



CHEROKEE AMATEUR RADIO SOCIETY

WX4CAR NEWSLETTER

SEPTEMBER 2025 | ISSUE 25





MESSAGE FROM THE PRESIDENT



Marty Buehring - KB4MG

I attended the Huntsville Hamfest in August. I was very encouraged to see so many people attending this event from many of the surrounding states. It is one of the best run hamfests in the country and has never disappointed me. The fact that this hamfest is completely indoors is a huge draw. We know that one of the big things at hamfests is the flea market. Being in the air conditioned Von Braun Center makes this a real success.

I spent most of my time attending the forums. To me, this is the best part of a hamfest because I am a continual learner that enjoys hearing about new things as well as a new slants about things I already know. This time I enjoyed hearing from Dr. Monte Bateman (WB5RZX) who is a recognized expert in lightning research for NASA/Marshall Space Flight Center in Huntsville. There are a lot of aspects to understanding lightning and how to protect yourself and your equipment. It was a very informative talk. If you attend any hamfest, be sure to check out the schedule for forums and see what new things you can learn.

Speaking of learning, if you have been a part of CARS for any time now, you know that we emphasize learning. Not all clubs are able to do

what we do on a consistent basis. We are very fortunate to have so many knowledgeable people in the club that are willing to share their expertise. I look forward to what we will learn together.

THIS MONTH

The technical talk this month is to complete our deeper dive into digital modes. In this session we will look at why we use digital modes, and even in general why the world has "gone digital". Why do these modes work so well and what should we know about digital technology to be better operators? We hope to answer these questions, so please attend the September meeting.

COMING TALK

I am working on a new talk that will explore the topic of modulation. The fact is, without some form of modulation, including on-off (CW), a radio carrier does not have any function because it does not carry any information. Modulation is the "information: we want to send and receive.

I will be using a tool called GNU Radio to demonstrate the various

types of modulation and their characteristics. GNU Radio is a free & open-source software development toolkit that provides signal processing blocks to implement software radios. It can be used with readily-available low-cost external RF hardware (like an RTLSDR dongle) to create software-defined radios, or without hardware in a simulation-like environment. It is widely used in hobbyist (like amateur radio), academic and commercial environments to support both wireless communications research and real-world radio systems.

In my demonstrations I will be using GNU Radio to build software models that execute radio functions in real time. You will be able to see and hear the results. It's an amazing tool that is free to use and learn. If you are so inclined, you can find all you need to know at gnuradio.org.

See you at the September meeting.

73,

Marty - KB4MG





GET READY: SIMULATED EMERGENCY TEST COMING OCTOBER 4, 2025



By Lee Hall - K4QO

Mark your calendars. Saturday, October 4, is the date for this year's nationwide **Simulated Emergency Test (SET)**. Sponsored by the ARRL and coordinated locally by our ARES and RACES teams, the SET is an annual exercise designed to evaluate amateur radio's readiness to assist in times of crisis.

The purpose of the SET is simple but vital: to put our communications skills, equipment, and procedures to the test in a realistic, time-compressed scenario.

"We will be passing traffic over VHF and UHF. We will incorporate DMR and D-STAR and even run some HF out of the emergency operations center," said **Rob Bruderer (W1JKU)**, emergency coordinator for Cherokee County ARES.

Emergencies don't arrive with advance notice, so the SET simulates situations where normal communications are disrupted—whether by severe weather, widespread power outages, or other disasters—and amateur radio operators are called upon to bridge the gap.

For local hams, the SET provides an opportunity to practice message handling, net control operation, and coordination with served agencies such as emergency management, the Red Cross, or local hospitals. Just as importantly, it's a chance to spot weaknesses in our plans so we can improve before a real emergency occurs.

