



W5NC

Houston, Texas

Northwest Amateur Radio Society

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

NARS NEWS

MAY 2024

Northwest Amateur Radio Society

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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 RON MATUSEK, WA6TQH

MFJ Announces the End of an Era

In an email that resonated deeply within the amateur radio world, Martin F. Jue, the founder of the iconic MFJ Enterprises, announced the cessation of on-site production.

Founded over 52 years ago the impact of the Covid pandemic has been profoundly felt, with Jue noting that it was "the hardest hit that we have ever had" and one from which the company never fully recovered.

While the news of the production stop is a disappointment to many in the ham radio community, MFJ is not closing its doors entirely. Jue assures customers and dealers that MFJ products will continue to be sold past the May deadline, thanks to a considerable existing stock. Additionally, the company will maintain its commitment to customer service by offering repair services for both out-of-warranty and in-warranty units for the foreseeable future.

Field Day Organization

Our Field Day Coordinator volunteer Paul Owen, N5NXS, has us off to an exceptionally good start.

Please keep the weekend of Field Day open and come out to have some fun operating.

June 22 and 23, starting time is 1800 UTC (1pm local) Saturday to 1800 UTC (1pm local) Sunday.

Yea, I know it's a long time away but it's only 7 weeks away.

Put it down on your calendar and then give it some thought on what you can do for the club to help out.

Please plan on coming out to make it a great day on one or both days.

New Ownership of IO-117 "GreenCube" Satellite

Rome, April 30, 2024 - AMSAT Italia is proud to announce the acquisition of the quote of property of the IO-117 "GreenCube" satellite. The other part of the property remains on behalf of "Sapienza University," Rome, Italy.

A collaborative work of the parts will let the satellite continue the amateur radio operations after the completion of the primary scientific mission. This will definitively avert the satellite decommissioning process by transferring the legal responsibility of the satellite from the Italian Space Agency to AMSAT Italia. Even formally and legally, the satellite, already known with its original name of GreenCube, becomes for the exclusive use of amateur radio. The scientific community continues the study of the behavior of this type of satellite placed in MEO orbit.

GreenCube was designed and developed by Sapienza University, ENEA and University of Naples Federico II for the Italian Space Agency AMSAT Italia contributed to design the digipeater and supported amateur radio operations. IARU coordinated the use of the operations in the amateur radio frequency bands.

The satellite was carried on the qualification flight of Vega-C launcher on July 13, 2022, from the French Guiana Space Center in Kourou. On October 29, 2022, the on-board digipeater was activated, allowing

GreenCube to become the first ham radio satellite to operate in a MEO orbit. Being a radio amateur worldwide success, AMSAT officially designated the satellite as Italy-OSCAR 117 (IO-117).

AMSAT Italia and Sapienza Space Systems and Space Surveillance Laboratory - S5LAB- are now committed to operating the satellite and to continue to offer the service to the amateur radio community.

For further information please contact AMSAT Italia at segreteria at amsat.it.

Board Positions Open

We have two positions open so if you are interested and have the time, please contact a board member.

1. Opening – “Public Information Officer” effective January 2024
 - a. See By-Laws for position description.
2. Opening – “Director” effective January 2024
 - a. See By-Laws for position description.

As you can see there is a lot of activity in the Global Amateur Radio Community, however NARS has a lot on the menu going forward. Stay up to date with our weekly VHF and DMR nets (info at w5nc.club) and be sure to attend our monthly NARS General meetings.

See you at the May 17th General Meeting!

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!

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)

T7B04

Which of the following could you use to cure distorted audio caused by RF current on the shield of a microphone cable?

- A. Low-pass filter
- B. Ferrite choke
- C. Preamplifier
- D. Band-pass filter

General (Element 3)

G2C10

What does the Q signal "QRN" mean?

- A. Zero beat my signal
- B. Send more slowly
- C. I am troubled by static
- D. Stop sending

Amateur Extra (Element 4), Ending June 30th

E1C07

At what level below a signal's mean power level is its bandwidth determined according to FCC rules?

- A. 26 dB
- B. 6 dB
- C. 23 dB
- D. 3 Db

Amateur Extra (Element 4), New!

E9C10

Which of the following describes a Zepp antenna?

- A. An omni-directional antenna commonly used for satellite communications
- B. A vertical array capable of quickly changing the direction of maximum radiation by changing phasing lines
- C. A horizontal array capable of quickly changing the direction of maximum radiation by changing phasing lines
- D. An end-fed half-wavelength dipole

See the answers on [Page 30](#).

The ARRL Letter

An excerpt from the weekly ARRL Letter

2024 ARRL National Convention at Dayton Hamvention -- Program and App Available

The 2024 ARRL National Convention, hosted by Dayton Hamvention®, is just a month away, and the convention program guide is now available at www.arrl.org/expo. The ARRL Events app is also ready to use, encouraging everyone planning to attend to preview all of the Hamvention exhibits, forums, and related activities.

Download the free [ARRL Events](#) app, or access the content from an internet [browser](#). The app is offered in partnership with Hamvention, and it contains Hamvention's full program and live updates, so attendees can browse and schedule forums, find affiliated events, and preview the extensive list of exhibitors. During the event, attendees can use many of the app's other features to follow the hourly prize drawings organized by the Dayton Hamvention Prize Committee and browse building and site maps.

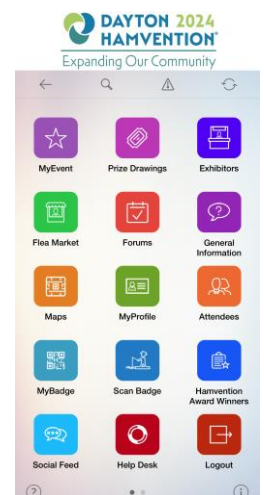


Did you know...

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>

The MyProfile icon in the app allows users to add their name, call sign, email address, and any additional information they would like to share with other Hamvention attendees.

Additionally, the MyBadge icon displays a QR code of your event badge that can be scanned by another attendee or exhibitor using the Scan Badge icon to instantly share contact information with other hams at the event. The app is available for Apple and Android smart devices. You can also access the web browser version, which is optimized for nearly any browser or mobile device.



Use the app to preview many of the informative presentations planned by Hamvention and ARRL that cover a variety of topics and interests to help grow your skills as a radio amateur -- no matter where you are in your journey.

Young hams and young newcomers to amateur radio are reminded to register for the 2024 ARRL Youth Rally, which will be held on Saturday during the convention. While Hamvention offers free tickets for youths aged 12 through high school, advance registration for the Youth Rally (\$20) includes a tee shirt to wear on Saturday, a badge, a lanyard, and a



reusable tote bag. [Register](#) for the Youth Rally now (11 to 21 years of age).

