



W5NC

Houston, Texas

Northwest Amateur Radio Society

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

NARS NEWS

JANUARY 2025

Northwest Amateur Radio Society

P.O. Box 11483

Klein, TX 77391

w5nc.club

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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 PAUL KENT, KI5FJS

Election results and congratulations to our new Board members:

- President; Paul Owen, N5NSX
- Vice President: OPEN
 - Current nominee: Bob Ewers K9HOU
- Secretary: Brandon Rogers, K5BLR
- Treasure: Tom Hoherd, KK5YU
- Director One: Rich Jones, W5VEK
- Director Two: Jorge Gutierrez, WK5J

Note: our official transition date will be at the January meeting.

Annual Banquet Plans

Rob Nixon has taken on the responsibility for locating a venue for our January awards banquet and Rob and I have selected Spring Creek BBQ based on food quality and location.

Spring Creek BBQ – The Party Room
21746 Tomball Parkway (location referred to as “Rogers Rd.”)
Houston 77070

You will make your dinner selection via the standard serving line and then head for the Party Room.

December General Meeting – “Annual Show and Tell”

Great turn out for our “Annual Show and Tell”, the projects you have completed, the projects you are working on with hardware or examples was great. Thanks for your participation.

David, WJ9O kicked off the meeting with the Fox Hunt activities, good amount of discussion regarding the Fox Hunt, antenna selection, transmitter signal level and input attenuation. David was supported by Scott KA2EEU who had located a lower power UHF transmitter and loop antenna to demonstrate.

Walter K5WH provided a demo of the simulated SatCube which provides a stationary device to verify all your Tx/Rx equipment.

By-the-way, we are always looking for new or updated subject content for our general meetings, if anyone is interested in making a presentation. Please let members of the Board know. Let's get some new presenters and new subject content.

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)

T1D01

With which countries are FCC-licensed amateur radio stations prohibited from exchanging communications?

- A. Any country banned from making such communications by the American Radio Relay League (ARRL)
- B. Any country banned from such communications by the International Amateur Radio Union (IARU)
- C. Any country whose administration has notified the American Radio Relay League (ARRL) that it objects to such communications
- D. Any country whose administration has notified the International Telecommunication Union (ITU) that it objects to such communications

General (Element 3)

G3C04

What does the term "critical angle" mean, as applied to radio wave propagation?

- A. The long path azimuth of a distant station
- B. The short path azimuth of a distant station
- C. The highest takeoff angle that will return a radio wave to Earth under specific ionospheric conditions
- D. The lowest takeoff angle that will return a radio wave to Earth under specific ionospheric conditions

Amateur Extra (Element 4)

E0A05

What hazard is created by operating at microwave frequencies?

- A. Microwaves are ionizing radiation
- B. Microwaves are in the frequency range where wave velocity is higher
- C. The extremely high frequency energy can damage the joints of antenna structures
- D. The high gain antennas commonly used can result in high exposure levels

See the answers on [Page 21](#).

NARS Membership – Due Dates and More



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](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!

Amateur Radio News

An excerpt from the ARRL News

ARRL Teachers Institute on Wireless Technology Now Accepting Applications for 2025 Cohorts

The ARRL Teachers Institute on Wireless Technology (TI) continues to grow. Fresh off a [highly successful YouTube telethon](#) that raised more than \$41,000 for the program, some of next year's dates have been announced. Applications are now open.

The program is growing, and educators will have the opportunity to attend sessions around the country. "We love having the teachers here at ARRL Headquarters, but we wanted to bring this program nationwide," said ARRL Education and Learning Manager Steve Goodgame, K5ATA. Dates and details of the regional sessions are still being determined, but the hope is to touch many areas of the United States.

The application process is straightforward. Interested educators can find the web form at www.arrl.org/ti. ARRL covers all the costs of the TI, including travel, but there is a \$100 application fee if the teacher is accepted.

The success generated from the program is demonstrable. "The teachers leave TI with energy and knowledge. They've taken that and built tremendous programs in their schools," said

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>

Goodgame. The program isn't necessarily designed to get young people licensed, but rather to get them thinking about radio in their other areas of study. Teachers work amateur radio and radio technology into science, technology, engineering, and mathematics lessons. Amateur radio is presented as a pathway to get hands-on with the concepts, and to use them in the real world.

There are 16 cohorts planned for the 2025 ARRL Teachers Institute on Wireless Technology. "The growth we're seeing in TI is a result of the teachers' experiences with the program, and the donors who enable it," said Goodgame. The TI is funded entirely by donations to the [ARRL Education & Technology Fund](#).



