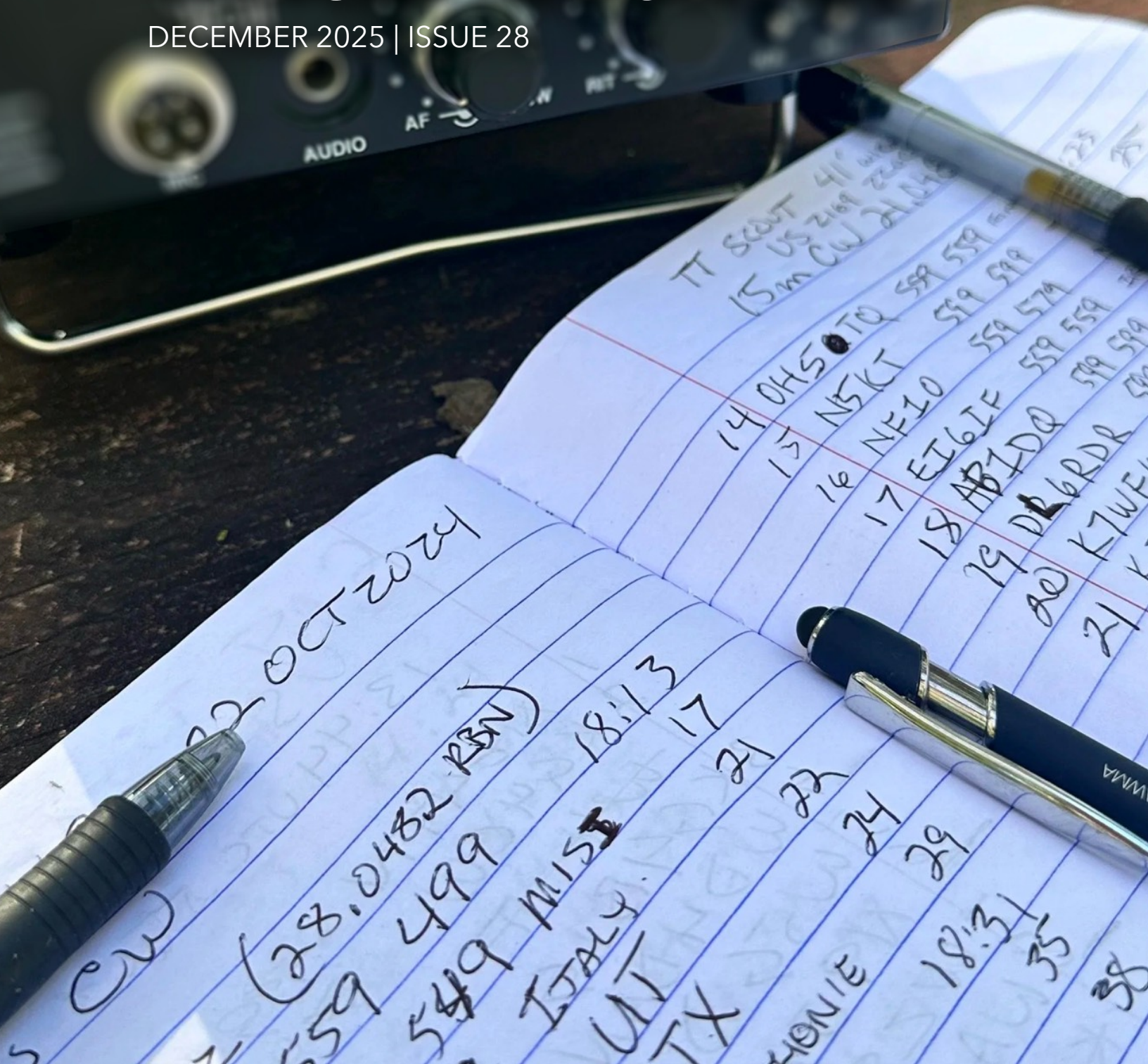




WX4CAR NEWSLETTER

DECEMBER 2025 | ISSUE 28



LOGGED BY HAND:
HOW ONE NORTH GEORGIA HAM
TALLIED 7,000 POTA QSOS





MESSAGE FROM THE PRESIDENT



Marty Buehring - KB4MG

Looking back on this year we can't help but be proud of what the CARS club has accomplished. We will review this at our annual Holiday Party.

