,400 Forest Service fee may impact Manistee County](#) / *Manistee News Advocate* (Michigan) February 24, 2022

["When all else fails, ham radio works"](#) / *Santa Cruz Sentinel* (California) February 8, 2022

["Amateur radio operators make contacts in global winter training"](#) / *NBC Montana* (Montana) February 6, 2022

["Freeport ham radio operator gets thrill from being part of air-waves"](#) / *Journal-Standard* (Illinois) February 1, 2022

["Remarkable man believed we could lick fuel addiction"](#) / *Baltimore Sun* (Digital Edition) (Maryland) March 8, 2022

["New proposed \\$1,400 Forest Service fee may impact Manistee County"](#) / *Manistee News Advocate* (Michigan) February 24, 2022

["When all else fails, ham radio works"](#) / *Santa Cruz Sentinel* (California) February 8, 2022

["Amateur radio operators make contacts in global winter training"](#) / *NBC Montana* (Montana) February 6, 2022

[Share](#) any amateur radio media hits you spot with us.

Announcements

The US Department of Defense has issued an updated Military Auxiliary Radio System (MARS) [instruction](#), DODI 4650.02, replacing MARS DODI 4650.02 issued in 2009. The document establishes policy, assigns responsibilities, and provides procedures for MARS. It further establishes MARS organization, membership, and functions. -- *Thanks to Gary Sessums, KC5QCN*

Special WRTC 2022 call signs will be active starting in January.

The World Radiosport Team Championship (WRTC) 2022 Organizing Committee has announced that more than 100 Italian radio amateurs will be activating special WRTC call signs, one for each Italian call district, starting on January 1, 2022, and concluding on July 10, 2022. A [first-time-ever award](#) will be available promoting WRTC 2022, which has been postponed until 2023. Look for these call signs to be active during some contests, concluding with the 2022 [JARU HF World Championship](#). Each participant's contact totals and award-hunter scores will be displayed on a [real-time leaderboard](#). Participants can download the award in digital format. -- *Thanks to The ARRL Contest Update.*

FEMA's Emergency Management Institute (EMI) will offer the [K0428 CERT Train-the-Trainer course](#) online. This course prepares participants to deliver FEMA's CERT Basic Training course. For additional information, [contact](#) Jamie "Betsy" Mauk, EMI Course Manager. Refer to the [EMI website](#) for course date availability.

Youth on the Air Camp 2022 Application Period Now Open

The application period for the second camp for young amateur radio operators in North, Central, and South America is now open at [YouthOn-TheAir.org](#) for radio amateurs aged 15 - 25 interested in attending. The Youth on the Air Camp is set for June 12 - 17 at the National Voice of America Museum of Broadcasting in West Chester Township (North Cincinnati), Ohio. The submission deadline is March 1. Applications received before the deadline will be given selection priority.

It costs nothing to apply, but a \$100 deposit is required upon acceptance. Scholarships and waivers are available. Campers are also responsible for transportation when arriving to or departing from the camp hotel. Travel during camp events is provided. Travel assistance may also be available, especially for those traveling from outside the US. Campers will be selected and notified by March 15. To encourage attendance from across IARU Region 2, slots will be held open for campers throughout the Americas. If positions become available, these will be filled from the waiting list.

Changes in the COVID-19 pandemic status and CDC guidelines and restrictions between now and June may impact plans to host the camp. For additional information, [contact](#) Camp Director Neil Rapp, WB9VPG.

"At this time, we have a high level of confidence that hosting the camp June 12 - 17, 2022, will be possible," Rapp said. "Should we not be able to host the camp or need to reschedule, we will let everyone know with as much notice as possible."

Appropriate requirements on masking and vaccination status will be announced as needed."

3Y0J Bouvet DXpedition Confirms Departure Date

The 3Y0J Bouvet Island DXpedition has confirmed January 6, 2023, as its date of departure on board the vessel SV *Marama*. The DXpedition will make the second-most-wanted DXCC entity available for the first time in several years.

"It is complex to plan the logistics of such a huge project like the 3Y0J Bouvet DXpedition, which involves many parties," the DXpedition announced this week. "The new date is mainly related to the *Marama* vessel logistics, but [also will] enable us to return to Cape Town in late February 2023." The 3Y0J team also confirmed that the DXpedition will run for 44 days overall, with a contingency week for added flexibility.

"We have contracted 22 days at Bouvet Island, and it means we will spend more than 3 weeks at Bouvet," the announcement said. "As we have the flexibility to still decide the port of departure - Ushuaia, Argentina, or Port Stanley, Falkland Islands -- this will be done at a later stage."

