



**W5NC**

Houston, Texas

Northwest Amateur Radio Society

A 501(c)(3) Organization

An ARRL Affiliated Club

---

# NARS NEWS

---

**JULY 2025**

Northwest Amateur Radio Society

P.O. Box 11483

Klein, TX 77391

[w5nc.club](http://w5nc.club)

**President's  
Message**  
Page 3

**NARS Activities**  
Page 15

**Amateur  
Radio  
Activities**  
Page 11



## Contents

President's Message .....	3
Exam Practice .....	5
NARS Membership – Due Dates and More .....	5
Amateur Radio News .....	6
How to become a Volunteer Examiner .....	9
New Radio for New Hams: Jumpstart Program .....	10
NARS Name Badges: Get Yours Today! .....	10
Amateur Radio Activities .....	11
A Remote-Controlled Balanced Antenna Tuner by Randy Mather, AJ7B .....	11
NARS Activities .....	15
VE Sessions and Results .....	16
New & Renewing Club Members .....	17
Training and Education .....	18
NARS Club Documents and Minutes .....	19
Of Interest to the Club .....	20
Calendar .....	21
Club Activities and Events .....	21
Social Events .....	21
Hamfests and Conventions .....	22
Contests and Radiosport .....	22
Area Event Alert .....	22
NARS Club Officers and Information .....	23
Board Officers with Voting Privileges .....	23
Committee Team Members .....	23
Club Nets .....	23

# President's Message

BY PAUL OWEN, N5NXS

## 2025 Field Day and More of NARS History

At the last meeting, I went over the plan for Field Day. The club will have three HF station plus a GOTA station and Talk-in station monitoring the 444.375 +100Hz tone repeater. David, WJ9O, will handle the satellite contact. James, AA5JW, helped me send the ARRL radio gram to the section manager. I still needed help with the Digital station and all the other things that need to be done. I do have some help from Michael who will get the Field Day message and then transmit it to me. Please see the preliminary pictures below and the full report in next month's issue.

## NARS History

In the beginning, NARS has participated in every field day since 1986. I remember many of the field day sites and somewhere very challenging to use for field day. We had the deal with the very challenging Houston weather, getting a tent big enough to put all the stations under, hooking up to a diesel generator provided by our first club president Ken Harlan, KA5AKG, and parking all the cars on very wet grass. We had to put up the beam antenna on a tower and use many hands to go from horizontal to vertical. Sometimes we had help. One year, Keith, NM5G/SK, brought out his John Deere tractor and we tied it to the bucket to raise the tower. In other years we had crank up on a trailer and one on a motor home. Then there was the logistics of tables, chairs, AC extension cords with multiple outlets and set up the coffee pot. Joe, KD5KR/SK, bought one for the club and used it at the club meetings. For the overnight crew Keith, NM5G/SK, would bring out his homemade warm honey buns after midnight. It was amazing to see all the CW hands in the club come out and show the new guys how fast they could send and receive morse code at 35wpm or faster.

*To be continued...*



## Repeater Status and Weekly Net Operations

The NARS Repeater Team has a lot on the menu going forward, to get the latest Repeater Status check out [Northwest Amateur Radio Society - Repeater Status Update](#).

*Repeater update, June 2025*

**LBT Repeater (Downtown)** - Is off the air.

**Galleria Repeater** – UHF machine is linked to ALLSTAR and the W5NC hub.

The VHF machine is operational as a standalone machine.

After some 39 years of operation from this site the repeater will be removed from this location on June 21.

The repeater team will try to install the 443.075 at the administration building as soon as they can.

**Klein Repeater** – Fully operational with UHF linked to ALLSTAR.

**W5NC HUB (Node 59847)** – Allstar and Echo links are operational. DMR repeater (K5MAP) is connected.

## 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, to 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

## 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)**

#### **T6D03**

Which of the following is a reason to use shielded wire?

- A. To couple the wire to other signals
- B. To prevent coupling of unwanted signals to or from the wire
- C. To decrease the resistance of DC power connections
- D. To increase the current carrying capability of the wire

### **General (Element 3)**

#### **G6B06**

What kind of device is an integrated circuit operational amplifier?

- A. MMIC
- B. Analog
- C. Digital
- D. Programmable logic

### **Amateur Extra (Element 4)**

#### **E3B08**

How does the maximum range of ground-wave propagation change when the signal frequency is increased?

