

# NARS NEWS

#### FEBRUARY 2023

Northwest Amateur Radio Society P.O. Box 11483 Spring, TX 77391 w5nc.net

# **ARTIFICIAL** INTELLIGENCE





### Contents

President's Message
Exam Practice
The ARRL Letter
NARS Monthly Club Meeting
Amateur Radio Activities
ChatGPT and Amateur Radio: Giving AI a voice on the air15
Greater Houston HamFest
VE Sessions and Results
New and Renewing Club Members
New General Question Pool Released for Ham Radio Licensing Effective July 1, 2023
Training and Education
Upcoming Skywarn Spotter Training for 202322
Of Interest to the Club
Calendar
Club Activities and Events
Social Events
ARRL Contests & Activities25
Hamfests and Conventions
Contests and Radiosport
NARS Club Officers and Information27
Board Officers with Voting Privileges27
Board Non-Voting Associate Members27
Club Nets
Repeaters

**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 <u>k5blr@arrl.net</u>



# **President's Message**

#### BY RON MATUSEK, WA6TQH

#### NARS Elects New Officers

I would like to thank everyone for a great year! As we charge forward into this new year with a fresh start, we have a list of important items that will be addressed and completed throughout this year that will continue our club's mission. As we get ready for meeting this month, I am reminded that the service NARS provides to the community is the reason for our club. Without our membership and a shared interest this would not be possible. As many have had conversations about a fresher look to younger members joining our ham community, it will be our task to share our passion and express it with others to help promote and grow not only our hobby but our club.

We began the new year with our annual "Awards Banquet" January 20th. This was a time of fellowship and recognition of Officers and Members that have provided exceptional contributions and leadership

throughout this past year. We also introduced the newly Elected Officers for 2023 who will lead us forward through the challenges and established goals set forth in our Constitution.

Congratulations to:

President: Ronald Matusek, WA6TQH Vice President: Paul Kent, KI5FJS Secretary: Brandon Rogers, K5BLR Treasurer: Tom Hoherd, KK5YU Director: Rich Jones, W5VEK Director: Sam Labarbera, N6HB

Please give your support to your officers — they are only part of the club!



**Back row (left to right):** Marty Fitzgerald (W5MF) – Repeater Team Lead, Bill Buoy (N5BIA) – Webmaster, Sam Labarbera (N6HB) – Director, Rich Jones (W5VEK) – Director, Paul Owen (N5NXS) – Call Trustee, Tom Hoherd (KK5YU) – Treasurer, Paul Kent (KI5FJS) – Vice President.

**Front Row (left to right):** Brandon Rogers (K5BLR) – Secretary/Newsletter Editor, Sheree Horton (WM5N) – ARRL/VEC/Public Information Liaison, Ron Matusek (WA6TQH) - President

#### HAM OF THE YEAR

One very special award that NARS started couple years ago is the recognition of a member who stands out as a major contributor in making NARS a viable contributor to the community and especially as an emergency services organization. It is difficult to select that person each year, as there are many who offer their time and technical services. Here are a some of the achievements just to mention a couple:



Amateur Radio License exams are now conducted via computer aided technology. This required a person with some computer skills to program laptops and assisted in the individual V.E. certification requirements to implement this capability. This has reduced the amount of paperwork and processing time significantly. Instead of an applicant waiting two weeks or more for an upgrade or new license it can now be completed in a day.

Expansion of NARS public activities visibility. Please take a good look at the NARS monthly Newsletter! Again, special skills of publishing art skills are a must here to ensure that the community is fully aware of the behind-the-scenes work of its members.

How about record keeping i.e., board meeting minutes and general meetings including all presentations so that new and longtime members can look back on the achievements of the club. The detail recorded makes it much easier for everyone to keep projects on schedule and within budget.



There is so very much more to list here however, I am sure everyone knows who I am referring to as the person who will be honored as the "Ham of The Year" for 2022 Brandon Rogers K5BLR. Here is a person who is always at the forefront of meeting and exceeding the needs of the club. Never complains and always eager to help everyone! Please extend my congratulations to Brandon Rogers and our appreciation of all his hard work making NARS the number ONE Club in Houston.

#### FIELD DAY 2023 – The fourth weekend in June is June 24-25 – so save the date!

We are looking for a person who would like to take on the position of "Field Day Coordinator". A field day coordinator is responsible for appointing team captains, facility survey for antenna placements and gaining facility management approval and, most important ensuring ALL guidelines for Field Day as outlined by ARRL RULES are followed.

We will be awarding this person a \$200 HRO Gift Certificate in appreciation for taking on this responsibility. The award will be presented at the next general meeting after Field Day.

See you at the General Meeting!

Ron Matusek President NARS



# **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)

#### T3C01

Why are simplex UHF signals rarely heard beyond their radio horizon?

- A. FCC regulations prohibit them from going more than 50 miles
  - B. UHF signals are usually not propagated by the ionosphere
  - C. UHF signals are absorbed by the ionospheric D region
  - D. They are too weak to go very far

#### General (Element 3)

#### G8A08

Which of the following is an effect of overmodulation?

