COLLINS AMATEUR RADIO CLUB
Richardson, Texas

SIGNALS
MONTHLY NEWSLETTER

Volume 47 Issue 09 **Web Site** http://www.n5cxx.us **June 2026**

CARC
Membership Meeting

Tuesday 23 June 2026 5:30 PM

The Meeting will be at

Woodcreek Church

3400 E. Renner Rd, Richardson TX

(and via Zoom)

"History of Amateur Mobile Operation", presented by David Cheek, WA5MWD

History of Amateur Mobile Operation

The June meeting of the Collins Amateur Radio Club will take place on Tuesday, June 23rd, beginning at 5:30pm at Woodcreek Church, 3400 East Renner Road, Richardson. Follow the directions shown on our web site (n5cxx.us) as well as the signs once you enter the main building. The meeting and program will also be streamed via Zoom. Zoom instructions will be emailed to members and also available via a link on the web site just under the Meeting Announcement.

Plan to arrive early or on time because we're going to provide pizza and soft drinks this month. Everyone seemed to enjoy the treat in March, so we're having a light snack available before you head out for dinner after the meeting.

Following a brief business meeting, David Cheek, WA5MWD, will present a program entitled "History of Amateur Mobile Operation." This is the program previously announced for the April meeting, which was cancelled due to inclement weather. His presentation will focus on his personal experience with mobile operation. David plans to discuss his favorite operating bands over the years, equipment of the early era and the evolution of equipment to SSB. He plans to explain his reasons for HF mobile and talk about how mobile HF antennas have changed over the years. David will conclude with an overview of his current stations and share some simple tips for a Quick Start on mobile HF.

David began his amateur radio journey in 1965 with a Novice license acquired between elementary and Junior High. His first rig was a home-built transmitter and Knight-Kit R55 receiver, which he says was a terrible receiver. He earned his General ticket in Junior High and got his Advanced license during his first year of college.

Immediately after high school, David passed the First Class Radiotelephone License exam and worked as a broadcast engineer for the university television station. Following college, he did engineering work for Danray and Northern Telecom.

He was an early promoter for amateur packet radio and had a small part in development of the first PACSAT project.

CARC LEADERSHIP

PRESIDENT		VICE-PRESIDENT	
Mike Montgomery	WD5TX	Frank Krizan	KR1ZAN
president@n5cxx.us		vp@n5cxx.us	
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	
MEMBERSHIP		**WEBSITE MANAGER**	
Frank Krizan	KR1ZA	Mike Hollingsworth	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.

President's Message.

Greetings to all,

As we move into June, we enter one of the busiest and most exciting times of the year for amateur radio. Warmer weather brings more opportunities for portable operations, public service events, outdoor activities, and preparations for Field Day.

Field Day is much more than an operating event - it is an opportunity to demonstrate the value of amateur radio to our communities while enjoying fellowship and improving our operating skills. Whether you are a seasoned operator or newly licensed, I encourage everyone to participate, whether on your own or with a club.

I would like to thank all of our members who continue to support Club activities, attend meetings, and volunteer their time. The strength of our Club comes from the dedication and enthusiasm of its members. Your willingness to share knowledge and help others learn is what keeps amateur radio vibrant and growing.

Thank you for being part of our Club and for helping make amateur radio a rewarding experience for all.

73 and good operating,

Mike Montgomery
WD5TX

Vice President's Report

Welcome new members: We are pleased to welcome Jeff Barton AG5JB and Jim Tatum W5JRT, who joined the Club at the May meeting.

Dues reminder letters were mailed to 15 members encouraging them to renew their memberships. We hope to see most renew and look forward to welcoming more new members in the near future.

At last month's meeting, no interest was expressed in CARC operating its own Field Day this year. If someone decides to operate from the Club Station, please let me know and I'll be happy to let our members know. Otherwise, we can all operate from our home stations or as individuals in the field. Individual scores can be reported, along with credit given to the Collins ARC so that we both benefit. Field Day rules and other info is available at https://www.arrl.org/field-day. And if you'd like to visit a nearby Field Day site to see what Field Day is really all about, you can find info and locations of area clubs using the ARRL Field Day Site Locator: https://www.arrl.org/field-day-locator

REMINDER: There's no meeting in July - instead we're having a Family Get-Together at Spring Creek Barbecue in Richardson (270 N Central Expressway Service Rd). Join us at 5:30pm and enjoy some great barbecue and fixin's — of course, everyone takes care of their own tab. No meeting or program is planned; just great food and fellowship - and plenty of tall-tale-tellin'. Bring the whole family. It's a great way for our members, spouses and kids to get to know one another.

For those who are frustrated with the on-going changes occurring with Windows 11 and the end of support for Windows 10, as well as those who have an older PC sitting around that won't run Win11, our August presenter may offer a solution. David Eddleman, K5RNL, will speak on "Linux in the Hamshack." I'm looking forward to this presentation, as I have some older Macs that could be used for specific applications running Linux.

Our fellow member, Wayne Collins KI5YOQ, that many of you know as our A/V Guy at Woodcreek Church, is very ill. Please keep Wayne in your thoughts and prayers. We miss you, Wayne.