- A. It decreases
- B. It peaks at roughly 8 MHz
- C. It stays the same
- D. It increases

See the answers on [Page 19](#).

## 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: [Northwest Amateur Radio Society - Club Roster](#). Find your name in the list and look at the “Expires” column of the table!

# Amateur Radio News

An excerpt from the ARRL News

## ARRL Teachers Institute Set for Record Year

The ARRL Teachers Institute on Wireless Technology (TI) has 13 sessions announced in 2025, with more in the works. The program is a donor-funded professional development program designed to help classroom teachers elevate their science, technology, engineering, and mathematics (STEM)



programs using wireless technology. “We are so excited that we get to grow the program this year,” said ARRL Education and Learning Manager Steve Goodgame, K5ATA. Donor support has been from all levels. A YouTube telethon brought in more than \$21,000 from individual hams. Remote sessions have been held on Staten Island and in Louisiana. The Johns Hopkins University Applied Physics Lab is hosting one later in the year.

The momentum continues to build around the program. Word is spreading and teachers are excited for what the TI can help them accomplish. Those wishing to contribute to this entirely donor-funded program can visit [www.arrl.org/givetostem](http://www.arrl.org/givetostem).

## Hams Report Fire & Helicopter Crew Extinguishes

With the help of amateur radio operators, a potential wildfire was averted in California on June 12. Robert Debevec, W6IWN, and Jacob Graham, KC7WXD, were hiking on the Grouse Ridge Trail in a section of the Tahoe National Forest. Their day started out hoping to activate several Summits on the Air (SOTA) locations when they saw smoke near the Black Buttes area. Wireless service is spotty in portions of the eastern Sierra, and they didn’t have a cell signal, so Debevec used his handheld radio to report the fire on a nearby repeater. Dan Patterson, W6AI, responded back and notified the U.S. Forest Service with the coordinates proved by Graham.



## Current News...

the ARRL website posts recent news on current events, activities, and policies that are taking shape in the Amateur Radio world. The following is an excerpt from their News section.

It only took about 10 minutes for them to dispatch a helicopter to the area, said Graham. “We watched four firefighters rappel down followed by a pack of equipment.” After putting out the fire a helicopter made a water drop. After the firefighters left, the winds picked up dramatically. Had that happened earlier, the outcome could have been much worse.



## ARRL Launches Dream Station Sweepstakes

ARRL has introduced a sweepstakes that gives members a chance to win an Icom Dream Station, which includes a limited edition IC-7760 HF/50 MHz transceiver, an IC-PW2 amplifier, and a microphone, all donated by Icom America.



Between January 3 and December 31, 2025, full ARRL members in the US have a chance to win an Icom Dream Station.

The sweepstakes is running from January 3 to December 31, 2025 and is part of a year-long campaign to encourage new membership (and a fun way for current members to extend their support for ARRL). The winner will also receive a limited edition Seiko watch celebrating Icom's 60<sup>th</sup> anniversary.

Participation is open to full ARRL members in the US. Members will automatically earn sweepstakes entries when they 1) join or renew membership (earn 1 entry), 2) set up auto-renewal (earn 2 entries), 3) donate to the ARRL Diamond Club (1 entry earned for every \$50 donated). Members can earn up to six entries during the year-long campaign. For more information about the ARRL Sweepstakes and the official rules, visit [www.arrl.org/dreamstation](http://www.arrl.org/dreamstation).

## Openings Available at ARRL

ARRL is looking for some new members of their Newington, Connecticut-headquarters based staff.

**Membership Manager** – responsible for membership growth, engagement and retention. **Advertising Sales Manager** – responsible for driving advertising revenue across ARRL's print and digital platforms, including magazines, media and sponsorships. It involves prospecting for new clients, developing targeted advertising products and campaigns.

Other open positions include **Production Coordinator** and **Senior RFI Lab Engineer**. Descriptions of each position are listed on the ARRL website at [www.arrl.org/careers](http://www.arrl.org/careers). If you have amateur radio experience and a desire to work at ARRL, apply for one of the jobs by submitting your resume and cover letter to [hr@arrl.org](mailto:hr@arrl.org).

## Next Gen DXing Videos Available

The ARRL has published an 8-video series about the Next Generation of DXing. The videos were captured during an all-day seminar at the 76<sup>th</sup> International DX Convention held April 11-13, 2025 in Visalia, California. A panel of experts covered everything from financing and planning a DXpedition to getting permits, arranging logistics, planning out equipment, managing both remote and local operators, dealing with problems, and much more. The latest technology being used in DXpeditions was explained in detail, including the Radio in a Box (RIB), Starlink, software-defined radios, and the latest digital modes such as FT-8 SuperFox. This content is available on the ARRLHQ YouTube channel as a [Playlist](#).