ARRL Awards Recognize Excellence in Ham Radio

It probably isn't hard to think of someone you know in the hobby who goes above and beyond in service to amateur radio, their club, their fellow hams, or their community. Volunteers are the very core of the Amateur Radio Service, and that dedication is what carries the ARRL Field Organization. Excellence in on-air operating inspires the rest of us to be better, build better, and do better.



Ed Menasian, N8LPQ, won the 2024 ARRL Technical Service Award.

ARRL seeks your help in honoring the outstanding work done by hams, through the ARRL Service Awards. There are a host of different awards which are divided into four categories: Education Awards, Media/Public Relations Awards, Technical Awards, and Distinguished Service Awards.

Education Awards

Hiram Percy Maxim Memorial Award

Named for the Founding President of ARRL, this award goes to a licensed radio amateur under age 21 who has made exemplary contributions to amateur radio and the local community. Nominees must be current ARRL members. Nomination deadline: March 31, 2025.

ARRL Herb S. Brier Award for Instructors and Teachers

Honoring Herb S. Brier, W9AD (SK), ARRL sponsors this award in conjunction with the Lake County (Indiana) Amateur Radio Club to recognize the very best in amateur radio instruction and recruitment. The award goes to a licensed radio amateur and ARRL member who is an ARRL-registered volunteer instructor or ARRL-registered professional classroom teacher. Nomination deadline: March 15, 2025.

Technical Awards

ARRL Microwave Development Award

This award recognizes a radio amateur or group of radio amateurs who contribute to the development of the amateur radio microwave bands. Nomination deadline: March 31, 2025.

ARRL Technical Service Award

This award recognizes a radio amateur or group of radio amateurs who provide amateur radio technical assistance or training to others. Nomination deadline: March 31, 2025.

ARRL Technical Innovation Award

This award recognizes a radio amateur or group of radio amateurs who develop and apply new technical ideas or techniques in amateur radio. Nomination deadline: March 31, 2025.

Public Relations Awards

ARRL Philip J. McGan Memorial Silver Antenna Award

Honoring Phil McGan, WA2MBQ (SK), this award recognizes a radio amateur and ARRL member who has demonstrated leadership in successfully promoting amateur radio to the public. Nomination deadline: March 31, 2025.

ARRL Bill Leonard Award

Honoring Bill Leonard, W2SKE (SK), three annual awards are given to professional journalists or journalistic teams whose outstanding coverage highlights the enjoyment, importance, and public service contribution of the Amateur Radio Service. The award is given in three media categories: audio, visual, and print. Nomination deadline: March 31, 2025.

Distinguished Service Awards

Knight Distinguished Service Award

Honoring Joe T. Knight, W5PDY (SK), the award recognizes exceptional contributions by a Section Manager to the health and vitality of ARRL. Nomination deadline: March 31, 2025 (for consideration during the July ARRL Board meeting).

George Hart Distinguished Service Award

Honoring George Hart, W1NJM (SK), the award recognizes an ARRL member's lifetime of activities within the ARRL Field Organization, including the National Traffic System and the Amateur Radio Emergency Service®. Nomination deadline: November 1, 2025.

CWops Announces 2024 Advancing the Art of CW Award

Each year, [CWops](#), an international organization that promotes and advances Morse code (CW) in amateur radio communications, accepts nominations for individuals, groups, and organizations for the CWops Award for Advancing the Art of CW. The award recognizes contributions made toward advancing the art or practice of radio communications by Morse code.



[The Radio Officer's Association](#) (ROA) is the recipient of [the 2024 CWops Award for Advancing the Art of CW](#). ROA honors and preserves the history and accomplishments of radio professionals from across the Merchant Navy, Coast Station Service, and Civil Aeronautical industry. Its membership includes nearly 400 former professional radio officers, half of whom hold amateur radio licenses. CWops recognized ROA's efforts to preserve CW history through its journal, and for activities that span CW mentoring, on air nets, and CW-related museum displays and related activities.

The award was recently accepted by ROA's Bill Cross, G0ELZ, at the organization's annual meeting in Liverpool, England. It was presented by CWops President Stew Rolfe, GW0ETF.

Winter Field Day 2025

[Winter Field Day \(WFD\)](#), hosted by the Winter Field Day Association, is scheduled to run from 1900 UTC on Saturday, January 25, through 1859 UTC on Sunday, January 26.

WFD is held on the last full weekend in January and is a communications exercise that can be worked from the comfort of your home or from a remote location. You can participate by yourself, with your friends and family, or with a local club.



WFD is designed to help increase your level of preparedness for disasters and for you to improve and practice your operating skills in winter environments, as the potential for freezing temperatures, snow, ice, and other hazards present unique operating conditions.