We all miss **Mark Schulze (KO4IFY-SK)**. He comes to mind because it has been a year since his passing on December 28, 2024. What a great man, ham operator, ARES Admin, Field Day volunteer, and great friend. In his honor we have designated the top award for Club Service as the **Mark Schulze Service Award**. This is given to the individual who earned the most participation points in 2025. People who give their time and talents need to be thanked and recognized by all of us.

A COLD DAY AT THE BARN

We kicked off the year with **Winter Field Day** at Rob Long's farm. It was really cold this past January and **Chad (KY4KP)** had to be innovative in the setup and layout of the stations.



Keeping the operators warm was the number one priority, so Chad pitched tents inside the barn with individual heaters. This worked really well! It was a big success with 1,135 contacts made and three ARES classes taught.

Another successful event that we have done in 2025 was the **New Hams Luncheon**. This gives people new to our hobby a time and place to ask the questions they have without the intimidation of that in the large group setting. Those new to ham radio need to be tutored, encouraged, and engaged. We work with the new hams to get them on the air at or before one of our club events. It's important to get news hams active in on-air events as soon as possible. We had two sessions in 2025, one in February and one in August. Plans for 2026 are to do the same.

LET'S EAT!

We have a tradition of having a Spring and Fall picnic.



This is a great time for people to gather, get to know them better, and share knowledge. Because we do not have clubhouse for our club it is challenging to present opportunities

for new hams to try their hand at operating an HF station. We are aware of "mic fright" and want to help everyone who wants to get on the air an opportunity to do so. These two events are the perfect setup for us to have a couple of stations where we can mentor new hams in the art of HF operating. This past year we had two successful picnic events at Red Top Mountain State Park and used the opportunity to be POTA stations for our club account WX4CAR.

This past year we were the number one club in Georgia for the POTA Georgia Parks on the Air event. We achieved 2,291 contacts at our Spring picnic, which was a record for any club in this event. Chad Cone (KY4KP) accepted the award at a ceremony on May 3rd.

The ARES Team had two great events in 2025 at the **Georgia Death Race (GADR)** and the **Georgia Jewel**. Both of these foot races are ultra-marathons in the dangerous terrain of the North Georgia mountains. We had teams at two aid stations for the GADR and one for the Jewel. **Rob Bruderer (W1JKU)** led these teams and provided the race organizers with much-needed communications and runner tracking.

Skill building is a goal of CARS. Each year we try to offer a hands-on project that is ham radio related. This past year we hosted two **antenna workshops**. Antennas are still the number one requested topic for workshops. In May we hosted an antenna construction workshop. One group built the Tape Measure VHF Yagi antennas, led by me, while a second group lead by **Stan Ham (WB9GFA)** built End Fed Half Wave wire antennas for HF. Your feedback about this event confirmed that it was well received and a great learning time.





CHEROKEE AMATEUR RADIO SOCIETY

Tony Drake (KC4OBY) led two antenna modeling workshops, one at Field Day and another in October. These provided a great introduction to antenna modeling, building, and testing. Anyone wanting to make their own antennas benefited.

The highlight of the year was **Field Day**. We had great participation, great food, and great prizes! This year we gave away a \$500 DX Engineering gift card, Chameleon POTA antenna, an Anytone DMR HT, a Vibroplex keyer, and a Diamond X300 VHF/UHF antenna.

We beat our previous record for contacts with 1,543 and total points of 6,951!

This year we also introduced the addition of a **Propagation Station** to provide real time monitoring of Space Weather as well as propagation data gathered from WSPR.



This proved to be useful in our strategy of choosing SSB and Digital modes at various times during the Field Day weekend. The December issue of QST magazine features our setup in the "Up Front" column on page 22. Check it out!