HOW TO PARTICIPATE

Our local SET will begin at 6:00 a.m. EDT on October 4 with the bulk of the operation taking place between 9:00 a.m. and noon. Operators can take part from home stations, mobile units, or designated field locations. We will run a voice net on our primary ARES repeater (**WA4EOC**, 145.19 MHz, +2.26 offset, PL tone 173.8). [Editor's Note: Maintenance work on WA4EOC may necessitate moving to the backup machine, K4SJR, at 146.700, a minus offset and PL tone of 123.0]

If you can operate a radio, log messages, run a net, or simply monitor and relay information, your help is needed. Every skill level is welcome—this is a learning





ARRL AND RRI JOIN FORCES TO STRENGTHEN EMERGENCY



A new agreement between two major amateur radio organizations -- ARRL® and Radio Relay International® (RRI) -- is good news for hams involved in emergency communications.

The two groups recently signed a Memorandum of Understanding (MOU), agreeing to work together to improve and modernize the National Traffic System (NTS), a key part of amateur radio's emergency response capability.

WHAT'S THIS ALL ABOUT?

For those not familiar, NTS is a nationwide network of radio operators trained to send and receive formal written messages, or "traffic," especially during emergencies. It's been around since 1949 and continues to evolve with new digital technologies and tools like Winlink, packet radio, and digital HF messaging.

ARRL has long been the voice for amateur radio operators, and its Amateur Radio Emergency Service® (ARES®) program is a well-known way for hams to serve their communities. RRI was formed in 2016 with a similar mission: to build stronger, more flexible emergency messaging systems and training for radio amateurs.

By working together, ARRL and RRI hope to avoid duplication of efforts; share tools, training, and technology; expand and modernize message-handling networks; and make sure local, state, and national emergency services have reliable radio-based backup communications when other systems go down

WHY SHOULD YOU CARE?

If you're an amateur radio operator interested in public service, this partnership matters. Whether you're involved in ARES®, SKYWARN, or just want to be prepared to help during local storms or disasters,

traffic handling is a vital skill – and it's getting easier to learn and use with modern tools.

As ARRL Emergency Management Director **Josh Johnston, KE5MHV**, put it:

"Amateur radio works When All Else Fails®, and traffic handling is an important part of that."

Recent hurricanes and floods have once again shown the value of ham radio in keeping people connected when cell towers and the internet fail.

With ARRL and RRI now working side by side, expect to see new training, better tools, and stronger networks, all designed to help hams be even more effective when called upon.

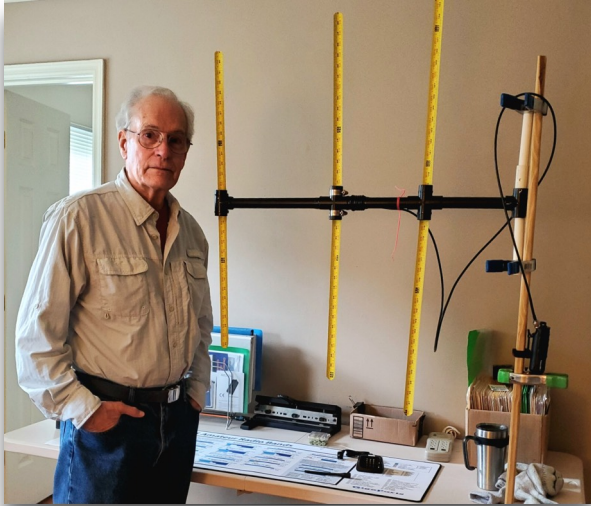
Source: ARRL





FROM KIT TO CONTACT: A DIY YAGI BUILD THAT DELIVERED ON THE AIR

By Ric Donato - KQ4TDF



A few months back, CARS hosted a hands-on Yagi antenna building workshop. The club provided all the materials and tools, with attendees covering the cost of their kits. Roughly 20 hams participated in the session. Unfortunately, I couldn't attend at the time.

Fast forward to the July club meeting: **Marty (KB4MG)** mentioned he had one extra kit available. I immediately raised my hand. He generously offered to help if I needed assistance with the build. After reviewing the instructions, I quickly realized I'd benefit from some expert guidance and Marty was the right person to ask.

We planned to meet after the August meeting, but with the New Hams Luncheon on the schedule, Marty suggested we do the job at his place instead. He had all the equipment we'd need. We met at 10 a.m. on Tuesday, July 29.