- A. Excessive bandwidth
- B. Insufficient audio
- C. Frequency drift
- D. Insufficient bandwidth

#### Amateur Extra (Element 4)

#### E9A02

What is the effective radiated power relative to a dipole of a repeater station with 150 watts transmitter power output, 2 dB feed line loss, 2.2 dB duplexer loss, and 7 dBd antenna gain?

- A. 420 watts
- B. 1977 watts
- C. 78.7 watts
- D. 286 watts

See the answers on Page 22.



# **The ARRL Letter**

An excerpt from the weekly ARRL Letter

# More Amateur Radio Astronauts Head for the International Space Station

Three of the four new astronauts on February's planned launch of the SpaceX Crew-6 mission to the International Space Station (ISS) are amateur radio operators.



The four crew members that comprise the SpaceX Crew-6 mission pose for a photo during a training session on the crew access arm at the Kennedy Space Center's Launch Pad 39A in Florida. From left are, Mission Specialist Andrey Fedyaev, Pilot Warren "Woody" Hoburg, Mission Specialist Sultan Al Nedayi, and Commander Stephen Bowen. Photo Courtesy of SpaceX.



### 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 <u>http://www.arrl.org/arrlletter</u>

Pilot Warren "Woody" Hoburg, KB3HTZ; Commander Stephen Bowen, KI5BKB, and Mission Specialist Sultan Al Neyadi, KI5VTV, will join Mission Specialist Andrey Fedyaev on board the SpaceX Dragon spacecraft, Endeavour.

The spacecraft will be atop a Falcon 9 rocket and, while a launch date has not been selected, the earliest date would be mid-February 2023.

All crew members have learned about <u>Amateur</u> <u>Radio on the International Space Station</u> (ARISS), received guidance on studying and testing, and learned how to operate the ARISS radios and the basics of on-the-air protocol from ARISS team members at NASA's Johnson Space Center.

The crew will be able to participate in ARISS, using the ham radio station on the ISS to contact schools and other educational institutions.

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, the ISS National Lab, <u>ARRL</u> The National Association for Amateur Radio<sup>®</sup>, and AMSAT.

# Service Academies Radio Group Now in Operation

The Service Academies Radio Group (SARG) was recently formed for alumni and amateur radio operators who are interested in the five U.S military academies.



William Curry, W5CQ, founder and net control operator for the SARG Net, said two months ago there was a new interest in forming a group and net. He noticed that only one military academy, West Point, W2KGY, was still operating a club station. At one time, every military academy had an operating club station.

"The club stations at the U.S. Military Academy, U.S. Naval Academy, U.S. Air Force Academy, U.S. Coast Guard Academy, and the U.S. Maritime Academy all have been off the air for some time," said Curry. "But we now have 50 new members, all who are interested in promoting amateur radio at all of the academies."

The SARG net meets every Thursday at 2200 UTC on 7.280 MHz, and every Saturday at 1600 UTC on 14.338 MHz. All amateur radio operators, whether they are veterans, or just have an interest in the military or history of the academies, are invited.

Curry has been licensed since 1950 and holds an Amateur Extra-class license. He is also an ARRL Life Member.

For additional information about the SARG Net, contact Curry at <u>w5cq@arrl.net</u>.

#### Orlando HamCation Presents Its 2023 Award Winners

Just a month ahead of its big event in Florida, Orlando HamCation<sup>®</sup> has announced the 2023 HamCation Award winners. Ken Lyons, KN4MDJ, and Jim Storms, AB8YK, are the 2023 recipients of the Carole Perry Educator of the Year Award. The award is given to individuals who have made outstanding contributions to educating and advancing youth in amateur radio. It was first awarded at HamCation 2019 to its



Ken Lyons, KN4MDJ (left), is a 2023 Carole Perry Educator of the Year Award winner. Photo courtesy of HamCation.

namesake, Carole Perry, WB2MGP, in honor of her work as an educator teaching students about ham radio.

Lyons is an ARRL Southeastern Division Assistant Director for Radio Scouting, and is the trustee of WB4SA, the Central Florida Council's Radio Scouting program, for activities and opportunities in both the Boy Scout and Girl Scout programs covered by Division 2. The program includes 30,000 scouts in nine counties. Lyons has been licensed since 2018 and now holds an Amateur Extra-class license. On receiving his award Lyons said, "I was not expecting the award but I'm honored to receive it."

Storms is a cofounder and a current team leader for the Dave Kalter Memorial Youth DX Adventure. He cofounded the Youth DX Adventure in 2010 with Dave Kalter, KB8OCP, (SK). He has been licensed since 2007



Jim Storms, AB8YK, is a 2023 Carole Perry Educator of the Year Award winner. Photo courtesy of HamCation.



and holds an Amateur Extra-class license. He is also an ARRL Member and General Chairman of 2023 Dayton Hamvention<sup>®</sup>.