Hamvention and the 2024 ARRL National Convention is May 17 - 19 at the Greene County Fairgrounds and Expo Center, in Xenia, Ohio. In the lead-up to the convention, the venue has finished making improvements to the flea market area. The walking paths have been topped with gravel and rolled to make the paths smooth and safe.

Complete information about this year's event can be found on the [Hamvention](#) website, [Facebook](#) page, and at www.arrl.org/expo.

Colorado Students Contact the International Space Station



In Colorado Springs, Colorado, students at the [Thrive Home School Academy](#) (THSA), along with students at Stratton Meadows Elementary (SME), were able to have a space chat with NASA astronaut and mission specialist Jeanette "Jo" Epps, KF5QNU, on board the International Space Station (ISS) on April 22, 2024. At the time of the contact Epps, a member of the SpaceX Crew-8 mission, was on her 47th day of the 180-day mission.

The [Amateur Radio on the International Space Station](#) (ARISS) event was organized with equipment provided by [ARRL The National Association for Amateur Radio](#)® and NASA for science, technology, engineering, and mathematics (STEM) education and outreach purposes. The [Pikes Peak Radio Amateur Association](#) (PPRAA) helped with technical coordination and Harrison School District 2 provided a link to livestream the event.



Students were able to ask questions ranging from

"Do things smell or taste differently in space?" to "What is your favorite thing you have seen in space?"

THSA opened in 2009 and serves homeschooled students with a 1-day-per-week school day program that is highly interactive and experiential and engages students in hands-on activities.



A crowd watches students ask questions during the ARISS contact from Thrive Home School Academy. [Desiree Baccus, N3DEZ, photo]

Amateur radio is used extensively in their classrooms to provide hands-on STEM learning and prepare students for future careers.

ARRL prepares teachers to engage students with amateur radio through the [ARRL Teachers Institute on Wireless Technology](#). ARRL TI graduate Dara Gardner, KF0NIX, is a teacher who helped organize this contact.



Students wait to talk to astronaut Jo Epps, KF5QNU. [Desiree Baccus, N3DEZ, photo]

Amateur Radio Contact in Space and on the Ground

On April 22, 2024, students at Pleasant Knoll Middle School in Fort Mill, South Carolina, enjoyed a full day of learning all about amateur radio from the Earth to the stars. In all, nearly 2,000 students learned how to operate VHF, UHF, and HF amateur radios in four sessions throughout the day, as well as listened, watched, and participated in a contact with the International Space Station (ISS), coordinated by the [Amateur Radio on the International Space Station](#) (ARISS) program.

Nine volunteers from the [York County Amateur Radio Society](#) (YCARS) helped coordinate the event and ARISS contact. Thirteen students, along with eighth grade science teacher Allison Killowitz, asked astronaut Matthew Dominick, KC0TOR, 23 questions during their 10-minute contact. Their questions ranged from how an astronaut uses the bathroom on the ISS to what astronauts eat. Dominick is also a Navy test pilot, and he's on the ISS as part of the SpaceX Crew-8 mission.



Pleasant Knoll Middle School students and science teacher Allison Killowitz during a "space chat" with astronaut Matthew Dominick, KC0TOR, aboard the International Space Station. [Photo courtesy of Section Manager of the ARRL South Carolina Section John P. Gendron, NJ4Z.

Four members of the [Radio Amateur Satellite Corporation](#), known as AMSAT, volunteered to help with equipment. They provided the school with a communication trailer and van with 52-foot masts, equipped with high-gain Yagi and vertical antennas, an elevation and azimuthal rotator, and multiple computers and IC-9700 radios. ARRL South Carolina Section Traffic Manager Dean French, N4AJK, helped

coordinate and produce a livestream of the event to YouTube channels for the ARRL South Carolina Section, ARISS, YCARS, and YouTuber Steve McGrane, KM9G. Currently, there are 2,000 views between all four YouTube channels. The event was also covered by two local television channels.

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](#), and AMSAT.

Amateur Radio Provides Communications Support for Boston Marathon

On Monday, April 15, 2024, ham radio operators provided communications for the 128th running of the Boston Marathon. More than 280 radio amateurs participated in the event.

The marathon is one of the largest events for which hams provide communications support.

It drew volunteers from many different places. "Operators are volunteering across Start, Course, Finish, Transportation, and various operations centers, including the Massachusetts Emergency Management Agency (MEMA) State Emergency Operations Center (SEOC) Unified Command Center (UCC) and the Boston Athletic Association (BAA) Race Operations Center (ROC) in Boston. They are performing communications duties that include logistics support as a primary function, and backup support



Sisay Lemma wins the 128th Boston Marathon with a time of 2:06:17. Hundreds of radio amateurs volunteered to provide communications for the historic race. [BAA Courtesy Photo]

for medical and other public safety requests for the race as needed," wrote District Emergency Coordinator for the ARRL Eastern Massachusetts Section Rob Macedo, KD1CY.



Amateur radio operators serving in the Unified Command Center (UCC) for the 128th running of the Boston Marathon. [Section Manager of the ARRL Rhode Island Section Nancy Austin, KC1NEK, photo]

Amateur radio operator volunteers supported the BAA, the American Red Cross, and other agencies surrounding the event, according to Macedo.

Armed Forces Day Crossband Test May 11, 2024

The US Department of Defense will host this year's Armed Forces Day (AFD) Crossband Test on May 11, 2024. For more than 50 years, military and amateur stations have taken part in this event, which is an interoperability exercise between hobbyist and government radio stations. The event is open to all licensed amateur radio operators and will not impact any public or private communications. The AFD Crossband Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service (ARS), as authorized in 47 CFR 97.111.

These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in



a tightly controlled exercise scenario. Military stations will transmit on selected military frequencies and announce the specific ARS frequencies monitored. All scheduled times will be in Zulu (Z), and all scheduled frequencies will be upper sideband (USB) unless otherwise noted.

Information on frequencies, times, and other technical information can be found at [DoD MARS - Armed Forces Day](#). Information for QSL cards and contact information is available at [Armed Forces Day QSL request form](#).

AFD is classified as an observance -- not a federal holiday. It will be celebrated on Saturday, May 18, 2024, and it will be a time of honor. The establishment of AFD was first announced on August 31, 1949, by then US Secretary of Defense Louis Johnson. It was meant to replace the separate Army, Navy, and Air Force Days. All branches were combined to create the US Department of Defense. The first Armed Forces Day was held on May 20, 1950. The day is celebrated with special events, tributes, observances, and parades.