We will conduct the first of our Club auctions to dispose of obsolete and unwanted Club equipment at the June meeting. This auction is open ONLY to Club Members. Details of the item to be auctioned, a Collins 30S-1 linear amplifier, were recently emailed to all members. If you didn't get the mailing, please send a request to have the announcement emailed to you by emailing vp@n5cxx.us . In the event that the equipment is not sold to a member, it will be offered for sale to the public. The auction will take place during the business session at the June 23rd meeting. Bidders must be in person or via Zoom. If on Zoom, a camera showing the bidder's face and a micro-phone allowing the bidder's voice to be heard are required.

We're considering a Club Project to build the LARCset, 40m CW and SSB XCVR kit. It's a 5-watt radio that has a 150 kHz bandspread, only requires point-to-point wiring and some mechanical assembly and costs around $50. Check it out at https://www.hfsignals.com/index.php/larcset/. If interested, let us know by emailing vp@n5cxx.us, or when you check into the Drive Home Net, in person or on the Elmer Nite via Zoom or the Elmer Net on-the-air. If there's enough interest we'll consider a group buy.

I hope you'll give Field Day a try, if only for a contact or two (or just listen) - and even better, visit a Field Day site to soak up the excitement and camaraderie of this annual outdoor event.

Thanks and 73, Frank KR1ZAN

Secretary's Report

26 May 2026

The meeting was called to order at 1736 by Vice President Frank Krizan KR1ZAN in the absence of President Mike Montgomery WD5TX. The Club met in-person at our meeting site at Woodcreek Church in Richardson, with Zoom access available.

The following were present:

Jeff Barton	AG5JB
Jim Brown	AF5MA
David Cheek	WA5MWD
Dennis Cobb	WA8ZBT
Frank Krizan	KR1ZAN
Norbert Raddatz	KJ4VXU
Clarence Sebesta	K5YO
Jim Skinner	WB0UNI
Jim Tatum	W5JRT
Christy Thompson	WE0UNI
Milton Withers	AD5XD

Three others attended via Zoom:

Phil Dobranski	KJ5LEZ
Gene Duprey	K1GD
Ward Silver	N0AX

Officer and Committee Reports

The Vice President's and Secretary's reports were published in the May 2026 CARC Newsletter. The Treasurer's report is available on the Members Only page of the CARC website; it was presented in the meeting by Vice President Frank Krizan in the absence of Treasurer Mark Dempsky N5MD.

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

Old Business

Frank Krizan reviewed a prior list of member suggestions for future program topics; there were no new additions offered at the meeting.

New Business

Equipment Disposal Procedure. At the April 2026 meeting of the CARC Board of Directors a procedure was approved to enable the Club to dispose of unneeded equipment through auction to members. This procedure was distributed to members via email before the meeting and presented to the general membership at the meeting for concurrence. Secretary Jim Brown AF5MA moved the following:

> **Motion:** It is moved that the Club adopt "A Process to Sell CARC Equipment to Club Members (Rev 0).

The motion was seconded by Gene Duprey K1GD and passed unanimously.

ARRL Field Day. Frank Krizan requested a volunteer to chair CARC Field Day events in June. In the absence of volunteers, it was agreed that Field Day activities would be conducted only by individual members.

Repeater-Duplexer Replacement. The owner of the repeater-duplexer used by the Club reclaimed his property recently. The previously-used repeater-duplexer owned by the Club was installed in its place and is operating effectively.

Announcements

Frank Krizan announced the following upcoming events:

Tuesday, July 28th: Family dinner at Spring Creek Barbeque in Richardson

First Tuesday, 7pm: Elmer Night via Zoom

Third Tuesday, 7pm: Elmer Net on CARC repeater, 441.875 MHz

Drive Home Net, Tuesdays at 5:30pm, 441.875 MHz

Auction of CARC Equipment. The first auction in accordance with the newly-approved procedure will occur at the June 23rd general meeting. The CARC-owned Collins 30S-1 amplifier (1.5 kW with 70-100W drive, 160 lbs.) will be offered for an opening bid of $500.

Adjournment

The meeting was adjourned at 1805, followed by a presentation on "Grounding and Bonding for the Home HF Station" by Ward Silver N0AX.

Minutes of CARC Board of Directors Meeting

9 June 2026

The informal pre-meeting workshop began at 1905 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

One non-voting CARC member also logged in:

Mike Hollingsworth W5QH

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

Funding of pizza for the 23 June meeting. It was agreed that approved funding for pizza for the 27 April meeting, which was canceled, would be used to provide pizza for the upcoming meeting.

Auction of equipment at the 23 June meeting. The Board confirmed that the Club-owned 30S1 linear amplifier would be auctioned off as previously announced to the membership.

New members. Frank Krizan KR1ZAN announced that the Club has acquired two new members: Jeff Barton AG5JB and Jim Tatum W5JRT.