The DXpedition will feature 12 stations, with eight CW or SSB stations and four FT8 stations. Operators aim to log at least 200,000 contacts. "We will be using the Elecraft K3S, a well-proven in the field DXpedition radio as the CW/SSB radio, and SunSDR2 DX as the FT8 radio," the DXpedition said. "We want to emphasize that the FT8 radios will *not* be run in unattended robot mode," the DXpedition said. "Each FT8 QSO will be initiated by a human operator sitting at Cape Fie on Bouvet."

"During peak times, we will run up to 12 radios simultaneously. We plan for minimum downtime on the radios, and to achieve this, we will set up the four FT8 stations to run 24/7, so that these can either be run by one operator separately or be run by any other operator in a simplified SO2R setup. This will be done so that each operator can log into the FT8 machine from his op-

erator position and run CW/SSB and FT8 simultaneously. Running several radios by a single operator this way has shown to be very efficient." Stations will be equipped with various 1.5 kW amplifiers (2 kW PEP for 160 meters).

The receive antenna will be a ground-independent RX loop system developed by LZ1AQ. It will be located some 300 meters from the camp for use on 160 - 30 meters. With the capability to feed up to six receivers. It also permits switching from loop to dipole mode.

Five diesel generators will power 3Y0J, with one spare.

The DXpedition's co-leaders are Ken \AA Opskar, \AA LA7GIA; Rune \AA ye, \AA LA7THA, and Erwann \AA Merrien, \AA LB1QI.

Keep up with the DXpedition's plans and preparations via the 3Y0J website and the 3Y0J [Facebook page](#). Individuals may [support](#) the DXpedition via the 3Y0J website.

[The Danish DX Group \(DDXG\) will celebrate its 50th year](#) with special event station [OZ50DDXG](#), on the air until December 31, 2022.

New rules go into effect in June for all ARRL HF Contests. Starting with the ARRL International Digital Contest, the use of online and other non-amateur radio platforms including -- but not limited to -- social media, live video streaming, and internet chat rooms will be permitted in all categories that allow assistance (Unlimited). In all Unlimited and Multi-operator categories, the prohibitions against self-spotting and asking another station to spot you will also be removed.

Registration is open for the 67th [Pacific Northwest DX Convention](#), set for August 5 - 7 in Spokane, Washington. The 2022 event will

emphasize DXing, contesting, and technology.

Volunteer Monitor Program Cautions against Operating Beyond License Privileges

Many of the Advisory Notices sent out each month by the ARRL [Volunteer Monitor Program](#) go to stations heard operating outside the operator's license privileges. While some may be doing so deliberately, it seems clear that many of these reports reflect a lack of clarity regarding the Part 97 -- Amateur Radio Service rules.

Typical cases often involve operators holding Technician- or General-class amateur licenses being heard on a frequency or band not permitted by their license privileges. Most recent incidents have frequently entailed FT8 digital mode operation by Technician licensees on 20 and 40 meters. Technician licensees do not have any operating privileges on 20 meters, let alone digital privileges, and FT8 is a digital protocol.

Technicians (and Novices) may operate CW between 21.025 and 21.200 MHz on 15 meters, from 7.025 and 7.125 MHz on 40 meters, and from 3.525 to 3.600 MHz on 80 meters, but they do not have *any* digital (data) mode privileges on these bands.

ARRL Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH, said licensees who need a refresher course regarding their operating privileges may refer to Section 97.301 of the rules. ARRL also has a convenient chart on its [website](#) that details privileges available to all license classes, from Novice to Amateur Extra.

As monthly Volunteer Monitor reports indicate, some General-class operators have lost their way on some bands too, and Advisory Notices have gone out to those operating outside of the General-class phone subbands. For example, on 20 meters, Generals may operate phone from 14.225 to 14.350 MHz, but occa-

sionally, General-class operators are heard outside of that subband. On 40 meters, the phone and image subband open to General licensees is 7.175 to 7.300 MHz. Of course, Technician- and General-class licensees may operate CW on any subband on which they have operating privileges, although operation within the CW subbands is preferred by band plan.

On 10 meters, Technicians have RTTY and data privileges -- including FT8 -- from 28.000 to 28.300 MHz, and SSB phone privileges from 28.300 to 28.500 MHz, and may operate on CW over the entire 28.0000 - 28.500 MHz segment. Technicians may enjoy all operating privileges at 50 MHz and above.

The ARRL Volunteer Monitor program is a formal agreement between the FCC and ARRL. Volunteers trained and vetted by ARRL monitor the airwaves and report evidence that may be used to correct errant operation or to recognize exemplary on-air operation.

Ukraine Maintains Ham Radio Silence in State of Emergency

Radio amateurs in Ukraine appear to be diligently maintaining radio silence as the state of emergency declared there just prior to the Russian military invasion remains in effect. A February 24 decree from President Volodymyr Zelensky included "a ban on the operation amateur radio transmitters for personal and collective use." The Ukraine Amateur Radio League ([UARL/LRU](#)) reported this past week that it has received many messages of encouragement from the worldwide amateur radio community.

