



September
2024

HPARC NEWSLETTER

High Point
Amateur Radio
Club



W4UA

W4UA repeater 147.165 MHz +Offset 67 Hz tone

Resilience Through Amateur Radio for National Preparedness Month

Source: ARRL Letter – August 29, 2024

Amateur radio is an excellent tool for community resilience in times of crisis. The utility value of the critical communications it provides is enhanced by having well trained local [Amateur Radio Emergency Service® \(ARES®\)](#) groups and other teams. However, to maximize the value to yourself, your family, and your community; an operator must be prepared. September is National Preparedness Month. ARRL's partners at the Federal Emergency Management Agency (FEMA) are sharing tips to help you be prepared. They are centered around the theme of ["Start a Conversation"](#).



ARRL Director of Emergency Management Josh Johnston, KE5MHV, is starting the conversation with radio amateurs to help make sure you, your station, and your family are ready for whatever may come your way. "It's

important that we take steps to ensure that not only are we ready to provide assistance to our served agencies, but that we have a plan for our families as well," he said.

Over the month of September, ARRL will share best practices to help prepare you, your station, your family, and your local ARES® group to thrive in times of emergency. "There are times when hams may be activated to serve when all aspects of your life, your station, and your environment are under stress. That's not the time to start planning or to discover shortcomings," said Johnston.

Johnston encourages any radio amateur who is interested in participating in ARES® to check out the "Join ARES" [flyer](#), then reach out to their local ARRL Emergency Coordinator. If you don't know who that is, find your local [ARRL Affiliated Club](#), or reach out to



Graphic courtesy of Ready.gov

your ARRL Section Manager or Section Emergency Coordinator, whose contact details you can find on page 16 of *QST* or on www.arrl.org/sections.

Find resources for ARES® at www.arrl.org/ares and tools to help plan your family's resilience at www.ready.gov.

HPARC Meeting

September 2, 2024 @ 6:30 p.m.

Mario's Pizza & Zoom
2645 N. Main St.
High Point, NC27265

Single Sideband Activity Nights

2 Meter SSB: Thursdays @ 9pm ET on 144.200 MHz

6 Meter SSB: Sundays @8:30pm ET on 50.155 MHz

Amateur Radio Serves as Hurricane Debby Dumps Rain on East Coast

Source: ARRL Letter –August 8, 2024

Hurricane Debby continues to drench the East Coast. The storm originally made landfall in Florida's Big Bend coastal area just after 11:00 PM on Sunday, August 4, as a Category 1, near Steinhatchee, Florida, just 9 miles southeast of where Category 3 Idalia made landfall on August 30, 2023.

The hurricane was downgraded the following day to a tropical storm and National Hurricane Center forecasters reported that sustained winds were 74 miles per hour (MPH), and the storm was moving north and east at 10 MPH.

The amateur radio station at the National Hurricane Center, WX4NHC, the Hurricane Watch Net, and the VoIP Hurricane Net were activated as Debby slowly traversed the Southeast US and dumped potentially catastrophic rainfall over widespread parts of Florida, Georgia, and South Carolina. On Monday morning, August 5, nearly 248,000 homes and business customers were without electricity.

Scott Roberts, KK4ECR, ARRL Northern Florida Section Manager, reported that Clay County Emergency Services (ARES®) was also active. Arc J. Thames, W4CPD, Northern Florida Section Emergency Coordinator,

reported that Alachua County and Franklin County ARES were also activated.

Thames reported an amateur radio operator was stranded due to high water in Suwannee County. He used the statewide repeater network, SARNET, to relay the information and a monitoring operator in Jacksonville was able to coordinate with an urban search-and-rescue (USAR) team with an embedded ham radio operator and was able to facilitate the rescue of a family.

Rick Palm, K1CE, editor of the ARRL ARES Letter, was at his home in Fort White, Florida, when the storm hit.

"It was another wild ride, with huge trees down and river levels rising fast," Palm reported. "For two days, lots of heavy machinery rolled into our neighborhood to saw up downed trees and restore power."