Session 1 – Mission Planning – talks about planning a DXpedition.

Session 2 – Search for Solutions – discusses hardware and process solutions.

Session 3 – Team Building – goes into detail about how to build your team for a DXpedition.

Session 4 – Data Networks for Ham Radio – covers the vital components of local networks and internet connectivity for activations.

Session 5 – Radio Systems Design – covers the RF hardware used in DXpeditions, including the RIB and the Mother of all Switches (MOAS).

Session 6 – Managing the User Experience – goes over how to make things work for your operators (both local and remote) and your DXers.

Session 7 – Station Integration and Test – shows you how to put it all together, and (perhaps more importantly) how to test it – really test it – before the activation hits the air.

Session 8 – Scheduling and Execution – is all about getting it done. The best laid plans are worthless if they aren't executed. This video shows you how to make it all work.

## ARRL Audio News

Listen to [ARRL Audio News](#), available every week. 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 thru podcast host Blubrry.com, iTunes, and Apple Podcasts -- [On the Air](#) | [ARRL Audio News](#).



Locally, the Spring repeater KA2EEU, on 444.350, broadcasts the Amateur Radio Newsline on Sunday at 4 pm and it broadcasts ARRL Audio News at 7pm on Monday. The NARS repeater, W5NC, on 444.375, broadcasts the Amateur Radio Newsline on Saturday at 10am.

# How to become a Volunteer Examiner

If you're interested in becoming an ARRL Volunteer Examiner it's easy and free. There are three steps to becoming a VE –

1. Review the [Volunteer Examiner Manual](#), paying special attention to Chapter 2. Also review the published manual [Supplemental Information](#)
2. Complete and sign the [ARRL Application / Open-Book Review](#) (40 questions).
3. E-mail, fax or mail forms to – ARRL VEC, 225 Main St, Newington, CT 06111 USA. You can also fax to 800-594-0339 or email to VEC @arrl.org

Once you are accredited, you'll receive a laminated VE badge to wear at exam sessions and a certificate suitable for framing. You don't have to be an ARRL member to be a VE, but you must include with your application a copy of your accreditation certification if you aren't an ARRL member.

VE sessions can be paper based or computer based (either in-person or remote sessions). Monthly NARS VE sessions are in-person computer based, using ExamTools software. To grade these computer-based exams a VE must go through a short training course on the ExamTool's website. Once completed they will qualify to grade ExamTools based exams.

At VE sessions, VE's may be asked to help with checking in examinees so knowing what IDs are accepted and how payment can be made is important. The current VEC Exam fees are \$15 for adults and youth under 18 pay \$5. If the examinee fails the exam and wants to re-take it during the session they must pay another fee.



## Next Club Meeting

Our next General Meeting will be held on July 18, 2025, at the HCESD 16 Admin Building – 18606 Stuebner Airline Rd, Spring, TX 77379. We hope to see everyone there!

## New Radio for New Hams: Jumpstart Program



Through a partnership with GigaParts, this program is designed to lower the barrier to entry into amateur radio by providing new hams with a high quality radio for **only \$17.99 (plus tax and shipping)**. The radio is supplied with an antenna, desktop cradle charger, battery, and belt clip. Effective February 28, 2025, new hams will be entitled to a **70% discount** on the Explorer QRZ-1 VHF/UHF handheld transceiver, as well as a variety of accessories.

The eligible ham must have a QRZ account and be able to log in and apply for the program. Certain types of identification, including a photo ID, will be required. This information is not shared or exchanged with any party and is used only to validate eligibility under this program.

This program is available exclusively to USA licensed amateur radio operators who obtained their first license from the FCC within the last 6 months. The Jumpstart program may be changed or terminated without notice based on availability and corporate sponsors.

### How it Works:

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

## 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.

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 learning new aspects of the amateur radio hobby. This article is taken from the March 2023 issue of QST.

### A Remote-Controlled Balanced Antenna Tuner by Randy Mather, AJ7B

In 1973, Walter Maxwell, W2DU/SK, wrote a series of QST articles about SWR. These articles convinced me to use a balanced feed line, especially when using a non-resonant antenna on multiple bands. Most antenna tuners on the market achieve a balanced output with a 4:1 voltage balun. However, as pointed out by W2DU, a voltage balun can cause power loss, and can even saturate a high SWR.