WFD is open to participants worldwide. Amateur radio operators may use frequencies on the HF,

VHF, or UHF bands and are free to use any mode that can faithfully transmit the required exchange intact. Similar to ARRL's Field Day, bonus points are earned in several ways, including from using non-commercial power sources, operating from remote locations, making satellite contacts, and more. Make sure you register your location at the [WFD registration page](#). To date, there are 345 locations registered around the world.

Also, remember to mark your calendar for 2025 ARRL Field Day on June 28 - 29. For additional information, visit [Field Day \(arrl.org\)](#).

On Air: Southeast Missouri Amateur Radio Club provides community for those interested in communication

The Southeast Missouri Amateur Radio Club (SEMOARC) has been a beacon for radio enthusiasts since its inception in 1958. The club, which meets monthly at the Jackson Civic Center, offers a welcoming community for those passionate about amateur radio. Members like Henry Clark and Larry Mohundro share their experiences and the joy they find in this unique hobby. Clark, who has been involved in amateur radio since the 1970s, enjoys building antennas and communicating with people worldwide. Mohundro, the club's president, emphasizes the sense of belonging and support that the club provides to its members.

Amateur radio, regulated by the Federal Communications Commission (FCC), allows operators to communicate globally, participate in contests, and assist in emergency communications. The SEMOARC is home to around 60 members, each with their own call sign and unique interests within the hobby. For instance, Kirk Barks enjoys the technological aspects, while Patty Chiles is motivated by the competitive nature of earning awards. The club's activities not only foster technical skills but also build a strong sense of community among its members.

The club's meetings are open to anyone interested in learning more about amateur radio. Members can seek help from experienced operators, known as "Elmers," and participate in activities like "fox hunts," where they use radio technology to locate hidden transmitters. This camaraderie and shared passion for amateur radio create a supportive environment where members can expand their knowledge and enjoy the hobby together.

Overall, the Southeast Missouri Amateur Radio Club is more than just a group of radio enthusiasts; it's a community where people from all walks of life come together to share their love for communication and technology. Whether it's building antennas, participating in contests, or providing emergency communication, the club offers something for everyone interested in amateur radio.

For more information, please [see this page](#).

Communication technology: Options for staying connected for next year's storm season

As hurricane season approaches, Floridians are reminded of the importance of staying connected during severe weather. While many prepare with non-perishable food and clean water, technological preparedness is often overlooked. The recent hurricane season saw significant communication challenges, with internet outages and poor cell service affecting thousands. To combat this, various solutions are available, ranging from affordable ham radios to more sophisticated satellite internet services.

Ham radios, regulated by the Federal Communications Commission (FCC), offer a reliable and cost-effective way to maintain communication during disasters. For just \$35, individuals can obtain a 10-year radio license, and hand-held radios can be purchased for as little as \$25. Amateur radio operators, like those in the Fort Myers Amateur Radio Club, play a crucial role in emergency

communications, often stepping in when traditional services fail. Their ability to operate independently of damaged infrastructure makes them invaluable during crises.

On the other hand, satellite internet services, such as Elon Musk's Starlink, provide high-speed connectivity even in the most challenging conditions. Although more expensive, with hardware costs starting at \$350 and monthly subscriptions ranging from \$50 to \$160, satellite internet ensures consistent connectivity. This technology has proven essential in recent hurricanes, allowing residents to stay connected with emergency services and loved ones. The ability to pause subscriptions and the portability of satellite receivers make this option increasingly attractive.

For those seeking a robust and consistent internet connection, cellular bonding technology offers a viable solution. By combining multiple signals from satellites and ground-based cellular providers, this technology ensures reliable connectivity from virtually anywhere. While more costly, cellular bonding is particularly useful for businesses and emergency services. As Floridians brace for the next storm season, these technological options provide peace of mind and a lifeline during emergencies.

For more information, please [see this page](#).

Hams Give Hillsboro Charter Students a Space Station Hookup

At approximately 1:45 p.m. on Wednesday, the International Space Station (ISS) passed over Loudoun County, allowing Ham radio operator Steve Greene to establish a connection with Astronaut Suni Williams from Hillsboro Charter Academy. This remarkable event, facilitated by the Amateur Radio on the International Space Station (ARISS) program, provided students and teachers with a unique opportunity to engage with Williams and ask her questions about life in space. The call, which lasted

about 10 minutes, was a once-in-a-lifetime experience for everyone involved.

