

SIGNALS

MONTHLY NEWSLETTER

Volume 47 Issue 02

Web Site http://www.n5cxx.us

November 2025

CARC Membership Meeting

Tuesday 18 November 2025 5:30 PM

The Meeting will be at Woodcreek Church 3400 E. Renner Rd, Richardson TX (and via Zoom)

ANNUAL MEETING and

Advanced HamClock Clinic



The November 18th meeting of the Collins Amateur Radio Club will be held at Woodcreek Church, 3400 E. Renner Rd., Richardson, beginning at 5:30pm. This is the Annual Meeting of CARC which includes a review of the past year, election of 2026 officers, review of the 2026 bBudget and several motions.

Please consider offering your name for nomination for any officer position. The involvement of every member is needed. On recommendation of the CARC Board, the members at the October meeting approved a set of goals for 2026 which include:

- Increase paid membership to 40
- Conduct at least one Tech Licensing Class
- Get CARC repeater on D-STAR and AllStar
- Increase meeting attendance by 25%
- Re-vamp CARC website to make it more useable and inviting

- Dispose of obsolete and unwanted equipment
- Conduct more on-the-air activities

Take a look at these goals and see how you can contribute to one or more of the items.

The November meeting will conclude with a presentation by Mark Dempsky N5MD on advanced topics for provisioning the HamClock.

CARC Christmas Party - Dec. 9th

Mark your calendars now for the Collins ARC Christmas Party at Aboca's Italian Grill, 100 S Central Expy Unit 63, Richardson TX, on Tuesday, December 9th, at 5:30pm.

Seating begins at 5:30 and meal orders take place at 6 pm. As before, everyone orders off the regular menu and is responsible for their own tab and gratuity. Aboca's offers a full bar service, as well as setups for beer and wine BYOB. Checkout their menu at: https://www.abocas.com.

After dinner, we've got some good door prizes. Then stick around for more fellowship.

R.S.V.P. to <u>vp@n5cxx.us</u> with names in your party, your email address and your mobile phone number.



HamClock Build at October 2025 Meeting

| CARC LEADERSHIP | | | | |
|---------------------|-------|----------------------|---------|--|
| PRESIDENT | | VICE-PRESIDENT | | |
| Mike Montgomery | WD5TX | Vacant | | |
| | | | | |
| president@n5cxx.us | | vp@n5cxx.us | | |
| | | TREACURER | | |
| SECRETARY | | TREASURER | | |
| Jim Brown | AF5MA | Mark Dempsky | N5MD | |
| | | | | |
| secretary@n5cxx.us | | treasurer@n5cxx.us | | |
| ACTIVITIES CHAIRMAN | | IMMED PAST PRESIDENT | | |
| OPEN | | Bill Swan | K5MWC | |
| | | | | |
| activities@n5cxx.us | | Director@n5cxx.us | | |
| | | | | |
| STATION TRUSTEE | | NEWSLETTER EDITOR | | |
| Mike Montgomery | WD5TX | Jim Skinner | WB0UNI | |
| | | | | |
| trustee@n5cxx,us | | newsletter@n5cxx.us | | |
| MEMBEROUS | | VALEDOITE MANAGED | | |
| MEMBERSHIP | | WEBSITE MANAGER | | |
| Bill Fell | KK5PB | Mike Hollingswor | th W5QH | |
| | | | | |
| membership@n5cxx.us | | webmaster@n5cxx.us | | |

VE SESSIONS

The Northeast Metro ARRL License Testing Group will hold testing sessions on the first Monday each month (except holidays) at the Garland Amateur Radio clubhouse in downtown Garland TX, 1027B Austin St., Garland TX 75040 beginning August 2023. Time 6-8pm. All who want to test for an amateur radio license are welcome. You will need photo ID, FRN from FCC and \$15.00 correct cash. All forms, etc., will be provided by testing group. You can reserve a seat by calling Kerry Weeks at 214.478.3230 or email at weeks.kerry@gmail.com in advance of the test.