Because I wanted a balanced wide-range tuner, the February 1990 QST article, “A *Balanced* Balanced Antenna Tuner” by Richard Measures, AG6K, piqued my interest. My goal was to build a remote-controlled version of this balanced antenna tuner, which would tune my 160-meter full-wave loop antenna on 160 through 40 meters. My completed tuner is contained in a 12x20x8” wooden box (Figure 1). A list of parts for my design is shown in Table 1.

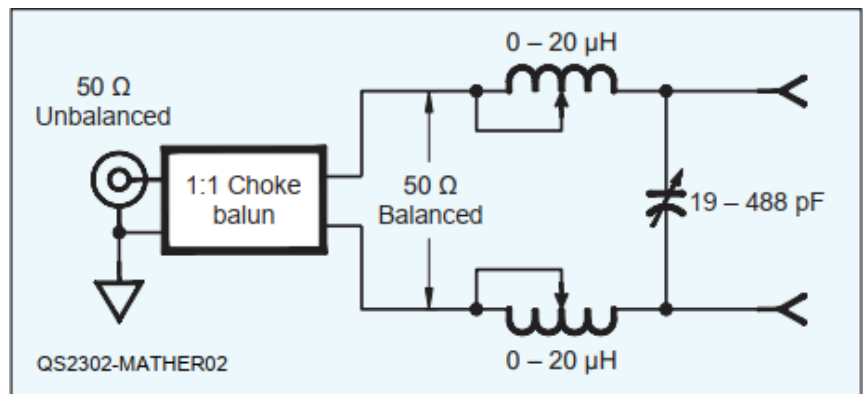
#### Design Considerations and Construction

Figure 2 shows the basic tuner design, including the component values used. The two balanced tuner inductors must be synchronized and adjusted simultaneously. This was accomplished with a timing belt and geared pulleys on each inductor shaft. The feedback loop that tracks the inductors’ positions consists of a 10-turn 10k Ohm potentiometer, with its shaft mechanically connected to one inductor shaft and 5 V dc applied across it. The voltage on the wiper indicates the relative position of the inductors. Because the inductors have 35 rotations from 0 – 20  $\mu$ H, and the potentiometer has 10 turns, a smaller pulley was placed on one of the inductor shafts, and a second timing belt mechanically connected the potentiometer to the inductors with a large pulley (Figure 3).



**Figure 1** — The completed remote-controlled balanced tuner.

Next, the variable capacitor was mounted above the two inductors, as shown in Figure 4. A 5 k Ohm potentiometer attached to the capacitor motor provides the capacitor's status information. This is a standard potentiometer with a rotation range of about 330 degrees to cover its full range. A dc motor with dual shafts exiting the gearbox connects to the capacitor and the potentiometer. The mechanical coupling between the capacitor, inductors, motors, and potentiometers must be insulated. The capacitor shaft and its positioned potentiometer are 1/4" in diameter. However, the dual motor output shafts are 5/16" in diameter. I used jaw couplings and jaw-coupling inserts from [www.surpluscenter.com](http://www.surpluscenter.com) (Table 1) to accomplish these insulated couplings.



**Figure 2 — My balanced L-network antenna tuner RF component values.**

### Controller for the Remote Tuner

The tuner remote control uses an Arduino Mega 2560 microcontroller and a dual-output L298N motor driver. The L298N controls the 12 V to the motors and supplies 5V dc for the potentiometers. An Arduino sketch monitors four digital inputs and the two toggle switches that position the tuner components. Two more inputs monitor the 0-5 V from the wipers of the inductors and capacitor potentiometers. Another input monitors the serial port for incoming data and acts based on the characters received. The tuner's front aluminum panel holds the switches, display, Arduino microcontroller, and motor driver board.