John Bigley, N7UR, is the 2023 HamCation recipient of the Gordon West Ambassador of the Year Award. This is the first time the award has been presented. The award honors its namesake, Gordon West, WB6NOA, in honor of his contributions and inspirations to the amateur radio community.

**Bigley is the ARRL** Nevada Section Manager and was chosen as the 2014 **ARRL Pacific Division** Ham of the Year. He has been licensed since 2003 and holds an Amateur Extra-class license. Bigley's reaction to receiving the award was, "Surprised? Absolutely!"



John Bigley, N7UR, is the 2023

Year Award winner. Photo

courtesy of HamCation.

Gordon West Ambassador of the

#### Orlando

#### HamCation has been

sponsored by the Orlando Amateur Radio Club since 1946, and is held annually on the second weekend of February. HamCation has grown to become the second largest hamfest in the world. 2023 HamCation is February 10 - 12 and will host the ARRL Southeastern Division Convention at the Central Florida Fairgrounds and Expo Park in Orlando. Visit www.hamcation.com for more information.

#### HAARP Thanks Amateur Radio **Operators for Help with Latest** Experiment

On Tuesday, December 27, 2022, the Highfrequency Active Auroral Research Program (HAARP) conducted its latest ionospheric

experiment of bouncing radio signals off an asteroid passing near Earth's orbit (see the ARRL News story from December 23, 2022).

Amateur radio operators and radio astronomy enthusiasts were invited to monitor the test and send their results to HAARP for analysis. While the results of the experiment will take several weeks, Jessica Matthews, **HAARP** Program



A frosty landscape surrounds antennas at the High-frequency Active Auroral Research Program site in Gakona, Alaska, on December 20, 2022. [JR Ancheta, UAF/GI, photo]

Manager, said the help was greatly appreciated. "So far we have received over 300 reception reports from the amateur radio and radio astronomy communities from six continents who confirmed the HAARP transmission."

HAARP officials say the results of the experiment could aid efforts to defend Earth from larger asteroids that could cause significant damage.

"We will be analyzing the data over the next few weeks and hope to publish the results in the coming months," said Mark Haynes, lead investigator on the project and a radar systems engineer at NASA's Jet Propulsion Laboratory in California. "This experiment was the first time an asteroid observation was attempted at such low frequencies," he said. "This shows the value of HAARP as a potential future research tool for the study of near-Earth objects."

The University of Alaska Fairbanks (UAF) operates HAARP under an agreement with the Air Force, which developed and owned HAARP but transferred the research instruments to UAF in August 2015.



#### Georgia State Parks On the Air

The <u>Georgia State Parks On the Air</u> will be held April 1 - 2, 2023.

ARRL member Claude Ray, AC4SH, said this is the first time that all of Georgia's 50 state parks have been involved.

"The objective is to encourage ham radio operators

to visit Georgia State Parks and experience the fun of Parks on the Air activations," said Ray. "This is a fun contest only, and the rules are minimal, the scoring is simple, and the main award is simply the fun of getting on the air."



The entire process is largely based on the honor system, although logs of top activators will be crosschecked. The contest period begins at 0800 EDT, April 1, 2023, through 2000 EDT, April 2, 2023, and operating hours are subject to park rules and times.

Participants with the top three scores in each of the five categories will receive a certificate indicating the award:

- Georgia Activator Individual
- Georgia Activator Club
- In-Georgia Hunter (individual or club)
- Out of State Hunter (individual of club)
- Georgia ARES<sup>®</sup> Club

Every station participating in the event and submitting a log will, upon request, receive a Certificate of Participation indicating the number of parks contacted. Ray added, "There are 47 parks that already have at least one ham planning to activate on the April 1 - 2, 2023, weekend."

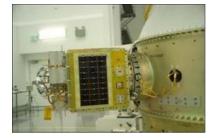
See the complete rules at gaparks.org/rules.

### Amateur Satellite FalconSAT-3 Nears Reentry

Many amateur radio operators and satellite watchers have been predicting the date and time of reentry for <u>FalconSAT-3 (FS-3)</u>. While all reentry predictions are something of a guessing game due to the large number of variables affecting the upper atmosphere, it is certain that the end for FS-3 will be coming very soon, possibly the week of January 16 - 21, 2023.

Radio Amateur Satellite Corporation (<u>AMSAT</u>) Board Member and FS-3 control operator, Mark Hammond, N8MH, said he will try to have the satellite operational for its final hours. The satellite has only been available for approximately 24 hours each weekend due to weak batteries.

FalconSAT-3 was built in 2005 and 2006 by cadets and faculty in the Space Systems Research Center at the US Air Force Academy (USAFA) in Colorado Springs, Colorado.



The FalconSAT-3 satellite. [Photo courtesy of AMSAT]

It is the fourth in a series of small satellites designed, built, and operated there as part of a capstone course, which brings together about 30 cadets each year from several different academic departments.

Nearly 700 cadets at the USAFA obtained their amateur radio licenses as part of training to operate FalconSAT-3 and other USAFA satellites. They have taken that knowledge, understanding, and value of



amateur radio into their Air Force service and industry. Since FalconSAT-3, the USAFA Astronautics Department has built and operated one additional satellite and has two more queued for launch. The space operations curriculum and the ground station are being rebuilt and configured for these new space assets.