Ham Radio Active During Eclipse

Millions of people across the United States got to see a rare solar eclipse on Monday, April 8, 2024.

The path of totality -- the line of darkness where the moon fully occluded the sun -- stretched through the South Pacific, Mexico, central Texas, the Ozarks, the Midwest, the Rust Belt area, and to New England through the Maritimes. In all, 14 ARRL Sections were



Totality as seen in Athens, Texas. [Paul Buck, KW5TNT, photo]

impacted directly and several more were on the fringes of the solar umbra.

Radio Serves

Amateur radio was active throughout the areas of impact. Most ARRL Sections in the path had been developing a plan with their served agencies for months or years beforehand.

Traffic was expected to be significant, with up to 3.7 million people forecast to travel to areas within the path of totality.



Bob Buck, K5HRB, monitors traffic on Highway 16 in Medina, Texas.

Radio amateurs were activated in many locations.

In Paris, Texas, hams split shifts at the Lamar County Emergency Operations Center (EOC). Teams of two operators volunteered for 4-hour shifts. The activation doubled as a training opportunity and an equipment test.



Bill Townsend, KJ5ABG; Jeff Laughlin, KJ5DNA, and Dr. Randy Holland, N5DDS, at the Lamar County EOC in Paris, Texas. [Steven Lott Smith, KG5VK, photo]

The ARRL Indiana Section was in full force with their Amateur Radio Emergency Service® (ARES®)

member-volunteers providing radio coverage on HF, VHF, and UHF amateur bands and utilizing GMRS. Using a mobile command center dubbed "Big Blue," the ARES team in Lake County set up on an overpass above Interstate 65 and was staffed in part by father and son volunteer team Chris Lattimer, N9MMR, and Tavas Lattimer, KD9NSC. The Section also utilized Winlink VARA HF to establish a digital connection with the incident command system.



Chris Lattimer, N9MMR, operating inside "Big Blue", the Lake County Indiana Communications Trailer. The vehicle was positioned on an overpass of Interstate 65.

In Hamilton County, Indiana, ARES members volunteered with the county emergency management teams. They fanned out across EOCs, parks, and other locations. One ARES member, who is also active in the Civil Air Patrol, monitored traffic and crowds from an airplane.

Section Emergency Coordinator of the ARRL Maine Section Keith Anoe, KE4UCW, held hourly check-ins via radio with the Maine Emergency Management Agency and other served agencies in case one of them needed to activate the Maine Emergency Communication Net.

Social media posts throughout the amateur radio space hold anecdotes of 146.52 MHz being extremely active during the post-eclipse traffic jam.



Traffic on Interstate 91 in Northern Vermont was at a near standstill after the eclipse. Many reports say that 146.52 MHz was active all over the country with amateurs reporting the latest traffic conditions. [Sierra Harrop, W5DX, photo]

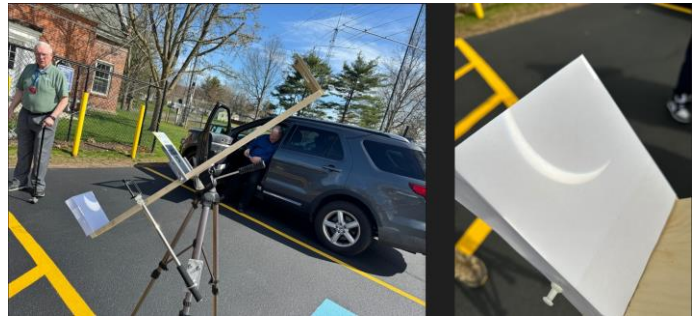
Radio Gathers

In Vermont, several ARRL members, who also happen to be pilots, gathered at the Northeast Kingdom International Airport in Newport to watch the eclipse.



ARRL Member Lauren Lee, N1OZJ, right, photographs totality from the Northeast Kingdom International Airport in Newport, Vermont. Lee is a Boeing 777 Captain for a major airline. [Sierra Harrop, W5DX, photo]

Outside ARRL Headquarters in Newington, Connecticut, staff members and headquarters volunteers took the opportunity to observe the 92% visible eclipse using a solar viewer built by W1AW Station Manager Joe Carcia, NJ1Q.



Left: A solar viewer setup outside of W1AW, the Hiram Percy Maxim Memorial Station at ARRL Headquarters.

Right: The output view of the viewer. [Joe Carcia, NJ1Q, photos]

Radio Studies

Across the world, radio amateurs participated in the HamSCI Solar Eclipse QSO Party. It involved operating before, during, and after the eclipse to gather log data. Those logs will be studied by researchers in the coming years to further investigate the sun's impact on the ionosphere.

HamSCI's program leader Dr. Nathaniel Frissell, W2NAF, was active from The University of Scranton Amateur Radio Club station. "I'm happy to report that we had an excellent day at W3USR in Scranton and believe that we both had fun and collected good data," he wrote in a message to the HamSCI team.

The organizers request that those who operated in the event upload their logs. If you used N1MM+ or N3FJP loggers, there's a setting called Solar Eclipse QSO Party. Participants can also submit a Cabrillo or ADIF file of their activity. All logs should go to <https://seqp.contesting.com/seqpsubmitlog.php>.

Amateur Radio Saves Family in Death Valley National Park



Death Valley National Park is in a remote desert in southern California, where mobile phone networks are spotty at best. On Saturday, April 6, a radio amateur and his family were enjoying the park when their vehicle became stuck in mud in a dangerous area. Without access to a cell network, the ham called for help on the 10-meter band.

According to a news release from the Black Swamp Amateur Radio Club, Caleb Gustwiller, KD8TGB, jumped into action.

Gustwiller was monitoring from Ohio when he picked up the distress call. He was able to hear the call sign and the general location of the ham in distress. He lost the signal to the noise, so he wrote a post in the Parks on the Air® Facebook group asking for other hams to listen for the calls.



Much of Death Valley National Park sits below sea level, surrounded by terrain. [Sierra Harrop, W5DX, photos]

Several hams contacted emergency officials in southern California, which led to the ham and their family being rescued within a few hours by park rangers. The club stated in their Facebook post: "Without Caleb hearing this distress call, it could have quickly become a very deadly situation for the operator and his family."

Active Hurricane Season Predicted for 2024

Colorado State University (CSU) hurricane researchers predict an active Atlantic hurricane

season (June 1 to November 30) in their initial 2024 forecast.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, attended the National Hurricane Conference in Florida in late March, where the CSU prediction was issued. "The common discussion at the National Hurricane Conference this year was the potential for a very active year, and the forecast from CSU enforces that thought," said Johnston. "Several of the forecasters were pointing to indications that we are moving from an El Niño to a La Niña and that could potentially cause a more active season."