"The LRU informed international amateur radio organizations about Russia's military invasion of Ukraine," said the message from UARL Vice President Anatoly Kirilenko, UT3UY. "To date, there have been many reports from radio amateurs around the world in support of Ukraine."

The International Amateur Radio Union ([IARU](#)) has adopted a neutral stance. "IARU is an apolitical organization focused on promoting and de-

fending amateur radio and the amateur radio services," the IARU said. "The amateur radio service is about self-instruction in communications and friendship between people." IARU Region 1 has said it continues to monitor the development and expect all radio amateurs "to follow their national laws and regulations."

IARU Region 1 also re-posted part of an [advisory](#) from the Deutscher Amateur Radio Club HF Committee on February 27. "Any radio amateur currently transmitting from Ukraine is risking his or her life. If you hear a Ukrainian station, do not broadcast its call sign, location, or frequency -- whether on the band, in a cluster, or on social media. You may be putting lives at risk." The DARC's overarching advice: "In the current situation, the best we can do is listen."

Ukraine's assigned amateur radio call sign prefixes include EMA - EOZ and the more commonplace URA - UZZ. Some stations with Ukrainian call signs may still be active, since an exception to the amateur radio ban was made for stations in the Donbas region of eastern Ukraine (eastern Donetsk and Luhansk oblasts), which have special legal status owing to Russia's occupation since 2014. -- *Thanks to [The Daily DX](#) for some information*

Registration is Open for USA ARDF Championships

[Registration](#) is now open for the 21st USA Championships of Amateur Radio Direction Finding (ARDF), set for April 7 - 10, 2022. The competition will take place in Prince William Forest Park near Quantico, Virginia.

"Radio orienteers from all over the country, plus visitors from abroad, are invited to attend," said ARRL ARDF Co-coordinator Gerald Boyd, WB8WFK. "The competitive courses are open to anyone of any age, with or without an amateur radio license. The results will help select who will be invited to fill positions on ARDF Team USA, which will travel to

Serbia for the 2022 ARDF World Championships in September.

Wednesday, April 6, will be a practice day for equipment testing and a competitor briefing. From Thursday through Sunday, competitors will have the opportunity to compete in the [sprint](#), foxoring, and classic courses on 2 meters and 80 meters. Awards for first through third places will be presented at ceremonies following the events.

Members of the Backwoods Orienteering Klub ([BOK](#)) will organize the 2022 USA Championships. All are experienced radio orienteers who organized the successful 2013 and 2019 national championships. The event director is Joseph Huberman, K5JGH, and the registrar is Ruth Bromer, WB4QZG.

The International Amateur Radio Union (IARU) sets [ARDF championship rules](#). For scoring and awards, participants are divided into 12 age/gender categories. In the classic ARDF events, competitors start together in small groups made up of different categories. As they seek the "fox" transmitters, they navigate through the forest from the starting corridor to the finish line, a distance ranging between 4 and 12 kilometers (about 2.5 miles and 7.4 miles). They plot their direction-finding bearings on orienteering maps that show terrain features, elevation contours, and vegetation type.



USA ARDF Championships Registrar Ruth Bromer, WB4QZG.

"The USA ARDF Championships are open to anyone who can safely navigate the woods by themselves. A ham radio license is not required," Boyd emphasized. "In ARDF,

personal navigation skills are important because each participant competes as an individual -- any teamwork or GPS map use is forbidden. Competitors bring their own direction-finding gear to the events, although extra gear is often available for loan from other attendees. Competitors may not transmit on the course, except in emergencies."

[Information bulletin #2](#) contains the complete schedule, technical details, fees, rule variations, and more. An [email reflector](#) is available for Q&A with the organizers, as well as for coordinating transportation and arranging equipment loans.

Announcements, rules, organizer instructions, and more are available at the [ARRL ARDF website](#). Basic information on international-style transmitter hunting is on the [Homing In](#) website, which includes equipment ideas for [2 meters](#) and [80 meters](#), plus photos and stories from previous championships. -- *Thanks to Joe Moell, K0OV*

Chess-Playing Ham Radio Satellite to Launch in Fall

Spain's IARU member-society [URE](#) reports that intensive work is under way to make URESAT-1 available before the end of the year. If all goes according to plan, URESAT-1 will launch aboard a SpaceX Falcon-9 rocket from Cape Canaveral in October 2022.