Dallas tests are held on the fourth Saturday of each month at 1000 hrs. 13350 Floyd Rd. (Old Credit Union) Contact Bob West, WA8YCD 972.917.6362

Irving tests are held on the third Saturday of each month at 0900. Fifth and Main St. Contact Bill Revis, KF5BL 252-8015

McKinney VE test sessions are held at the Heard Museum the first Sunday of the month. The address is 1 Nature Place, McKinney TX. The time of the testing is 1430, ending no later than 1645. *Note: no tests given on holiday weekends.*

Garland in-person testing is held on the first Saturday of each month and begins at 1000 sharp. Location is Freeman Heights Baptist. Church, 1120 N Garland Ave, Garland (between W Walnut and Buckingham Rd). Enter via the north driveway. A HUGE parking lot is located behind the church. Both the parking lot and the Fellowship Hall are located on

the east side of the church building, with big signs by the entrance door. Contact Janet Crenshaw, WB9ZPH at 972.302.9992. *** Online video testing via Zoom is, also, offered on the 1st & 3rd Thursdays at 1900. See https://sites.google.com/site/wb9zph. ***

Plano testing is on the third Saturday of each month, 1300 hrs at Williams High School, 1717 17th St. East Plano. Check Repeater 147.180+ for announcements.

Richardson The Richardson Wireless Klub (RWK) VE team hold license testing on the third Thursday of each month at St. Barnabas Presbyterian Church, 1220 West Beltline Rd. Testing begins at 1900 hrs in room 12. Enter through the Northern most door on the east side of the church building. For further information contact Don Klick KG5CK. 972.464.2889 or E-mail rwkhamtest@gmail.com.

SIGNALS is the monthly newsletter of the Collins Amateur Radio Club, published by and for its members. The entire contents of this newsletter are copyright © 2025 by the Collins Amateur Radio Club. Permission is hereby granted to any not-for-profit amateur radio publication to reprint any portion of this newsletter provided both the author and Collins Amateur Radio Club are credited.

President's Message.

Happy Thanksgiving! Watch for a message here next month. Until next month,

Mike Montgomery WD5TX

Vice-President's Report

As of November 1st, we have 53 members in the Club: 34 are Full Voting Members and 14 are Associate Members. Our membership is made up of 14 employees, 25 retirees, nine dependents and five from the general public.

Our fiscal year ends on December 31st, and ten individuals have memberships expiring soon. If your membership will expire soon, you will be receiving a membership renewal via email. We hope you will renew your membership either in person at a Club meeting or by sending a check to our Treasurer, Mark Dempsky N5MD. Mark's mailing address is 1724 Falmouth Drive, Plano, Texas 75025. Current dues are shown on the CARC Membership Application form at https://www.n5cxx.us/Club Membership Form.pdf. It is anticipated that dues will be increasing in the coming year, so it is to your advantage to renew now to avoid a fee increase.

Our Annual Meeting and Election of Officers for 2026 will be held on Tuesday, November 18th. All positions are up for grabs. Please consider offering your talents to serve on the Board of Directors for the coming year.

The job of Activities Manager is open. If you'd like to help plan programs for Club meetings or promote Club activities, please let a member of the Board know. And if you have ideas for Club programs that you would like to hear more about or that you can offer as a presentation, let the Board know. Otherwise, it will be up to the Board to decide on topics for the foreseeable future.

73, Frank KR1ZAN

Secretary's Report

28 October 2025

The meeting was called to order by President Mike Montgomery WD5TX at 1736. The Club met in-person at our meeting site at Woodcreek Church in Richardson, with Zoom access available.

The following were present:

| Dennis Cobb | WA8ZBT |
|-----------------|--------|
| Wayne Collins | KI5YOQ |
| Mark Dempsky | N5MD |
| Mike Montgomery | WD5TX |
| Frank Krizan | KR1ZAN |
| Jon Moon | KA5HND |
| Mike Schmit | WA9WCC |
| Jim Skinner | WB0UNI |
| Kerry Weeks | K5WKS |
| Milton Withers | AD5XD |

There were no attendees via Zoom.

Officer and Committee Reports

The Vice President's and Secretary's reports were published in the October 2025 CARC Newsletter. The Treasurer's report is available on the Members Only page of the CARC website; it was presented in the meeting by Treasurer Mark Dempsky N5MD.

No clarifications or updates to these reports were offered at the meeting.

Old Business

There was no old business.