To sum it up, I would like to say that I am proud of the effort we have made this year. We have a very active and vibrant club that is the envy of many other clubs in the country. In 2026 we want to continue in that quest and continue to improve. We depend a lot on you as members and volunteers to make it work. Field Day alone requires about 25-30 volunteers to make it a success. I wish you a very happy holiday season with family and friends. Be ready for an exciting 2026 kicking off with Winter Field Day. See you then!

73,

Marty - KB4MG

UPCOMING EVENTS

CALENDAR

DEC. 13

CARS monthly meeting and holiday lunch (NOTE: Meeting starts at 11am!)

JAN 1

ARRL Straight Key Night

JAN 10

CARS monthly meeting. 10am. William G. Long Senior Center, Woodstock.

JAN 24-25

Winter Field Day at Rob Long Farm in Taylorsville, Georgia

FEB. 14

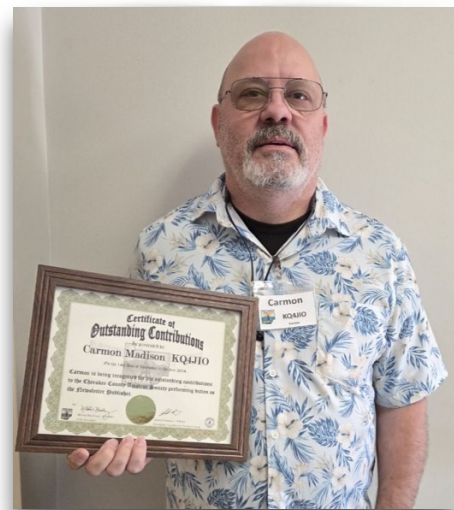
CARS monthly meeting. 10am.

FEB 13-15

ORLANDO Ham-Cation

JUN 27-28

Field Day



Carmon (KQ4JIO) displays his award for "Outstanding Contributions to the Cherokee Amateur Radio Society..". He designs and publishes the monthly CARS newsletter.





CHEROKEE AMATEUR RADIO SOCIETY

7,000 POTA QSOS AT ONE PARK

By David Saylor - WK4DS

I recently reached a major Parks on the Air (POTA) milestone—crossing 7,000 QSOS during my October 1 activation. This was a big deal for me since most of my activations produce 30 or 40 contacts at most. Some days I log only a dozen. Running low power (QRP) with modest antennas makes every contact count.

For this activation, I chose the Sitton's Gulch parking lot near Trenton, Georgia. It's much closer to my QTH than the top of the mountain. The only drawback is that the mountain rises almost straight up from this spot, but I still have a good opening from the north-northeast around to the south-southwest. That's usually plenty for 20 meters.

Those buildings in the background aren't restrooms. They're changing rooms for cavers exploring Case Cave, which requires a special permit from the park. If you plan to visit, call ahead to learn what's required.

That day, I was once again using my Wolf River Coils telescoping vertical antenna with two ground radials. Since I expected to stay on 20 and maybe 17 meters, I didn't bother setting up for other bands. My goal was to reach 7,000 QSOS, so I wanted to be on the most active frequency range.

This antenna has served me very well, and it made sense to stick with what works. I enjoy experimenting with new

antenna designs, but sometimes you just want to get on the air and make contacts.



THE SETUP

After a little repositioning of the truck, I managed to deploy the antenna for 20 meters without touching a single leaf, a real trick considering the antenna stands about 16 feet tall on a six-foot base. Once tuned, I ran the coax inside the truck, powered up from the vehicle's 12-volt outlet, and began setting up for the day.

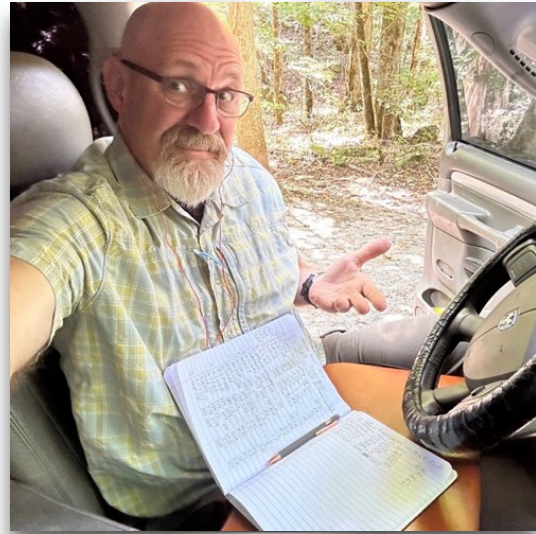
For this activation, I used the Begali Traveler paddle, a Pico keyer, and my Ten Tec Scout 555 HF radio. I tuned the Scout to 40 watts output instead of the rated 50 watts to reduce stress on the transmitter and keep it cooler. The signal difference is less than one S-unit, so it's well worth it for longer life.