THE BUILD

Marty was incredibly patient throughout the process, explaining both the practical steps and the theory behind the design. For those unfamiliar, this version of the Yagi uses actual metal tape measure elements -- reflector, driven element, and directors -- mounted to a prefabricated PVC boom. It's a clever and inexpensive design that's both lightweight and effective.

The driven element consists of two tape measure segments, each needing a section of paint stripped to expose bare metal. This is where the coax is soldered and the hairpin match installed. Under Marty's supervision, I handled the soldering, a great learning opportunity.

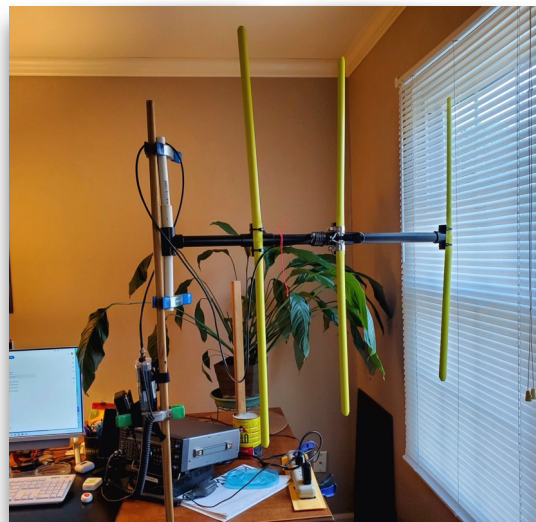
We attached the director and reflector to the boom using zip ties. The driven elements were more finicky and were secured using hose clamps, allowing for easier fine-tuning. Marty emphasized that precise spacing of the elements is critical for achieving a good SWR.

We wrapped the coax around the boom six times to form a simple RF choke, then secured it with zip ties and electrical tape.

TUNING AND TESTING

With the antenna assembled, Marty connected a NanoVNA to check the SWR. Results were excellent right out of the gate. A few minor adjustments, spacing and trimming the driven elements, brought the SWR down to between 1.1:1 and 1.3:1 across the 2-meter band. Outstanding performance!

Next, we used a signal strength meter to check for pattern nulls. As expected, the sides and rear showed minimal signal, while the front delivered a strong, focused beam. Exactly what you want from a directional antenna. **Continued on page 7**





PRODUCT REVIEW - RIG EXPERT SHACKMASTER POWER SUPPLY

By Martin Buehring - KB4MG



When we build out our shacks we often do not pay as close attention to the power supplies or power needs in general. Yet, we spend potentially thousands of dollars on our radios. So, why don't we pay more attention to what powers our radios? This is a brief product review of the Rig Expert Shackmaster power supply, which I purchase a while back. This is a beautifully designed and manufactured power supply with amateur radio in mind.

The reason I wanted a new power supply was because I could see some flaws in the "cheaper" ones that are often purchased as an aside to buying a rig. I did this as well, thinking, why does it matter, its just 12 volts. I own a Samlex switching supply and had been using it for my ICOM 7300 for a few years. It seemed to be fine, but when I started looking closer, I noticed that in digital modes that the output voltage is not as well-regulated as it should be. I would often see it drop a volt or more when I was transmitting. The supply is rated at 30 amps, but even at 12 amps it seemed to strain. As an engineer who has designed equipment before, I knew this was not right. Small excursions in voltage ($< .5$ volts) are an acceptable behavior. Drops in voltages to your rig can cause issues with the transmitted power and could even cause your rig to crash. Remember, most new rigs are a computer with an RF front end.

An alternative is to look at linear power supplies, as opposed to switching supplies. These supplies take the voltage from the mains, rectify and filter it, then regulate the voltage and current output. You can still

buy these at most ham radio supply houses like DX Engineering. They are costly, heavy (30-50 lbs), and take up a lot of space. An example of this is the Astron VS Series. They also are inefficient and therefore give off a lot of heat. This was the reason switching power supplies were invented in the first place. These linear supplies are usually better regulated but have the aforementioned drawbacks.

When I looked at the specs for Rig Expert Shackmaster I was impressed. This is a well engineered, stable power, RF clean supply, all in compact package. It is designed to not drop voltage in higher load conditions, like transmitting. The output is very low ripple, which excessive ripple can be a cause of low frequency noise when transmitting on SSB and AM.