Approach to handling donated equipment. A request from a possible equipment donor prompted discussion of a Club approach to handling such actions. It was generally agreed that the Club does not have the resources to accept additional equipment, but other approaches to facilitating transactions among donors, members and other interested parties could be addressed. No conclusions were reached.

Trustee for N5CXX. President Mike Montgomery agreed to continue in the role despite his remote location. He will update the necessary paperwork.

Member incentives for future meetings. It was agreed that pizza would be discontinued for future CARC meetings. A suggestion of a possible monthly door prize found no support.

General discussion on ways to interact with and support Collins Aerospace. No actionable results were found.

Overview of possible topics for future meetings. Frank Krizan addressed current efforts to develop future programs.

Need for postage for activities related to membership processing activities. It was agreed that not all membership correspondence could be reliably accomplished through email alone. A motion to fund postage was developed for action in the formal meeting documented below.

Formal Board Meeting. President Mike Montgomery WD5TX declared a formal meeting at 2023 to act on one proposed motion:

> It is moved that $100 be allocated from the CARC budget to cover membership-related postage for the calendar year 2026.

It was moved by Jim Brown AF5MA and seconded by Frank Krizan; approval was unanimous.

The meeting was adjourned at 2024.

Image link: https://www.patreon.com/KM6LYW/posts/better-than-vara-161078038?utm_campaign=patron_engagement&utm_source=post_link&post_id=161078038&utm_id=c42b8d0a-c42f-4e53-8584-40265499677e&utm_medium=email

[Editor's note: Last year CARC members built their own DigiPi controllers using a Raspberry Pi Zero 2W. Built in was a Winlink capability using Pat software and a Packet Modem. Several have experimented with VARA over FM and HF. Now that Mercury has been introduced, Craig KM6LYW is working on implementing a Mercury modem in the DigiPi. This article introduces the concept. Now we have to wait for Winlink nodes to add Mercury to their suite of modes.]

The guys at Rhizomatica just made a better VARA than VARA. Unlike VARA, it's free, open-source, runs on Linux and Raspberry Pi. While not directly compatible with the proprietary VARA encoding, it does use the same API so existing VARA-HF clients (Pat, Winlink Express) can immediately leverage this exiting new HF radio transport!

In this video, we use "Pat" (http://getpat.io) Winlink email client on "DigiPi" (http://digipi.org) and Mercury (https://github.com/Rhizomatica/mercury) to send an email message over RF from one Raspberry Pi to the other.

The radio on the right (ic705) is the client running pat client (pat http), and the radio on the left (ic7300) is running pat server (pat --listen=vara http).

This is a first-ever technology demonstration and proof-of-life. Much more is to come, in fact, I think I'll create a MERCURY Winlink Server that everyone can run along side VARA, Packet, ARDOP, etc.

Both VARA and MERCURY leverage "Orthoganal Frequency Division Multiplexing" which is the foundation for modern/commercial RF transports, including WIFI. That's how we get our speed and reliability. MERCURY includes "gear shifting" dynamically adapting to conditions and fading SNR.

Project MERCURY https://github.com/Rhizomatica/mercury

DigiPi https://digipi.org/

Members at the May CARC meeting totally absorbed in the presentation on Bonding and Grounding presented by Ward Silver, N0AX.

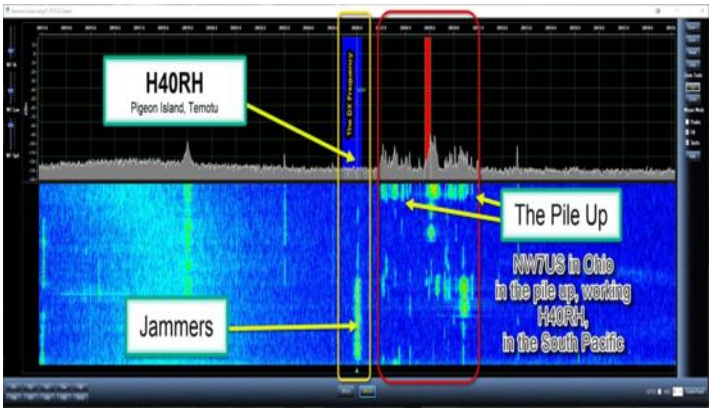
2026 World Soccer Tournament

Amateur radio operators across USA, Canada and Mexico host cities are activating special callsigns to celebrate this summer's 2026 World Soccer Tournament from June 11th to July 19th. More information on each is at: https://wc2026ses.org/.

A Pileup? What It Is And How To Work One

Welcome to the chaotic, thrilling world of the HF pileup. When a rare station or a Parks On The Air (POTA) activator goes on the air, dozens or even hundreds of operators might try to make contact at the exact same time. Working a pileup is an art that takes time to master. Whether you are the one calling CQ from a park in Nebraska or the one hunting a rare DX station, success relies on rhythm, frequency management, and a deep understanding of human behavior.

Here is a proper look at how a pileup appears on a modern display, followed by a complete guide on how to survive it.



A "pileup" on shortwave amateur radio frequencies. The main station is at the low frequency, and stays put. The hunters spread out, above, and call on a single frequency somewhere in the calling window of frequencies (I.e., up five to ten).