You might notice the red cord in the photo—that's for my earbuds. I've learned something important about the Scout: its internal speaker isn't great. Weak signals near the noise floor can vanish in the speaker's poor audio response. Plugging in earbuds and reducing the volume lets the signals rise above the noise. This trick nearly doubled the number of stations I could hear.

The Scout has both paddle and straight-key inputs, and the internal keyer works well for casual contacts. However, for POTA where you send the same exchange repeatedly, a memory keyer like the Pico is far more efficient. One quirk with the Scout is that it resets the keyer speed every time it's powered off. If you forget to reset it, you'll send gibberish at 25 WPM when your brain expects 20!

Another overlooked feature is the AUX 13.5 VDC power port. It can power accessories like the Pico keyer. I plan to make a dedicated cable for this so I don't have to rely on the keyer's battery during long activations. That project just moved up on my to-do list.

In the photo above, I hadn't realized yet that I had already logged my 7,000th contact—N8BB, operating from a park in Michigan. I thought I still needed about 40 more QSOs when I actually only needed 18!



You'll also notice I was using paper logs instead of the little computer I usually bring. I forgot it at home, but honestly, I didn't mind. Entering 40 contacts later into the computer for POTA upload only took about an hour.

TIME TO ACTIVATE

Once on the air, I started by hunting Park-to-Park contacts to check conditions. The bands were rough, with a lot of fading on 20 meters. That ruled out 17 meters, which typically behaves the same or worse when propagation is weak. So, I stayed on 20 meters for the day.

While logging by hand, I recorded each contact's exact frequency in case someone later requests a QSL card. I also made a few notes at the top of the log about gear, power level, and setup details. These notes are handy when I look back later.

After about ten minutes of hunting, I found a clear spot on 14.059 MHz and started calling CQ. Looking over the paper log later, I noticed I was sending higher signal reports than I should have—those earbuds made everything sound stronger! My old S-meter isn't accurate anyway, so it didn't matter much.

Once things were set up, I hardly looked at the radio. The flow of contacts was steady and relaxed, with a few small pileups here and there. It was the perfect pace—enough activity to stay busy without chaos. For me, that's what makes a POTA activation so enjoyable.

When the day was done, I had 7,023 total QSOs from this park. It took 217 activations to get there, but time really flies when you're having fun.

(Editor's note: David's dedication to portable operating shows how much fun there is to be found in POTA, no matter the power level or location. His persistence and steady approach should inspire anyone working toward their next milestone in Parks on the Air.)



A NEW 2M/70CM TELESCOPING ANTENNA

By Bob Witte - K0NR



I came across this new antenna, the [TWAYRDIO RH 660S](#), mentioned in this [Ham Radio Crash Course video](#). I have previously been recommending the TWAYRDIO TH770 antenna. The RH 660S is a newer dual-band 2m/70cm telescoping antenna from the same company.

For Summits On The Air (SOTA), I generally take along such an antenna. The performance of any half-wave antenna on a handheld radio is always much better than the standard rubber duck. Although a three-element Yagi antenna provides even better performance, it has to be pointed in the right direction. Sometimes, we will set up the RH 660 or TH 770 on a small vertical pole (actually a camera monopod with a homebrew BNC attachment). This allows us to monitor and work the band with an omnidirectional antenna without having to hold or point the Yagi. Much more convenient while sitting on a summit eating lunch.

A key advantage to an omnidirectional antenna is that it is always pointed in the right direction.