The ARISS program, which connects schools to the ISS, selects around 100 schools worldwide each year, with 20 to 25 of them in the United States. This was the first time Hillsboro Charter Academy participated in the program, and the excitement was palpable. Students asked Williams a variety of questions, ranging from how astronauts bathe in space to the best innovation on the ISS. One memorable question came from eighth-grader Anna Parker, who asked Williams what she would wish for if she could have one item right now. Williams' heartfelt response was her dog, highlighting the personal sacrifices astronauts make while in space.

The process of arranging the call was extensive, taking almost a year from application to execution. Megan Tucker, the Dean of Curriculum and technology teacher at Hillsboro, spearheaded the effort. She attended an American Radio Relay League summer camp for teachers, which gave her the confidence to navigate the lengthy application process. The school had to provide regular updates to ARISS about their curriculum and how they were engaging students in amateur radio. This dedication paid off, culminating in a successful and inspiring event.

The experience left a lasting impression on the students, particularly those in the Ham Radio Club. Fifth-grader Juliet Ellinger expressed her newfound interest in pursuing a Ham radio license. The event not only provided a rare glimpse into life aboard the ISS but also sparked a passion for amateur radio among the students. The Hillsboro Charter Academy Ham Radio Club, with its dedicated teachers and enthusiastic students, exemplifies the power of hands-on learning and the importance of fostering curiosity and technical skills in young minds.

For more information, please [see this page](#).

Amateur radio antenna returns to Carson Planning Commission

The Carson City Planning Commission is set to review a special use permit (SUP) for a proposed 62-foot-tall amateur radio antenna at 1630 S. Deer Run Road. The applicant, Michael Vicari, seeks to construct this antenna to enhance emergency communications in collaboration with the Military Auxiliary Radio System (MARS). The antenna, which can retract to 30 feet, aims to provide significantly improved communication capabilities compared to ground-mounted systems. Despite the local zoning district's 32-foot height limitation, the SUP would allow the structure to exceed this restriction.

The application has faced several hurdles, including an initial denial by the Carson City Community Development director. However, after Vicari provided additional information on effective radio communications, the Planning Commission remanded the appeal for further review. The staff report highlights federal regulations that limit local governments' ability to regulate amateur radio structures, supporting the need for the proposed height to achieve effective communications.

Public notices about the project were sent to 36 property owners within 600 feet of the site, with no written comments received as of the report's writing. The Planning Commission's decision will be crucial in determining whether the antenna can be constructed as proposed. This project underscores the ongoing balance between local zoning regulations and the need for robust emergency communication infrastructure.

In addition to the antenna proposal, the Planning Commission will consider other significant matters, including amendments to the tentative subdivision map conditions for Blackstone Ranch South and a one-year extension for a multifamily residential development in the Silver Oak Planned Unit Development. These discussions reflect the

commission's broader role in shaping the community's development and ensuring that projects align with both local regulations and broader community needs.

For more information, please [see this page](#).

Ham radio is still a disaster lifeline, even in the iPhone era - here's why

In an era dominated by smartphones and advanced technology, ham radio remains a vital lifeline during disasters. When conventional communication systems fail, amateur radio operators step in to bridge the gap, providing crucial links between affected areas and the outside world. These skilled volunteers use their equipment to establish communication networks, often when cell towers are down and internet access is unavailable. Their efforts not only connect individuals but also help coordinate large-scale relief efforts, ensuring that emergency management officials receive critical information and resources are directed where they are needed most.

Ham radio operators, despite being labeled "amateurs," are highly trained and prepared for emergencies. They undergo regular training and participate in drills, such as the Amateur Radio Emergency Service (ARES) Field Day, to ensure they are ready for any disaster. Armed with battery-powered radio equipment, these operators create self-organized networks to relay messages about victims, supplies, and damage reports. They use standardized message formats and procedures to transmit information accurately, prioritizing emergency traffic over routine communications.

In the United States, ham radio operators are regulated by the Radio Amateur Civil Emergency Service (RACES) and often complete additional training with the Federal Emergency Management Agency (FEMA) and the National Weather Service (SKYWARN). This training enables them to work effectively within emergency management

communication frameworks and provide accurate severe weather reports. Many operators also take Auxiliary Communications (AUXCOMM) training to integrate seamlessly into local emergency operations centers.

For those interested in becoming a ham radio operator, the journey begins with studying ham radio concepts and passing the FCC Amateur Radio License Exam. Joining a local ham group can accelerate the learning process and provide valuable support. With their skills and dedication, ham radio operators continue to play an indispensable role in disaster response, ensuring that communication lines remain open and help reaches those in need.

For more information, please [see this page](#).