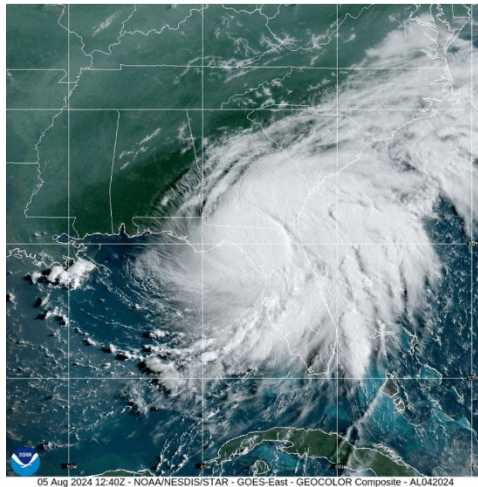
Palm also reported to the town shelter and worked with Darren

DeMarino, KO4DLN, and had contact with Brad Swartz, N5CBP, who is the Emergency Coordinator stationed at the EOC radio room. He managed to send a "Field Situation Report" via Winlink to the EOC in Lake City. Palm said he was a little rusty but got the form to go through.

The Five Flags Amateur Radio Association, W4UC, located in Pensacola, Florida, was asked by state officials to serve as HF backup for the SARNET system even though they were outside the warned area.

Tropical Storm Debby, now off the Atlantic coast, will move through the Carolinas, and then northeast from the mid-Atlantic into New England.

Colorado State University meteorologists released an updated forecast Tuesday, August 6, for the [2024 Atlantic hurricane season](#), the day after [Hurricane Debby made landfall in Florida's Big Bend](#). Forecasters reduced the number of named storms slightly from the July forecast, from 25 to 23 named storms. All other numbers remained the same, including the predicted number of major hurricanes, six.



Ham Radio Classes

By: Peter Kapetanakis, KN4OCX

The Tri-County ARC, High Point ARC, and GARA (Greensboro Amateur Radio Association) have formed a partnership to provide online (Zoom) classes for those seeking to acquire their Technician Class operator's license, or to upgrade to a General Class license.

Each course is comprised of 6 class sessions. Each class session is held via Zoom on Tuesday evenings from 7:00 – 9:00pm ET and is free of charge.

The Technician & General classes are held in an alternating sequence. The next course is the **Technician** Course scheduled to begin **October 8th**. Please note, that the courses are meant to prepare you for the FCC license exam, but do not include the license exam itself.

Please Note, the upcoming Technician Class will be the last class offered in 2024.

Pre-registration is required for each course. Please contact Richard Weinbaum, KK4RR at 336-687-8001 or

KK4RR@mac.com to register.

The starting dates for each course in 2024 are as follows:

Technician Course:

January 9, April 2, July 9, October 8

General Course:

February 20, May 14, August 20

ARRL Urges Protecting the Amateur Radio 902-928 MHz Band

Source: ARRL Letter –August 15, 2024

The Federal Communications Commission (FCC) accepted for public comment a [Petition for Rulemaking filed by NextNav Inc.](#), a licensee in the 900-MHz Location and Monitoring Service (LMS), to completely reconfigure the 902-928 MHz band and replace the LMS with high-powered 5G cellular and related location services.

The FCC [Notice requested comment](#) on the effects that NextNav's proposals would have on amateur radio operations in the band. [ARRL®](#)



is preparing comments urging protection of existing and future amateur uses in this band and urges all amateurs

to file their own comments describing their activities in this band and the expected effect of the proposed changes. [Click here for a guide to filing comments.](#)

NextNav currently holds licenses in the 900-MHz band that authorize it to provide services limited to determining the location and status of mobile radio units. NextNav ties its request to provide high-power broadband, cellular and location services to the vulnerabilities of the current satellite-based GPS system and argues that implementation of its proposal would complement GPS by providing an alternative nationwide terrestrial location

system in addition to cellular and broadband services. Under its proposal, NextNav would be designated the sole nationwide licensee for this spectrum in exchange for its more limited licenses.

The new nationwide license would authorize NextNav to provide much higher-powered traditional broadband and 5G cellular services as well as the related location service occupying 15 of the total 26 megahertz available in the band. The reconfiguration proposed by NextNav would create a 5-megahertz-wide uplink subband at 902-907 MHz paired with a 10-megahertz downlink subband at 918-928 MHz. The 5-megahertz uplink subband would be limited to use by mobiles with a maximum of 3 watts ERP. On the 10-megahertz downlink subband, up to 2000 watts ERP would be permitted in rural areas and 1000 watts ERP in urban and suburban areas, radiating from tower structures that could reach 1000 or more feet above average terrain. These configurations reflect the FCC's rules for standard cellular configurations that have been adopted to govern a number of other bands used for similar 5G and like services.