New Business

Two motions developed by the Board of Directors were submitted for approval:

Motion 1: It is moved that the CARC Membership approve letters of support from the Club prepared by the CARC Board of Directors as requested by the ARRL

for Congressional action to limit HOA interference with ham activities.

This was moved by Frank Krizan KR1ZAN and seconded by Milt Withers; the motion passed unanimously.

Motion 2: It is moved that the following be approved as the set of CARC goals for 2026:

- Increase paid membership to 40
- Conduct at least one Tech Licensing Class
- Get CARC repeater on D-STAR and AllStar
- Increase meeting attendance by 25%
- Re-vamp CARC website to make it more usable and inviting
- Dispose of obsolete and unwanted equipment
- Conduct more on-the-air activities

This was moved by Frank Krizan KR1ZAN and seconded by Kerry Weeks K5WKS; the motion passed unanimously.

Announcements

It was announced that the November Annual Meeting would include election of officers for 2026 and approval of the 2026 Club budget. Nominees / volunteers for officer positions were requested.

Program Chairman Frank Krizan announced the following upcoming activities:

HamClock follow-up activities at the November meeting

Christmas dinner on 9 December at Aboca's

Show-and-tell at the January meeting

Adjournment

The meeting was adjourned at 1750, followed by a HamClock presentation and assembly session.

Minutes recorded by Jim Skinner WB0UNI, Acting Secretary

Minutes of CARC Board of Directors Meeting

11 November 2025

The informal pre-meeting workshop began at 1902 via Zoom.

The following Board members logged into the meeting:

Mike Montgomery WD5TX, President

Frank Krizan KR1ZAN, Vice President

Jim Brown AF5MA, Secretary

Mark Dempsky N5MD, Treasurer

Bill Swan K5MWC, Immediate Past President

The pre-meeting workshop was a general discussion covering a number of subjects. Topics discussed included:

Agenda for the November 2025 Annual Meeting. There was general discussion of topics required for inclusion and additional items to be addressed. The meeting will include the President's annual summary, a review of programs and events completed in the past year, election of officers for 2026, budgeting for 2026 and a listing of 2026 Club goals and project and event proposals.

Election of of CARC Officers for 2026. All members of the current Board have agreed to serve again in 2026 if no other candidates are identified.

Revisions to the CARC Constitution. Proposed changes were finalized for presentation to the general membership at the Annual Meeting. Changes include elimination of constraint on officers serving multiple consecutive terms.

Plans for a CARC dues increase. The Board agreed to increase dues to \$20 per year for all membership categories except Life Members. A motion was developed for approval in the formal Board meeting to follow recommending the increase for final approval by the general membership at the Annual Meeting.

CARC Budget for 2026. A general discussion addressed the need for budget constraints consistent with a diminishing membership pool. Details of the budget will be presented at the Annual Meeting for approval by the general membership.

Formal Board Meeting. A formal Board meeting was declared at 2050 to address the motion developed as part of the workshop discussed above.

Motion: It is moved that the Board recommend a dues increase to \$20 per year for all membership categories except Life Members.

Moved by Jim Brown AF5MA and seconded by Bill Swan K5MWC; approved unanimously.

Adjournment. The Board meeting was adjourned at 2051.



The CARC Drive Home Net is conducted on the Club's repeater every Tuesday from 5:30 to 6pm., except for Tuesdays on which we have a general membership meeting, social activity or holiday. This column typically documents responses to Core Topics discussed at the weekly Nets. Because of the short deadline for November, we'll report the November responses and check-ins in the December issue of SIGNALS. Please join us on Tuesdays for some great ham talk.

CARC Membership Now Open to Raytheon

The CARC Board of Directors determined at its July meeting that Full memberships will be extended to Raytheon employees and retirees. The CARC Constitution states this implicitly.

We invite all Raytheon employees, contractors, and retirees to join the Collins Amateur Radio Club by submitting a membership application, which can be found on the Club website (n5cxx.us) or directly at: https://www.n5cxx.us/Club Membership Form.pdf

All current members who may know Raytheon employees or retirees who are hams or interested in amateur radio should let them know about our Club and encourage them to join. New members get the remainder of 2025 and all of 2026 for one annual fee.