Local club connecting amateur radio enthusiasts

The Steubenville-Weirton Amateur Radio Club (SWARC) is a vibrant community for ham radio enthusiasts in the Ohio Valley. Founded to connect individuals passionate about amateur radio, the club offers a space for members to share their experiences and knowledge. With nearly 50 members, SWARC meets twice a month at the Public Library of Steubenville and Jefferson County Main Library and a local restaurant. These gatherings provide opportunities for members to discuss club business, participate in learning sessions, and socialize.

SWARC is affiliated with the American Radio Relay League and includes several volunteer examiners authorized by the FCC to conduct licensing examinations. The club supports members in obtaining their licenses, which are necessary to operate ham radios in the U.S. There are three levels of licensure: technician, general, and amateur extra, each granting access to more frequency bands. The club also organizes "nets," or on-air

gatherings, for disaster preparedness training, information sharing, and socialization.

The club's activities extend beyond meetings and nets. Members participate in events like the Parks on the Air program, where they set up stations in parks and attempt to make contacts with other operators. SWARC also plays a crucial role in emergency communications, providing reliable communication services when traditional methods fail. This was particularly evident during recent hurricanes in the American Southeast, where ham radio operators assisted first responders and relief organizations.

SWARC members are dedicated to promoting amateur radio and supporting each other. The club offers discounted membership fees for individuals under 18 and waives the first year's fee for those who pass their licensure exam. With a mix of seasoned operators and newcomers, SWARC fosters a welcoming environment for anyone interested in exploring the world of amateur radio. Whether for casual enjoyment or serious emergency communication, the club provides valuable resources and a sense of community for its members.

For more information, please [see this page](#).

John J. Ellis, NP2B – Silent Key

John J. Ellis, NP2B, former ARRL Section Manager for the US Virgin Islands, became a Silent Key (SK) December 3, 2024. He was 81 years old. Originally licensed as KØMMI in Kansas City in 1957, Ellis also held the calls W5RPI and W4MRJ, and was known as a DXer and contester. He and his wife, Jeanette, KB4XO, lived on St. Croix between 1988 and 2012. During hurricane seasons there, he served as net control operator for the Maritime Mobile Service Net and the Hurricane Watch Net. In 2012, Ellis and his wife moved to The Villages, Florida, where he was an active contributing member of The Villages Amateur Radio Club. A celebration of life service

was held on December 9, 2024. In lieu of flowers, memorial contributions may be made in Ellis's name to American Radio Relay League at www.arrl.org/memorial-gifts or by mail to:

Kevin Beal, K8EAL
ARRL Director of Development
225 Main Street, Newington, CT. 06111-1494
telephone 860-594-0317

“Dream Rig” Essay Contest Winners

The [Intrepid-DX Group](#) has announced the winners of the fifth annual Youth “Dream Rig” Essay Contest. Thirty-four essays were received from young amateurs in Canada and the USA. Judges concluded that each essay was unique in thought and very well written. Extra consideration was given for correct grammar, punctuation, and spelling. The essays gave interesting perspectives on how to reach out and connect with the youth of today. The First Place winner, and recipient of the ICOM IC-7300, is Katie Campbell, 16, KE8LQR. The Second Place winner, and recipient of an ICOM ID-52A dual-band multi-function D-STAR radio, is 14-year-old Lila Shearer, KK7RRV. The Third Place winner, and recipient of an ICOM T-10 dual-band handheld transceiver, is 15-year-old Michael Simon, KK7KLG. “Having read your many essays, we can tell that our youth are full of great ideas, and are brimming with enthusiasm to keep our hobby alive well into the future,” said Paul Ewing, N6PSE, Intrepid-DX Group President. “We received a number of outstanding essays, and we wish that we had more prizes for the deserving authors. In the coming weeks, we will be sharing the winning essays on our [Facebook page](#). Thank you to all the youth participants for helping us make our fifth annual youth essay contest a success.”

HamSCI Community Workshop

Ham Radio Science Citizen Investigation, HamSCI, will hold its 2025 community workshop on March 14 - 15, 2025, at the New Jersey Institute of Technology (NJIT) in Newark, New Jersey. The theme for this