Although uses by the Amateur Radio Service in this band are secondary to LMS, NextNav is proposing substantial technical and use changes that would completely alter the foundation upon which the current rules and spectrum sharing arrangements rely and undercut shared use of the band by amateurs as well as a

variety of other users. In addition, NextNav proposes deletion of a specific interference provision in the Commission's rules that was adopted to encourage and protect continued sharing with amateurs and other secondary users.

NextNav, in its petition, argues without evidence that the changes that it proposes to the 902-928 MHz band "will not impede amateur operations." In an [8-page description](#) of NextNav's proposal released by the FCC's Wireless Telecommunications Bureau, the FCC staff asks a series of questions that would clarify the proposal and help the Commission ascertain the likely effect of the proposed changes on existing users if the requested changes were adopted. Comment was specifically requested on the extent of amateur operations in the band, the potential impact of the proposed changes, any other spectrum options that may exist, and the costs for relocations if other options exist.

ARRL is preparing comments urging protection of existing and future amateur uses in this band. ARRL urges all amateurs to study the proposal and file their own comments describing their activities in this band and the expected effect of the proposed changes. The filing deadline is September 5, 2024. Replies to comments are due by September 20, 2024. [Click here for a guide to filing comments.](#)

Solar Cycle 25 Producing Record High Sunspot Numbers

Source: ARRL Letter –August 15, 2024

Solar Cycle 25 Impressing Propagation Experts

By: Frank Donovan, W3LPL

Editor's note: This article was written earlier in the week. The latest measurements show even higher numbers. See K7RA Solar Report, below.

Record High Solar Cycle 25 Solar Maximum Sunspot Numbers Have Improved HF Propagation Since Mid-July and Possibly Bringing Worldwide 6 Meter F2 Propagation This Fall

According to the NOAA Space Weather Prediction Center (SWPC), Solar Cycle 25 likely reached its highest

sunspot number yet of at least 299 on August 8th.

www.swpc.noaa.gov/news/solar-cycle-25-likely-reached-highest-sunspot-number-over-20-years

The World Data Center - Sunspot Index and Long-Term Solar Observations (SILSO) publishes near-real-time Estimated International Sunspot Number (EISN) reports based on its global network of reporting stations. Daily EISN reports during Solar Cycle 25 were consistently well below 200 until suddenly rising to 218 on July 14th and

reaching 289 on July 18th, but then declining to 178 on July 22nd.



While occasional brief daily EISN increases are not unusual during solar maximum, after only five days, the daily EISN suddenly rose to 212 on July 27th, reaching a Solar Cycle 25 record high 297 on August 8th and remaining mostly well above 200 through this writing on August 11th. Daily EISN reports are likely

to remain well above 200 during most days through late September and possibly much longer.

Since February 2002, worldwide 6-meter propagation has been mostly limited to sporadic occurrences of trans-equatorial propagation (TEP) near the equinox months and occasional

sporadic-E propagation reaching many thousands of miles during June and July. Worldwide 6-meter F2 propagation may again occur -- perhaps very frequently -- starting in late October 2024 if daily EISN reports consistently remain well above 200. See www.sidc.be/SILSO/eisnplot.

2024 USA and IARU Region 2 Radio Orienteering Championships Set for October

Source: ARRL Letter –August 1, 2024

There is still time to register for the [2024 USA and IARU Region 2 Radio Orienteering Championships](#) to be held in Chelsea, Michigan, on October 5 - 13. The regular registration deadline is August 15, and the late registration deadline is September 15. A direct link to registration is available here: [EventReg | Radio Orienteering USA Championships 2024](#).

All radio transmitter hunters, from beginners to experts, are invited to participate in a full week of radio orienteering (amateur radio direction finding) competition and other fun events. There will be competitors from the United States, Canada, Australia, and China. The schedule includes:

- 2-day training camp coached by

course designers Charles & Nadia Scharlau the weekend of October 5 - 6

- 2 practice days October 8 - 9
- Cultural / social outings to Henry Ford Museum & Ford F-150 factory on October 7, cider mill and German restaurant visit on October 10, among other opportunities
- Informational meeting, guest speaker & casual dinner on Wednesday night October 9.
- 4 days of challenging championship-level racing, including prior USA orienteering champs and team trials venues on October 10 - 13.
- Sprint, Foxoring, and 2m & 80m Classics October 10 - 13.
- A search and rescue exhibition team contest October 12.