Since its launch on an Atlas V rocket from Cape Canaveral in March 2007, the satellite has been through three mission phases. The first phase was operation of the science payloads. The second phase was used as a tool for training cadets in the space operations squadron, students in undergraduate space training in California, and graduate students at the Air Force Institute of Technology. The satellite's third phase was an onorbit resource for amateur radio and amateursatellite services operation managed by AMSAT.

For amateur radio service the downlink is at 435.103 MHz transmitting 1 W into a quarter-wave whip antenna. The uplink is at 145.840 MHz and the receiving antenna



is a quarter-wave whip antenna on the opposite side of the satellite. All UHF and S-band equipment on National Telecommunications and Information Administration licensed frequencies has been disabled. The VHF receiver is very sensitive. Modulation is 9600 bps GMSK for the uplink and downlink. The broadcast call sign is PFS3-11, and the BBS callsign is PFS3-12, Unproto APRS via PFS3-1.

The core avionics were designed and built by Mark Kanawati, N4TPY, and Dino Lorenzini, KC4YMG at <u>SpaceQuest</u>, and have performed remarkably well for nearly 16 years in orbit. Jim White, WD0E, was the lead engineer for FalconSAT-3 at the USAFA and managed the design, construction, testing, and early operations of the satellite. The success of FalconSAT-3 is an excellent example of how amateur radio can be integrated into the curriculum of an education institution for the benefit of the students and the amateur radio service.

-- Thanks to Sasha Timokhov, VE3SVF; Jean Marc Momple, 3B8DU; Mark Hammond, N8MH; AMSAT Operations, and AMSAT News for the information contained in this story.

# Missouri S&T Amateur Radio Club to Celebrate 100 Years

The <u>Missouri S&T Amateur Radio Club</u>, WOEEE, at Missouri University of Science and Technology (Missouri S&T), is gearing up for an early celebration of their 100 years. Club President Morgan Lyons, KI5SXY, said the station first went on the air in 1923 as the M.S.M Radio Club, broadcasting basketball games from the Jackling Gym on the grounds of the Missouri School of Mines and Metallurgy (MSM).

"The FCC was not around in 1923, but we believe the original M.S.M Radio Set Missouri S&T Amateur Radio Club

club used the call sign W9DUM," said Lyons. Then, between September 1937 and March 1938, W9EEE had been assigned to the M.S.M. Radio Club, and in September 1947, the M.S.M Radio club was assigned the call sign W0EEE and changed its name to the Missouri S&T Amateur Radio Club.

The club now has 20 active members and over 300 alumni that regularly visit to help support club activities.

The official date for the celebration in April has not been selected, but there will be an open house and tour



Missouri S&T Amateur Radio Club members operate from their shack. Photo courtesy of Missouri S&T Amateur Radio Club.



of the club's radio shack, and a special event station.

The Missouri S&T Amateur Radio Club is an ARRL Affiliated Club. Students from the club regularly participate in the ARRL <u>Collegiate Amateur Radio</u> <u>Program</u> -- which provides networking opportunities for students and their college radio clubs.

# ARDC Welcomes New Committee Members

Amateur Radio Digital Communications (ARDC) has announced new 2023 volunteers serving on the Grants Advisory Committee (GAC) and Technical Advisory Committee (TAC).

The GAC reviews and advises the ARDC Board of Directors on eligible



AMATEUR RADIO DIGITAL COMMUNICATIONS

proposals and helps identify potential grant-making opportunities, while the TAC advises the board and staff on 44Net technology, architecture, and policy. Volunteers commit to serving at least a year and may serve up to a maximum of 3 years. The term starts in January and runs through December.

The volunteers joining the GAC:

- Katie Allen, WY7YL
- Judi Clark, KK6ZCU
- Dennis Derickson, ACOP
- Jim Idelson, K1IR
- Kristin Paget, KJ6GCG
- William Thomas, WT0DX
- Randy Wilkinson, W4LKS

Joining the 2023 TAC are:

- Dave Gingrich, K9DC
- Rich Gopstein, KD2CQ
- Randy Neals, VE3RWN/W3RWN
- Alvaro Prieto, KC2VVE

• Ian Redden, VA3IAN

"It's always exciting to bring on new members to these committees," says ARDC Executive Director Rosy Schechter, KJ7RYV. "This year, I'm delighted to see more women and a variety of technical skills brought to the table. I'm [looking forward] to seeing what these committees do in 2023."

ARDC provides support for ARRL programs and initiatives including the ARRL Foundation Club Grant Program and Scholarship Program. Read more about the new volunteers, their backgrounds, and their committees at the <u>ARDC</u> website.

#### **ARRL Podcasts Schedule**

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





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

The On the Air and Eclectic Tech podcasts are sponsored by Icom. Both podcasts are available on iTunes (iOS) and Stitcher (Android) as well as on Blubrry -- <u>On the Air</u> | <u>Eclectic Tech</u>.