year's conference is “HamSCI's Big Year” and will provide an opportunity for both amateur radio and professional research communities to collaborate and share ideas. The session planned for Friday will be organized in the format of a traditional science workshop, with a full day's program of oral technical and scientific presentations. The Saturday session will focus more on the “citizen science” (volunteer) aspects of HamSCI, where amateur radio operators make the greatest impact. HamSCI and NJIT will be hosting a banquet on Friday night, with a keynote speaker. Conference and registration details will be available soon. For more information about HamSCI, and to join the mailing list and receive their quarterly newsletter, please visit the HamSCI website. Ham Radio Science Citizen Investigation, HamSCI, will hold its 2025 community workshop on March 14 - 15, 2025, at the New Jersey Institute of Technology (NJIT) in Newark, New Jersey. The theme for this year's conference is “HamSCI's Big Year” and will provide an opportunity for both amateur radio and professional research communities to collaborate and share ideas. The session planned for Friday will be organized in the format of a traditional science workshop, with a full day's program of oral technical and scientific presentations. The Saturday session will focus more on the “citizen science” (volunteer) aspects of HamSCI, where amateur radio operators make the greatest impact. HamSCI and NJIT will be hosting a banquet on Friday night, with a keynote speaker. Conference and registration details will be available soon. For more information about HamSCI, and to join the mailing list and receive their quarterly newsletter, please visit the [HamSCI website](#).

ARRL Podcasts Schedule

December YOTA Month

In early 2025, the ARRL Education & Learning Department will launch an interactive livestreamed video podcast, *On the Air Live*. The monthly episodes will be aimed toward educating new and intermediate-level hams, inspiring them to explore the nearly endless aspects of amateur radio and develop their skills. ARRL Education Specialist Wayne Greene, KB4DSF, who will host each episode, joins the *On the Air* podcast to share more details, including upcoming topics and how to participate in real time.

ARRL Audio News

Listen to [ARRL Audio News](#), available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.



The *On the Air* podcast and ARRL Audio News are available on blubrry, iTunes, and Apple Podcasts -
- [On the Air](#) | [ARRL Audio News](#).

NARS Monthly Club Meeting

December General Meeting

The Northwest Amateur Radio Club (NARS) met for the December General Meeting at the HCESD 16 Admin Building. As part of the meeting, members shared and demonstrated projects and kit that they have worked on this year. From foxhunts to antenna to CubeSats, our annual “Show and Tell” meeting was full of fantastic information and presenters!

Next Club Meeting

As is tradition, the Annual Banquet will be held in lieu of our January General Meeting. The Annual Banquet will be held on January 17th, 2025 at Spring Creek BBQ (Roger’s Rd Location), Houston, TX 77070. Arrive around 6:30pm to order your food and stay for a program to start at 7:30pm. We hope to see everyone 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, Klein, TX 77379](#)
Zoom Conference Call, Meeting ID: 2815436502, Passcode: 123456

New Radio for New Hams: Jumpstart Program



QRZ, RT Systems and GigaParts have teamed up to offer a sustainable program that is available, while supplies last, to amateur radio operators licensed in the USA for 6 months or less. The program offers a coupon code to the new ham that gives them a QRZ-1 radio, programming cable, RT Systems programming software, New Ham Welcome Kit, and a QRZ membership for only **\$21.99 (+tax & + S&H)**.

What's Included:

- Explorer QRZ-1 Handheld Radio
- Programming cable
- RT Systems Programming Software
- Premium QRZ Subscription

How it Works:

1. Apply at <https://www.qrz.com/jumpstart>
2. Receive your unique discount code from QRZ via email
3. Add a QRZ-1 to your cart.
4. Add any accessories you may want to purchase.
5. At checkout, enter your unique discount code

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.

Automating Your Ham Radio Shack: A Modern Approach to Amateur Radio

In the ever-evolving world of amateur radio, automation has become a game-changer for enthusiasts looking to enhance their ham radio shacks. By integrating modern technology, operators can streamline their setups, improve efficiency, and enjoy a more seamless experience. This article explores the benefits of automating your ham radio shack and provides practical tips for getting started, along with some recommended products.

The Benefits of Automation

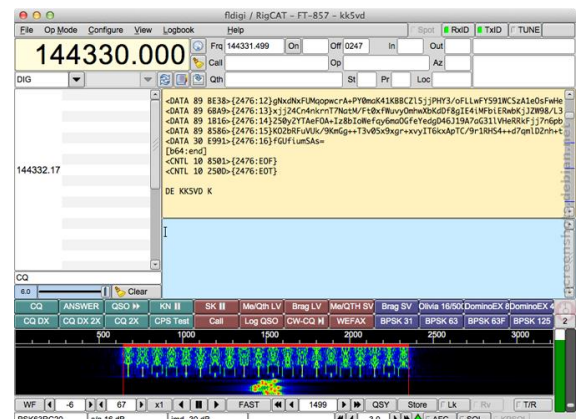
Automation in a ham radio shack offers numerous advantages. Firstly, it allows operators to manage multiple tasks simultaneously, such as logging contacts, controlling antennas, and monitoring frequencies. This multitasking capability is particularly useful during contests or emergency situations when time is of the essence. Additionally, automation can reduce the risk of human error, ensuring more accurate and reliable operations.