The RH660 is available with the three standard connectors: BNC, SMA Male and SMA female. Make sure you pick the right one that matches your radio. The RH660 collapses down to a small size.



On our most recent SOTA activation, I did a quick comparison between the old TH 770 and the new RH 660 on 2 meters. The RH 660 seemed to perform ever so slightly better, but that was probably within the measurement error of the test. It certainly was not worse than the TH 770. I only did the comparison test on 2 meters, as that is the go-to band for VHF SOTA. However, the antenna seemed to work OK on 70cm as well.

The packaging on the antenna indicates 3.0 dBi gain on 144 MHz and 5.0 dBi gain on 430 MHz. Do I believe those numbers? Not really, but they are probably close. (An ideal halfwave radiator has a gain of 2.2 dBi.) Note that the newer antenna does not have the magic tuning lump in the middle of the radiating element, which simplifies the mechanical design. This is the main advantage of the new antenna: no lump in the middle, resulting in a slimmer and sturdier design.

SUMMARY

I am pleased with this new design, and I now recommend it as a good compact antenna for portable use. As with all telescoping 2m half-wave antennas, it is long and should be handled with care. Otherwise, you can poke someone's eye out, break it in two, or snap the connector off your HT.

The RH660 antenna is [available at Amazon](#) for about \$17. At this price, why wouldn't you have one in your backpack or Go Bag?



GET TO KNOW...

BOB CHEEK, N4RFC

CARS IS A VIBRANT AND EXPANDING COMMUNITY, WELCOMING NEW MEMBERS REGULARLY. TO FOSTER CONNECTIONS, WE'LL PERIODICALLY SPOTLIGHT A MEMBER THROUGH A BRIEF Q&A. IF YOU'D LIKE TO BE FEATURED OR HAVE SOMEONE IN MIND, [PLEASE LET US KNOW](#).

What is your name, callsign and license classification? Bob Cheek, N4RFC and I hold a Extra Class License.

How long have you been licensed? I was first licensed in 1965 as WN4EJE. I upgraded to General Class and was assigned WB4EJE. Wow, that's 60 years! WB4EJE is a terrible CW call, so I changed to the vanity N4RFC because it had a nice CW "swing."

What interests you most about amateur radio? I like designing, building, and using electronic projects and I also enjoy restoring vintage radios.

What modes do you operate? 75% of my contacts are on CW, and half of those are using a semiautomatic key, also known as a BUG.

What are some of your most memorable experiences with amateur radio? Working the 160meter contest using a broadcast tower as a transmitting antenna with a Beverage antenna to receive. My self and N4NJ could work anything we could hear! My first Field Day, in the Florida Keys, using a vertical antenna on the beach in the Gulf of Mexico and a Galaxy V Mk 2 transceiver on CW.

What is your most memorable QSO? Working KA4JUL aeronautical mobile over Colorado on 20 meters and finding out that the pilot lived in Boca Raton, Florida. We became friends for more than 40 years.

How long have you been a member of CARS? About 10 years.

What is one piece of advice you would offer a new ham? Get on the air, and try every mode, every band and see what you enjoy the most.

What do you like to do outside of ham radio? Classic and sports cars, motorcycles, forming and welding metal into useful items like antenna mounts, camping, and traveling.





CHEROKEE ARES DEMONSTRATES READINESS IN 2025 SIMULATED EMERGENCY TEST



The 2025 Simulated Emergency Test (SET) on October 11 attracted more than 160 participants with check-ins across several modes including HF, VHF, D-STAR, D-RATS, WinLink and DMR. The annual fall training exercise helps evaluate strengths and weaknesses in emergency preparedness and communications, and demonstrates the value of amateur radio to the public.

A large portion of the event involves passing traffic among operators. Rule No. 1: relay the information exactly as presented.

“That’s a skill we have to keep practicing, said **Rob Bruderer (W1JKU)**, emergency coordinator, Cherokee County ARES. “We pass messages 100 percent as we receive them, with no changes, even if it looks incorrect.”

Exchanging information “as-is” is essential to maintain message integrity and accountability.