URE says URESAT-1 is based on the architecture used in the AMSAT-EA GENESIS, EASAT-2, and HADES missions but with significant improvements, such as a 32-bit computer, and enhancements in the deployment mechanism, antennas, and batteries. URESAT-1 will carry a VHF/UHF FM ham radio repeater as well as digipeating capability of AX.25 and APRS. URE says the payload is not yet defined but could be the same slow-scan television (SSTV) camera that flies in HADES, a thruster, or some kind of experiment. One confirmed project is a chess game that will allow radio amateurs to play against the onboard computer via FSK telemetry.

Several radio amateurs are working on the project, and if it is completed by the time the satellite is due to be delivered, it will be included. URE has created a [blog](#) in Spanish, where the status of the project is being reported.

Bouvet Island 3Y0J DXpedition co-leader Ken Opskar, LA7GIA, has updated plans for the January 2023 DXpedition, noting that the camp setup plan will be finalized over the next 3 months. The plan is to go ashore upon arrival, even during a very short weather window, starting with a single generator, antennas, and five radios and tent, plus necessary food, water, heat, and safety gear. The subsequent runs ashore will bring another generator, more antennas, fuel, radios and spare parts. "We have roughly 5 metric tons of equipment and food/water/fuel supplies to be landed, but for us to be able to go ashore and make QSOs, only a small fraction of that must be landed," he said on the team's Facebook page. "If we have a longer weather window, we will of course continue to land all equipment in one long run."

Annual Armed Forces Day Cross-Band

Exercise Set for May 14

The 2022 running of the Armed Forces Day (AFD) Cross-Band exercise will be held on May 14, 1300 - 2200 UTC. A complete list of participating stations, modes, frequencies, times, and other details [will be announced](#) on April 1. The event is open to all radio amateurs. Armed Forces Day is May 21, but the AFD Cross-band Military-Amateur Radio event traditionally takes place 1 week earlier in order to avoid conflicting with Dayton Hamvention®. During the exercise, radio amateurs listen for stations on military operating frequencies and transmit on frequencies in adjacent amateur bands.



Military and amateur stations have taken part in this event for more than 50 years. It's an exercise scenario, designed to include ham radio and government radio operators alike.

Per previous announcements: "The AFD Cross-band Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service, as authorized in 47 CFR 97.111. These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise scenario that does not impact any public or private communications."

Military stations in various locations will transmit

on selected military frequencies and announce the specific ham band frequencies they are monitoring.

An AFD message will be transmitted utilizing the Military Standard (MIL-STD) serial PSK waveform (M110) followed by MIL-STD Wide Shift FSK (850 Hz RTTY), as described in MIL-STD 188-110A/B. The AFD message will also be sent in CW and RTTY.

Full details will be released on April 1.

Successful Emergency Communications Exercise Carried Out on QO-100 Satellite

On February 26, 22 stations representing 14 countries within IARU Region 1 took part in a short-notice exercise using the geostationary satellite QO-100.

This was the first of a number of smaller exercises, tests, and meetings to be held by IARU Region 1 throughout the year, building on the earlier Global Simulated Emergency Tests to cover as many aspects of emergency communications as possible. The intention is to bring emergency communicators together more frequently to demonstrate how the Amateur Radio Service can work together as a global community and develop a common understanding of each others' capabilities.

The exercise was deemed a success, with a number of formal messages passed among stations and some lessons learned from the inevitable challenges of equipment failure, language barriers and co-ordination of an exercise with a coverage area from South Africa to the United Kingdom. Once all the exercise feedback is received, another test on QO-100 is planned for October 2022.

"QO-100 brings another asset to the emergency communications toolbox in Region 1, and its presence is much appreciated," IARU Region 1 Emergency Communications Coordinator Greg

Mossop, G0DUB, commented. -- *Thanks to IARU via Greg Mossop, G0DUB*

France's IARU member-society REF has announced that special event station TM97WARD will be among those on the air April 16 - 25 to celebrate World Amateur Radio Day ([WARD](#)), which takes place each year on April 18.

The [final results](#) for the February North American CW Sprint are published on the *NCJ* website.

Parks on the Air (POTA) reports a lot of activity in February, with an average of 270 activations every day. Just under 1,500 operators helmed approximately 7,500 activations from more than 3,000 different parks in 31 different DX entities. POTA was inspired by the National Parks on the Air (NPOTA) program of ARRL, overseen by former ARRL staffers Sean Kutzko, KX9X, and Norm Fusaro, W3IZ, in 2016.

ARISS notes that it has been 2 years since the launch of the ARISS InterOperable Radio System (IORS) to the International Space Station. Today, the IORS is a staple of ARISS operations in the *Columbus* module. Congratulations go to the ARISS team, which contributed to the development and flight certification of the IORS!

The ARRL Maine Section has announced the [Maine 2-Meter FM Simplex Challenge](#), sponsored by the Wireless Society of Southern Maine. The event is March 26, 2022.