Over my decades of working Morse code (CW on amateur radio), I have learned a few critical things about how to navigate the chaotic, thrilling world of the HF pileup. When a rare station or a Parks On The Air (POTA) activator goes on the air, dozens or even hundreds of operators might try to make contact at the exact same time. **Working a pileup is an art that takes time to master**. Whether you are the one calling CQ from a park in Nebraska or the one hunting a rare DX station, success relies on rhythm, frequency management, and a deep understanding of human behavior.

One of the ***most important strategies is to determine the operating style of the DX station***, specifically discerning how that operator scans the pileup for the next station to work. With modern waterfall displays, that process is MUCH easier. As an example, I worked the Temotu DXpedition (H40RH) that had just started a few hours prior to my attempt. I broke through with ***only five calls*** into the pileup, and it took me a mere 60 seconds to call and get an answer. Of course, I *first* listened and watched the waterfall for about five minutes to get a hang of the operating style of H40RH. This was on 10 Meters where 28.026 MHz was the DX frequency. We callers spread out five to 15 kHz UP in frequency from the DX station because we never want to cover up the DX station with our own signals. Even with a long carrier of intentional interference visible on the waterfall, the visual aid of the SDR made the catch possible. Temotu was a new country for my DXCC, so I am incredibly pleased to have made the contact!

When You Are the Hunted (The Activator)

When you are the station that everyone wants in their logbook, you are the conductor of the orchestra. If the pileup senses hesitation, chaos ensues. You must dictate the pace, for both CW and SSB operations.

Controlling the Pileup on CW

Establish a Predictable Rhythm: Your CQ, your exchange, and your QRZ should follow a strict pattern. Consistency allows hunters to time their calls perfectly. *If you change your cadence, the pileup gets messy*.

Run Split for Large Piles: If the pileup merges into a single continuous drone, go split immediately. You might send "UP 1" to tell callers to transmit one kilohertz above your listening frequency. This spreads the callers out. Send your "UP" frequently enough that the self-appointed pileup police do not take over your transmit frequency. I suggest sending "UP" after each successful logged contact (QSO).

Own the Partials: If you only pull "NW7" out of the noise, send "NW7?". Do not send "QRZ?" immediately. Stick to that partial call until that specific station finishes the exchange. If they fade out, clearly send "QRZ?" to reset the pile.

Adjust Speed to Control Volume: A slight speed increase (bumping up 3 to 5 WPM) will naturally thin the pileup down to the more experienced operators. Dropping your speed will invite the newer operators back in.

Receiver Management: Back off your RF gain and use a wider filter than you might expect (around 400 to 500 Hz). A filter that is too narrow will cause you to miss the operators who are smartly calling slightly off-frequency.

Controlling the Pileup on SSB

Command with Your Voice: Speak clearly and maintain a steady, authoritative tone. Avoid shouting. Just like in CW, a predictable rhythm helps callers know exactly when to key their microphones.

Use Standard Phonetics: Stick strictly to the standard NATO phonetic alphabet (Alpha, Bravo, Charlie). Cute or custom phonetics confuse operators who do not speak English as their first language.

Acknowledge and Isolate: When multiple voices blur together, listen for the last phonetic letter you can understand. If you hear "Sierra," say "The station ending in Sierra,

go ahead." Ignore everyone else until that station completes the contact.

My POTA / Portable HF station (a low-power, or, QRP, station).

When You Are the Hunter (The Chaser)

When you are trying to break through a massive wall of sound, ***raw output power is secondary to timing and sharp observation***.

Breaking the Pileup on CW

Listen First, Key Second: Before touching the paddle, listen to three or four complete exchanges. If the activator is working split, figure out their pattern. Are they tuning from the bottom up? Top down? Find where they listened last, and place your transmit frequency just above it.

Use XIT (The Golden Rule): Never perfectly zero-beat the DX station if others are calling. To the activator, three zero-beat stations merge into a single tone. Use your Transmitter Incremental Tuning (XIT) to shift your transmit frequency by 30 to 50 Hz. This slight difference in pitch makes your signal pop out of the receiver passband.

Time the Tail-End: Wait for the massive wall of sound to begin fading, and send your call exactly as the main group finishes. A perfectly timed tail-end call lets your suffix ring out in the clear.

Send Once: When the DX sends "QRZ?", send your callsign exactly once and listen. Sending your call multiple times just causes interference and slows down the entire operation.

Follow Instructions: If the DX sends "NW7?", and that is not you, keep your hand off the key. Transmitting over the station they are trying to work only prolongs the pileup for everyone.

Breaking the Pileup on SSB

Study the Cadence: Just like with Morse code, listen to the activator to find the rhythm. Wait for the exact moment the activator stops speaking before you key up.

Drop Your Call and Wait: Say your full callsign once using standard phonetics, then unkey and listen. If you are tail-ending, you might just drop the last two letters of your callsign precisely as the noise floor drops.

Adjust Your Pitch: If you have equalization controls on your radio, boost the mid-to-high frequencies on your microphone audio. A slightly punchy and higher-pitched voice will cut through the bass-heavy rumble of a dozen other stations calling at once.

