



W5NC

Houston, Texas

Northwest Amateur Radio Society

A 501(c)(3) Organization
An ARRL Affiliated Club

NARS NEWS

OCTOBER 2023

Northwest Amateur Radio Society

P.O. Box 11483

Spring, TX 77391

w5nc.club

**President's
Message**
Page 3

**Foxhunting for
Beginners**
Page 17

DIY Projects
Page 19



Contents

President’s Message	3
Ham of The Year Award Nominations	4
Exam Practice.....	5
The ARRL Letter	6
NARS Monthly Club Meeting	15
NARS Name Badges: Get Yours Today!	16
NARS Announces a Dues Increase	16
Amateur Radio Activities	17
Projects and Tinkering	19
VE Sessions and Results	20
Renewing Club Members.....	21
NARS Membership – Due Dates and More	21
Training and Education	22
Upcoming Skywarn Spotter Training for 2023	23
Of Interest to the Club	24
Calendar	25
Club Activities and Events.....	25
Social Events	25
Hamfests and Conventions.....	26
Contests and Radiosport.....	26
NARS Club Officers and Information	27
Board Officers with Voting Privileges	27
Board Non-Voting Associate Members	27
Club Nets.....	27
Repeaters	27

NARS News is published monthly by the Northwest Amateur Radio Society (NARS). Northwest Amateur Radio Society is a Special Services Club affiliated with the American Radio Relay League, ARRL Club No. 2120.

If you would like to contribute to the newsletter by publishing an article, adding calendar events, or any other contribution, please send all submissions before the end of the month to the newsletter editor:

Brandon Rogers (K5BLR), Newsletter Editor

k5blr@arrl.net

President's Message

BY RON MATUSEK, WA6TQH

In August 2023, our Club, Northwest Amateur Radio Society (NARS), became a 501c3 Non-profit Corporation organized exclusively for charitable, educational, and scientific purposes as described under section 501(c) (3) of the Internal Revenue Code or corresponding section of any future tax code.

As a result of this action, we made a written request to the legal team at LBT (“Brookfield Asset Management”) where we currently house our 146.66 MHz VHF Repeater to consider a possible amendment to our annual contract to show that we are now a 501c3 Non-profit Corporation. We suggested our annual facility rental agreement be modified to consider the annual fee as a donation to our organization going forward.

Here is the current response we received:

Hello Gentlemen,

I have reached out to our legal and leasing departments. They have considered the request but have said no.

Thank you,
LBT

We will make another request to address this next year.

Alternative for Digital Communications

After listening to the weekly DMR and UHF/VHF nets, it is apparent several are struggling with keeping their hotspots aligned and functional. It's also apparent there are some out there that want to participate on the DMR weekly net but don't have a digital radio.

Want to work both analog and digital modes without investing several hundreds of dollars in multiple hotspots and radios? Here is a solution to consider that will allow you to work Digital modes with both Digital and an analog handheld radio!

Unlike current hotspots you need to build, configure, and keep calibrated, here is a plug and play solution worth taking a hard look at as an alternative for a lot less investment.

ClearNode

ClearNode is a pre-configured Raspberry Pi based AllStar, EchoLink & Digital Modes simplex node with an integrated low power UHF (or VHF) FM radio transceiver. Digital modes now include DMR, P25, YSF, FCS and NXDN.

You can also control your node connections using DTMF commands from your handheld radio.

The ClearNode Mobile App allows you to:

- Configure your AllStar, EchoLink & Digital credentials and settings.
- Configure your ClearNode Wi-Fi credentials without using SSH and Terminal.
- Connect and disconnect your ClearNode from remote nodes, hubs, reflectors, and Talk Groups.
- Automate your connects and disconnects with calendar Timed Events
- Keep, edit, and tag a catalog of the nodes you regularly connect to.
- Control the integrated radio: Tx/Rx frequency, CTCSS/DCS codes, Squelch, Volume ...
- Power down or reboot your ClearNode.
- Play a delayed stream (~20 sec) of the audio traffic on your ClearNode on your mobile device.
- Update the software revisions running on your ClearNode.
- Find your ClearNode's current LAN/WAN IP Address.
- Control multiple AllStar & EchoLink ClearNodes.

MMDVM_Bridge and Analog Bridge are included in DVSwitch (<https://dvswitch.groups.io/g/main>) in the ClearNode software distribution. We are currently supporting DMR, P25, System Fusion YFS Reflectors, FCS Rooms and NXDN Reflectors.

You do not need a digital radio – You will use your Analog FM radio as normal – your audio is bridged over to the Digital Network via the Analog and MMDVM bridges. ClearNode includes a free companion iPhone and Android mobile app to Setup and Control your node – from anywhere you have an internet connection.

For more information, please visit the web site at: <https://www.node-ventures.com/buy-clearnode/>

See you at the October General Meeting!

Ron Matusek
President, Northwest Amateur Radio Society (NARS)

Ham of The Year Award Nominations

Every year at the NARS Annual Banquet, a Ham of the Year award is presented to a member of the club that has been active in the club, helped other members, and has been an exemplary member of the club.

Nominations for the Ham of the Year are now being accepted for a vote near the end of the year. All nominations *must* be received no later than the General Meeting in November. Look for the “Ham of the Year” nomination box at our upcoming General Meeting in October and November. Alternatively, you can send nominations to Brandon Rogers (K5BLR) at k5blr@arrl.net, Paul Kent (KI5FJS), or Ron Matusek (WA6TQH).

Exam Practice

Are you new to the hobby and looking to pass your Technician exam? Are you preparing to level up your license by taking the next level exam? Check out the questions below to test your knowledge!

Technician (Element 2)

T8A01

Which of the following is a form of amplitude modulation?

- A. Phase shift keying (PSK)
- B. Spread spectrum
- C. Single sideband
- D. Packet radio

General (Element 3)

G2E14

What could be wrong if you cannot decode an RTTY or other FSK signal even though it is apparently tuned in properly?

- A. You may have selected the wrong baud rate
- B. All these choices are correct
- C. You may be listening on the wrong sideband
- D. The mark and space frequencies may be reversed

Amateur Extra (Element 4)

E2E12

How do ALE stations establish contact?

- A. ALE radios monitor an internet site for the frequency they are being paged on
- B. ALE constantly scans a list of frequencies, activating the radio when the designated call sign is received
- C. ALE radios activate when they hear their signal echoed by back scatter
- D. ALE radios send a constant tone code to establish a frequency for future use

See the answers on [*Page 23*](#).