Hurricane Florence in 2019 [NASA photo]

The [CSU Tropical Weather & Climate Research team](#) predicts 23 named storms during the Atlantic hurricane season. Of those, researchers forecast that 11 will become hurricanes and five will reach major hurricane strength, as measured by the [Saffir-Simpson Hurricane Wind Scale](#), with sustained winds of 111 mph or greater. The prediction is above the 30-year average for hurricanes and storms and is above the total of 20 storms, seven hurricanes, and three Category 3 or higher hurricanes in 2023.

Senior Research Scientist in the Department of Atmospheric Science at CSU and the lead author of the report Phil Klotzbach said, "So far, the 2024 hurricane season is exhibiting characteristics similar to 1878, 1926, 1998, 2010, and 2020. Our analog seasons were all very active Atlantic hurricane seasons."

The team predicts that 2024 hurricane activity will be about 170% of the average season from 1991 - 2020. By comparison, 2023's hurricane activity was about 120% of the average season. The report also

includes the probability of major hurricanes making landfall, including a 62% probability for the entire US coastline. The average landfall from 1880 - 2020 was 43%.

The report also indicates increased landfall probabilities of 34% for the East Coast of the US, including the Florida peninsula (the average from 1880 - 2020 was 21%); 42% for the Gulf Coast, from the Florida panhandle westward to Brownsville (the average from 1880 - 2020 was 27%), and 66% for the Caribbean (the average from 1880 - 2020 was 47%).

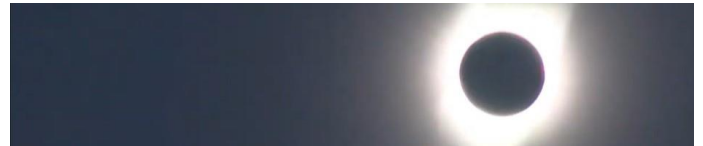
The National Weather Service (NWS), National Hurricane Center (NHC), and Hurricane Watch Net (HWN) are prepared for an active hurricane season. Amateur radio operators can take part in activations on 14.325 MHz during the day and on 7.268 kHz at night. As propagation changes, the HWN may operate both frequencies simultaneously.

At the Florida conference, Johnston also highlighted [the relationship between ARRL and the Federal Emergency Management Agency \(FEMA\)](#), as well as ARRL's position as a net control station within the [SHARed RESources High Frequency Radio Program \(SHARES\)](#) managed by the Cybersecurity and Infrastructure Security Agency.

"Now is the time to prepare for emergencies of any type by building relationships, training and refreshing skills, and testing and preparing equipment," added Johnston.

Ham Radio's Many Roles During Solar Eclipse

In one of nature's most spectacular visual displays, on April 8, 2024, the sun will align with the moon and the Earth, casting a shadow that will transit much of North America.



*Totality as seen in Madras, Oregon in 2017
[Sierra Harrop, W5DX, photo]*

Spectacular Display and Gathering

Millions will gather along the path of totality - the section where the sun is fully blocked by the moon - to witness something that happens, on average, once every 375 years for any place on our planet. The moon's shadow path will begin over the South Pacific Ocean, and then it will cross into North America, passing over Mexico, the United States, and Canada. Weather permitting, the first location in continental North America that will experience totality is Mexico's Pacific coast, at around 11:07 a.m. PDT. The shadow will exit continental North America on the Atlantic coast of Newfoundland, Canada, at 5:16 p.m. NDT.

Ham radio will be there - operators will participate in scientific experiments, serve local communities that will be overrun with hundreds of thousands of visitors, and provide a valuable tool for communicating if the mobile phone networks become overloaded.



*The diamond ring effect of the 2017 eclipse
[Sierra Harrop, W5DX, photo]*

Science

Regular sun and moon watchers will be out in force while many scientists, astronomers, and amateur radio operators will be "working" the eclipse. ARRL has partnered with Ham Radio Science Citizen Investigation (HamSCI), a NASA citizen science project, to encourage hams to send and receive signals to one another before, during, and after the eclipse. The project will be led by Nathaniel Frissell, W2NAF, a professor of Physics and Engineering at the University of Scranton in Pennsylvania. HamSCI participants will share their radio data to catalog how the sudden loss of sunlight during totality affects their radio signals. All radio amateurs are welcome to participate in the ionospheric research that is being conducted. Information is available at the [Solar Eclipse QSO Party on the HamSCI website](#).

HamSCI

NASA plans to point a large telescope at the eclipse and broadcast the entire event across North America. The agency will host live coverage of the eclipse from 1:00 to 4:00 p.m. EDT (17:00 to 20:00 UTC) on April 8 on the [NASA YouTube](#) channel. There will be live views of the eclipse from watch parties across the country, and even from NASA's Glenn Research Center in Ohio, which happens to be inside the path of totality.

In addition to NASA's plans, the Super Dual Auroral Radar Network (SuperDARN), a collection of radars located at sites around the world, will bounce radio waves off of the ionosphere and analyze the returning signals. Their data will reveal changes in the ionosphere's density, temperature, and location.

There is also the Radio JOVE project, which is made up of a team of citizen scientists dedicated to documenting radio signals from space, and especially from Jupiter. During the total solar eclipse, Radio JOVE participants will focus on the sun. Using radio antenna kits that they set up

themselves, they'll record solar radio bursts before, during, and after the eclipse.

EmComm

Emergency communications groups, including those affiliated with the [Amateur Radio Emergency Service® \(ARES®\)](#), will be active in the areas near totality. National Weather Service (NWS) offices are closely watching weather patterns in and around the eclipse path for any severe weather that could impact watchers and increase traffic. Many first responders, including law enforcement, medical personnel, and fire departments, will be ready to respond to any emergency that might occur during the eclipse. Those officials represent some of the served agencies that radio amateurs work to support.



Most ARRL Sections within the path of totality have been working with their local served agencies to provide communications volunteers through amateur radio. In New Hampshire, for example, where cell phone and road networks are expected to be overwhelmed, New Hampshire ARES has local groups activated in many communities.

Public Information Coordinator of the ARRL New Hampshire Section Skip Camejo, AC1LC, said members across the state are ready. "A small team pulled from several NH-ARES groups will be providing limited communications support for the American Red Cross, using both HF and VHF. We will have an RV-based station in Lancaster, NH, and another in Pittsburg, both at locations provided by the New Hampshire Department of Transportation," he said.

In the event of a mass-casualty incident or a need for emergency sheltering, the teams will travel to the scene with a state police escort. They're

expecting 10,000 to 50,000 visitors on Monday in that community alone.