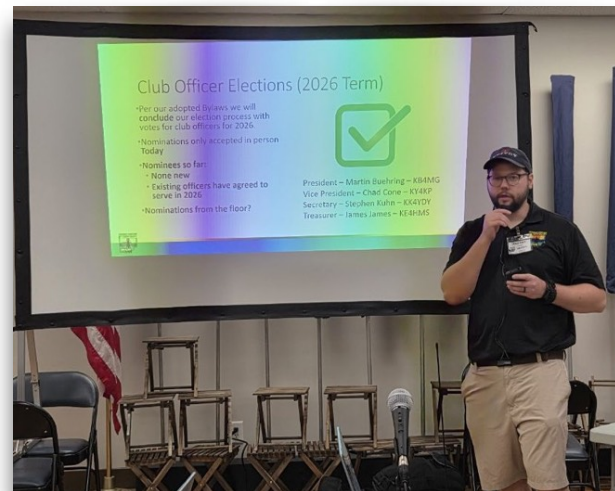
The half-day exercise identified a few unfilled needs including maintenance of the HF antenna at the county emergency operations center, work on the trailer that carries communication equipment during activations and the need for a DMR radio for use at the EOC.

Bruderer thanked all who participated in the SET. He specifically mentioned **Randy Kerr (KD4KHO)**, **Don Coltrane (KJ4UC)**, **Rod Atwell (KO4PWB)**, **Bill Sangster (KO4UQF)**, and **Shawn Walsh (K4ZRI)** for their efforts.

CLUB OFFICERS RE-ELECTED FOR 2026

CARS members re-elected the full slate of club officers at the November meeting. **Marty Buehring (KB4MG)** will continue as president following a unanimous vote. Also returning are vice president **Chad Cone (KY4KP)**, secretary **Stephen Kuhn (KK4YDY)** and treasurer **James James (KE4HMS)**.

The club now boasts more than 140 members, making it one of the largest amateur radio groups in the state. As membership expands, the officers are seeking member support in several areas. Volunteers are needed to for technical presentations, hospitality and greeters for club events and several other areas. If you can help, please contact club leadership at wx4car.club@gmail.com





BE READY BEFORE THE FREEZE: PREPARING YOUR HOME AND HAM SHACK FOR WINTER WEATHER

By Lee Hall -K4QO

As autumn turns to winter in Georgia, we know that ice, sleet, and freezing rain –though unusual– are always possible. While our winters are frequently mild, we’ve all seen the occasional storm that leaves roads impassable, knocks out power, and strands motorists. For amateur radio operators, being prepared means not only safeguarding our homes and families, but also protecting the radios and antennas we depend on to stay connected when other systems fail. Here are some tips to help you get ready for the season ahead.

PROTECTING YOUR HOUSEHOLD

Start with the basics: make sure your home is ready to withstand a cold snap. Check weather stripping around doors and windows to keep warm air inside. Stock up on essentials such as bottled water, canned goods, batteries, and any prescriptions you may need if stores or pharmacies close during an ice storm. A reliable source of heat is critical—whether that’s a fireplace, wood stove, or backup generator. If you rely on electric heat, consider how you’ll stay warm if the power goes out.

Don’t forget your vehicle. Keep an emergency kit in the trunk with blankets, a flashlight, jumper cables, bottled water (careful, it can freeze!), and snacks.

Many hams keep a handheld transceiver in the car; be sure to store it where it won’t be damaged by extreme cold. Lithium batteries can lose capacity quickly when temperatures dip, so rotate or recharge them regularly. The chemical reactions inside the battery become less efficient as the temperature drops. This can affect battery capacity and discharge rate, making them less effective in cold weather. Additionally, charging the battery in cold conditions can compromise these reactions and damage the battery.