The ARRL Letter

An excerpt from the weekly ARRL Letter

Solar Eclipse QSO Party Seeks Amateurs and Radio Enthusiasts for Global Experiment

ARRL is proud to partner with HamSCI to help promote participation in the Solar Eclipse QSO Party (SEQP). SEQPs are a series of global experiments -- and you can be a part of them. Solar eclipses will pass across the

continental United States on October 14, 2023, and April 8, 2024. During these celestial events, you can join thousands of fellow amateurs as part

of the largest crowd-sourced event for ham radio scientific exploration. The SEQP is part of the Festivals of Eclipse Ionospheric Science and is for learning more about how the ionosphere works.

All radio amateurs need to do is operate using any mode and any band for all or part of the day, then upload their logs. Participation can be from anywhere; you don't need to be near the path of the eclipse to contribute valuable data. You don't even have to be a licensed ham to participate in the experiment (only to transmit).



Did you know...

that the ARRL sends a weekly letter describing some of the current events, activities, and policies that are taking shape in the Amateur Radio world? The following is an excerpt from these letters in January. View all the ARRL letters at <http://www.arrl.org/arrlletter>

For SEQP contest and rules, visit www.hamsci.org/contest-info.

For information on the Gladstone Signal Spotting Challenge using CW, WSPR, and FST4W, go to www.hamsci.org/contest-info.

If you're an SWL or AM DXer, you might be interested in the Medium Wave Recording Event. Go to www.hamsci.org/mw-recordings/ for more information.

Or just get on the air and help provide data to better understand the ionosphere.

The first SEQP is on Saturday, October 14, 2023, from 1200 - 2200 UTC, and participants may use any band or mode (except WARC bands). Researchers will take the submitted logs and work to derive meaningful observations from the data.

ARRL members can find out more about the SEQP by reading "The Solar Eclipse QSO Party: A Fun Way to Support Radio Science" in the September/October 2023 issue of On the Air magazine. The On the Air podcast will feature the article's author, Gary Mikitin, AF8A, talking about the event. The episode will go live on October 12.

Students Wanted: Talk to an Astronaut via Amateur Radio in 2024!

There's an opportunity for STEM education via amateur radio that will put students in contact with astronauts. The Amateur Radio on the International Space Station (ARISS) program is seeking formal and informal education institutions and organizations, individually or working together, to host an amateur radio contact with a crew member aboard the International Space Station (ISS). ARISS anticipates that the contacts will be held between July 1 and December 31, 2024. Crew scheduling and ISS orbits will determine the exact contact dates.



To maximize these radio contact opportunities, ARISS is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. The voice-only radio contacts are approximately 10 minutes long and allow students to interact with the astronauts through a question-and-answer session. Students also have an opportunity to learn about satellite communication, wireless technology, and radio science.

The deadline to submit a proposal is November 10, 2023. Proposal information and more details, such as expectations, proposal guidelines, and the proposal form, can be found at www.ariss.org. An ARISS proposal webinar session will be held on October 5, 2023, at 7 PM ET. Visit <https://ariss-proposal-webinar-fall-2023.eventbrite.com> sign up.

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

Additional information is available at [ARISS.org](http://ariss.org).

AMI Jamboree Scheduled for November

The 2023 [Amplitude Modulation International \(AMI\) Jamboree](http://ariss.org) will be held over the Thanksgiving weekend, starting at dusk on November 24 and ending at dawn on November 27.



AMI Executive Director John C. McGrath, N9AMI, said the jamboree is not a contest but rather an AM-only operating event. "Everyone is welcome to participate, and there is a certificate available for those who contact 25 stations and submit a log," said McGrath. "Each class winner will receive a certificate, and a short biography will be posted on the AMI website. While the age of the equipment doesn't matter, there must be an AM mode selection on the radio," he added.

The preferred AM bands for operation are:

- 160 meters: 1.885, 1.900, 1.945, 1.985
- 80 meters: 3.870 to 3.890
- 40 meters: 7.175, 7.290, 7.293, 7.295
- 20 meters: 14.286 and the upper end of 20 meters

According to the club's history, AMI was formed in 1993. The name was taken from a west coast amateur radio club that was no longer in operation. AMI is now dedicated to the enjoyment, promotion, and preservation of AM. Club memberships include numbered membership certificates, an organization of 10 regions with directors, annual operating events, local club support, and the monitoring of activities that affect AM operations. While the FCC reduced the peak-envelope power measurement for AM, they also issued a statement in support of continuing the mode's important place in amateur radio.

More information is available on the [AMI](http://ariss.org) website.

Celebrating 50 Years of the ARRL Foundation

Thursday, September 21, 2023, marks 50 years since the ARRL Foundation was formed. As a partner with ARRL, the ARRL Foundation stewards philanthropic support for amateur radio through [scholarships](#), [club grants](#), and other programs to ensure a strong and vibrant future for the amateur radio avocation.

The total assets of the nonprofit entity measured nearly \$8M at its most recent [annual audit](#), but it grew from humble beginnings. In September 1973, several members of the ARRL Board of Directors worked to establish the charity. Larry Shima, WOPAN, was the Director of the ARRL Dakota Division at the time and did a lot of work to get the Foundation started. Shima is very pleased with the Foundation's success, stating, "We started off with \$1,000, and just look at it now!"



Shima says the original intent was to support future generations of radio amateurs. At the time, space and satellite communications were cutting-edge, and they were the focus of ARRL Foundation activities, though scholarships were also high on the list. "I was thrilled when I got the recent issue of QST that had the photos of the scholarship recipients in it. That is exactly what it was intended to do; we wanted to provide scholarships for young people," he said.

Gifts from generous donors support The ARRL Foundation, but it also works to help other charitable groups extend their reach. In an address to donors delivered over the summer, ARRL Foundation President David Norris, K5UZ, highlighted a recent grant the Foundation received. "The recent support the Foundation has received from Amateur Radio Digital Communications, or ARDC, has been transformational. We have been

able to dramatically increase the funding of scholarships through their generosity and are working through a program of club grants, where more than \$500,000 was distributed to clubs looking to take on new projects or sustain their organizations - and to share their learning with others," he told the crowd.

Shima was just 35 when the ARRL Foundation was formed. He is the only surviving founding member of the Foundation Board. Fifty years later, he believes that hams who have done well in life have an obligation to support amateur radio by giving generously to ARRL and the ARRL Foundation. Ongoing financial support enables ARRL to promote and protect amateur radio while the Foundation supports the future generations of hams.

That generous support will have a tangible reach. More than 100 scholarships, ranging from \$500 to \$25,000, will be awarded in 2024. Thank you to the many donors for making this work possible, and congratulations to the numerous scholarship recipients who have benefited from their generosity.

To learn more about the ARRL Foundation, please visit the Foundation website at <http://www.arrrl.org/the-arrrl-foundation>. To learn how to make amateur radio a part of your charitable giving, contact the ARRL Development Office at <http://www.arrrl.org/contact-us>.