The "Heavenly Water Storm" Hawaii Amateur Radio Emergency Service[®] (ARES[®]) communications drill is set for April. It will take place on April 16, from 9 AM - noon HST using the incident command system structure. This exercise will simulate a 4-day period of cata-

strophic rain and wind covering the Hawaiian Islands from Kauai to the Big Island, with loss of power, internet, and cell towers. Approximately 1 hour in the drill will represent 1 day of the simulated storm. The [Hawaii ARES website](#) has details. Radio amateurs planning to participate should [register](#) in advance. It will take place 9 AM - noon HST using the incident command system structure. This exercise will simulate a 4-day period of catastrophic rain and wind covering the Hawaiian Islands from Kauai to the Big Island with loss of power, internet, and cell towers. Approximately 1 hour in the drill will represent one day of the simulated storm. The [Hawaii ARES website](#) has details. Radio amateurs planning to participate should [register](#) in advance.

More Announcements

The Danish DX Group celebrates its 50th anniversary in 2022.

For that occasion, special event station OZ50DDXG will be on the air, and radio amateurs can apply for an anniversary award by working the station. More information is in the [OZ50DDXG QRZ.com profile](#).

ARRL Announces New World Wide Digital Contest

The [ARRL World Wide Digital Contest](#) will debut at 1800 UTC on June 4, ending at 2359 on June 5, 2022. All non-RTTY modes are permitted. Going forward, RTTY will be the sole mode for the ARRL RTTY Roundup, which will continue to take place in January.

In broad strokes, this will be an HF to 6-meter event, on 160, 80, 40, 20, 15, 10, and 6 meters, with single-operator and multi-single entry categories. These are Single Operator, One Radio (SO1R), Single Operator, Two Radio (SO2R), and Multi-Single (MS). Overlays in the single-operator categories will include "all enclosed antennas" and "maximum of 8 operating hours." Single-operator entries may operate for 24 hours (with off times taken in one or two breaks that are at least 60 minutes long), while MS entries may operate for the full 30 hours.

Operating assistance is permitted for all operating categories.

Power categories will be:

- **QRP** (5 W transmitter output or less)

Low Power (maximum 100 W PEP transmitter output)

The exchange for the World Wide Digital Contest will be a station's four-character grid square designation. Stations may work each

other once per band, regardless of digital mode. Participants will earn 1 point for each contact, plus 1 point for each 500 kilometers (310 miles) between stations. So, a contact between stations 1,000 kilometers apart would be worth 3 points. The total score is total contact points.

ARRL makes available a grid-center [distance calculation tool](#). Options include kilometers (always rounded up), distance between pairs, and points.

For instructions on how to [submit logs](#), visit the ARRL Contest page. Logs will be due 7 days after the event has concluded.

In succeeding years, the World Wide Digital Contest will take place on the first full weekend of June.

[Full details](#) on the new operating event are on the ARRL website.

AMSAT Receives a Grant From ARDC

AMSAT has received a generous grant from Amateur Radio Digital Communications (ARDC) for the development of a 3U spaceframe with deployable solar panels. This standardized 3U CubeSat spaceframe will serve as the mechanical platform for AMSAT's Greater Orbit, Larger Footprint (GOLF) series of satellites, as well as for a new generation of low-Earth orbit (LEO) FM satellites.

Central to the development of the 3U spaceframe, AMSAT will build three flight-ready spaceframes for an upcoming series of satellites with potentially enhanced flight control, payload, and communication capabilities.

The need for a 3U spaceframe with deployable solar panels goes back to the original design requirements for the GOLF satellites that would return AMSAT to highly elliptical orbits (HEO). The benefit of this program will provide satellites

with wider coverage and longer access times to the entire amateur radio satellite community worldwide. -- *Thanks to Frank Karnauskas, N1UW, AMSAT VP of Development*

RSGB Legacy Committee to Fund 50 MHz Meteor Scatter Beacon

The Radio Society of Great Britain (RSGB) [has announced](#) that its [Legacy Committee](#) has agreed to fund a 50 MHz beacon specifically aimed at studying meteor events above the UK. The RSGB website reports, "Unlike conventional propagation beacons, this will beam vertically up using circular polarization. The 50 MHz band is particularly suitable for observing meteors by radio as they create an ionized trail strongly reflective to radio at that frequency, while they burn up on entry to the Earth's atmosphere. This is a collaborative project between the amateur radio and radio astronomy communities, and will enable a range of radio-based citizen science and STEM projects studying meteors. The beacon is to be located at the Sherwood Observatory of the Mansfield and Sutton Astronomical Society, a central location for UK coverage." -- *Thanks to Southgate Amateur Radio News*

WRTC 2022 Special Event Station Award Begins New Cycle

World Radiosport Team Championship 2022 ([WRTC 2022](#)) special event stations have been on the air to call attention to the international competition, now set to take place in July 2023. Stations that already worked toward the [WRTC 2022 Award](#) in January and February may be contacted again. Stations need 50 points for the award. The point structure is 5 for CW contacts, 10 for SSB contacts, 12 for RTTY contacts, and 17 for FT8 (or mixed). Points accumulate each month. Your [March score](#) will be added to your February and January scores. Register and log in to <https://hamaward.cloud> and select "WRTC2022 Award" to access your score page and logbook. The WRTC 2022 Award organiz-

ers are asking participants not to send or email QSL cards. Further information will show up on the hunters' website.