SAFEGUARDING YOUR RADIO GEAR

Your radio shack represents a major investment of time and money. Cold weather brings unique risks—condensation, static electricity, and power surges are just a few. Here’s how to protect your equipment:

- **Use Surge Protection:** Winter storms can bring down power lines and generate surges when power is restored. A high-quality surge protector or, better yet, an uninterruptible power supply (UPS) can save your rigs from costly damage.
- **Grounding and Lightning Protection:** Even in winter, lightning can be a threat. Make sure your station ground system is in good order and that your feedlines are properly protected. Be aware that ice can form on exposed cabling. Disconnecting antennas during storms is always a smart move.
- **Condensation Control:** When warm air meets cold metal, moisture forms. Keep your shack space at a consistent temperature if possible. Silica gel packs or a small dehumidifier can help reduce moisture around sensitive electronics.
- **Battery Backup:** Check your station batteries now. Lead-acid and lithium batteries both have reduced performance in the cold. Keep them fully charged and, if possible, stored in a climate-controlled space. Portable power packs can be lifesavers when commercial power fails.
- **Mobile and Portable Gear:** If you carry radios in your vehicle, avoid leaving them there overnight during freezing weather. Rapid heating (from a cold car into a warm house) can cause condensation inside the unit. Allow gear to reach room temperature before powering it on.

STAY READY TO SERVE

Finally, remember why preparedness matters. Severe weather often leads to communication outages, and amateur radio can provide a vital lifeline for neighbors and first responders. Check that club repeaters are functioning, program local emergency frequencies into your radios, and review your emergency response plan.

By taking a few simple steps now, you’ll protect your household, safeguard your equipment, and be ready to serve when the call comes. Winter in Georgia may be unpredictable, but as hams, we can make sure we’re never caught off guard.





CONTESTING

CONTEST CORNER DECEMBER 2025

ARRL 160m Contest
2200Z, Dec 5 to 1600Z, Dec 7

ARRL 10m Contest
0000Z, Dec 13 to 2400Z, Dec 14

TRC Digital Contest
0600Z, Dec 13 to 1800Z, Dec 14

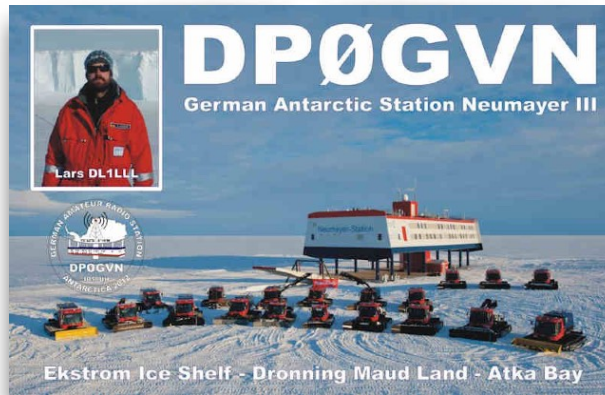
NTC QSO Party
1900Z-2000Z, Dec 18

ARRL Rookie Roundup, CW
1800Z-2359Z, Dec 21

DXPEDITION NEWS



TZ4AM, Mali - December 2025, 80-6m



DP0GVN, Antarctica - December 2025, HF Bands



For all of your Amateur Radio needs, CARS recommends [DX Engineering](http://www.DXEngineering.com).



OX7AM, Greenland - December 2025, 80-6m





FCC EXTENDS LICENSE RENEWAL DEADLINE FOLLOWING GOVERNMENT SHUTDOWN

The Federal Communications Commission (FCC) has granted a temporary extension for amateur radio license renewals affected by the recent federal government shutdown. According to a Public Notice released November 17 (DA-25-943), any amateur radio license originally set to expire between **October 1, 2025, and March 5, 2026**, will now have a new renewal deadline of **March 5, 2026**.

The change comes in the wake of the 43-day federal shutdown, which ended November 13. As federal agencies work to resume normal operations, many— including the FCC — are managing significant backlogs. These delays have affected amateur radio licensing processes across the board.

The FCC notice states that personal radio licensees, including Amateur, Ship, Aircraft, GMRS, and Commercial Operator license holders, may continue to operate under [Section](#)

[1.62](#) of the Commission’s rules as long as they file their renewal applications by the newly extended date. This ensures no lapse in legal operating privileges for amateurs caught in the shutdown’s fallout.

ARRL Volunteer Examiner Coordinator Manager **Maria Somma (AB1FM)** emphasized that amateurs with licenses expiring during the affected window may remain on the air as long as their renewal is filed by March 5. She also confirmed that the FCC’s Universal Licensing System (ULS) is back online – including the license manager, license search, and CORES systems.