Anna Gomez Confirmed as FCC Commissioner

The US Senate confirmed Anna Gomez as the fifth commissioner of the Federal Communications Commission on September 7, 2023.

Gomez thanked President Biden for the nomination and the Senate for her confirmation.

"I am grateful for the opportunity to serve," she said in a statement on her LinkedIn page.

Gomez is an attorney with decades of experience in domestic and international communications law and policy. She served for 12 years in various positions at the FCC, including Deputy Chief of the International Bureau and Senior Legal Advisor. She most recently served as a Senior Advisor for International Information and Communications Policy in the State Department's Bureau of Cyberspace and Digital Policy, where she has been leading US preparations for the month-long World Radiocommunication Conference 2023 (WRC-23) that will commence on November 20 in Dubai, United Arab Emirates.

Steve Lang will replace Gomez as head of the US delegation to WRC-2023. Lang is a longtime state department official serving as Deputy Assistant Secretary for International Information and Communications Policy. Lang has been working closely with Gomez on US WRC-2023 delegation preparations.

[ARRL The National Association for Amateur Radio®](#) has represented the interests of US radio amateurs in preparation for the conference, and ARRL Technical Relations Specialist Jon Siverling, WB3ERA, has been appointed to the US delegation for WRC-23. ARRL also actively supports the work of the [International Amateur Radio Union \(IARU\)](#), which, as a member of the International



Anna M. Gomez [National Telecommunications and Information Administration, photo]

Telecommunication Union (ITU) Radiocommunication Sector, participates in conference preparatory work and whose representatives will also attend WRC-23 by invitation as observers in an advisory capacity.

Fair Season Puts Ham Radio on Exhibition

It is autumn across the United States, and with the season draws changing colors, pumpkin spice everything, and agricultural fairs. Many amateur radio clubs and groups use the fairs as an opportunity to get ham radio in front of new and curious audiences. In New England, The Big E is a multi-state fair in West Springfield, Massachusetts, from September 15 to October 1, 2023.

Located inside the Better Living Center is "Project Big E". It was conceived in 2021 by Larry Krainson, W1AST, and other members of the [Hampden County Radio Association](#) (HCRA), who envisioned a booth that would demonstrate the many aspects of modern ham radio and provide an avenue to sign up for information and courses in their local area.

This year's event includes an EmComm display; D-STAR and other digital mobile mode demonstrations; digital HF modes on a big screen; SSB, CW, and other digital modes, and demonstrations of



Greg Bonaguide, WA1VUG (left), Christy Bonaguide, KF4UXP (middle), with Ray Lajoie, AA1SE (right), Section Manager of the ARRL Western Massachusetts Section. [Section Manager of the ARRL Rhode Island Section, Nancy Austin, KC1NEK, photo.]

Order this [radio communications banner](#) for your club from the ARRL Store.

portable stations for field operations like Parks on the Air and Summits on the Air. The exhibit will also highlight youth in ham radio.

The Project Big E booth (#103) is staffed 12 hours each day by 10 clubs and over 80 individuals from across New England. At the booth table there are two hand-made telegraph keys. Visitors are shown how to print and send their name in Morse code.

2023 SET Exercise to Test Skills and Emergency Preparedness

The ARRL Simulated Emergency Test (SET) is scheduled for October 7 - 8, 2023.

The SET is ARRL's annual national emergency exercise designed to assess the skills and preparedness of Amateur Radio Emergency Service® (ARES®) volunteers, as well as those affiliated with other organizations involved in emergency and disaster responses. The SET is open to all radio amateurs and partner organizations, in addition to national, state, and local officials. Besides ARES volunteers, those active in the National Traffic System (NTS), Radio Amateur Civil Emergency Service (RACES), National Weather Service's SKYWARN® Storm Spotter program, Community Emergency Response Team (CERT), and a variety of other allied groups and public service-oriented radio amateurs are needed to fulfill important roles in this nationwide exercise.



During the exercise, volunteers can assess equipment, modes, and skills under simulated emergency conditions and scenarios. Individuals can use the time to update a go-kit for use during deployments and to ensure their home station's operational capability during an emergency or disaster.

To get involved, contact your local ARRL Emergency Coordinator or Net Manager.

SET guidelines and report forms can be found at:

[ARRL Simulated Emergency Test \(SET\) Guidelines+](#)

In addition to the ARRL SET exercise, as part of their communications interoperability outreach to the amateur radio community, the US Department of Defense (DOD) will be conducting a DOD COMEX 23-4 exercise. During the week of October 16, they'll conduct a series of high-power HF information transmissions on 60 meters and channel 1 (5330.5 kHz). This event will coincide with the ARRL SET.

Amateur Radio Serves in Large Utah Bike Race

On September 9, 2023, the [Bridgerland Amateur Radio Club](#) (BARC) in northern Utah provided amateur radio communications support during [LoToJa](#), the longest 1-day USA Cycling (USAC)-sanctioned bicycle race in America. The LoToJa course consists of 200 miles of rough, mountainous terrain. BARC was prepared for the challenge and had been training and working on their communications plans for more than 3 decades.



The club's involvement with LoToJa began in 1991, when the race had 200 riders and 14 amateur radio operators. This year's event had 1,700 riders and 120 amateur radio operators, including 35 cars with amateur radio operators along for the ride. Amateur radio was engaged in every aspect of the race from start to finish thanks to assistance of operators from Ogden, Davis County, and Salt Lake City, as well as Idaho, Wyoming, and Maryland.

Section Manager of the ARRL Utah Section Pat Malan, N7PAT, said that BARC members evaluate their operating skills and equipment, which is the best form of preparation for emergency communications. "It's a tremendous effort and dedication from everyone," Malan said.

Youth Coordinator for the ARRL Utah Section and former BARC President Kevin Reeve, N7RXE, said the teams deployed two mountaintop portable repeaters (using batteries and solar power), three portable digipeaters, and a portable IGate throughout the racecourse, in addition to setting up four command and net control centers. Reeve explained, "This provided continuous audio and an Automatic Packet Reporting System (APRS) for the 35 cars covering the entire event."

Reeve went on to say that this year, a family needed to contact one of the riders because of an emergency. He stated, "There was no cell phone coverage, but we were able to locate the cyclist in about 5 minutes, then reunite them with their family in 15 minutes."

BARC also provided emergency communications for at least two other large-scale cycling events this year, including the Little Red Riding Hood event that had 3,500 women cyclists and 70 ham radio operators, and the Cache Gran Fondo event that had 1,500 cyclists.

BARC was founded in 1976 by Jeff Jacobsen, WA7MBL; Bob Wood, WA7MXZ, and Bill Neville, WA7KMF (SK), and it exists for the training and fellowship of amateur radio operators. The club currently has 227 members.