Special call signs are active during this event. More than 100 Italian radio amateurs will activate special WRTC call signs, one for each Italian call district, concluding on July 10, 2022. A [first-time award](#) promoting WRTC 2022 will be available. Look for these call signs to be active during some contests, concluding with the 2022 [IARU HF World Championship](#). Each participant's contact totals and award-hunter scores will be displayed on a [real-time leaderboard](#). Participants can download the award in digital format. -- *Thanks to The ARRL Contest Update*

Nordic HF Conference 2022 to Be Held in Fårö, Sweden

[The Nordic HF Conference](#) takes place every 3 years, and the next one is planned for August 15 - 17, 2022, reports the Norwegian Radio Relay League ([NRRL](#)), Norway's International Amateur Radio Union (IARU) member-society. NRRL says the conference is a meeting place for industry and defense research within HF, as well as for radio amateurs. The conference takes place in a relaxed and informal environment on Fårö, an island north of Gotland on the Swedish east coast. The event will include "many exciting lectures," together with radios and antennas, held outdoors or in an exhibition tent. The [Nordic HF Conference](#) website includes useful information about the conference, a link to registration, and a look back at previous conferences. -- *Thanks to the NRRL*

SOTA Activators Complete their Summit Sweep in Wales

In May 2021, father-and-son Summits on the Air ([SOTA](#)) activators Tom Read, M1EYP, and Jimmy Read, M0HGY, (the SOTA Association Manager), completed activating every SOTA summit in Wales -- or so they thought. Detailed surveying work later that year, however, revealed the existence of a new "Marilyn" summit in Wales -- Rhinog Fach. "Marilyn" is the nickname given to Brit-

ish and Irish hills with a topographical prominence of 150 meters and is also the qualification criteria for a summit to be included in SOTA in the UK. The new entity was designated the SOTA reference GW/NW-078. Simon Melhuish, G4TJC, was the first to operate from this particular Marilyn in October 2021. The Reads set out to activate the summit on December 21, 2021. The walk was a long one and included a steep final ascent, but the pair were able to complete most of the route in the short daylight hours. Jimmy made 12 contacts, all on 2-meter FM, while Tom completed 19, mainly on 20, 30, and 40 meters on CW. Jimmy and Tom Read can once again claim to have activated every SOTA summit in England, Wales, Northern Ireland, Isle of Man, Jersey, and Guernsey.

A Contesting Word to the Wise

When submitting contest logs, many contest sponsors will provide an email confirmation of your entry. It's always advisable to check your confirmation email or the contest's Logs Received page to ensure that your entry has been submitted and that your entry category, club name, and location are correct. ARRL, CQ, and other contest sponsors allow you to resubmit your log with any corrections before the log submission deadline. The most recent uploaded log will be used for scoring purposes. After the deadline, some contest sponsors will release raw scores that reflect the results before any log checking has been completed. If, after the deadline, you notice an error in your log submission, contact the contest sponsor to correct it before the results are tabulated and made public. -- [The ARRL Contest Update](#)

New Amateur Radio License Applications Fee To Become Effective April 19, 2022

Newington CT March 25, 2022
To all radio amateurs

A Public Notice released by the Federal Communications Commission (FCC) on March 23, 2022, in MD Docket No. 20-270, announced that new application fees for Wireless Telecommunications Bureau applications will become effective on April 19, 2022. The new fees, mandated by Congress, apply to applications for Amateur Radio licenses including those associated with filing Form 605, the Amateur Operator/Primary Station Licensee Application.

The docket can be found online at, <https://www.fcc.gov/document/effective-date-wireless-application-fee-rates>.

Effective April 19, 2022, a \$35 fee will apply to applications for a new Amateur Radio license, modification (upgrade and sequential call sign change), renewal, and vanity call signs.

Anticipating the implementation of the fee in 2022, the ARRL Board of Directors, at its July 2021 meeting, approved the "ARRL Youth Licensing Grant Program." Under the program, ARRL will cover a one-time \$35 application fee for license candidates younger than 18 years old for tests administered under the auspices of the ARRL Volunteer Examiner Coordinator (ARRL VEC). Qualified candidates also would pay a reduced exam session fee of \$5 to the ARRL VEC. ARRL is finalizing details for administering the program.