If your license expiration falls between October 1, 2025, and March 5, 2026, you now have until **March 5, 2026**, to submit your renewal – and you can continue operating in the meantime.

Source: ARRL





RESOURCE LINKS

Website - <https://www.wx4car.org>

Contact Us - <https://www.wx4car.org/contact-us.html>

Membership - <https://www.wx4car.org/membership-form.html>

CARS Club Technical Programs - <https://www.wx4car.org/technical-monthly-programs.html>

Club Activities - <https://www.wx4car.org/club-activities.html>

POTA Corner - <https://www.wx4car.org/pota-corner.html>

ARRL FIELD DAY - <https://www.wx4car.org/field-day.html>

Ham Fests - <https://www.wx4car.org/amateur-radio-events.html>

CARS Groups.io - <https://groups.io/groups>

ARRL Testing Info - <https://www.wx4car.org/testing2023.html>

New Ham Kit - https://www.wx4car.org/uploads/8/3/7/7/83773582/wx4cars_intro_to_new_hams-7apr2021.pdf

Ham License Upgrading - <https://www.wx4car.org/obtaining-a-license.html>

Technician Ham Cram Study Guide - https://www.wx4car.org/uploads/8/3/7/7/83773582/2022-2026_technician_pool_study_guide.pdf

Club Apparel - <https://www.hamthreads.com>

CARS Club Badges - <https://www.thesignman.com/clubs/carsga.html>

POTA Supplies - <https://www.clubgearonline.com>

CONTESTING LINKS

ARRL Contest Calendar - <http://www.arrl.org/contest-calendar>

Contesting Calendar - <http://www.contesting.com/>

CQ Contest Calendar - http://cq-amateur-radio.com/cq_contests/cq_annual_contest_calendar/

SolarHam Site - <http://www.solarham.net/index.htm>

Space Weather - <http://www.spaceweatherwoman.com/>

Contest Calendar - <https://www.contestcalendar.com>

OTHER LINKS

ARRL - <http://www.arrl.org>

Sky Warn - <http://skywarn.org>

QSO Today - <http://qsotoday.com>

Cherokee EMA - <http://cherokeega-ema.org>

Georgia ARES - <https://www.gaares.org>

Ham Radio Work Bench - <http://hamradioworkbench.com>

On All Bands - <https://www.onallbands.com>





MISSION STATEMENT

The mission of the Cherokee Amateur Radio Society is to promote the hobby of amateur radio to the Cherokee County residents and surrounding communities. It primarily serves to provide education, FCC testing, public service, and fellowship to people with the common interest of amateur radio.

Cherokee Amateur Radio Society is an organization of FCC licensed amateur radio operators (also called Hams) that meet and share the hobby, educate people about amateur radio, as well as support our local community in times of disaster. We are located in Cherokee County, Georgia and have club call sign WX4CAR. We are an ARRL Affiliated Club.

The club also participates with ARES, and the Cherokee County EOC when severe weather gets close to the area, and we help with local public service projects. The members of the club also dedicate some of their time to promote and help new hams to develop their skills and knowledge on Amateur communications modes and to be better operators. We are a very active club and participate in ARRL Field Day every year. If you are located in Cherokee County or the surrounding area, we would like to invite you to participate.

CARS OFFICERS FOR 2024:

President: Martin Buehring - KB4MG

Vice President: Chad Cone - KY4KP

Secretary: Stephen Kuhn - KK4YDY

Treasurer: James James - KE4HMS

Cherokee County Emergency Coordinator:

Rob Bruderer - W1JKU

Email: wx4car.club@gmail.com

Time & Location of Meetings:

Meetings are the second Saturday of each month at 10:00 am Eastern Time.

William G. Long Senior Center

223 Arnold Mill Road

Woodstock, Georgia 30188

Our meetings are open to all visitors. You do not need to be a member or have a license to attend. Come for the fellowship and technical programs. We also have a combined ARES meeting at the same time. ARRL FCC Testing is at 1:00PM following the meeting.

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