Changes in the ARRL Louisiana Section

Section Manager of the ARRL Louisiana Section John Mark Robertson, K5JMR, has stepped down. He has held this role since April 1, 2018. Robertson has been active in the Section and in Louisiana ARES. He held the Emergency Coordinator and both District and Section Emergency Coordinator positions before he assumed the role of Section Manager.



Matt Anderson, KD5KNZ, has been appointed to fill the remaining term, effective September 1, 2023.

Anderson has also held several previous positions in leadership, including Assistant Section Emergency Coordinator and Assistant Section Manager of the Louisiana Section.

USA Radio Orienteering Team Brings Home Silver and Bronze Medals

At the 21st International Amateur Radio Union World Amateur Radio Direction Finding (ARDF) Championship in Liberec, Czech Republic, held August 27 through September 2, 2023, USA competitors won a silver medal for an individual competition, as well as two bronze team medals.

ARDF, also known as radio orienteering, is a multi-skill sport that involves running and navigation using only a map and compass.

Competitors use a 2-meter (144 MHz) or 80-meter (3.5 MHz) radio receiver to locate multiple transmitters hidden in a forest. The sport directly applies to important activities such as search and rescue, wildlife tracking, airborne and seaborne navigation, and communications. The competition at the championship in Liberec involved mountainous terrain, intricate navigation challenges, periods of rain, and elite racing.



Nadia Scharlau, KO4AD, competing in the 3.5 MHz (80-meter) Sprint. Photo courtesy of IARU.

The USA fielded its largest team ever, including 21 athletes, with seven competing in a world championship for the first time. The (IARU) and Czech Radio Club hosted the event in the mountainous region of North Bohemia, with 28 countries and nearly 400 racers attending.

Ruth Bromer, WB4QZG, won a silver medal in the W65 category during the 3.5 MHz "foxoring" event

that combines orienteering and transmitter (fox) hunting. Nadia Scharlau, KO4ADV, and Natalia Leoni earned a bronze team medal in the W55 category 144 MHz classic competition. Several USA athletes also finished within the top 10 results in nearly all the classes, including two fourth - place finishes by Scharlau.

Scharlau was thrilled with the results. "All our newcomers performed beyond our expectations. The courses were extremely hard. We all got along and supported one another. Most importantly, almost everyone expressed their determination to improve and come back to compete again," said Scharlau.

ARRL's ARDF Committee Chair Charles Scharlau, NZ0I, who also raced, echoed the positive take on the USA team, stating, "They successfully navigated well-designed courses on rugged terrain against a field of skilled and experienced competitors. The Czech Republic is an ideal place to hold the world championships. They have great maps, excellent venues, and they know how to put on a world-class event," he said.

The USA Radio Orienteering Championship will be held in Michigan on October 7 - 13, 2024. Team USA will select its team members for the 2025 USA Championship, and that team will travel to Lithuania in 2025 to compete in the 22nd World ARDF Championship.

A complete list of the 2023 results can be found at <https://vysledky.ardf2023.cz/>.

Thanks to ARRL ARDF Committee and Event Director Joseph Burkhead, KE8MKR, for the information contained in this story.

North Carolina School Contacts the International Space Station

On August 28, 2023, students at Bowman Middle School in Bakersville, North Carolina, talked to NASA

Astronaut Stephen Bowen, KI5BKB, who as on board the International Space Station (ISS).

For months, 22 students had been preparing for a 10-minute window to ask Bowen about his time and experiences on the ISS. They were able to ask 13 questions, like, "What is it like to be in space?" and, "Is the crew doing any research on diseases that affect humans?"

Section Manager of the ARRL North Carolina Section Marv Hoffman, WA4NC, presented the Supporting, Upgrading, Growing Amateur Radio (SUGAR) Award to the school and its science, technology,



Students at Bowman Middle School in Bakersville, North Carolina, who participated in contacting the ISS on August 28, 2023, with STEM teacher Dan Hopson, back row, right. Photo courtesy of Tammy Hopson and used with parental permission.

engineering, and mathematics (STEM) teacher, Dan Hopson, for arranging the ISS contact.

Hopson said, "The waiting and static, are suspenseful but when you hear the man's voice or that person's voice come over the air, the kids know this is really happening."

Bowen, returned to Earth with SpaceX Crew-6 on September 5.

US Congresswoman Virginia Foxx (NC-05) also attended the event. She called the experience "a

stellar opportunity." In a recent letter to her constituents in North Carolina, Foxx wrote, "On Monday, I traveled to Bakersville in Mitchell County to meet with students, staff, and administrators of Bowman Middle School - as well as to view the school's International Space Station (ISS) contact project. As part of the project, students were able to ask questions in real time via ham radio to Steve Bowen, a NASA Astronaut who successfully traveled to the ISS on March 3 of this year. This impressive event was one that these students will surely remember as they continue their educational journeys. Congratulations to all who made this event, and learning opportunity, such a success."

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

Dave Coons, WT8W, Former ARRL Great Lakes Division Director, SK

David "Dave" Lee Coons, WT8W, former Director of the ARRL Great Lakes Division, passed away on September 2, 2023, at the age of 92. Coons joined ARRL in 1963 and was a member of the ARRL Diamond Club.

According to [the obituary](#) published in the Dayton Daily News, Coons was a disabled veteran of the United States Navy, having served during the Korean War. He retired from his role as postmaster of the Miamisburg, Ohio, post office after 37 years with the United States Postal Service.



Dave Coons, WT8W, SK. [Photo courtesy of the Dayton Amateur Radio Association.]

Coons served in numerous volunteer roles within the amateur radio community, including Vice Director of the ARRL Great Lakes Division from 1996 - 1998 and Director from 1998 - 2000. He was a Volunteer Examiner through the ARRL VEC.

Coons was active in leadership of the Dayton Amateur Radio Association, where he served as President, Vice President, and Secretary at different times. He served as Chairman of the Dayton Hamvention® Flea Market Committee and on the Communications Committee. He was also active in the Clark County Amateur Radio Association, who honored him with the Frank J. Kirkpatrick Memorial Award in 1993 for services that went above and beyond.

Federal Aviation Administration records show Coons was an Instrument Rated private pilot. According to his obituary, Coons was involved with maintenance at the Dayton-Wright Brothers Airport.

ARRL Podcasts Schedule

The latest episode of the ARRL [On the Air](#) podcast (Episode 28) features a discussion of digital multimeters with practical usage examples and shopping tips.



The latest edition (Episode 58) of the ARRL [Eclectic Tech](#) podcast features a discussion with author Nick Tusa, K5EF, about his new book *Wes Schum - Amateur Radio's Unsung Hero*.

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.