Working a pileup tests your patience and your ear. Whether you are tapping out Morse code or speaking into a microphone, the operator who listens more than they transmit almost always makes the contact first.

Propagation and the Pile-Up

As many of you know, I was the space weather and radio propagation columnist in CQ Amateur Radio Magazine from 2001 through its demise. I strongly advocate for all HF radio operators to understand the basics of radio wave propagation on shortwave frequencies. There are a lot of myths and frankly, horrific theories on how radio waves propagate.

Understanding how the ionosphere refracts radio waves is a crucial tactical advantage. The behavior of a pile-up changes dramatically based on the frequency band you choose and the current mood of our sun.

The Sun Dictates the Rules

The ionosphere is charged by solar radiation. When solar activity is high, higher frequencies become usable for long distances.

Solar Flux Index: The SFI is a great indicator of overall ionization. A higher SFI means better conditions for the higher HF bands. When the SFI climbs, bands like 15, 12, and 10 meters open up globally.

Geomagnetic Storms: Measured by the K-index, these storms can disrupt communications entirely. A high K-index often absorbs signals crossing the polar regions. This can suddenly mute a massive European pile-up for North American operators.

Fading: The ionosphere is always shifting. Signals will constantly rise and fall in strength, which is known as QSB. A smart chaser listens for the rhythm of this fade and throws their callsign into the pile-up exactly when the band peaks for their specific location.

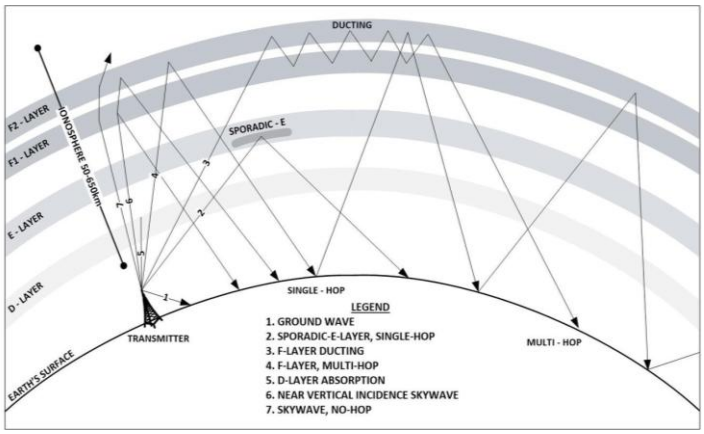
How Bands Shape the Pile-Up

Every amateur radio band has its own personality. The pile-ups you encounter will reflect these differences perfectly.

10, 12, and 15 Meters: These high bands are daytime frequencies that thrive on high solar activity. When 10 meters opens up, signals can be astonishingly loud with very low atmospheric noise. Pile-ups here can ignite suddenly and stretch very wide across the frequency spectrum.

20 Meters: This is the traditional workhorse band for global communication. Pile-ups on 20 meters are massive, sustained, and densely packed. You will often compete with high-power stations and massive beam antennas on this frequency day or night.

40 and 80 Meters: These low bands come alive at night. They are heavily affected by atmospheric noise and static crashes. Breaking a pile-up here requires an exceptionally well-tuned ear and the ability to pull faint CW tones or muffled voices out of a very high noise floor.



The propagation of radio waves.

One of the most confusing aspects of a pile-up for a new operator is the skip zone. Radio waves bounce off the ionosphere and return to earth far away, which means they skip right over the geographic areas in between. You might hear the DX station perfectly, but you might not hear the hundreds of other operators calling them because those callers are inside your skip zone. This phenomenon is exactly why you must rely on the DX station's cadence rather than waiting to hear the pile-up clear.

While raw power is often cited as the key to breaking a pile-up, your antenna system plays a far more decisive role in your overall effectiveness. A directional antenna, like a Yagi or a hexbeam, not only focuses your transmitted energy directly toward the DX station but also actively rejects interfering signals from other directions. However, do not be discouraged if you are running a simple wire antenna. A well-placed dipole or end-fed half-wave can still break monumental pile-ups if you leverage good timing, exploit the skip zone, and listen closely to the DX operator. Ultimately, the best antenna in the world cannot compensate for poor operating habits.

Over to You

Working a pile-up is one of the most rewarding challenges in amateur radio. It tests your patience, refines your ear, and forces you to understand both the science of radio wave propagation and the psychology of your fellow operators. Every massive wall of sound is a puzzle waiting to be solved.

Now, I would love to hear from you. What was your most memorable pile-up experience? Do you have a specific tactic that consistently helps you break through the noise, or perhaps a frustrating moment that taught you a valuable lesson? Drop your stories and questions in the comments below, and let us keep the conversation going.

From my shack to yours,

73 de NW7US

**** To leave a comment, go to https://www.amateurradio.com/a-pileup-what-it-is-and-how-to-work-one/ and scroll down to the bottom of the page. ****

[This article courtesy Amateur Radio Newsletter,, June 14, 2026 and used with permission of the author who invites you to visit, subscribe: NW7US Radio Communications and Propagation YouTube Channel]

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.