Another significant benefit is the ability to remotely control your ham radio equipment. With the right setup, operators can access their shacks from anywhere in the world, making it easier to participate in global events and maintain communication during travel. Remote access also provides a convenient solution for those with limited space or who prefer to keep their equipment in a dedicated location.

Getting Started with Automation

To begin automating your ham radio shack, you'll need to invest in some essential hardware and software. Key components include a computer, an interface device to connect your radio to the computer, and automation software. There are many Popular software options, including [Ham Radio Deluxe](#), [N1MM](#), [Logger+](#), and [FLdigi](#), which are low cost and which offer a range of features to suit different needs.

FLdigi is a commonly used and supports PSK31, RTTY, and CW, making it a powerful tool for any ham radio operator. To get started, you'll need to connect your radio to your computer. If your radio supports USB connections, this may be a relatively trivial task. Simply follow the instruction manual for your radio to configure the software to connect to the FLdigi software. If your radio does not support a USB connection, you may be able to use an interface device, such as the [SignalLink USB Interface](#), combined with VOX mode to semi-automate your rig. Once connected, you can configure FLdigi to handle tasks like



frequency changes, mode switching, and signal processing automatically.

While FLdigi is a common option, there are many options out there that provide this same functionality. In some cases these software packages are even provided by the manufacturer of your radio.

Remote Operation

Enabling remote operation of an amateur radio station can significantly enhance your flexibility and convenience as an operator. Remote operation can be integrated into your radio, as with the FlexRadio SDRs, or can be software loaded onto the computer connected to your radio. There are several popular free and paid options, including [VNC](#), [RemoteHams](#), [Remote Desktop \(RDP\)](#), or others. These software package will allow you to connect, potentially from anywhere in the world, to the computer connected to your radio. You can then operate the radio remotely.



You may need to configure a connection through your home router to allow connection to these services. Reach out to a club elmer for help configuring these solutions, if you are interested and need help.

Advanced Automation Techniques

Another advanced technique is to implement a software-defined radio (SDR) system. SDRs use software to perform radio functions traditionally handled by hardware, offering greater flexibility and control. By integrating an SDR into

your setup, you can enjoy features such as spectrum analysis, digital signal processing, and advanced filtering. Learn more about [SDRs here](#).

Many SDRs offer native connectivity to home networks and remote control is built-in to the product. If you have an SDR, review the radio manual for more details on how to do this. If you need help, reach out to a club elmer.

Conclusion

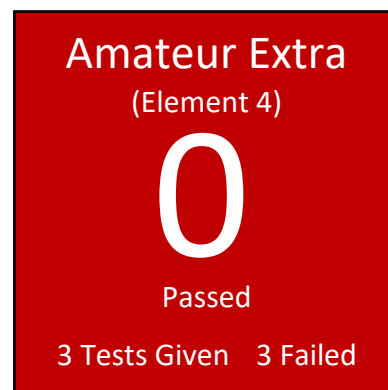
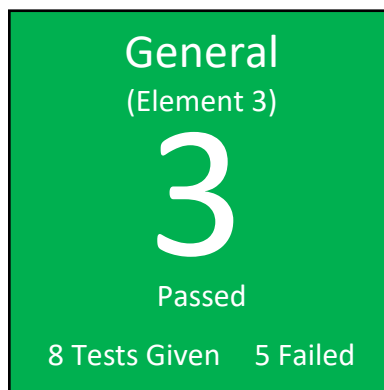
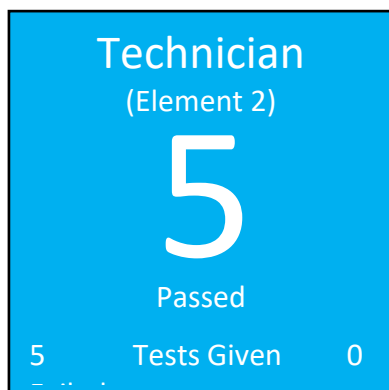
Automating your ham radio shack can significantly enhance your amateur radio experience, providing greater efficiency, accuracy, and convenience. By investing in the right hardware and software, and exploring advanced techniques, you can create a modern, streamlined setup that meets your needs. Whether you're a seasoned operator or a newcomer to the hobby, automation offers exciting possibilities for the future of amateur radio.