["Meet the Gaston County man who is the oldest living ham radio operator in the U.S."](#) / The Gaston Gazette (North Carolina) September 22, 2023 -- The Gaston County Amateur Radio Society is an ARRL Affiliated Club.

["Ham radio event set for Sept. 30 in South Point"](#) / The Herald - Dispatch (Ohio) September 22, 2023 - - The Southern Ohio Amateur Radio Association is an ARRL Affiliated Club.

["Amateur radio emergency test drill Sept. 30"](#) / The Monroe News (Michigan) September 26, 2023 - The Monroe County Amateur Radio Public Service Corps.

["Longmont Amateur Radio Club to celebrate Peak to Peak Byway anniversary"](#) / Times - Call (Colorado) September 27, 2023 -- The Longmont Amateur Radio Club is an ARRL Affiliated Club.

["Volunteer Amateur Radio Operators restore vital communication link in Waushara County"](#) / Waushara Argus (Wisconsin) September 27, 2023 -- Waushara County Amateur Radio Emergency Service®.

["Cambridge amateur radio club off the air after equipment stolen, damaged"](#) / CBC News (Canada) September 13, 2023 -- The Cambridge Amateur Radio Club.

["Caribou group wants to install the 1st ham radio tower between Caribou and St. John Valley"](#) / Bangor Daily News (Maine) September 16, 2023 -- Caribou Emergency Amateur Radio Service.

["Focused on Mississippi: Amateur radio operators"](#) / WJTV (Mississippi) September 11, 2023 - The

Jackson Amateur Radio Club is an ARRL Affiliated Club.

["Ham radio operators from throughout state gather in Ridgeland Saturday. See why."](#) / The Clarion-Ledger (Mississippi) September 11, 2023 - The Jackson Amateur Radio Club is an ARRL Affiliated Club.

["ECN training specializes in keeping up communication when it's critical"](#) / Minnesota Department of Public Safety, September 7, 2023 - - Emergency Communication Networks.

["Ham radio and the world of amateur radio operators"](#) / Canadian Geographic (Canada) August 30, 2023 -- Society of Newfoundland Radio Amateurs.

["Neighborhood Radio Watch seen as way to strengthen emergency communications"](#) / Buffalo Bulletin (Wyoming) September 5, 2023 - - The Buffalo Amateur Radio Klub (BARK) is an ARRL Affiliated Club.

["Amateur radio hobbyists share historic Texas lighthouse restoration story with world"](#) / Beaumont Enterprise (Texas) September 6, 2023 -- Sabine Pass Lighthouse restoration.

["Tehachapi radio club looking for new members"](#) / The Renegade Rip (California) September 6, 2023 -- The Tehachapi Amateur Radio Association is an ARRL Affiliated Club.

["Get your start in the world of amateur radio"](#) / Adirondack Daily Enterprise (New York) September 7, 2023 -- Champlain Valley Amateur Radio Club.

Arrl.org. 2023. ARRL Letter. [online] Available at: <http://www.arrl.org/arrlletter?issue=current> [Accessed 30 Sept 2023]

NARS Monthly Club Meeting

September's Monthly Meeting

The September meeting featured our very own Walter Holmes, K5WH, who provided a presentation on balloon launches and related activities. Walter brought hardware that has been used in previous launches, shared video of high altitude “popper” and long-distance “floater” balloon activities, and participation on JOTA scouting activities.



Next Club Meeting

Our next club meeting will be October 20th at HCESD 16 Admin – 18606 Stuebner Airline Rd, Spring, TX 77379. We look forward to seeing you there!

NARS General Club Meetings

NARS holds monthly club meetings where a variety of topics are presented from a number of guests. Come learn anything from antenna design, phasing, emergency response, and more!

Who: All club members, friends, or anyone interested in the Amateur Radio hobby

When: The Third Friday of the Month at 7:30pm

Where: HCESD 16 Admin, [18606 Stuebner Airline Rd, Spring, TX 77379](#)
Zoom Conference Call, Meeting ID: 2815436502, Passcode: 123456

NARS Name Badges: Get Yours Today!

Cindy (KM4YGG) and Art (KM4YGH) Grant are offering the club a deal for the NARS club on getting membership name badges. Each badge costs \$10 and can be delivered at the next NARS meeting (if ordered two weeks or more before the next meeting).



To order, go to <https://badgesunlimitedllc.com/#!/4-2-NARS-CLUB-MEMBERS-ONLY/p/104217140/category=13635038> and pay the fees using the checkout capability on the website.

NARS Announces a Dues Increase

NARS has made the difficult decision to increase its annual membership dues for the first time in its history. While this was a difficult choice for the Board, it has become necessary to sustain the provision of our numerous services to the community. Over the years, prices on goods and services have risen, and we have faced these increases while maintaining our membership fees, despite enhancing our repeater system and other services to our members.

Effective January 2024, the dues will increase by \$5.00 across the board. The new dues structure will be as follows:

- Individual Membership \$25.00
- Family Membership \$30.00
- Student Membership \$17.50

We will continue to offer new licensees a \$5.00 discount upon their initial sign-up.

Members who need to renew their membership before January 1 will pay the current dues, while those renewing after January 1 will see the increase. Membership terms run for one year from the day of joining, so many members will not experience the increase until sometime next year.

Amateur Radio Activities

The “Amateur Radio Activities” feature of NARS News highlights various activities related to ham radio. Each issue provides a quick overview for those who may be interested in the learning new aspects of the amateur radio hobby.

This month, the ARRL “On the Air” magazine is featuring an article on foxhunting. See the magazine online by [clicking on this link](#) (ARRL members only) or by looking on page 16 of your printed copy.

What is Foxhunting?

Amateur radio foxhunting, more formally known as Amateur Radio Direction Finding or ARDF, is a sport that combines radio communication skills with navigation, problem-solving, and a bit of friendly competition. The primary goal of foxhunting is to locate a hidden transmitter, also known as a "fox" or "fox box," using a directional antenna and receiver. The transmitter emits a signal at a specific frequency, and participants use their equipment to track down its location.

History of Foxhunting

The origins of amateur radio foxhunting can be traced back to the early 20th century. During World War I, radio direction finding technology was developed to locate enemy radio transmissions. After the war, this technology found its way into the hands of amateur radio operators who began using it for recreational purposes. Foxhunting soon became a popular activity, and it continues to captivate ham radio enthusiasts to this day.