Table 1 — Parts List				
Description	Quantity	Part #	Manufacturer	Source
Variable coils 0 – 20 $\mu$ H	2	RI-20	Palstar	Palstar
Variable capacitor 19 – 488 pF	1	154-3-1	Cardwell	RF Parts
Arduino Mega 2560	1		Arduino	Amazon
Screw terminal shield	1			Amazon
Motor driver controller	1	L298N	Smart Car Power	Amazon
Fuse block	2	RV24YN205	Parts Express	Amazon
XBee Series 2	2		SparkFun	Amazon
XBee Explorer Regulated	1		SparkFun	Amazon
XBee Explorer Dongle	1		SparkFun	Amazon
12 V dc motor, 60 RPM, dual shaft	1			Amazon
12 V dc motor, 100 RPM	1			Amazon
Timing belt, 90 teeth	2	180XL037NG		SureMotion
Pulley, 10 teeth	1	APB10XL037		SureMotion
Pulley, 24 teeth	2	APB24XL037		SureMotion
Pulley, 32 teeth	1	APB32XL037		SureMotion
1/4-inch jaw coupling half	4	1-3419-A		Surplus Center
5/16-inch jaw coupling half	2	1-3419-B		Surplus Center
Jaw coupling insert	4	1-3419-X		Surplus Center
Terminal block — 2 x 2 connections	3			Numerous
SPDT (middle off) switch	2			Numerous
DPST switch (mini)	1			Numerous
Variable resistor — 10 k $\Omega$ , 10 turn	1			Numerous
Variable resistor — 5 k $\Omega$ , 1 turn	1			Numerous
Binding post	2			
Female coaxial connector	1	SO-239		Numerous
1:1 current balun (W2DU type)	1	833-Balun	The Wireman	The Wireman

In addition to looking for user commands, the Arduino sketch also monitors the movement of the components to prevent them from being driven beyond their mechanical range. The position feedback voltage from the potentiometers is compared to the maximum and minimum values permitted. If the voltage is outside this range, the motor is stopped. Finally, a

1602 serial LCD module display was added to the tuner to monitor the inductor and capacitor values without having to take a laptop to the remote position. The Arduino sketch and a list of tuner commands are provided at [www.arrl.org/qst-in-depth](http://www.arrl.org/qst-in-depth).

Because this tuner would be 200 feet from my shack, a pair of XBee Series 2 wireless modules were used to extend the USB control (USB 2.0 has only a 5-meter maximum length specification). Arduino data inputs D0 and D1 are connected to the XBee's data-in and data-out pins, permitting commands to be sent and received over a wireless connection. A SparkFun XBee Explorer Regulated circuit board simplifies the connection between the XBee module and the Arduino microcontroller. The XBee module plugs into the circuit board, which has pads to solder wires for power, ground, and input/output signals. On the shack side, a SparkFun XBee Explorer Dongle plugs into a USB port on my PC. The two XBee modules are configured to communicate using *XCTU*, a free multi-platform PC application designed for configuring and testing Digi RF modules. One module is set to **COORDINATOR** and the other is set to **ROUTER**.

## Tuner Setup

After installation, I used an antenna analyzer to adjust the capacitor and inductors for minimum SWR every 100kHz on 160, 80, and 40 meters. I entered these position values into a table sorted by frequency. Now, using the wireless USB interface, I can use the monitor built into the *Arduino Integrated Development Environment (IDE)* to send commands to the tuner to position the components. For example, to position the capacitor to analog-to-digital converter setting 123, enter "CA, 123" and click **SEND**. The Arduino program parses the command and causes the capacitor motor to move to the position where the voltage on the potentiometer is read as 123.