#### Amateur Radio in the News

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

"<u>Amateur Radio 'Winter Field Day' later this month</u> will demonstrate science, skill and service" / The Observer (New Jersey), January 19, 2023. -- The West Hudson Amateur Radio Club is an ARRL Affiliated Club.



"<u>Blast from the Past / 1954: Ready to help in an</u> <u>emergency</u>" / The Lewiston Tribune (Idaho), January 21, 2023. -- The Lewiston-Clarkston Amateur Radio Club.

"<u>Bryan Amateur Radio Club to host annual Winter</u> <u>Field Day exercises from Jan. 28 - 29</u>" / KAGS - TV (Texas), January 23, 2023. -- The Bryan Amateur Radio Club is an ARRL Affiliated Club.

"Local youth invited to try ham radio with reduced fees through Paducah Amateur Radio Association" / WPSD - TV (Kentucky), January 26, 2023. -- The Paducah Amateur Radio Association is an ARRL Affiliated Club.

"<u>Amateur Radio Winter Field Day to be held this</u> weekend" / Alachua Chronicle (Florida), January 25, 2023. -- The Gainesville Amateur Radio Society is an ARRL Affiliated Club.

"<u>Ham Radio Operators to Host Winter Field Day</u> <u>Event January 28th & 29th</u>" / WTCA (Indiana), January 16, 2023.

"<u>Forget dot com, Americans are making a new dash</u> <u>for Morse code</u>" / The Times (United Kingdom), January 11, 2023. "<u>Ham radio operators 'still a thing' in this advanced</u> <u>technological world</u>" / WDJT (Wisconsin), January 9, 2023. -- The Fond du Lac Amateur Radio Club is an ARRL Affiliated Club.

"<u>3 days of activities planned in January celebrating</u> Orange [Amateur] Radio Club's 75th Anniversary" / The Orange Leader (Texas), January 9, 2023. -- The Orange Amateur Radio Club is an ARRL Affiliated Club.

"<u>Ham radio club receives grant</u>" / Effingham Daily News (Illinois), December 21, 2022. -- The National Trail Amateur Radio Club is an ARRL Affiliated Club.

"What's the frequency, Kenneth?": Watertown Amateur Radio Club celebrates 40th anniversary / Watertown Daily Times (Wisconsin), December 27, 2022. -- The Watertown Amateur Radio Club is an ARRL Affiliated Club.

"Looking to Ditch Twitter? Morse Code Is Back" / Smithsonian Magazine, January/February 2023, by Larry Kahaner, KN4XW.

Arrl.org. 2022. ARRL Letter. [online] Available at: http://www.arrl.org/arrlletter?issue=current [Accessed 1 January 2023]



# **NARS Monthly Club Meeting**

#### **Annual Banquet**

In January, the club held its annual banquet, recognizing contributors to the success of the club, having some great food, and enjoying the best company! The banquet was held at Valley Ranch BBQ, at SH-249 and Spring Cypress. Take a moment to review pictures from a fantastic evening!







#### **Next Club Meeting**

Our next club meeting will be February 17<sup>th</sup> at the Klein Fire Station #3 Training Facility. We look forward to seeing you there!

### NARS General Club Meetings

NARS holds monthly club meetings where a variety of topics are presented from a number of guests. Come learn anything from antenna design, phasing, emergency response, and more!
Who: All club members, friends, or anyone interested in the Amateur Radio hobby
When: The Third Friday of the Month at 7:30pm
Where: Klein Fire Station #3, <u>9755 Landry Blvd, Spring, TX 77379</u> Zoom Conference Call, Meeting ID: 2815436502, Passcode: 123456



# **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.

### ChatGPT and Amateur Radio: Giving AI a voice on the air

#### BY BRANDON ROGERS, K5BLR

Even if you don't follow the latest advances in AI, chances are that you've heard of <u>ChatGPT</u>. ChatGPT was created by openai.com, the same organization behind <u>DALL-E 2</u>, "an AI model that that can create realistic images and art from a description in natural language." (OpenAI, 2022) On the other hand, ChatGPT is a model which interacts in a conversational way, allowing simple access to the AI model. Ask ChatGPT how to fix code, and it will respond, as if you were talking with another person, with suggestions on how to fix it. Wondering how to protect your home? Ask ChatGPT, and it will provide many common methods to prevent your home from burglary. ChatGPT isn't a search engine, like Google, but dynamically creates conversational responses based on the its model. Of course, like many AI models, ChatGPT "mimicks understanding but, in reality, simply stringing together the statistically most-likely words you would expect from a response. Its flexibility has captured plenty of imaginations, but the technology has come in for criticism too — ranging from its tendency to make up 'facts' as it goes along to its potential uses for academic cheating or malicious compositions." (Halfacree, 2023)