The Hunt Begins

Participating in a foxhunt requires some essential equipment:

- **Transmitter (Fox Box):** The heart of the game, this small device emits a radio signal on a specific frequency.
- **Receiver:** Operators use a handheld receiver with a directional antenna to pick up the signal.
- **Directional Antenna:** A directional antenna, along with a receiver, will allow you easily determine the signal direction of the transmitter. A [tape measure Yagi](#) is a common design for this purpose.
- **Attenuator (optional, but highly recommended):** An attenuator reduces the signal received from the transmitter. When you get close to the transmitter, the signal can overwhelm an antenna and sound like it is coming from all directions. An attenuator will allow you to reduce the incoming signal so that your directional antenna can continue to be effective.
- **Map and Compass:** Navigational tools help hunters plot their course as they track the signal.
- **Notepad and Pencil:** Record-bearing notes can be crucial for solving clues.
- **Squad:** Many foxhunts are team efforts, so having a squad can be advantageous. Each team member can help with different aspects of the hunt, from navigating to interpreting clues.

The Rules

Foxhunting events often have specific rules, such as time limits and scoring systems. Some competitions may require participants to locate multiple transmitters in a predefined order, adding an extra layer of complexity and excitement. Additionally, hunters are usually required to stay within a designated search area, enhancing the challenge.

Competitions are not the only way to enjoy this part of the hobby. As the article in the ARRL "On the Air" magazine states, "foxhunting can be a club activity but it's also possible to head outdoors with a friend or tow, and designate one person to be the fox." You can make up your own rules and enjoy the time of outdoor, active fun.

Techniques and Strategies

Successfully finding the hidden transmitter in a foxhunt requires more than just good equipment. Here are some strategies that hunters employ:

- **Signal Strength:** As you get closer to the fox, the signal strength on your receiver will increase. Use this information to narrow down your search area.
- **Triangulation:** By taking bearings from multiple locations and plotting them on a map, you can determine the general direction of the transmitter.
- **Clues:** Many foxhunts involve solving puzzles or riddles that provide clues about the transmitter's location. These can be both fun and challenging.
- **Teamwork:** Working as a team can be highly effective. Team members can spread out, take bearings from different locations, and share information to pinpoint the transmitter more quickly.

The Thrill of the Hunt

Amateur radio foxhunting offers a unique combination of technical skills, outdoor adventure, and camaraderie among fellow enthusiasts. It's a hobby that challenges participants to think on their feet, navigate through various terrains, and use their radio expertise to outwit the fox. Whether you're a seasoned ham radio operator or new to the world of amateur radio, foxhunting offers an exciting way to put your skills to the test.

Conclusion

Amateur radio foxhunting is more than just a sport; it's a thrilling adventure that brings together the worlds of radio communication, navigation, and problem-solving. As you embark on your next foxhunt, remember that it's not just about finding the hidden transmitter; it's about the journey, the challenge, and the sense of accomplishment that comes from honing your skills in this unique and exciting hobby. So, grab your equipment, assemble your team, and prepare to embark on a radio direction finding adventure like no other. Happy hunting!

Did you know...

There are several members of the NARS club that are interested in setting up a regular ARDF/foxhunting activity with the club. If you have interest in being a part of this, please contact the newsletter editor (k5blr@arrl.net) or post on the club Groups.io email reflector.

Projects and Tinkering

Many amateur radio operators love to work on projects for their stations almost as much as operating itself. Here are a few fun projects we found on the internet that you might like to try!

A 100 W Dummy Load

Nick Kennedy, WA5BDU, wrote about building a super-simple dummy load in the current ARRL QST magazine ([click here, page 32](#)). Nick describes a method to build a 100W dummy load with a monitor port for testing the signal put into the load. You'll need a sturdy heatsink, a few thick-film resistors, and a couple of terminals/connectors for your feedline, and can be assembled quickly and efficiently.

Another 100W Dummy Load

Matthew Carr, KM4NMP, provides details on building a dummy load using a metal paint can, a couple of handfuls of resistors, and some coaxial connectors. These could even be submerged in a non-conductive material, like mineral oil, to increase heat dissipation. Matthew's writeup on his dummy load project can be found here: <https://km4nmp.com/2020/02/08/100w-hf-dummy-load/>.

A 2-meter Coaxial Sleeve Antenna

This not-so-well-known type of dipole antenna can make for a simple, inexpensive, 2-meter antenna for portable operating or for a base station. The ARRL "On the Air" magazine explains that, "on a sleeve dipole, the feed line coax does not connect to the antenna from the side, but instead passes up from the base 'coaxially' through the inside of the antenna's lower monopole, which has been reconfigured as a cylinder or sleeve." For complete details on how to build this antenna, check out page 21 of the current "On the Air" magazine [here](#).

A DIY AZ/EL Antenna Rotator

Building an antenna rotator can be a more advanced project that can help the operator build skills in controlling stepper motors. In this post by Tysonpower, instructions are provided to build an antenna rotator powered by NEMA-23 stepper motors, and built with tubing and bearings. The rotator can be used to change direction of a directional antenna or to track the motion of passing satellites. Tysonpower provides directions [here](#) and an [accompanying YouTube video](#).

Raspberry Pi-based RTL-SDR Scanner

Have you ever wanted to have a portable, easy to use scanner to monitor the bands in your area? With a Raspberry Pi computer, a USB SDR dongle, and a touchscreen display, you can create your own scanner. [In this article](#), Tony DiCola with Adafruit, provides step-by-step instructions for building this scanner.

Build a Simple Repeater

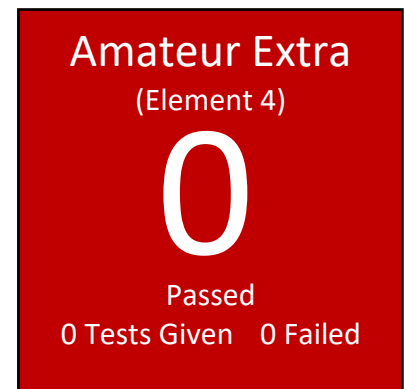
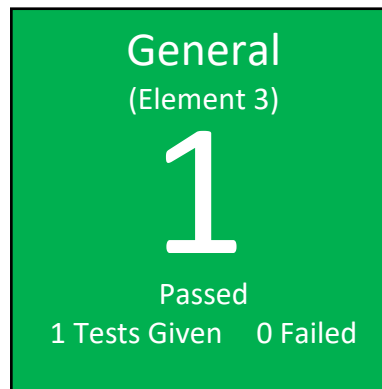
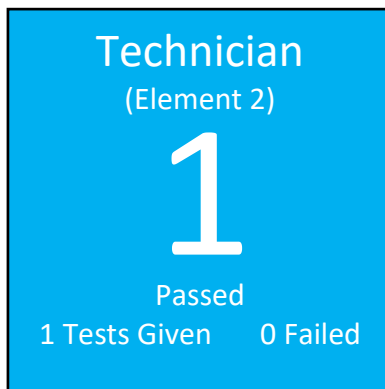
[In his comprehensive article and video here](#), Anton Janovsky, ZR6AIC, describes how to build a simple repeater using an RTL dongle and mini-computer. The range is minimal, but can be used to train yourself on how repeaters work, some important considerations in operating them, and can be used for a micro-repeater.