## The Windows Program

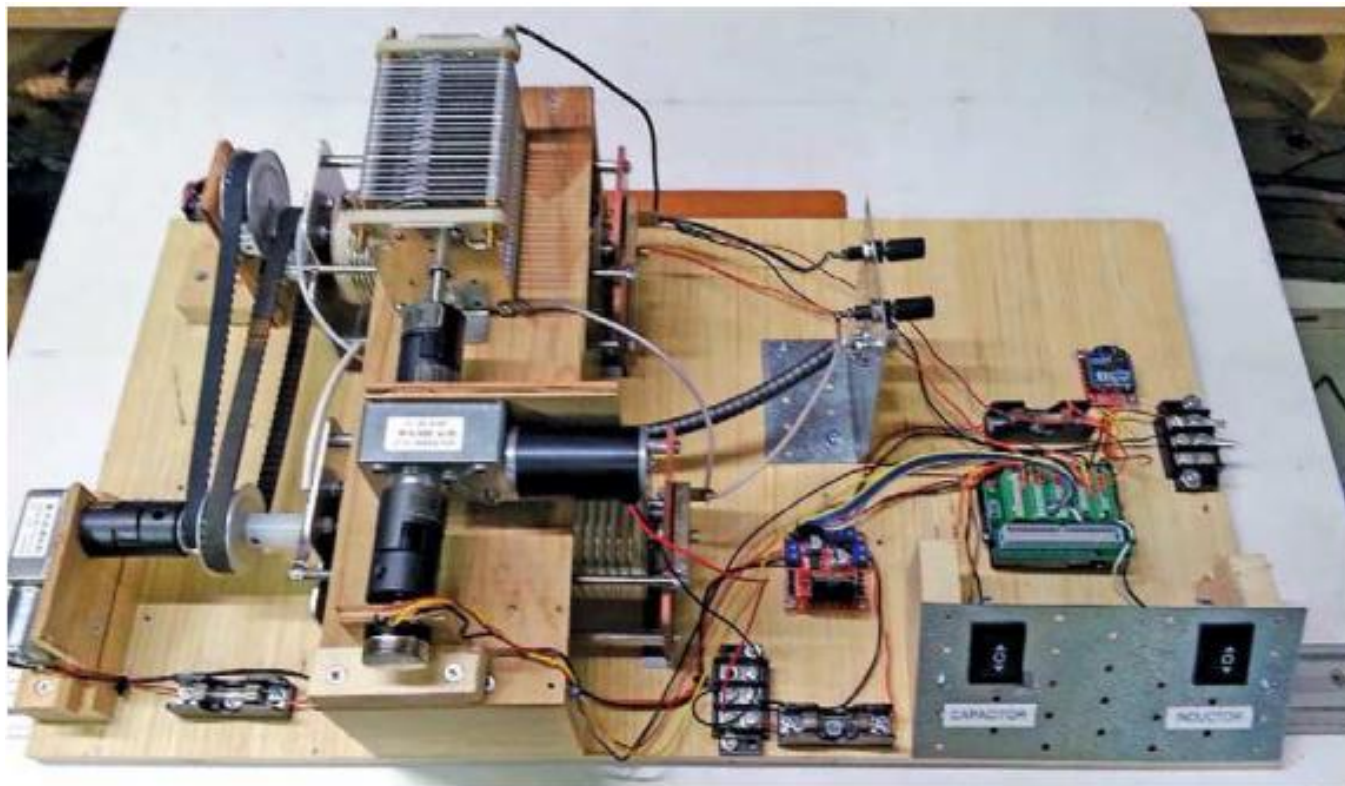
My final solution was to have the tuner respond by entering just the desired frequency. Using Visual Studio, I created a program that controls the tuner from a PC running Windows. A full description of the Windows program is given on the WST in Depth web page ([www.arrl.org/qst-in-depth](http://www.arrl.org/qst-in-depth)). This Windows program is available by emailing me at [randymather@frontier.com](mailto:randymather@frontier.com).



**Figure 3** — Inductor synchronization details.

## Results

My tuner worked great right from the start, easily obtaining a 1:1 match on any part of the three lower bands. This was a fun project, as it covered antenna-matching components, motor controls, programming, and fabrication. I asl want to acknowledge Rob Salsgiver, NR3O, who fabricated the front panel and helped with testing. Rob and I have many ideas for improving the tuner, but for now, I'm very happy with the result.



**Figure 4** — The final configuration with all parts mounted. Note the two inductors synced by the timing belt. In the center, just to the right of the capacitor platform, you can see the ferrite beads that make up the 1:1 current balun stacked on the cable.

About the author - Randy Mather, AJ7B, is an ARRL Life Member and has been licensed since 1964. He was an electronics technician in the Navy with a specialty in satellite communications. He is currently an active member of the Snohomish County Hams Club. Randy can be reached at [randymather@frontier.com](mailto:randymather@frontier.com)

## NARS Activities

### *Helping a former NARS member/SK*

After the passing of well-known NARS member, Keith Dutson, NM5G/SK, his wife, Beth, requested help removing his 150 ft tower. On June 5, tower climber, Dustin, came with a crane to accomplish the task. The initial plan was to remove the two vertical antennas and the 7-element beam, and then remove the tower in three sections.



Thanks to Paul Kent, KI5FJS, for setting this up and providing the photos.

Unfortunately, Dustin could not get the bolts out of the beam antenna boom, so the plan was revised to remove the tower in two sections with the beam still attached. The upper section was a bit stuck, but the crane operator managed to wiggle it free. The final section was removed from the ground level and it was found that the bolts were rusted in place. A little hammer persuasion removed these and the last section was lowered to the ground. It took Dustin about 3 hours of intense work to get the tower down. Dustin has done a good job of bringing down towers for the club's members. If anyone needs help from a climber, call Dustin at 281-868-9663.