The case design, size, and weight are amazing. It weighs just 2 lbs 7 oz and delivers up to 40 Amps at 13.8 volts. My Samlex supply has a fan that can be annoying. It does not come on often, but when it does you know about it. The Shackmaster has variable speed fan that is very quiet and no disturbance at < 21 dB.

There are some other key features worth mentioning that make this a perfect power supply for amateur radio.

- Plug-and-Play Connectivity: The inclusion of standard connectors, such as Anderson Powerpole on back and front panel, makes setup intuitive and reduces the risk of wiring errors.
- 4 USB jacks on the front panel for 2 -USB 2.0, 2-USB-C
- Expandable Power Distribution: Operators can easily add distribution boxes or power strips, allowing the Shackmaster to serve as the central power hub for an entire station.
- USB Computer connection for monitoring operation
- Touch screen for On/Off and monitor functions
- Can be used in a vertical orientation where desk space may be at a premium
- Remote Monitoring (Advanced Models): Some Shackmaster units offer USB or network connectivity, enabling remote monitoring and control via

Continued on page 7





ANTENNA CONT'D

By Ric Donato - KQ4TDF

PRO TIPS FROM MARTY

Marty shared a couple of great tips:

- **Electrical Tape:** Use Scotch Super 88 vinyl electrical tape. It holds up better than cheaper alternatives.
- **Zip Tie Trick:** For extra-tight zip ties, place a monkey wrench over the connector and pull the long end with pliers --a mechanical advantage approach worthy of Archimedes.

REAL-WORLD RESULTS

That evening, I used the Yagi during the ARES and Preparedness nets. Pointing the antenna north toward the repeaters yielded excellent signal reports. When the net switched to simplex, I had trouble reaching one operator, **Robert (KJ4EQK)**, until we figured out he was northwest of my location. A quick azimuth adjustment fixed the issue; Robert came back with a solid 59 signal.

For the curious, I was running a handheld Tidradio TD-H8 at about seven watts.

This was a fun and rewarding project. The performance of the tape measure Yagi exceeded my expectations. Big thanks to Marty for his guidance, patience, and sharing his knowledge. I tip my hat to him and recommend this build to anyone looking for a portable, high-gain antenna solution on a budget.

SHACKMASTER CONT'D

By Martin Buehring - KB4MG

smartphone or computer—perfect for unattended or remote stations.

My experience this far has been great! I like that touchscreen display that can be set to show any number of operational parameters. The noise level is as advertised and voltage regulation is great.

Did I mention that it has a 3 year warranty? Rig Expert has been a company that stands behind their products. Located in the Ukraine and continuing to produce great products must be a challenge to just do it better.

The Rig Expert Shackmaster power supply stands out as a premier choice for those seeking reliability, versatility, and advanced features in their radio station's power management. With its high current capacity, intelligent protection systems, user-friendly interface, and global compatibility, the Shackmaster allows radio amateurs to focus on what matters most: communicating across the airwaves, unhindered by power concerns. Whether for the seasoned operator

or the newbie, this power supply promises to be the backbone of any well-equipped shack.





GRAY LINE: THE TWILIGHT ZONE OF RADIO PROPAGATION

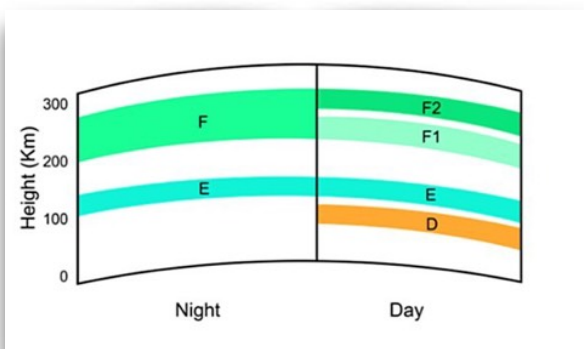
By Mark Haverstock - K8MSH

Imagine for a moment that you're sitting in your ham shack, coffee in one hand and microphone in the other. It's either just before sunrise or just after sunset, and suddenly—boom!—you're talking to someone halfway around the world who sounds like he's right next to you. No sunspots, no fancy beam antenna, no EME wizardry.