How does this relate to amateur radio? Fellow ham, William Franzin (VE4VR) combined the technology of ChatGPT with a voice synthesizer to allow ChatGPT to speak on the air. Franzin explains the project, "In this case we're using a D-STAR digital voice repeater on VHF, which will receive my test transmission, which is digital voice, and then that's sent over the internet to a server in a data center which has a Northwest Digital Radio ThumbDV AMBE transcoder plugged into it. The voice is transcoded to plain digital voice, it's run through a speech-to-text engine, which is then run through ChatGPT and then all the way back, transcoded, and comes back to the radio." (Halfacree, 2023)

If you are interested in seeing this technology in action, please see Franzin's video here: <u>https://youtu.be/x1eZpZtEb-A</u>

Halfacree, G. (2023, February 1). William Franzin Puts OpenAI's ChatGPT On-the-Air with a Custom Amateur Radio Interface. Hackster.io. https://www.hackster.io/news/william-franzin-puts-openai-s-chatgpt-on-the-air-with-a-customamateur-radio-interface-72f3bcd548c3

OpenAI. (2022, April 14). DALL·E 2. https://openai.com/dall-e-2/



# **Greater Houston HamFest**





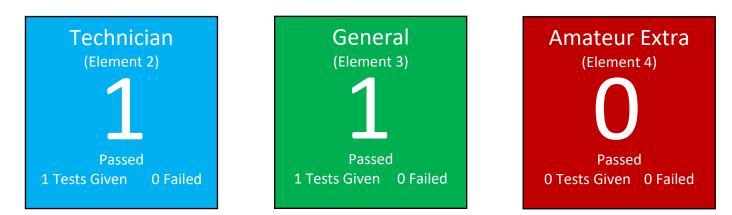


# **VE Sessions and Results**

#### PROVIDED BY SHEREE HORTON, WM5N

#### Attendees

On Saturday, January 21, 2023, a VE Test Session was held at Klein Fire Station #3 in Spring, Texas. During the testing session, 2 candidates took 2 tests.



#### Congratulations!

Congratulations to the following for passing their new license exams<sup>1</sup>:

• Roger E Errington Jr – Technician

Congratulations to the following for passing their upgrade exams:

• Dale E Schmirler KI5SCP – 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 February 11, 2023. Please visit <u>www.w5nc.net</u> for the announcement.

<sup>1</sup> Successful candidates will only receive their <u>NEW</u> 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 <u>NOT</u> have to retest.



#### Thanks and Gratitude

Thanks to the Exam VE's in attendance:

- Ed Messman KT5EM
- Kyle Vann K5KNV
- Bob Ewers K9HOU
- Marvin J Wilken KT4W
- Michael Robinson KIODE
- Keith Dutson NM5G

### **VE Session Guidelines**

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

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

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

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

#### Volunteering and Becoming a Volunteer Examiner

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

# Did you know...

NARS now has the ability to run computer-aided tests through <u>Ham.Study</u>. Computer-aided tests provides many benefits, including the ability to make the tests easier to administer, quicker to get results, easier for many test-takers, and many more!



# **New and Renewing Club Members**

#### **New Club Members**

Welcome to the following new members of NARS!

• Jane Golden, KM5P

#### **Renewing Club Members**

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

- Michael Ballesteros, WI5FI
- Ryan Callison, KA5K
- Lance Clarke, KB5UC
- Jay Close, KOGEO
- Marty Fitzgerald, W5MF
- John Garcia, KC5CSP
- Thomas B (Ben) Gillis, K5TBN
- Darryl Gunter, KG5KOS
- Rudy Hildreth Hardy Jr., W5HRH
- David Harnish, AD6ME
- Tom Hoherd, KK5YU
- Teresa Holmes, W5MOM
- Walter Holmes, K5WH
- John Jackson, N3AG
- John M Jeffers, W3GYV
- George Levandoski, KD5AYF
- Jay Lovett, KD5HSS

- Allen Majeski, WA5REJ
- Paul Pacior, KA5PUD
- Michael Panico, KG5BBJ
- Mike Pate, K5MAP
- Raul Pavon, AK5KK
- Paul Protas, WA5ABR
- David Revere, WB5AYU
- Brandon Rogers, K5BLR
- Gregory Sanders, KE5DXA
- Jackie Shallington, KM5SC
- Tom Smith, N5AMA
- Stephen Stepinoff, KG5VUG
- Thomas Stokes, KD5MER
- Robert White, KORCW
- Inga Woods-Waight, KI5SNB
- George Young, N5NBS



# New General Question Pool Released for Ham Radio Licensing Effective July 1, 2023

The National Conference of Volunteer Examiner Coordinators' (NCVEC) Question Pool Committee (QPC) has released the 2023 - 2027 General Class FCC Element 3 Syllabus and Question Pool to the public. The new General Question Pool is effective July 1, 2023, through June 30, 2027.

The new pool incorporates some significant changes compared to the 2019 - 2023 version. Its 432 questions were modified slightly to improve wording and to replace distractors; 51 new questions were generated, and 73 questions were eliminated. This resulted in a reduction of 22 questions, bringing the total number of questions in the pool down from 454. The level of difficulty of questions is more balanced, and the techniques and practices addressed have been updated.