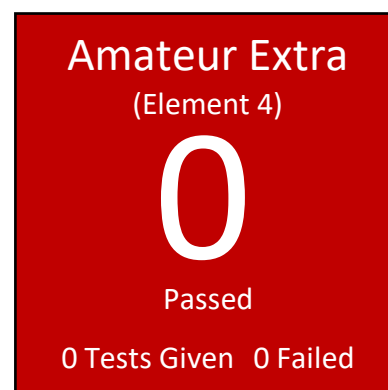
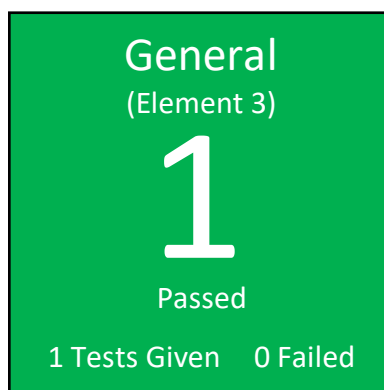
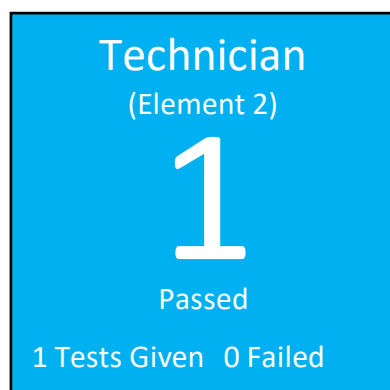


# VE Sessions and Results

PROVIDED BY SYNOMEN HEBERT, KG5IRS

## Attendees

On Saturday, June 28, 2025, a VE Test Session was held at HCESD 16 Admin, 18606 Stuebner Airline Rd, Klein, TX 77379 in conjunction with Field Day. During the testing session, 2 candidates took 2 tests.



## Congratulations!

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

- Paul Brownell – upgraded to General
- Clayton Weaver – new Technician

## Pre-registration for Testing Sessions

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

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

The next session will be July 26, 2025 at the HCESD 16 Admin Building. Please visit [Northwest Amateur Radio Society - License Exams](#) for the announcement.

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

## Thanks and Gratitude

Thanks to the Exam VE's in attendance:

- Brett Hebert KG5IQU – session manager
- Synomen Hebert KG5IRS
- Logan Hebert KG5LLM
- Brynn Hebert KG5KRV
- Paul Owen N5NXS
- Craig Veteto W5CEV
- Kyle Vann K5KNV
- A. John Canik KI5YPD

### VE Session Guidelines

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

Wear a mask 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:

Brett or Synomen Hebert – [vec@w5nc.net](mailto:vec@w5nc.net)

## Volunteering and Becoming a Volunteer Examiner

Anyone who wants to observe and/or participate in a session is always welcome. Please let Brett or Synomen Hebert 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!

- Daniel Beights, KJ5DWS
- Susan McCauley, KJ5JBF
- Alexander McCauley, KJ5JBO
- Kyle Vann, K5KNV

## Renewing Club Members

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

- Joe Lasater, KG5ZOZ
- Robert Bridges, KI5WAL
- Bob Hardie, W5UQ
- Elba Hardie, KG5HIE

# 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!

## NARS Club Documents and Minutes

Did you know that you can find all of the club's public documents, including board meeting minutes, financial statements, and newsletters on the [Northwest Amateur Radio Society - Home](#) website?

## Exam Practice Answers

**Technician:** T6D03 – B. To prevent coupling of unwanted signals to or from the wire

**General:** G6B06 – B. Analog

**Amateur Extra:** EB08 – A. It decreases

# 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

CENT	UTC	MON	TUE	WED	THU	FRI
8 AM	1300		FAST CODE	SLOW CODE	FAST CODE	SLOW CODE
9 AM-2 <sup>45</sup> PM	1400-1945	VISITING OPERATOR TIME				
3 PM	2000	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE
4 PM	2100	CODE BULLETIN				
5 PM	2200	DIGITAL BULLETIN				
6 PM	2300	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE
7 PM	0000	CODE BULLETIN				
8 PM	0100	DIGITAL BULLETIN				
8 <sup>45</sup> PM	0145	VOICE BULLETIN				
9 PM	0200	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE
10 PM	0300	CODE BULLETIN				

## W1AW Schedule

Morse code transmissions on 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, 147.555 MHz

Slow code = practice sent at 5, 7 ½, 10, 13, and 15 wpm

Fast code = practice sent at 35, 30, 25, 20, 15, 13, and 10 wpm

Code bulletins are sent at 18 wpm

Voice transmissions on 1.855, 3.99, 7.29, 14.29, 18.16, 21.39, 28.59, 50.350 and 147.555 MHz.