Other ARES groups have been preparing and drilling over the last few months. In the ARRL North Texas Section, a set of criteria has been established as reportable to the local served agencies' emergency operations centers. Look for more details on ham radio involvement during the eclipse in next week's The ARRL Letter.

Outreach

Many groups are holding eclipse festivals. Some amateur radio groups and clubs are taking advantage of these gatherings to get radio in front of the curious public. Vice Director of the ARRL Hudson Division Ed Wilson, N2XDD, is preparing an informational display for an event at his local library.

The Suffolk County Radio Club on Long Island, New York, will be participating in the Solar Eclipse QSO Party from the Moriches Branch Library.



An amateur radio outreach booth at The Big E in Springfield, Massachusetts. [Nancy Austin, KC1NEK, photo]

Wilson saw radio as a perfect addition to the library's eclipse activities. "Another club member and I went down to the librarian and spoke to her about the HamSCI event. We asked if we would be able to set up a ham radio station during the course of the day. They loved the idea and approved it, and they invited us to some other events that they're having in the next few months," he said.

For clubs that may have a public presence during the eclipse, there are [resources on the ARRL website](#) detailing how to help explain the hobby to the uninitiated.

The total solar eclipse will be the last of its kind for more than two decades in the contiguous U.S. The next total solar eclipse on U.S. soil won't occur until March 30, 2033, and it will be viewable only in Alaska.

Register Now for the 2024 ARRL Youth Rally!

As part of the fun at Dayton Hamvention®, youth attendees are invited to participate in the 2024 ARRL Youth Rally on Saturday, May 18. The day will include a special agenda of activities and presentations intended to engage and inspire young hams and young newcomers to amateur radio.

The Youth Rally is intended for students who are 11 to 21 years of age. While Hamvention offers free tickets for junior high and high school students, advance registration for the Youth Rally is recommended. A preliminary Youth Rally agenda and registration instructions are on the ARRL website, at www.arrl.org/expo. The Youth Rally registration fee is \$20 and includes a tee shirt (to wear on Saturday), a badge, a lanyard, and a reusable tote bag.



Member-volunteer Cyndi Goodgame, K5CYN, with student member Liam Gazeley, K15JXQ, at the 2023 ARRL Northwestern Division Convention, SEA-PAC.

The Youth Rally promises a full day of activities, discovery, sharing, and fun. Rally day begins at 9:15 AM on Saturday with the annual Dayton Youth Forum -- open to all Hamvention attendees -- moderated by



Young people working on a kit.

well-known amateur radio educator Carole Perry, WB2MGP.

The forum includes presentations from young hams covering a variety of amateur radio activities, topics, and technology.

After lunch (on your own), Youth Rally registrants will gather in Forum Room 3 to get to know each other and explore a variety of amateur radio interests and activities. Learn about satellite communications, participate in a short sprint contest, contact a parachute mobile station, and participate in other fun! Bring a 2-meter handheld if you have one. The afternoon activities will be led by ARRL Education and Learning Manager Steve Goodgame, K5ATA, and will include other guests representing well-known amateur radio youth programs.



Students with a homemade antenna.

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

The 2024 ARRL Youth Rally is just part of the fun planned for the 2024 ARRL National Convention at Hamvention. Visit www.arrl.org/expo, where you can find the full listing of ARRL-sponsored forums, exhibits, and activities. Hamvention is May 17 - 19, 2024, at the Greene County Fair and Expo Center, in Xenia, Ohio; hamvention.org.

ARRL Seeking Applicants for Assistant Education and Learning Manager

ARRL is working to engage the next generation of radio amateurs right in the classroom. Many young people have become active hams because of the [ARRL Teachers Institute on Wireless Technology](#).

This donor-funded effort brings teachers from across the United States together to get them excited about radio through hands-on experiments. The Institute then trains them on how to take that excitement back to their classrooms as they incorporate amateur radio into science, technology, engineering, and mathematics (STEM) learning.



Teachers downlink from a weather satellite outside ARRL Headquarters.

Now, we're looking for the right candidate for a position that will help us grow that program. In a posting at www.arrl.org/employment-opportunities, potential candidates can find the entire list of criteria we're looking for in the Assistant Education and Learning Manager.

The position is perfect for someone with an education background, but the most important trait is being able to authentically share a passion for amateur radio, according to ARRL Education and Learning Manager Steve Goodgame, K5ATA. "We want someone energetic and passionate about amateur radio - willing to hit the streets at conferences to get teachers fired up. This person is going to help run the Teachers Institute and be a champion for engaging youth in amateur radio," he said.

Someone who has a passion for educating will be a great fit. According to the listing, the incumbent will develop schedules, choose material and coursework, and understand the needs of education program students. The Assistant Manager will work to facilitate and instruct Teachers Institute sessions.

If you're interested in the job, email Goodgame at sgoodgame@arrl.org. ARRL is an equal-opportunity employer.

2024 ARRL Field Day Poster Released

A poster promoting 2024 ARRL Field Day has been released on the Field Day web page, www.arrl.org/field-day. The two-sided informational poster features this year's theme "Be Radio Active". It includes a space for clubs to fill in information about their planned activation so that members of their community can come visit the site.

More resources for promoting 2024 ARRL Field Day are being developed and will be available soon. ARRL Field Day always occurs on the fourth full weekend in June. This year, it happens on June 22 - 23.



ARRL Podcasts Schedule

Served Agencies: Who They Are and How We Serve Them

We often hear about served agencies when hams talk about disaster response and emergency communications. ARRL Director of Emergency Management Josh Johnston, KE5MHV, joins the podcast this month to discuss exactly what and who served agencies are, and where the Amateur Radio Service fits into their responses.

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](#).

Amateur Radio in the News

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

["Santa Barbara Amateur Radio Club site agreement ends, and an urgent search for a new location is underway"](#) / KEYT-TV (California) April 18, 2024 - The Santa Barbara Amateur Radio Club is an ARRL Affiliated Club.

["South Carolina middle school makes contact with International Space Station"](#) / WCNC-TV (North Carolina) April 23, 2024 -- The York County Amateur Radio Society is an ARRL Affiliated Club.

["Amateur radio operators gather at the Expo"](#) / The Claremore Daily Progress (Oklahoma) April 13, 2024 -- The Green Country Hamfest.

"Going the extra mile: the radio operators who connect all 26.2 miles of the Boston Marathon" / The Huntington News (Massachusetts) April 15, 2024 -- The Northeastern Wireless Club.

"World Amateur Radio Day is April 18" / The Monroe News (Michigan) April 16, 2024 -- The Monroe County Radio Communications Association.