The pool is available as a Microsoft Word document and PDF. The single graphic required for the new General Question Pool is available within the documents, or separately as PDF and JPG file formats.

The newly revised pool must be used for General-class license exams starting July 1, 2023," said ARRL VEC Manager Maria Somma, AB1FM, who is a member of the NCVEC Question Pool Committee. "New test designs will be available to ARRL Volunteer Examiners on that date. The ARRL VEC will supply its officially appointed, field-stocked VE teams with new General exam booklet designs around mid-June."

General class examination candidates preparing for their exams using the 9th edition of The General Class License Manual, and/or the 6th edition of ARRL's General Q & A are encouraged to test by, or before, June 30, 2023. New editions of ARRL licensing publications will be available in May, for exams taken on, or after, July 1, 2023.



# **Training and Education**

#### NARS

NARS Member Articles and Tutorials - http://w5nc.net/index.php/2014-03-31-00-54-20

#### ARRL

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

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

ARRL Webinars - <u>http://www.arrl.org/ARRL-Learning-</u> 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 <u>study guide</u> 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**

<u>Online Technician license exam self-study course</u>, 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 <u>"kid friendly" self-study course</u> and a self-study program especially designed for <u>emergency services personnel</u>.

"The Ham Whisperer" <u>Video Course</u>, Andy Vallenga, KE4GKP – This course is based on the FCC question pool sequence to assist with Technician license preparation.

<u>A Self-Study Video Course</u>, Dave Casler, KEOOG – This course provides a guided self-study <u>video</u> <u>course</u> based on ARRL's Ham Radio License Manual curriculum.

Online Technician License Preparation Course – Chris Johnson, N1IR





#### **Study Tools**

<u>HamStudy.org: Cutting edge amateur radio study tools</u> - 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

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

HamTestOnline - Study for your Ham Radio License Exam!

### Upcoming Skywarn Spotter Training for 2023

Training is free and open to the public. More dates to be added soon. For more details, please see <u>SKYWARN - Schedule (weather.gov)</u>.

Date/Time	Location	Point of Contact
Basic	Lone Star Convention Center	Victor Reyes
February 13th	9055 Airport Road	Victor.reyes@mctx.org
6:30 pm to 8:30 pm	Conroe, TX 77303	936-523-3908
Basic	Dunbar Gym	Polk County Emergency Management
March 8th	1103 Dunbar Street	emergencymanagement@co.polk.tx.us
6:30 pm to 8:30 pm	Livingston, TX 77351	
Basic Advanced	Brazos Center	Amy Zaragoza
March 9th	3232 Briarcrest Drive	azaragoza@cstx.gov
Basic 1 pm to 3 pm	Bryan, TX 77802	
Advanced 6 pm to 8 pm		
Advanced, Virtual	Virtual, online, <u>register here</u>	dan.reilly@noaa.gov
March 21st		
6 pm to 815 pm		

### **Exam Practice Answers**

**Technician**: T3C01 – B. UHF signals are usually not propagated by the ionosphere **General**: G8A08 – A, Excessive bandwidth **Amateur Extra**: E9A02 – D. 286 watts



# **Of Interest to the Club**

#### Houston Local Traffic Net

The Houston Local Traffic Net meets each Monday night at from 6:30 – 7:30pm on the 146.940 repeater with a PL tone of 167.9 Hz. The backup repeater for Monday night is the NARS repeater 146.660/100.0. The Thursday night edition of the Houston Local Traffic Net meets on Thursday evenings at 6:30pm on the 146.660 repeater with a PL tone of 100.0 Hz. This repeater is linked to the 70cm repeater on 444.375 also with a PL tone of 100 Hz. You can access the two linked repeaters via EchoLink node W5NC-R. The Thursday night backup repeater is 147.000 with a PL tone of 103.5 Hz. The purpose of both nets is to pass National Traffic System (NTS) radiogram messages into and out of the Houston area. The Monday edition of the Net also provides traffic handling instruction/training.

Anyone with questions about the Houston Local Traffic Nets, radiograms and or message handling can call or email Sheree Horton WM5N for more information.

#### **GHSN** monthly Simplex Propagation Net

Beginning January 2022, the <u>Greater Houston Simplex Network</u> will return to its regular schedule of the 4<sup>th</sup> 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 <u>the website</u>. Contact Mark - <u>N5PRD@yahoo.com</u>

### Local Events

February 18 - CERT Rodeo - <u>https://volunteerhouston.org/certrodeo/</u>

March 4 - Pedaling the Prairie - http://www.pedalingtheprairie.org/

March 11 - Buffalo Bayou Regatta

April 29-30, 2023 – Texas MS 150 - To complete your 2023 Sign-Up you need to visit two separate websites as outlined below:

- The Com Form
- 2023 TX MS 150 Volunteer Registration (Galaxy Digital Site)

Please make sure you have completed the process on both websites. You will not be considered fully registered for the event until you have done so.