Determining Cable Loss

Cable loss is a critical parameter in RF and microwave systems, impacting signal integrity and overall system performance. While direct measurement of insertion loss (S21) is often preferred, situations arise where access to both ends of the cable is impractical or impossible. In such scenarios, measuring the reflection coefficient (S11) with an open and a short circuit at the far end of the cable provides a clever and effective method for estimating cable loss.

This technique leverages the principle that the reflected signal's magnitude and phase are altered by the cable's attenuation and electrical length. By comparing the S11 measurements with known terminations, we can extract valuable information about the cable's characteristics.

When a signal is launched into a cable, a portion of it is reflected back if there's an impedance mismatch at the far end. The S11 parameter, measured at the input of the cable, quantifies this reflection.

Open Circuit Termination: When the far end of the cable is left open, the signal travels down the cable, reflects off the open circuit (which presents an infinite impedance), and travels back to the measurement port. The reflected signal experiences twice the cable's attenuation and a phase shift corresponding to twice the cable's electrical length.

Short Circuit Termination: Similarly, when the far end is shorted, the signal reflects off the short circuit (zero impedance). The key difference here is a 180-degree phase shift introduced by the short circuit reflection, in addition to the phase shift and attenuation due to the cable's round trip.

The following formula provides a good approximation of the cable's one-way insertion loss

L=-20log10(2|S11open-S11short|)

The difference between S11_open and S11_short effectively cancels out the reflection from the VNA's port and highlights the round-trip attenuation and phase shift caused by the cable.

Dividing by 2 accounts for the fact that the signal travels down and back, so we're interested in the one-way loss.

This method assumes a relatively uniform impedance cable. The quality of open and short circuit terminations determines accuracy, which can degrade at very high frequencies. Also a longer cable's dispersion can influence results. Phase information can be used to determine the cable's electrical length and characteristic impedance.



Here are the meetings we have lined up for 2025. We'd like to offer programs and projects that interest our members, so please send your ideas to frank@krizan.org.

We're now following our new meeting schema of a presentation on a topic/project at the first meeting of the quarter, then an Elmer Night and Workshop to build the project or help with troubleshooting, followed by a Family Dinner or Social Activity. Based on the recent Meeting Format and Member Interest Survey, our meeting schema will be adjusted somewhat. If you have a topic you would like to present or be considered for a presentation or workshop, please let a Club officer know.

Here's the calendar for the remainder of 2025:

Dec 9 - CARC Christmas Dinner - Aboca's Italian Grill, Richardson

2026

Jan 27 - Annual Show 'n Tell Night

Pass The Bill: Have You Sent Your Letters?

ARRL's push to pass the bill has great momentum, but we need **EVERY** radio amateur in the United States to send their letters

Your participation can make the difference in passing this legislation. Membership in the ARRL is NOT required.

It only takes seconds. If you're a licensed ham in the US, go to https://send-a-letter.org/hoa/, enter your call sign, validate your address, and click the red SEND MY LETTERS button. It really is that easy!

In less time than it takes to make a single QSO, your letters will tell Congress to remove the legal restraints on hams living in restrictive HOAs to put up an antenna.

Follow the link at https://send-a-letter.org/hoa/ to send your letter now!

What it is:

The Amateur Radio Emergency Preparedness Act (see ARRL News 02/07/2025) is a pair of bipartisan bills - H.R.1094 in the House and S.459 in the Senate — which are designed to prevent restrictive homeowners' association (HOA) rules that currently prohibit or severely limit the installation of amateur radio antennas, even when such antennas are hidden in trees, placed in attics, mounted on vehicles, or look like flagpoles.



CARC Community Service Activities

Siren Testing Dennis Cobb WA8ZBT and Jim Skinner WB0UNI participate in the Richardson outdoor warning siren testing. The November 2025 test was conducted on 5 November. All twenty-six sirens were fully functional, although they started two minutes late. (Did someone at the city of Richardson forget about the time change?) The sirens are monitored by amateur radio operators and reports made using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz. Siren testing occasionally uses the University of Texas at Dallas (UTD) repeater at 145.430 MHz, as backup. Frank Krizan, KR1ZAN, helped with the Garland Siren Test on Wednesday November 5th. Garland Siren Tests are conducted on the Garland ARC 146.66 MHz repeater.