ARRL had filed comments in opposition to imposing a fee on Amateur Radio license applications. The FCC initially proposed a higher, \$50 fee. In a Report and Order (R&O), released on December 29, 2020, the amount was reduced -- the FCC agreeing with ARRL and other commenters that its proposed \$50 fee for certain amateur radio applications was "too high to account for the minimal staff involvement in these applications."

ARRL Volunteer Examiner Coordinator (ARRL VEC) Manager Maria Somma, AB1FM, explained that all fees are per application. "There will be no fee for administrative updates, such as a change of mailing or

email address. The fees will be the responsibility of the applicant regardless of filing method and must be paid within 10 calendar days of FCC's receipt of the application. For applications filed by a VEC, the period does not begin until the application is received by the Commission, a ULS file number assigned, and an email sent by the FCC directly to the applicant."

VECs and Volunteer Examiner (VE) teams will not collect the \$35 fee at license exam sessions. New and upgrade candidates at an exam session will continue to pay the \$15 exam session fee to the ARRL VE team as usual, and pay the new, \$35 application fee directly to the FCC by using the CORES FRN Registration system (CORES - Login).

The CORES Login can be found at,
<https://apps.fcc.gov/cores/userLogin.do> .

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 calendar days from the date of the email to pay. After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license or explanation of other action. The link will be good for 30 days.

Somma also explained that applications that are processed and dismissed will not be entitled to a refund. This includes vanity call sign requests where the applicant does not receive the requested call sign. "The FCC staff has suggested that applicants for vanity call signs should first ensure the call signs requested are available and eligible for their operator class and area, and then request as many call signs as the form allows to maximize their chances of receiving a call sign."

Further information and instructions about the FCC Application Fee are available from the ARRL VEC at

www.arrl.org/fcc-application-fee.

Details for the ARRL Youth Licensing Grant Program will be similarly posted there, when available.

BARC Website, some Blog page Titles

[How to run a special-event station](#)

[JOTA at Greenville, NC](#) with BARC.

[VOA Site "C" Project](#) (Blog)

[Morserino 32 adventure](#)

[What to do when you see a need... – Brightleaf Amateur Radio Club \(w4amc.com\)](#)

[CQ WW VHF Contest – Brightleaf Amateur Radio Club \(w4amc.com\)](#)

[Antenna Fun! – Brightleaf Amateur Radio Club \(w4amc.com\)](#)

[Field Day Report 6/27/2021 – Brightleaf Amateur Radio Club \(w4amc.com\)](#)

Even more than this on the website.

Feel free to view, comment and add.

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

*** 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 • Life 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.



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*

WinLink Nets and Practice

Great Lakes Area Winlink Net Started

A new Great Lakes Winlink Net has been started 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 Pro-*

jects, 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 case of Repeater failure.

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
Fountain 444.425 MHz, 88.5 Tone N4HAJ
- ◆Newport SkyWarn Tues. nights 2100E Grifton-146.685-88.5 tone
- ◆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 146.685 MHz.
- ◆Wilson Amateur Radio Club Net, Thursdays @ 2000 on 146.76 MHz.
- ◆ Piedmont Coastal Traffic Net, Nightly 2030 on 146.88 MHz.
- ◆Carteret County ARS (CCARS) Emergency Net, Tuesdays, 1930 on the Newport 145.45 (-) MHz.
- ◆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

HF

Tar Heel Emergency Communications Net on 3923 kHz Nightly 1930.

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

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:

HALLICRAFTERS SUPER SKYRIDER

de W4BOH: I have a neat Super Skyrider that needs to participate in my downsizing. If you actually want one you can turn on and listen to, this is it. It was worked over and had some external paint touched up by a serious collector in NM. I bought from his estate and don't know anything about him, but all the eight things I bought are in fine shape. Someday, you may want to buy one of my Pilot Wasps! Anyhow, the Super Skyrider is hot and I've made several QSOs with it. Halli was bad about reusing names and it has no number, but I think it's much like an SX-16. The often lost plug in xtal filter is present and works. It's one of the few with variable BFO injection level. The chrome is great and the RX will look good on any operating table or display shelf. Are you sold? It's \$200, picked up in Hillsborough. I'll even deliver, if you are sure you want it and pay upfront! Of course you'll want a picture, so just email me at infomet@embarqmail.com and I'll send you one, or more. 73, Wilson, W4BOH infomet@embarqmail.com

Radioddity DMR GD-77 HT. With Battery (Little weak), Charger, Programming cord, Standard and long antenna's, Speaker Mike. Buyer will need to use a DMR ID. Almost New condition. \$75 or best offer. (Over \$100 New)

Mark Raysin KG4GVJ
Markdriedgrape@gmail.com

TRADE

CUSTOM Larcen 6m rack amp, no PS

FT920 no tx

TS2000 needs help, but works

lots of older computer parts/stuff/cables; very cheap or free for pickup

more details via phone 252-402-6765/with voice mail or email

WD4KPD@SUDDENLINK.NET

visit would be nice for chat

seeking small to midsize HF beam/rotor and or nice computer for WIN11.