Calendar of Events

Tues. June 23 - 5:30pm - Membership Meeting at Woodcreek Church

Sat/Sun June 27/28 - ARRL Field Day

Tues. June 30 - 5:30pm - Drive Home Net (441.875)

Tues. July 7 - 5:30pm - Drive Home Net (441.875)

Tues. July 7 - 7:00pm - 1st Tuesday Elmer Night via Zoom

Tues. July 14 - 5:30pm - Drive Home Net (441.875)

Tues. July 14 - 7:00pm - CARC Board of Directors via Zoom

Tues. July 21 - 5:30pm - Drive Home Net (441.875)

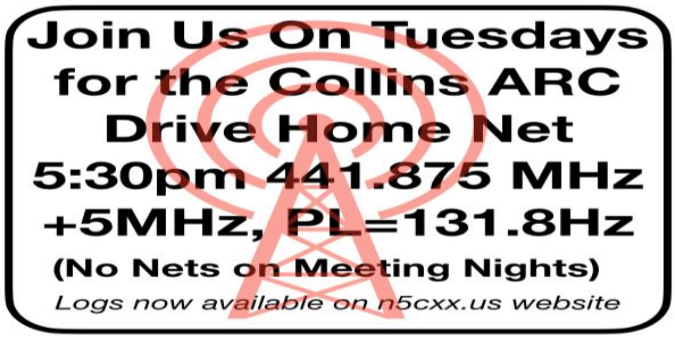
Tues. July 21 - 7:00pm - 3rd Tuesday Elmer Net (441.875)

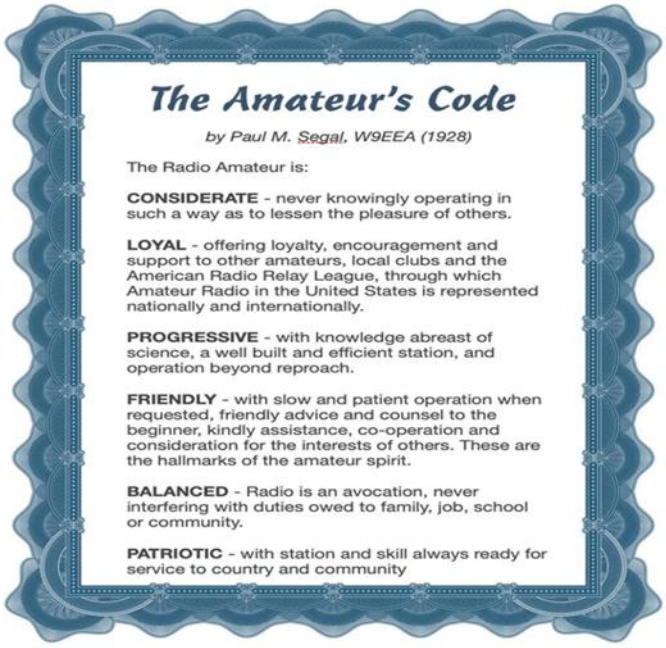
Tues. July 28 - 5:30pm – Family Dinner at Spring Creek BBQ, Richardson

CARC Community Service Activities

Siren Testing AG5JB Jeffrey Barton, Dennis Cobb WA8ZBT and Jim Skinner WB0UNI participate in the Richardson outdoor warning siren testing. The June 2026 test was conducted on 3 June, with all but one siren fully functional. 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, assisted with the monthly Garland Siren Test. The Garland Siren Test is held at Noon on the first Wednesday monthly with hams reporting 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.





Radio Equipment Available to CARC Members and Others

Long-time Rockwell Collins engineer and ham operator Earl Milliken WB5M passed away some time ago and left behind a collection of vintage ham gear. His son David has contacted the Club and offered equipment from his ham shack for purchase at a low price by interested members and non-member hams.

The photos below show the equipment available, including a tower with antenna, which is also available. (The tower and antenna are visible in the back of the house-and-bicycle photo). Anyone interested should contact David Milliken directly at email address dmilliken66@gmail.com or call at 972-351-1411.