VE Sessions and Results

PROVIDED BY SHEREE HORTON, WM5N

Attendees

On Saturday September 23, 2023, a VE Test Session was held at HCESD 16 Admin, 18606 Stuebner Airline Rd, Spring, TX 77379. During the testing session, 2 candidates took 2 tests.



Congratulations!

Congratulations to the following for passing their new license exams¹:

- Michael A Millard – Technician

Congratulations to the following for passing their upgrade exams:

- Richard A McCauley Jr KJ4EAG – Upgrade to General

Pre-registration for Testing Sessions

To pre-register for an upcoming testing session, you can use one of the following links:

HamStudy.org page link: <https://hamstudy.org/sessions/arrl/77070/inperson>

The next session will be September 23, 2023 at the HCESD 16 Admin Building. Please visit www.w5nc.club for the announcement.

¹ Successful candidates will only receive their **NEW** licenses if they pay the \$35 fee to the FCC within 10 days of receipt of their notification emails. They will have to request the ARRL VEC to resubmit their paperwork if they miss the 10-day deadline. They do **NOT** have to retest.

Thanks and Gratitude

Thanks to the following VE's for serving as Assistant Session Managers:

- Michael Robinson KI0DE
- Ed Messman KT5EM

Thanks to the Exam VE's in attendance:

- Bob Ewers K9HOU
- Synomen Hebert KG5IRS
- Brett Hebert KG5IQU
- August J Canik KI5YPD

VE Session Guidelines

If you have a temperature or feel ill – DO NOT attend.

- Tables and chairs will be arranged to meet social distancing. DO NOT MOVE THEM.
- Wear masks if you are not fully vaccinated or feel the need to wear them.

Please send an email to either of the following if you plan on attending the test session:

Sheree Horton - wm5n@arrl.net or vec@w5nc.net

Volunteering and Becoming a Volunteer Examiner

Anyone who wants to observe and/or participate in a session is always welcome. Please let Sheree Horton know if you want to learn more about becoming a volunteer examiner.

Renewing Club Members

Renewing Club Members

Thank you to all the members who renewed their NARS membership this past month:

- George Cryar, KI5QYZ
- Charles Davis, KB5BAM
- Art Grant, KM4YGH
- Cindy Grant, KM4YGG
- David Holden, WJ9O
- Edward Messman, KT5EM

Did you know...

NARS now has the ability to run computer-aided tests through [Ham.Study](#). Computer-aided tests provides many benefits, including the ability to make the tests easier to administer, quicker to get results, easier for many test-takers, and many more!

NARS Membership – Due Dates and More

DID YOU
KNOW



Did you know that you can find your membership expiration date on the club website? Simply click the “Membership Reports” link on the home page or visit this link: <http://www.w5nc.club/nars/index.php/2014-03-30-18-23-31/membership-reports/club-roster>. Find your name in the list and look at the “Expires” column of the table!

Training and Education

NARS

NARS Meeting Presentations - <http://w5nc.club/nars/index.php/club-info/technical-presentations>

ARRL

ARRL Online Course Catalog - <http://www.arrl.org/online-course-catalog>

ARRL Emergency Communications Training -
<http://www.arrl.org/emergency-communications-training>

ARRL Webinars - <http://www.arrl.org/ARRL-Learning-Network#schedule>

Exam Review for Ham Radio - <http://www.arrl.org/examreview>

Find an Amateur Radio License Class -
<http://www.arrl.org/find-an-amateur-radio-license-class>



Free Study Guides

A [study guide](#) for Technician license preparation, Dan Romanchik, KB6NU

A [study guide](#) for Technician license preparation on the Inland Empire VHF Radio Club website, Jack Tiley, AD7FO (Click on "Training Links" and go to the Technician training link)

Online Video/Audio Courses

[Online Technician license exam self-study course](#), Fred Benson, NC4FB - The purpose of the resources developed for this course is to provide candidates in geographical areas that do not provide classes and candidates who cannot attend a class with the means to prepare for the Technician license exam. The materials cover all questions in the question pool with explanations, sub element tests, and sample license exams. Help is available upon request via email.

Benson also offers a ["kid friendly" self-study course](#) and a self-study program especially designed for [emergency services personnel](#).

"The Ham Whisperer" [Video Course](#), Andy Vallenga, KE4GKP – This course is based on the FCC question pool sequence to assist with Technician license preparation.

[A Self-Study Video Course](#), Dave Casler, KE0OG – This course provides a guided self-study [video course](#) based on ARRL's Ham Radio License Manual curriculum.

[Online Technician License Preparation Course](#) – Chris Johnson, N1IR

Study Tools

[HamStudy.org: Cutting edge amateur radio study tools](#) - Free ham radio flash cards, practice tests, and question pools as well as introduction to ham radio and explanations for questions.

[HamTestOnline](#) – Study Tips for the Ham Radio License Exams

[HamExam.org](#) - Free Amateur Radio Practice Tests with Flash Cards

[eHam.net Ham Radio Practice Exams](#)

Paid Resources

[W5YI Group](#) - Your Resource for Ham Radio and Commercial Radio Licensing

[HamRadioPrep](#) - Enroll in Ham Radio Prep, the industry's #1 online test prep and training program, and pass your FCC Amateur Radio License exam on the first try - or your money back.

[HamTestOnline](#) - Study for your Ham Radio License Exam!

Upcoming Skywarn Spotter Training for 2023

Training is free and open to the public. More dates to be added soon. For more details, please see [SKYWARN - Schedule \(weather.gov\)](#).

Date/Time	Location	Point of Contact
Advanced October 17 th – 5:30pm – 7:30pm	Walker County Storm Shelter Huntsville, TX	

Exam Practice Answers

Technician: T8A01 - C. Single sideband

General: G2E14 - B. All these choices are correct

Amateur Extra: E2E12 - B. ALE constantly scans a list of frequencies, activating the radio when the designated call sign is received

Of Interest to the Club

Houston Local Traffic Net

The Houston Local Traffic Net (HLTN) was formed July 14, 2020 in preparation for ARRL Field Day 2020. Originally called the Fort Bend County Traffic Net, the HLTN has been in continuous operation since then.

The nets ran on Monday nights for one hour with training sessions during the net. Because of the volume and interest in the Traffic Net, on April 15, 2021 an additional session was added on Thursday nights for 30 minutes and in 2020 the time was increased for up to an hour to also accommodate training.

The Houston Local Traffic Net currently meets from 6:30pm – 7:30pm twice a week handling National Traffic System (NTS) traffic (Radiograms) into and around the Houston Metro area and also includes, time permitted, traffic handling/training.