VE Sessions and Results

PROVIDED BY SHEREE HORTON, WM5N

Attendees

On Saturday December 21, 2024, a VE Test Session was held at HCESD 16 Admin, 18606 Stuebner Airline Rd, Klein, TX 77379. During the testing session, 12 candidates took 16 tests.



Congratulations!

Congratulations to the following for passing their new license exams:

- Keith E Black – new Technician
- Jason M Boughter – new Technician
- Ronald C Geedman - new Technician
- Tim D Keller - new Technician
- Kevin C Milazzo - new Technician

Congratulations to the following for their successful upgrade:

- Mitchell Boughter KJ5GZR (Youth) – upgrade to General
- Glen H Freeland K5GLN - upgrade to General
- Michael E Mittman KJ5FQV - 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 January 18, 2025 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 Exam VE's in attendance:

- Brett Hebert KG5IQU – Session Manager
- Synomen Hebert KG5IRS
- Brynn Hebert KG5KRV
- Paul Owen N5NXS
- Robert Ewers K9HOU
- Kyle Vann K5KNV
- Logan Hebert KG5LLM (non-VE) - an extra thanks for helping with the session

VE Session Guidelines

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

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 Brett Hebert KG5IQU know if you want to learn more about becoming a volunteer examiner. He will be the NARS VE Liaison beginning January 1st.

New & Renewing Club Members

New Club Members

Welcome to the following new members of NARS!

- Fernando Teston, N5FRF
- Robert Williams, KJ5IMW

Renewing Club Members

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

- Bill Bierman, N5RDO
- Ralph DiGuilio, KF5AHC
- Randolph Pickut, KI5LQS
- Paul Protas, WA5ABR
- Brandon Rogers, K5BLR
- Stephen Stepinoff, KG5VUG
- Nora Stovall, KB5FYJ
- William Walker, KI5ZDD

NARS Club Documents and Minutes



Did you know that you can find all of the club's public documents, including board meeting minutes, financial statements, and newsletters on the [club website](http://www.w5nc.club/doc_repos/) at http://www.w5nc.club/doc_repos/?

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!

Exam Practice Answers

Technician: T1D01 - D. Any country whose administration has notified the International Telecommunication Union (ITU) that it objects to such communications

General: G3C04 - C. The highest takeoff angle that will return a radio wave to Earth under specific ionospheric conditions

Amateur Extra: E0A05 - D. The high gain antennas commonly used can result in high exposure levels

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: 147.190 PL 123.0

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

NARS Annual Banquet January 17th, 2025 at [Spring Creek BBQ \(Roger's Rd Location\), Houston, TX 77070](#). The banquet will be held in lieu of the General Meeting.

VE Test Session – January 18, 2025 – [18606 Stuebner Airline Rd, Klein, TX 77379](#) - Check-in will start at 8:30am with testing lasting from 9:00am - 11:00am. 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

January 17-18 | Cowtown Hamfest in Fort Worth

February 7 - 9, 2025 | Orlando HamCation, ARRL Southeastern Division Convention, Orlando, Florida

March 7-8 | Greater Houston Hamfest

Contests and Radiosport

ARRL Contest Corral

January 2025 - <https://www.arrl.org/files/file/Contest%20Corral/2025/January%202025%20Corral.pdf>

February 2025 - <https://www.arrl.org/files/file/Contest%20Corral/2025/February%202025%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

President: Paul Owen, N5NSX, officers@w5nc.net

Vice President: TBN

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: Jorge Gutierrez, WK5J

Committee Team Members

Administrative Secretary: Neal Naumann, N5EN

Social Media Liaison: Sam Labarbera, N6HB

Newsletter Editor: TBN

Public Information Liaison: TBN

VE Liaison to the ARRL VEC: Brett Hebert, KG5IQU

Repeater Team Lead: Rich Jones, W5VEK

Lead Net Control Operator: Mike Lizzio, WA2TOP

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

Trustee: Paul Owen, N5NXS

Club Nets

The Weekly Tuesday Evening Net - Every Tuesday at 7:00 pm. Join us on one of the W5NC DMR access points:

- Hotspot: Brandmeister NARS Talk Group 3146211 CC 1 Slot 2
- Klein: 440.3000 DMR Repeater CC3 Slot 1
- Droidstar/Dudestar Apps: CC1 Slot 2

The Weekly Wednesday Evening Net - Every Wednesday at 8:00 pm. Join us on one of the W5NC Analog access points:

- NARS Analog Access
- Klein: UHF Analog Repeater 444.3750 Tone 100
- Access points:
 - ALLSTAR: 59847
 - Echolink: W5NC-R

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>

Please be on the lookout for a weekly message from Mike WA2TOP on w5nc.groups.io/g/main for more information.