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 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 4th Tuesday.)
1st Wednesday	Richardson Emergency Siren Test. At noon using the Richardson Wireless Klub (RWK) repeater at 147.120 MHz.
2nd Wednesday	ARES North Texas HF Net Every month—3860 KHz at 8:30 pm—9:30pm
	MAY
30-31	**CQ WPX CW.** The WPX Contest is based on an award offered by CQ Magazine for working all prefixes. Held on the next-to-last weekend of May, the contest draws thousands of entries from around the world. Starts: 0000 UTC Saturday, Ends: 2359 UTC Sunday. Details at https://www.cqwpx.com/
	JUNE
27-28	**Field Day Objective:** To contact as many stations as possible on the 160, 80, 40, 20,15 and 10 Meter HF bands, as well as all bands 50 MHz and above, and to learn to operate in abnormal situations in less than optimal conditions. Details at http://www.arrl.org/field-day
	JULY
4-5	**CQWW VHF CW & Phone.** The CQ World Wide VHF Contest promotes VHF activity on the 6 and 2 meter bands with participation from around the world. Starts: 1200 UTC Saturday, Ends: 1200 UTC Sunday. https://www.cqww-vhf.com/
11-12	**IARU HF World Championship.** Contact as many amateurs around the world as possible using 160, 80, 40, 20, 15 and 10 meter bands. 1200 UTC Saturday and ends 1159 UTC Sunday. http://www.arrl.org/iaru-hf-world-championship
18-19	**CQWW VHF Digital.** The CQ World Wide VHF Contest promotes VHF activity on the 6 and 2 meter bands with participation from around the world. Starts: 1200 UTC Saturday, Ends: 1200 UTC Sunday. https://www.cqww-vhf.com/
	AUGUST
1-2	**222 MHz and Up Distance Contest.** Work as many stations as possible on 222 MHz through 241 GHz bands using any allowable mode. Begins at 1800 UTC Saturday and ends at 1759 UTC Sunday. Details at http://www.arrl.org/222-mhz-and-up-distance-contest

Brandmeister Annual Re-Up

The ID numbers used for DMR and other amateur radio digital networks are a finite resource. Due to the growing popularity of these modes, along with some users requiring multiple IDs, certain regions are expected to face ID shortages in the near future.

To help ensure that available IDs are being used efficiently, the organization in charge of maintaining the ID database will periodically verify that currently assigned IDs are still needed and that the information associated with them remains accurate.

Beginning July 1, 2026, RadioID.net will implement an annual verification process. On the anniversary of each account's creation, it will send an email to the account holder requesting confirmation that the assigned ID(s) are still needed and that the the account information remains accurate and up to date.

If no confirmation is received, the associated ID(s) will be temporarily deactivated. If RadioID.net is unable to obtain a response after a reasonable period, the ID(s) will be removed from the database and made available for reassignment.

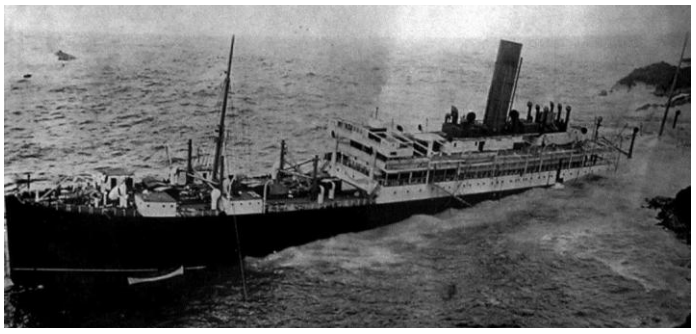
This process is intended to preserve the long-term availability of ID numbers and maintain an accurate database for the amateur radio community.

If you have any questions or concerns regarding this process, please contact RadioID through their support page.

[Source: https://news.brandmeister.network/new-annual-verification-process-by-radioid-net/]

The First Use of SOS

The International Radiotelegraph Convention produced an agreement that become effective on July 1st, 1908, adopting that ships in distress would use the Morse code sequence of three dots / three dashes / three dots, or SOS.



The first ship said to have used the SOS call while in distress, was the Cunard liner RMS *Slavonia*, which ran aground near the Azores, on June 10th, 1909. All on board were rescued.

Calendar of Select Amateur Radio Contests for 2026

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
3 4 ARRL RTTY Roundup	1 1 NA Sprint SSB	7 8 ARRL INT'L DX SSB	4 5 SP Polish DX CW & SSB	2 3 ARI Int'l DX	6 7 IARU Region 1 Fieldday CW	1 1 RAC Canada Day CW & PH	1 2 10-10 INT'L Summer SSB	5 5 CW OPS OPEN	10 11 OCEANIA DX CW	1 1 NA Sprint SSB	4 6 ARRL 160m CW
10 11 NAQP CW	7 8 10-10 INT'L Winter Phone	14 14 YB DX RTTY	11 12 JIDX CW	9 10 VOLTA WW RTTY	7 7 ARRL INT'L DIGITAL (No RTTY)	4 5 Marconi Memorial Contest HF CW	1 2 NAQP CW	12 13 DARC WAE SSB	10 10 10-10 INT'L Sprint	7 9 ARRL SS CW	5 6 FT Challenge
17 18 NAQP SSB	8 8 NA Sprint CW	14 15 Stew Perry Top Band CW Challenge	11 12 IG-RY WW RTTY	9 10 CQ-M INT'L DX Contest CW & SSB	13 15 ARRL June VHF	4 5 CQ WW VHF CW & PH	8 9 DARC WAE CW	12 14 ARRL September VHF	17 18 JARTS WW RTTY	14 15 DARC WAE RTTY	12 13 ARRL 10M CW & PH
17 19 ARRL January VHF	14 15 CQ WW WPX RTTY	14 15 South America 10m CW & PH	18 19 CQMM DX CW	14 14 Contest University Dayton	20 21 ALL ASIAN DX CW	11 12 IARU HF World CW & PH	15 16 SARTG WW RTTY	13 13 NA Sprint CW	17 18 Worked All Germany CW & PH	14 16 CQ WE (Western Electric)	19 19 OK DX RTTY
23 25 CQ 160m CW	21 22 ARRL INT'L DX CW	15 15 NA Sprint RTTY	25 26 10-10 INT'L Spring Digital	16 16 NZART Sangster Shield CW	20 21 Stew Perry Top Band CW Challenge	18 19 NAQP RTTY	15 16 NAQP SSB	20 20 NA Sprint RTTY	17 18 Stew Perry Top Band CW Challenge	10 11 JIDX Phone	20 20 ARRL Rookie Roundup CW
24 25 BARTG RTTY Sprint	27 MAR 1 CQ 160m SSB	21 23 BARTG HF RTTY	25 26 SP DX RTTY	16 17 EU PSK63 DX	20 20 ARRL Kids Day SSB	18 19 CQ WW VHF Digital	16 16 ARRL Rookie Roundup RTTY	20 20 BARTG PSK63 Sprint	19 23 ARRL School Club Roundup	21 23 ARRL SS Phone	19 19 RAC Winter CW & PH
24 25 Winter Field Day	28 MAR 1 NAQP RTTY	28 29 CQ WW WPX SSB	26 26 BARTG Sprint RTTY (75 Baud)	30 31 CQ WW WPX CW	27 28 ARRL Field Day	25 26 RSGB IOTA CW & SSB	29 30 World Wide Digi DX	26 27 CQ WW DX RTTY	24 25 CQ WW SSB	28 29 CQ WW CW	26 27 Stew Perry Top Band CW Challenge