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!

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

BARC on FACEBOOK

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

Facebook and Group details

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

Pitt County Repeater Association

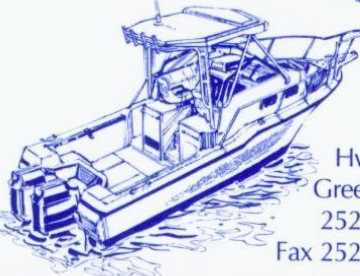
<http://www.pcra.us/>

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TERRY A. MONDAY, CPA, CVA, EA
K4ZYD

105-D East Victoria Ct. Phone (252) 321-6007
 Greenville, NC 27858 Fax (252) 321-2991

MARK'S MARINE, INC.



Mark Langley
 Mike Langley
KD4MTT

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



East Carolina Retina
 CONSULTANTS

Peter Van Houten, M.D.
 2501a Stantonsburg Road
 Greenville, NC 27834
 252-758-2402
<https://ECRetina.com>

CALENDAR OF EVENTS

Contest, Events and Meetings

2022 Starts Here: Just some of the MANY contests and Events

- April 10 [Rookie Roundup – Phone](#)
April 12 BARC Meeting
April 14-15 The CW-only [Maritime Radio Day](#) 2022 is set for 1200 UTC on April 14 until 2200 UTC on April 15.
April 26 BARC Board Meeting
May 10 BARC Meeting
May 31 BARC Board Meeting
June 1-13 [June VHF](#)
June 4-5 The [ARRL World Wide Digital Contest](#)
June 7 BARC Meeting
June 18 [Kids Day](#)
June 18-19 West Virginia QSO party
June 25-26 [Field Day](#)
June 28 BARC Board Meeting
Sept 10-11 Bike MS, New Bern

Contest Calendar: For more Contest and all the rules:

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

There's more than I could post available.

Bruce Horn, WA7BNM, [Contest Calendar](#) website. The site now includes a [5-Week Calendar](#) .



June, 1958

CALENDAR OF EVENTS

BARC Meetings are open to all.**BARC Regular Meeting** - 2nd Tuesday @ 7:00 PM

Live and Zoom

BARC Board Meeting - Last Tuesday @ 7:00 PM

ZOOM

Upcoming ARRL Section, State, and Division Conventions:April 1 - 2 -- [ARRL Maine State Convention](#),
Lewiston, MaineApril 8 - 9 -- [ARRL Oklahoma State Convention](#)
(Green Country Hamfest 2022), Claremore, OklahomaApril 16 -- [ARRL Roanoke Division Convention](#)
(Raleigh Hamfest), Raleigh, North CarolinaApril 23 -- [ARRL Delaware State Convention](#)
(Delmarva Amateur Radio and Electronics Expo),
Georgetown, DelawareMay 1 -- [ARRL Eastern Pennsylvania Convention](#)
(Warminster Amateur Radio Club Hamfest), Bristol,
PennsylvaniaMay 7 -- [ARRL Indiana State Convention](#) (North
Central Indiana Hamfest), Peru, IndianaMay 14 -- [ARRL Nebraska State Convention](#), Lincoln,
NebraskaMay 20-22 — [Dayton Hamvention](#)[®], at the
Greene County Fairgrounds and Expo Center in
Xenia, Ohio.August 26 - 28, 2022 — [Northeast HamXposition](#)
Marlborough, Massachusetts, and tickets will be
available May 1.Find conventions and hamfests [in your area](#).

Check the calendar of events on the ARRL website.

Other events:UPCOMING HAMFESTS IN THE ROANOKE
DIVISION

Saturday, April 16, 2022

RARSfest—the ARRL Roanoke Division Convention
North Carolina State Fairgrounds, 4285 Trinity
Road, Raleigh, NC 27601Website: <https://www.rarsfest.org>

Talk-In:

146.640, no tone

BARC 2 METER NET - MONDAY NIGHTS AT 8:00 PM - 147.09 W4GDF REPEATER - 131.8 Tone
Down East Hospital Net - 2nd Tuesday at noon - Greenville 444.725 MHz, 91.5 tone N4HAJ
BRIGHTLEAF AMATEUR RADIO CLUB STATIONS

W I V O A - W 4 A M C - W 4 U H S