Crime Watch Patrol Jim Skinner WB0UNI participates in Richardson Duck Creek Crime Watch Patrol (CWP). CWP members, after successful completion of Richardson Police Department training, patrol their neighborhoods and report all suspicious activities to the police department.

Elmer Night

The Club's new quarterly meeting format, which includes a night to construct personal projects, doesn't provide sufficient time for troubleshooting, discussing issues, trying new things ... so, we've added something new to help those working on Club projects and for all members who may seek a place to ask questions or share interesting info related to amateur radio.

We call this "Elmer Night" and they take place via Zoom using the standard Zoom login that is available on the <u>n5cxx.us</u> website via a link just below the meeting announcement. Elmer Nights are the first and third Tuesdays of each month, starting at 7pm. Sessions tend to run from one hour to about an hour-and-a-half.

The primary focus is info related to the current project, followed by previous project issues or questions and then general amateur radio questions and findings.

We hope you'll consider joining us even if you're not currently working on a Club project. You may be the person with a solution to someone's question or problem.

Join Us On Tuesdays
for the Collins ARC
Drive Home Net
5:30pm 441.875 MHz
+5MHz, PL=131.8Hz
(No Nets on Meeting Nights)

Need another Badge or Coffee Mug?

Logs now available on n5cxx.us website





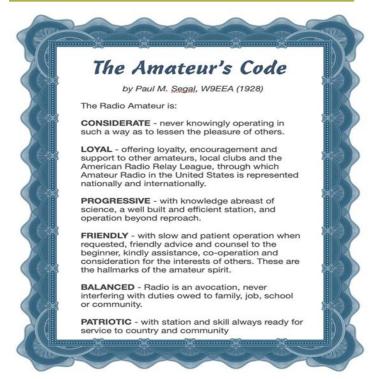
Order from The Sign Man of Baton Rouge at: https://www.thesignman.com/clubs/collinsarccart.html

Upcoming Events

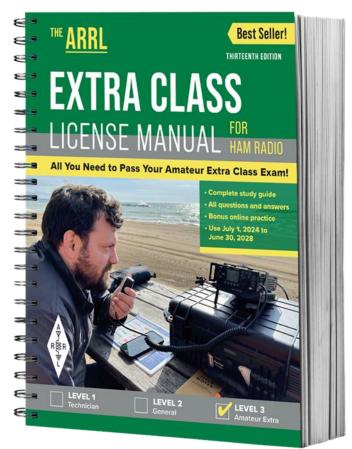
| | DFW Early Traffic Net (NTS) at 6:30pm 146.88 - PL 110.9Hz |
|--------------------------------|---|
| Daily | DFW Late Traffic Net (NTS) at 10:30pm 146.72 – PL 110.9Hz |
| Daily | Texas CW Traffic Net at 7:00pm on 7106 KHz and at 10pm on 3541 KHz $\underline{\text{www.k6jt.com}}$ |
| Tuesdays | Collins ARC Drive Home Net. 441.875 (+5) MHz, PL=131.8 Hz (N5CXX repeater), 5:30-6:00pm (no net 4^{th} Tuesday.) |
| 1 st Wednes- day | Richardson Emergency Siren Test. At noon using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz. |
| 2 nd Wednesday | ARES North Texas HF Net Every month—3860 KHz at 8:30 pm—9:30pm |
| | NOVEMBER |
| 15-17 | Nov. Sweepstakes – Phone —Stations in the US and Canada exchange QSONovember-SweepstakesLogo.jpg information with as many other US and Canadian stations as possible. Details at http://www.arrl.org/sweepstakes |
| 29-30 | CQWW-CW— The CQ WW is the largest Amateur Radio competition in the world. Over 35,000 participants take to the airwaves on the last weekend of November (CW) with the goal of making as many contacts with as many different DXCC entities and CQ Zones as possible. Details at https://cqww.com/ . |
| | DECEMBER |
| 5-7 | 160 Meter For Amateurs worldwide to exchange information with W/VE amateurs on 160-meter CW. Starts 2200 UTC Friday, ends 1600 UTC Sunday: forty-two hour period with no time limitation. Details at http://www.arrl.org/160-meter |
| 13-14 | 10 Meter For Amateurs worldwide to exchange QSO information with as many stations as possible on the 10 meter band. Starts 0000 UTC Saturday; runs through 2359 UTC Sunday. Details at http://www.arrl.org/10-meter |
| 21 | Rookie RoundupCW. Mission is to encourage newly-licensed operators ("Rookies") in North America to operate on the HF bands and experience competitive Amateur Radio operating. Experienced operators ("Non-Rookies") are strongly encouraged to participate and help new operators – either on the air or in person. Objective: Rookies exchange information with as many other stations as possible on the 80, 40, 20, 15, and 10 meter HF bands. Details at http://www.arrl.org/rookie-roundup . |