"A Stroudsburg teens' passion for radio" / WBRE (Pennsylvania) April 16, 2024 -- The Eastern Pennsylvania Amateur Radio Association.

"Amateur radio club collaborates to help during emergencies" / Clark Fork Valley Press (Montana) April 17, 2024 -- The Clark Fork Valley Amateur Radio Club is an ARRL Affiliated Club.

"Local amateur radio club to represent Ohio in national event" / The Highland County Press (Ohio) April 3, 2024 -- The Highland Amateur Radio Association is an ARRL Affiliated Club.

"South Students watch eclipse: High Schoolers viewing the eclipse with help from Amateur radio

operators" / The Marietta Times (Ohio) April 9, 2024 -- The Parkersburg Amateur Radio Klub is an ARRL Affiliated Club.

"Utah students use ham radio to connect with astronaut during eclipse" / Desert News (Utah) April 9, 2024 -- The Bridgerland Amateur Radio Club is an ARRL Affiliated Club.

"Monitoring the Moon when it happens: Ham radio scientists to monitor eclipse" / WEWS (Ohio) April 1, 2024 -- The Case Amateur Radio Club is an ARRL Affiliated Club.

"Amateur operators of ham radios chase storms, offer service" / Tahlequah Daily Press (Oklahoma) April 1, 2024 -- The Pottawatomie County Amateur Radio Club is an ARRL Affiliated Club.

Arrl.org. 2024. ARRL Letter. [online] Available at: <http://www.arrl.org/arrlletter?issue=current> [Accessed 05 May 2024]

NARS Monthly Club Meeting

April General Meeting

In the April General Meeting, Gordon West, WB6NOA, presented on tropospheric ducting and using this phenomenon to accomplish long range activity on VHF and UHF, providing examples of tropospheric ducting using examples with visible light and providing information on atmospheric layering to help propagate VHF and UHF signals.

Gordon West has been an amateur radio operator for more than 60 years, holding the top-level license of Amateur Extra, call sign WB6NOA. He also holds an FCC Commercial Operator License, the First Class General Radiotelephone Certificate with Radar Endorsement. Gordon was recently named the ARRL National Instructor.

Next Club Meeting

Our next club meeting will be on May 17th at HCESD 16 Admin – 18606 Stuebner Airline Rd, Spring, TX 77379.

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

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.



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.

Building Directional Antennas for Fox Hunting

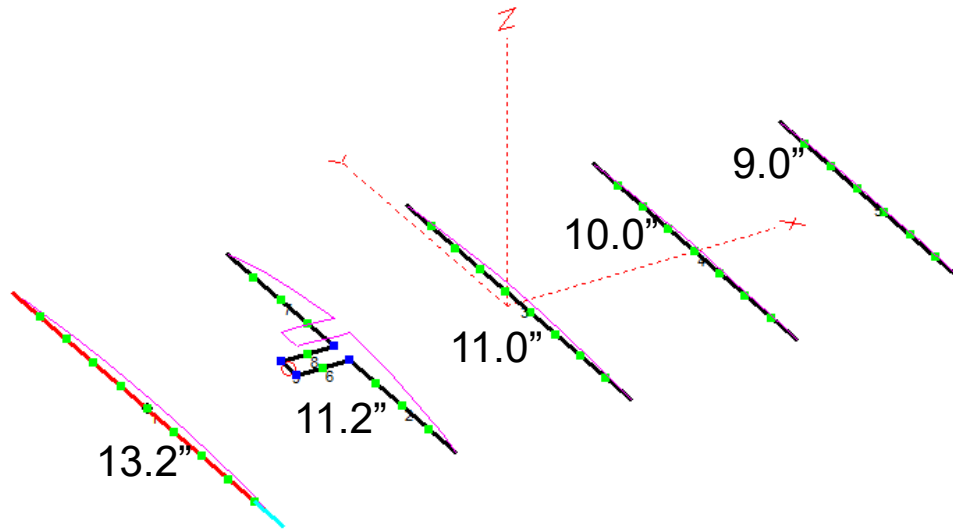
BY DAVID HOLDEN, WJ9O

Late in 2023 or early 2024 several of us were kicking around the idea of organizing a Fox Hunt. Part of the interest came from the Cy Creek CERT group as a way to get the group involved in a search activity using their HTs. At the same time, we learned that Brandon Rogers, K5BLR, had developed a controller to pair with an HT that would automatically transmit an appropriate message and could be deployed as the “fox.” What was needed was a number of handheld directional antennas. After a bit of googling and a review of the ARRL Antenna handbook, it was decided to build some Yagi antennas. To keep the cost down we came upon the idea that the metal frames used to support political campaign signs could be salvaged and used as the antenna’s elements. Thus the elements are free and look better than the often seen tape measure elements. Kudos to Scott, KI5SCP, for salvaging a bunch of signs after the March primary election. Note that we did use some cheap all-thread for the driven element making attachment to the coax a bit easier. The overall bill of materials is as follows.

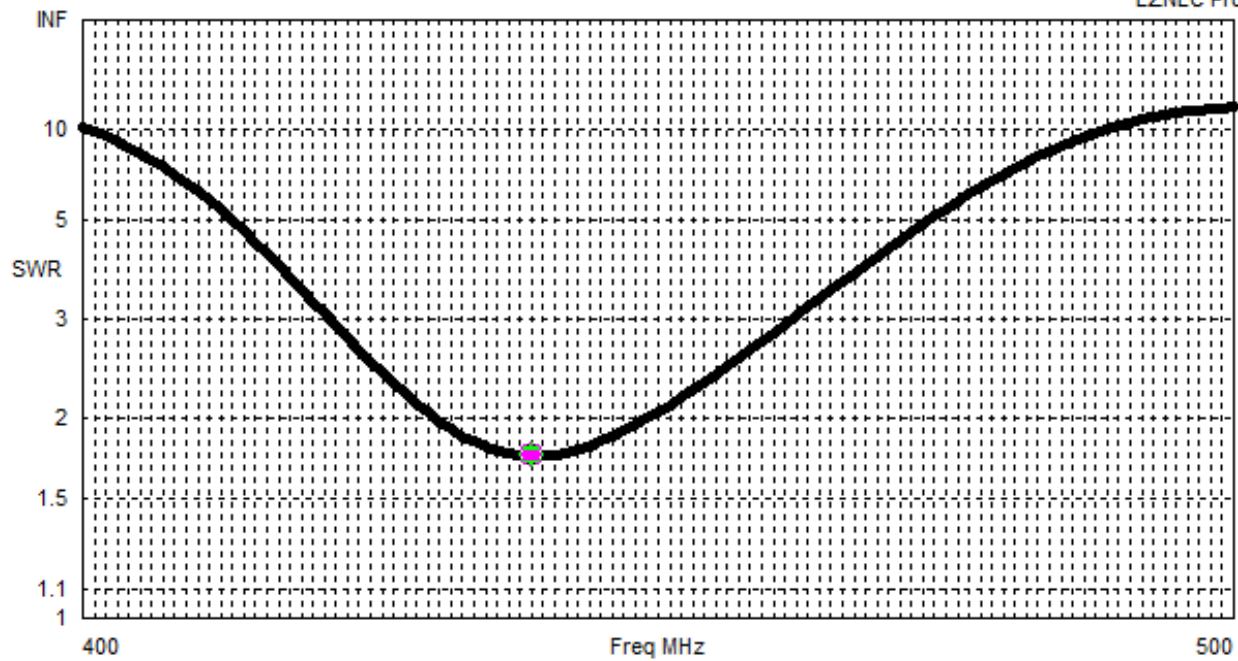
Antenna Mast	1/2" PVC pipe ~2' long
Driven Element	8/32" All Thread rod from Temu
Other Elements	Salvaged Sign Frame
Coax Connector	BNC
BNC Plate	1" Aluminum sheet, bent and drilled
Miscellaneous	16 gage wire, wire rings
	8/32" nuts