Monday's net: 146.940 (-) PL 167.9
Thursday's Net: 147.000 (+) PL 103.5

Backup repeater for both:

- 146.660 (-) PL 100.0,
- 444.375 (+) PL 100.0
- Echolink Node W5NC-R (all linked)

A complete schedule of Area Traffic Nets is located on the HLTN.org 'Nets' web tab with the times and frequencies. Visitors are welcome and encouraged to check-in to listen and learn this important Amateur Radio skill.

Direct any questions, via phone or email, about the Houston Local Traffic Net, Radiograms, and Traffic handling to: Sheree Horton WM5N, ARRL South Texas Section Traffic Manager

GHSN monthly Simplex Propagation Net

Beginning January 2022, the [Greater Houston Simplex Network](#) will return to its regular schedule of the 4th Thursday evening of the month, with 6:15pm for the Zoom meeting and 7:00pm for the beginning of the net. Simplex frequencies are 146.540 MHz.

I would also like to restart the relay nets for the 2nd week of each month, so I need volunteer(s) to help out as Net Control Operator. I am just swamped with developing our cool new propagation application. Please contact me if you can help with this. The script is fully developed, and can be found on [the website](#).
Contact Mark - N5PRD@yahoo.com

Calendar

Club Activities and Events

Monthly Club Meeting – October 20, 2023 - HCESD 16 Admin – [18606 Stuebner Airline Rd, Spring, TX 77379](#)

VE Test Session – October 21, 2023 – [18606 Stuebner Airline Rd, Spring, TX 77379](#) - Check-in will start at 8:30am with testing lasting from 9:00am - 11:30am. All testing activities will be completed by noon.

The full NARS calendar can be viewed at: <https://w5nc.groups.io/g/main/calendar>

Social Events

Lunch Break – North

Take a break with fellow radio operators and enjoy a lunch together!

Locations are announced weekly on the NARS email reflector!

Lunch Break – Medical Center

Near the Medical Center and want to take a break with fellow radio operators and enjoy a lunch together?

Watch the NARS email reflector for details!

Saturday Breakfast

Saturdays at 7 am Broken Yolk Café, 16803 Stuebner Airline Road, Spring, TX 77379

Monday Lunch (Taildraggers Lunch)

Mondays at 11 am; Aviator's Grill at Hooks Airport Terminal

Did you know...

NARS has a social media presence! Thanks to Sam Labarbera, N6HB, we have a Facebook page for those who would like to follow us there. Visit the [W5NC Facebook page](#) and join! It is open to ham radio operators, so there is a short quiz to qualify new members.

Hamfests and Conventions

October 6 - 7 | [Slidell EOC Hamfest](#), sponsoring the ARRL Louisiana State Convention, Slidell, Louisiana

October 7 | [Wichita Area and Kansas State Hamfest](#), sponsoring the ARRL Kansas State Convention, Wichita, Kansas

October 7 | [71st Rock Hill Hamfest](#), sponsoring the ARRL South Carolina Section Convention, Rock Hill, South Carolina

October 8 | [Nutmeg Hamfest](#), hosting the ARRL Connecticut State Convention, North Haven, Connecticut

October 13 - 14 | [Melbourne Hamfest](#), hosting the ARRL Florida State Convention, Melbourne, Florida

October 14 | [ARRL Minnesota State Convention](#), Brooklyn Park, Minnesota

October 20 - 22 | [Pacificon](#), hosting the ARRL Pacific Division Convention, San Ramon, California

November 4 - 5 | [Stone Mountain Hamfest](#), hosting the ARRL Georgia State Convention, Lawrenceville, Georgia

November 4 | [Wisconsin ARES/RACES Conference 2023](#), hosting the ARRL Wisconsin Section Convention, Wisconsin Rapids, Wisconsin

November 18 - 19 | [Fort Wayne Hamfest and Computer Expo](#), hosting the ARRL Central Division Convention, Fort Wayne, Indiana.

December 8 - 9 | [Tampa Bay Hamfest](#), hosting the ARRL West Central Florida Section Convention, Plant City, Florida

Contests and Radiosport

ARRL Contest Corral

October 2023 - <http://www.arrl.org/files/file/Contest%20Corral/2023/October%202023%20Corral.pdf>

November 2023 - <http://www.arrl.org/files/file/Contest%20Corral/2023/November%202023%20Corral.pdf>

For a calendar of ARRL contests, please see <http://www.arrl.org/contest-calendar>.

For resources and results for all ARRL contests, please see <https://contests.arrl.org>.

NARS Club Officers and Information

Board Officers with Voting Privileges

President: Ron Matussek, WA6TQH, 713-825-9606, officers@w5nc.net

Vice President: Paul Kent, KI5FJS, officers@w5nc.net

Treasurer: Tom Hoherd, KK5YU, 713-828-8630, treasurer@w5nc.net

Secretary: Brandon Rogers, K5BLR, 713-294-6630, officers@w5nc.net

Director: Rich Jones, W5VEK, officers@w5nc.net

Director: Jerry Davis, N5EKO, officers@w5nc.net

Board Non-Voting Associate Members

Administrative Secretary: Neal Naumann, N5EN

Social Media Liaison: Sam Labarbera, N6HB

Newsletter Editor: Brandon Rogers, K5BLR

Public Information Liaison: Sheree Horton, WM5N

ARRL/VEC Liaison: Sheree Horton, WM5N

Repeater Team Lead: Marty Fitzgerald, W5MF

Webmaster: Bill Buoy, N5BIA, webmaster@w5nc.net

Trustee: Paul Owen, N5NXS

Club Nets

DMR Weekly Net – Every Tuesday at 7pm. Tune in on Talkgroup 3146211 for information on configuring codeplugs, see the DMR pages on the Club website (<http://w5nc.clubs>) or contact a club Elmer. Sam Labarbera, N6HB, coordinates this Net.

The Weekly Wednesday Evening Net - Every Wednesday at 8:00 pm. Join us on one of the W5NC repeaters: 146.660 MHz, -600kHz offset, PL 100.0 - wide area centered on downtown Houston and/or 444.375, + 5 MHz offset, PL 100 best in the Spring / Klein area. You can also join from anywhere in the world by connecting to EchoLink node W5NC-R. Kirc Breden, N5XJB, coordinates this Net.

Repeaters

For information on NARS-managed repeaters, please see the club website at <http://w5nc.club/nars/index.php/repeaters/nars-repeaters>

Did you know...

that NARS has a messaging service, called Groups.io, that allows you to connect with a giant group of experts, club members, and resources. Get more information on our club website at <http://w5nc.club/nars/index.php/social-media/email-reflector-groups>