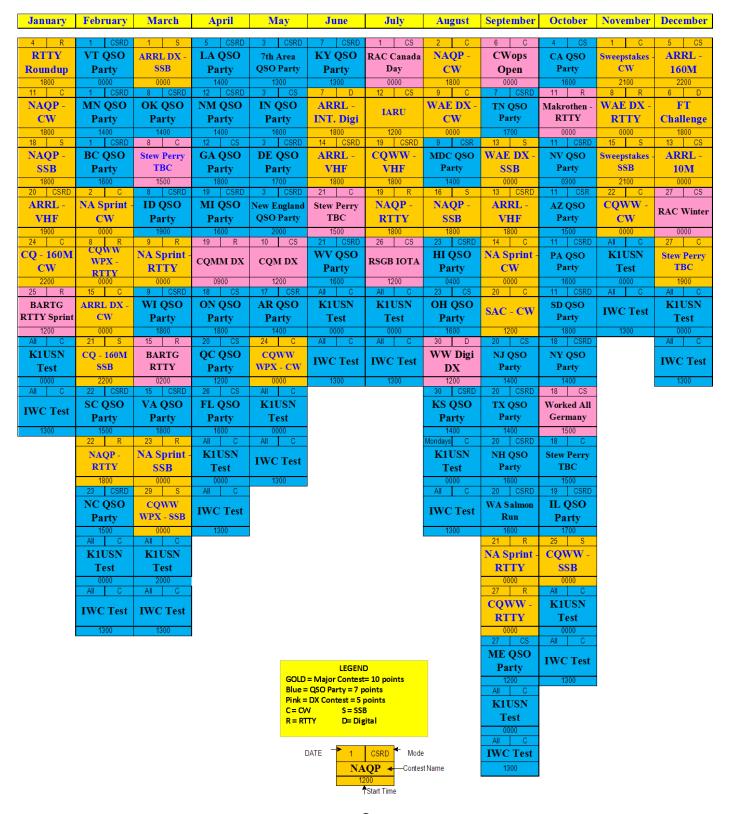
FREE



FREE

Free to any General class ham wanting to upgrade to Extra. I PASSED MY EXAM AND I DON'T NEED IT ANYMORE!

CDXA Periodic Table of Contests - 2025





3200 E Renner Rd Mail Station 461-290 Richardson, TX 75082

www.N5CXX.us

TO:

N5CXX D-STAR SETTINGS:

441.875 MHz, PLUS OFFSET (5 MHz) -- DR mode Set for Local Mode -- CQCQCQ Set RPT1 as N5CXX..B (replace periods with spaces) RPT2 is NOT USED; some radios or software require something in this field, so use N5CXX..B or N5CXX..G (again, replace the periods with spaces)

The N5CXX D-STAR repeater operates only in local mode at this time. There is no Gateway. We hope to have a connection to the D-STAR network in early 2025.

The N5CXX Repeater is Mixed Mode. The incoming Mode determines if FM Analog or D-STAR.

CLUB STATION PHONE

TBD

N5CXX REPEATER

441.875 MHz +5 MHz Input 131.8 Hz PL - RX and TX

N5CXX-1 PACKET BBS COL Node 145.05 MHz

N5CXX-N1, N5CXX-N2 & N5CXX-N3 HSMM-MESHNET Nodes 2.4 GHz

Membership Meeting

Tuesday 18 November 2025 5:30 PM
THE MEETING WILL BE AT

Woodcreek Church Richardson TX

NEXT SIGNALS INPUTS DEADLINE:

→ → → 12 December 2025 ← ← ←