The next step was to model the antenna using EZNEC to determine length and spacing of the elements. An existing model for a UHF Yagi was found among the supplemental material that came with the ARRL Antenna handbook. A design frequency of 435 MHz was chosen. One thing that was learned during the modeling is that there is a trade-off between directional gain and SWR. The antenna will be primarily used for receiving and in fox hunting directional gain is more important than SWR. The EZNEC plots showing the elements, directional gain and SWR are as follows:

EZNEC Pro/2+



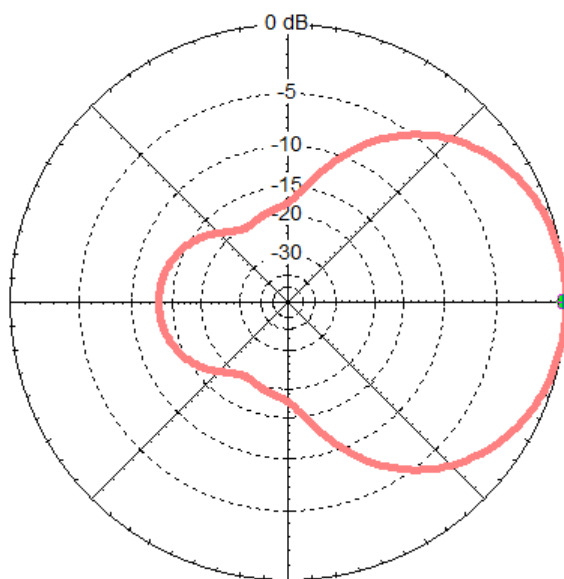
EZNEC Pro/2+



Freq	439 MHz	Source #	1
SWR	1.74	Z0	50 ohms
Z	30.01 at 12.04 deg. = 29.35 + j6.259 ohms		
Refl Coeff	0.2711 at 158.63 deg. = -0.2525 + j0.0988		
Ret Loss	11.3 dB		

Total Field

EZNEC Pro/2+



Elevation Plot
 Azimuth Angle 0.0 deg.
 Outer Ring 8.62 dBi

 Slice Max Gain 8.62 dBi @ Elev Angle = 0.0 deg.
 Front/Back 13.18 dB
 Beamwidth 87.2 deg.; -3dB @ 316.4, 43.6 deg.
 Sidelobe Gain -4.56 dBi @ Elev Angle = 180.0 deg.
 Front/Sidelobe 13.18 dB

435 MHz
 Cursor Elev 0.0 deg.
 Gain 8.62 dBi
 0.0 dBmax

Note that the driven element is modeled with connecting wires between the element and the coax connector. The connecting wires are essentially part of the driven element. It was found that the model agreed with actual measurements much better this way. The actual SWR was measured with both a Comet SWR meter and a NanoVNA. The measured SWR was not as good as the model predicted and the measured minimum SWR was at a little higher frequency than predicted. Still the ultimate test was to send one operator down the road with his HT and test the directionality of the Yagi – it worked very well as long as the transmitter and receiver were not so close together that the signal strength meter on the HT was overwhelmed. Subsequently an attenuator from KC9ON was built (both kits and completed units are available) which makes closing in on the rabbit much more doable.

A team of interested hams built five antennas over three different work sessions of about 3 hours each. Of course, we learned a lot along the way and could build five more antennas in 3 hours or less if we chose to. Getting a reasonable match between the EZNEC model and measured reality probably took the most time as we varied the element lengths and the configuration of the driven element. There was also a super glue incident that took a bit of time to unravel.

A dress rehearsal Fox Hunt is planned for May 4 with at least one additional Fox Hunt to be scheduled sometime later.



Glenn, KJ5EYL and Dale KN5DS



Scott, KI5SCP and John KI5YPD



John, David, Dale and Scott

Follow-up: May 4th 2024 Foxhunt Activity

As planned, on May 4th, 2024, the foxhunting group go together to test their equipment and skills. The fox controller and an HT was placed in an undisclosed spot and, after a few moments to tune and adjust the equipment, the foxhunters were off! Utilizing the directional antennas and the attenuators, the team was able to hone in on the signal. In under 2 hours since the search started, all the hunters were able to find the fox!

All in all, the day was spent in an enjoyable activity with wonderful company!

If you are interested in building your own VHF/UHF directional antenna, take a look at this month's ARRL QST / On the Air magazines! There are several articles on antenna design for the sport!



This first hunt went well. Antennas and attenuators worked and the teams were able to zero in on the fox. Pictured above are Cody KI5CMC, Matt NO2U, Scott KI5SCP, John KI5YPD and Dale KN5DS.

Attenuators were kits from KC9ON. Fairly easy to build and easy to use. Starch this call sign for more information.

New Amateur Extra-Class Question Pool Released Effective July 1, 2024

The (NCVEC) [Question Pool Committee](#) (QPC) has released the 2024 - 2028 Extra-Class FCC Element 4 Question Pool and Syllabus to the public. The new [Extra-Class Question Pool is effective from July 1, 2024, through June 30, 2028.](#)

The 2024 - 2028 pool is available as a Microsoft Word document and as a PDF. The 10 graphics required for the new Extra-Class Question Pool are available within the documents or separately in PDF and JPG file formats.