# Calendar

### **Club Activities and Events**

Monthly Club Meeting – February 17, 2023 - Valley Ranch BBQ

VE Test Session – February 11, 2023 – <u>Klein Fire Station #3</u> - Check-in will start at 8:30am with testing lasting from 9:00am - 11:30am. All testing activities will be completed by noon.

# 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 <u>W5NC Facebook page</u> and join! It is open to ham radio operators, so there is a short quiz to qualify new members.

We also have a Twitter feed. Follow us on https://twitter.com/nars\_w5nc



### **ARRL Contests & Activities**

January 2023 1: Straight Key Night 7: Kids Day 7-8: RTTY Roundup 21-23: January VHF TBD: Winter Field Day	February 2023 13-17: School Club Roundup 18-19: International DX – CW	March 2023 4-5: International DX– Phone
April 2023 16: Rookie Roundup – Phone	May 2023	June 2023 3-4: International Digital Contest 10-12: June VHF 17: Kids Day 24-25: Field Day
July 2023 8-9: IARU HF World Champ	August 2023 5-6: 222 MHz and Up Distance 19-20: 10 GHz & Up – Round 1 20: Rookie Roundup – RTTY 12-13: EME - 2.3 GHz & Up #1	September 2023 9-11: September VHF 16-17: 10 GHz & Up - Round 2 9-10: EME - 2.3 GHz & Up #2
October 2023 16-20: School Club Roundup 28-29: EME - 2.3 GHz & Up #3	November 2023 4-6: Nov. Sweepstakes – CW 18-20: Nov. Sweeps. – Phone 25-26: EME-50 to 1296 MHz #4	December 2023 2-4: 160 Meter 10-11: 10 Meter 18: Rookie Roundup–CW

### Hamfests and Conventions

February 10 - 12 | Orlando HamCation, hosting the ARRL Southeastern Division Convention, Orlando, Florida

February 17 - 18 | LCARC Winter-Fest, ARRL Arkansas State Convention, Hoxie, Arkansas

February 25 | <u>HAM-CON</u>, hosting the ARRL Vermont State Convention, Colchester, Vermont

March 3 - 4 | <u>BirmingHamfest</u>, hosting the ARRL Alabama Section Convention, Trussville, Alabama

March 3 - 4 | Greater Houston HamFest, hosting the ARRL Texas State Convention, Rosenberg, Texas

March 18 | MARC St. Patricks Day Hamfest, hosting the ARRL West Texas Section, Midland, Texas



- March 18 | <u>Charleston Area Hamfest</u>, hosting the ARRL West Virginia Section Convention, Charleston, West Virginia
- March 24 25 | ARRL Maine State Convention and Hamfest, Lewiston, Maine
- March 25 26 | <u>QSO Today Virtual Ham Expo</u> (online)
- April 7 8 | Green Country Hamfest, hosting the ARRL Oklahoma Section Convention, Claremore, Oklahoma
- April 8 | Raleigh Hamfest, hosting the ARRL North Carolina State Convention, Raleigh, North Carolina
- **Contests and Radiosport**
- February 4 5 -- Vermont QSO Party (CW, phone, digital)
- February 4 5 -- 10-10 International Winter Contest, SSB (phone)
- February 4 -- EurAsia HF Championship (CW, phone)
- February 4 5 -- F9AA Cup, CW (CW)
- February 4 5 -- Mexico RTTY International Contest (digital)
- February 4 -- Minnesota QSO Party (CW, phone, digital)
- February 4 -- FYBO Winter QRP Sprint (CW, phone, digital)
- February 4 -- AGCW Straight Key Party (CW)
- February 4 5 -- British Columbia QSO Party (CW, phone)
- February 4 5 -- European Union DX Contest (CW, phone)
- February 4 5 -- North American Sprint, CW (CW)
- February 6 -- OK1WC Memorial (MWC) (CW)
- February 6 -- RSGB 80-Meter Club Championship, SSB (phone)
- February 7 -- ARS Spartan Sprint (CW)
- February 8 -- NAQCC CW Sprint (CW)





# **NARS Club Officers and Information**

**Board Officers with Voting Privileges** 

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

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

Treasurer: Tom Hoherd, KK5YU, 281-370-2941, treasurer@w5nc.net

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

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

Director: Sam Labarbera, N6HB, officers@w5nc.net

**Board Non-Voting Associate Members** 

Administrative Secretary: Neal Naumann, N5EN

Social Media Liaison: Sam Labarbera, N6HB

Newsletter Editor: Brandon Rogers, K5BLR

Public Information Liaison: Sheree Horton, WM5N

ARRL/VEC Liaison: Sheree Horton, WM5N

Repeater Team Lead: Marty Fitzgerald, W5MF

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

Trustee: Paul Owen, N5NXS

## 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 <u>http://w5nc.net/index.php/clubinfo/email-reflector-groups</u>

### 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 (<u>http://w5nc.net</u>) or contact a club Elmer. Sam Labarbera, N6HB, coordinates this Net.

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

### Repeaters

For information on NARS-managed repeaters, please see the club website at <a href="http://w5nc.net/index.php/club-info/repeaters">http://w5nc.net/index.php/club-info/repeaters</a>