This year's event director is Joseph Burkhead, KE8MKR. He is a 2018 World ARDF Championship bronze medalist, 2019 144 MHz Classic M40 national champion, and has competed as an athlete for the USA Radio Orienteering Team. He also competed on the Armed Forces USA Orienteering Team at the 2013 World Military Orienteering Championships in Eksjo, Sweden. Burkhead is a member of the

[Southern Michigan Orienteering Club](#).



New York High School Helps License Young Hams

Source: ARRL Letter –August 8, 2024

On August 1, 2024, Steve Goodgame, K5ATA, ARRL Education and Learning Manager, took a train trip to New York City to visit the [Staten Island Technical High School](#). He was there to help administer amateur radio exams to 49 students and all passed their exams. Several upgraded their licenses from General to Extra class and two students went from unlicensed to Extra class in one sitting.

Their teacher, Everton Henriques, KD2ZZT, attended [ARRL's Teachers Institute on Wireless Technology](#) TI - 1 last year and TI - 2 this year. Since then, Everton has helped over 100 kids successfully test for their amateur radio licenses. He has built a program

incorporating HF, local repeater use, foxhunting, and space communications and has plans to incorporate mesh networking with his students this coming school year.

On August 6, 2024, Henriques was helping his students build antennas to help make contact with the International Space Station. They made a 5-element VHF "bad boy" antenna with a mounting mechanism to rotate and pitch the heading using 3D-printed materials, PVC,

and aluminum rods. They tried using an IC-2730a VHF/UHF radio on medium power. While that didn't go as well as planned, they were able to hear a lot of activity on 70 centimeters.

Staten Island Technical High School began as a New York City public high school in 1988. Its student body is comprised of lifelong learners, innovation facilitators, contributors to the betterment of society and intellectually inquisitive young men and women. In September of 2005, the school was granted the status as New York City's 7th Specialized High School by the New York City Department of Education. New York City's Specialized High Schools are comprised of the most academically gifted and talented students.



Volunteers Needed

By: Peter Kapetanakis, KN4OCX

Hello readers,

As many of you have heard in our club meetings, the HPARC has been working with the Nido & Mariana Qubein Children's Museum to educate our younger population and their accompanying adults about the world of radio and morse code. Richard Weinbaum, KK4RR has been spearheading this partnership for some time and we have dates on the calendar for us to have an exposition and share our knowledge. To volunteer you must go through the museum's volunteer process. To get started, or to learn more, please contact Richard Weinbaum, KK4RR at 336-687-8001 or KK4RR@mac.com.



HPARC SEPTEMBER CALENDAR

- 2 — **HPARC Meeting**
- 2 — Labor Day
- 14 — W4VEC Greensboro VE Session
(Hinshaw United Methodist Church, Fellowship Bldg)
- 22 — HPARC Newsletter Deadline
- 28 — W4VEC High Point VE Session
(Hickory Chapel Wesleyan Church)

SEPTEMBER BIRTHDAYS

Draughan, Bobby	KM4UHU
Evans, Thomas L.	NA4U
Sledge, Dwight	W4EIO
Williams, George H.	KQ4NBH

For W4VEC Test information, call or email Keith Thomas, KA4JAH, (336) 906-2469, KA4JAH@Aol.com

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**Breakfast every
Saturday**

—
8:00 a.m.
—

**Biscuitville,
2709 S. Main St.**

The HPARC Newsletter is published monthly by the High Point Amateur Radio Club (HPARC) for its members. The HPARC Newsletter serves as a source of information about Club activities, and general news items of interest to Amateur Radio. Material in this Newsletter be reproduced provided the HPARC is properly credited. Complimentary issues of the HPARC Newsletter are available by writing to the HPARC Newsletter at PO Box 4941, High Point, NC 27263 or emailing your request to w4ua@arrl.net. Membership in the HPARC is open to all licensed Amateur Radio operators. Membership is \$24.00 a year. Associate membership is also available to those who are interested in Amateur Radio but who do not currently hold a license. Associate membership is \$12.00 a year.

The High Point Amateur Radio Club meets the first Monday of each month (except for holidays) at a local restaurant announced in the newsletter. Come early to enjoy dinner. The business meeting starts at 6:30 p.m. followed by a short program of interest. Family and visitors are welcome to attend. For more information, please call or email one of the HPARC officers listed in this newsletter. Contributions and letters/emails to the editor are welcome.