ARRL VEC Manager Maria Somma, AB1FM, and member of the NCVEC QPC, said, "The new pool incorporates significant changes compared to the 2020 - 2024 version. We carefully went over the pool for technical accuracy, relevancy to today's amateur radio practices, syntax, grammar, style, format, and clarity and redundancy within and between the pools. With these goals in mind, 82 new questions were created, and 101 questions were eliminated, resulting in a reduction [of] the number of questions from 622 to 603. Over 350 questions were modified. We considered a question modified when the knowledge being tested was not changed but wording was improved, or answers or distractors were replaced."

Somma advised that "the newly revised pool must be used for Extra-class license exams starting July 1, 2024. New test designs will be available to [ARRL Volunteer Examiners](#) (VEs) on that date. The ARRL VEC will supply its officially appointed, field-stocked VE teams with new Extra-class [exam booklet designs](#) around mid-June."

Extra-class examination candidates preparing for their exams using the 12th edition of [The ARRL Extra Class License Manual](#) or the 5th edition of [ARRL's Extra Q & A](#) are encouraged to test on or before June 30, 2024. New editions of ARRL licensing publications will be available in May for exams taken on or after July 1, 2024.

Notice provided by the ARRL at <https://www.arrl.org/news/new-amateur-extra-class-question-pool-released-effective-july-1-2024>, Accessed on January 1, 2024

NARS Club Documents and Minutes

DID YOU
KNOW



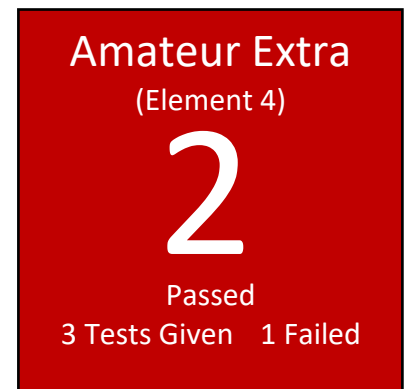
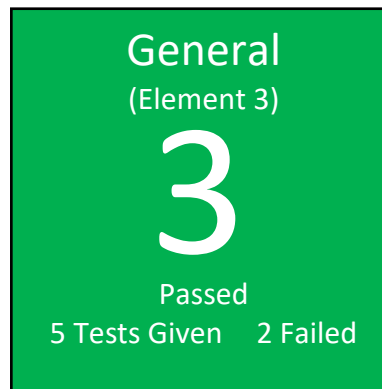
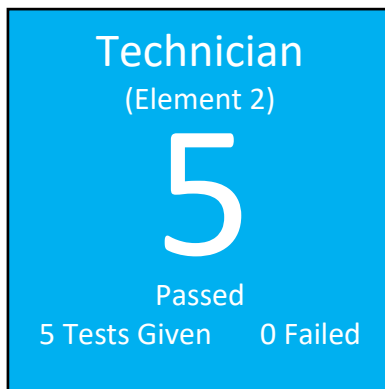
Did you know that you can find all of the club's public documents, including board meeting minutes, financial statements, and newsletters on the [club website](#) at http://www.w5nc.club/doc_repos/

VE Sessions and Results

PROVIDED BY SHEREE HORTON, WM5N

Attendees

On Saturday April 20, 2024, a VE Test Session was held at HCESD 16 Admin, 18606 Stuebner Airline Rd, Klein, TX 77379. During the testing session, 10 candidates took 13 tests.



Congratulations!

Congratulations to the following for passing their new license exams¹:

- Alfred E Eggeling Jr – Technician
- Carl C Farmer Jr. – Technician
- Julie A Francis – Technician
- Zachary B Griffin III – Technician
- Finley H Merry II – Technician

Congratulations to the following for passing their upgrade exams:

- Martin E Deutsch KJ5FEH – upgrade to General
- Guy M Morgan KJ5FPA - upgrade to General
- Arthur J Scotto KJ5EBD - upgrade to General
- Robert L Creacy KJ5FEL – upgrade to Extra
- Donald Ellsworth KJ5FHS – upgrade to Extra

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 May 18, 2024 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:

- Paul Owen N5NXS
- Dale Schmirler KN5DS
- Brandy Lang WE9L
- Brett Hebert KG5IQU
- Synomen Hebert KG5IRS

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 Sheree Horton know if you want to learn more about becoming a volunteer examiner.

New & Renewing Club Members

New Club Members

Welcome to the following new members of NARS!

- Adam Grant, KJ5FRP
- Nancy Jackson, KJ5FEI
- James Wheeler, AA5JW

Renewing Club Members

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

- Tom Davis, KB9KY
- Adam Grant, KJ5FRP
- Nancy Jackson, KJ5FEI
- Marie Rogoff, N5VLA
- Martin Rogoff, N5GPS
- James Wheeler, AA5JW

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: T7B04 - B. Ferrite choke

General: G2C10 - C. I am troubled by static

Amateur Extra (Ending June 30th): E1C07 - A. 26 dB

Amateur Extra (New): E9C10 - D. An end-fed half-wavelength dipole

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

Monthly Club Meeting – May 17th - HCESD 16 Admin – [18606 Stuebner Airline Rd, Klein, TX 77379](#)

VE Test Session – May 18th – [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

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

May 31 - June 2 | [SEA-PAC](#), ARRL Northwestern Division Convention, Seaside, Oregon

June 15 | [Knoxville Hamfest](#), ARRL Delta Division Convention, Knoxville, Tennessee

June 28 - 30 | [HAM RADIO](#), Friedrichshafen, Germany

July 12 - 13 | [HamCon: Zion](#), ARRL Rocky Mountain Division Convention, St. George, Utah

August 17 - 18 | [Huntsville Hamfest](#), ARRL Southeastern Division Convention, Huntsville, Alabama

August 22 - 25 | [Northeast HamXposition](#), ARRL New England Division Convention, Marlborough, Massachusetts

September 28 | [Red Rivers Radio Amateurs Hamfest](#), ARRL Dakota Division Convention, West Fargo, North Dakota

October 18 - 20 | [Pacificon](#), ARRL Pacific Division Convention, San Ramon, California

Contests and Radiosport

ARRL Contest Corral

May 2024 - <http://www.arrl.org/files/file/Contest%20Corral/2024/May%202024%20Corral.pdf>

June 2024 - <http://www.arrl.org/files/file/Contest%20Corral/2024/June%202024%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: TBN

Board Non-Voting Associate Members

Administrative Secretary: Neal Naumann, N5EN

Social Media Liaison: Sam Labarbera, N6HB

Newsletter Editor: Brandon Rogers, K5BLR

Public Information Liaison: TBN

ARRL/VEC Liaison: Sheree Horton, WM5N

Repeater Team Lead: Mike Pate, K5MAP

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.

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 or via Allstar (node #59847).

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>