CW | Phone | CW & PH | RTTY | FT4 / FT8 | Digital | All Modes | VHF/UHF

Some Contests allow AM and FM with SSB as operating modes for Phone.
All Modes does include CW, Phone and some digital modes but not all.
Links to Contest Rules may be found at WA7BNM's Contest Calendar website: www.contestcalendar.com

Start Date / Start Time — 27 28 — End Date / End Time
All Modes — ARRL Field Day — Contest Name

Calendar of Select Amateur Radio State & Area QSO Parties for 2026

JAN	FEB	MAR	APRIL		MAY	JUN	JUL	AUG	SEPTEMBER		OCTOBER		NOV	DEC
	7 8 Vermont QSO Party	1 2 North Carolina QSO Party	4 5 Louisiana QSO Party	18 19 Michigan QSO Party	2 3 7th Call Area QSO Party	6 7 Kentucky QSO Party	25 26 Alabama QSO Party	8 9 Maryland DC QSO Party	6 7 Tennessee QSO Party	19 20 New Hampshire QSO Party	3 4 California QSO Party	17 18 New York QSO Party		
	7 7 Minnesota QSO Party	14 15 Oklahoma QSO Party	4 5 Mississippi QSO Party	25 26 Florida QSO Party	2 3 Indiana QSO Party	20 21 West Virginia QSO Party		22 23 Hawaii QSO Party	12 13 Colorado QSO Party	19 20 Washington State Salmon Run QSO Party	10 11 Nevada QSO Party	19 20 Illinois QSO Party		
	28 MAR 1 South Carolina QSO Party	14 15 Idaho QSO Party	11 12 Missouri QSO Party	11 12 North Dakota QSO Party	2 3 Delaware QSO Party			22 23 Ohio QSO Party	19 20 Iowa QSO Party	26 27 Maine QSO Party	10 11 Arizona QSO Party			
		15 16 Wisconsin QSO Party	11 12 New Mexico QSO Party	17 18 Nebraska QSO Party	2 3 New England QSO Party			29 30 Kansas QSO Party	19 20 Texas QSO Party		10 11 Pennsylvania QSO Party			
		21 22 Virginia QSO Party	11 12 Georgia QSO Party		16 17 Arkansas QSO Party				19 20 New Jersey QSO Party		10 11 South Dakota QSO Party			
	7 8 British Columbia QSO Party	1 1 Nova Scotia QSO Party (80m Only)	18 19 Ontario QSO Party		9 10 Canadian Prairies QSO Party	6 7 Atlantic Canada QSO Party								
			19 19 Quebec QSO Party											

CW & PH | All Modes

Some States allow AM and FM with SSB as operating modes for Phone. All Modes does include CW, Phone and some digital modes but not all; Check individual QSO Party Rules. **** Dates and times in Red Background are estimated and not official. ****
Links to QSO Party Rules may be found at WA7BNM's Contest Calendar website: www.contestcalendar.com

Start Date / Start Time — 30 31 — End Date / End Time
All Modes — Kansas QSO Party — Contest Name

Calendars contributed by Brad Wick, W0CO, the author of the Contest Calendar and the State QSO Party Calendar.

COLLINS AMATEUR RADIO CLUB

Richardson, Texas
www.N5CXX.us

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

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 23 JUNE 2026 5:30 PM

THE MEETING WILL BE AT

Woodcreek Church Richardson TX

NEXT SIGNALS INPUTS DEADLINE:

➔➔➔ 17 July 2026 ➔➔➔