Digital transmissions on 3.5975, 7.095, 14.095, 18.1025, 21.095, 28.095, 50.350 and 147.555 MHz.

Bulletins sent using 45.45-baud Baudot, PSK31 in BPSK mode and MFSK16 on a daily revolving schedule.

For more information, visit W1AW at [www.arrl.org/w1aw](http://www.arrl.org/w1aw)

# Calendar

## Club Activities and Events

NARS General Meeting – July 18, 2025 - HCESD 16 Admin – [18606 Stuebner Airline Rd, Klein, TX 77379](#)

VE Test Session – July 26, 2025 – [18606 Stuebner Airline Rd, Klein, TX 77379](#) - Check-in will start at 8:30am with testing lasting from 9:00am - 11:00am. All testing activities will be completed by noon.

Celebration of Life for Keith Dutson, NM5G/SK – Jul 5, 2025 10am – 1pm, 24417 Deep Meadow Dr, Tomball, TX

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

## Social Events

### Wed 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

## Hamfests and Conventions

July 12 | Tidelands Texas City Hamfest at Doyle Convention Center, Texas City, TX

August 9, 2025 | Shreveport-Bossier Hamfest at La State Fair Bldg, 3206 Pershing Ave, Shreveport, LA

August 16-17 | Huntsville Hamfest 2025 at Von Braun Center South, Huntsville, AL

September 12-13 | Slidell EOC Hamfest LA State Convention at Slidell, LA

## Contests and Radiosport

### *ARRL Contest Corral*

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

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

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

For a list of Special Event Stations, please see <https://www.arrl.org/special-event-stations>

## Area Event Alert

The South East Texas Amateur Club will host a Hidden Transmitter Hunt – Mobile on July 19 at 10 am. The area will be the Northwest Quadrant of the Inner Loop, boundaries will be I-45 North, I-10 West and Loop 610 NW, approx. ¼ of the inner city. The fox will be a mobile set on low power and transmitting at set intervals. The hunters will attempt to locate the Fox via RDF techniques. For those of you with Doppler or other high-tech RDF, you are invited to come practice, but you will be exempted from the prizes. The Fox will begin transmitting at 10 am, July 19 on 146.56 and we will have 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place prizes. For more information contact Anthony at [ke5gip@arrl.net](mailto:ke5gip@arrl.net).

### Did you know...

NARS has a social media presence! Thanks to Sam Labarbera, K5FM, 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.

# NARS Club Officers and Information

## Board Officers with Voting Privileges

President: Paul Owen, N5NXS, [officers@w5nc.net](mailto:officers@w5nc.net)

Vice President: Kyle Vann, K5KNV, [officers@w5nc.net](mailto:officers@w5nc.net)

Treasurer: Tom Hoherd, KK5YU, [treasurer@w5nc.net](mailto:treasurer@w5nc.net)

Secretary: Brandon Rogers, K5BLR, [officers@w5nc.net](mailto:officers@w5nc.net)

Director: Rich Jones, W5VEK, [officers@w5nc.net](mailto:officers@w5nc.net)

Director: Jorge Gutierrez, WK5J, [officers@w5nc.net](mailto:officers@w5nc.net)

## Committee Team Members

Administrative Secretary: Neal Naumann, N5EN

Social Media Liaison: Sam Labarbera, K5FM

Newsletter Editor: Vicki Owen, AC5EW

Public Information Officer: TBD

VE Team Lead: Brett Hebert, KG5IQU

Repeater Team Lead: Rich Jones, W5VEK

Lead Net Control Operator: Mike Lizzio, WA2TOP

Webmaster: Bill Buoy, N5BIA, [webmaster@w5nc.net](mailto: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 [Northwest Amateur Radio Society - W5NC Email Reflector](http://NorthwestAmateurRadioSociety-W5NCEmailReflector.groups.io)

## Club Nets

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

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

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

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

Please be on the lookout for a weekly message from Mike WA2TOP on [w5nc.groups.io/g/main](http://w5nc.groups.io/g/main) for more information.