What just happened? Welcome to the weird and wonderful world of gray line propagation—also known as the magical twilight zone of HF radio. Before we travel this middle ground between light and shadow, let's start with a quick review of the ionosphere.

THE IONOSPHERE: NATURE'S BOUNCER

Your HF signals generally don't travel in straight lines to faraway lands—they bounce. And they don't bounce off clouds or car-sized drones. They bounce off the ionosphere, a high layer of Earth's atmosphere charged with solar radiation. Think of the ionosphere as a bouncer at the exclusive club called DX Planet. During the day, it's all lit up and active with layers named D, E, and F. At night, the scene changes. Some layers disappear while others chill out, and the bouncer's attitude shifts from "get lost" to "come on in."



Most of the time, HF propagation is a battle between you, the sun, and the ionosphere's charges. But twice a day, during dawn and dusk, all the rules change—and that's where gray line propagation comes into play.

WHAT IS GRAY LINE?

The gray line represents the band of twilight that surrounds the Earth at sunrise and sunset. It's not quite night, not quite day. Just enough light to find your car

keys but not enough to see the puddle you're about to step in.

In radio terms, the gray line is a narrow corridor of enhanced propagation that follows this twilight zone. When your QTH is in the gray line and your target station is also in the gray line—boom! The ionosphere enters a cooperative state, allowing long-distance communication with remarkably low power and minimal QRM.

WHY IT WORKS: A TALE OF TWO IONOSPHERES

Let's go back to D, E, and F for a moment.

During the day, the ionosphere's D layer is strong and active. And like SpongeBob absorbs water, it loves to absorb your HF signals—especially the lower bands such as 160, 80, and 40 meters. These signals don't bounce; they die. But when night falls, the D layer quickly dissipates, the E layer's refraction becomes weaker, and the ionosphere is left in the hands of the F layers. F1 and F2 combine into a single F layer, which is much more accommodating for bouncing signals around the planet.

In the gray line, you're at the perfect handoff point. The D layer is disappearing, but the F layer is still energized—hello long-distance skip! This sweet spot gives signals a temporary pass to skip much farther than usual—think thousands of miles. It's as if the Earth is saying, "Hey, for the next 45 minutes, let's open up those bands."

TIMING IS EVERYTHING

So, when should you fire up your transceiver? Gray line propagation lasts just a short time—roughly 30 to 60 minutes—during local sunrise and sunset. But here's the kicker: It works best when both you and the distant station are in the gray line at the same time. It's like speed dating. You've got a narrow window to meet your DX contact, so don't be late.

Want to talk to New Zealand from Woodstock on 40 meters with 10 watts? Try doing it when both cities are bathed in twilight. You'll sound like you're across town instead of across the globe. Of course, if you miss the window, you're back to shouting into the ether. Can you hear me now?





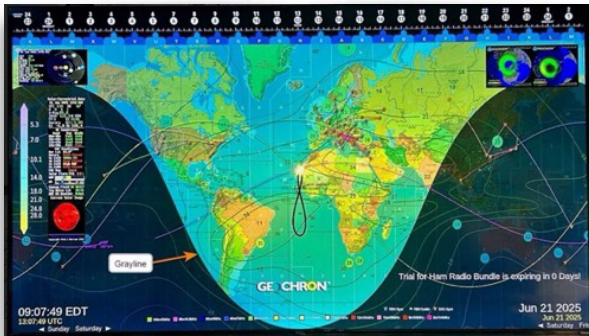
WHAT BANDS ROCK THE GRAY LINE?

Glad you asked. Radio waves, particularly on lower bands like 160 meters, can travel long distances along the gray line due to reduced signal absorption in the D layer of the ionosphere:

- 160 meters (Top Band) lives for the gray line. Signals that typically vanish into the noise floor suddenly soar across continents.
- 80 and 40 meters are also fantastic. Many seasoned DXers get their best contacts on 40 meters during gray line hours.
- 30 meters: Low absorption and strong F-layer reflection during gray line can produce long-distance contacts on 30 meters, sometimes even across the globe.
- 20 meters occasionally benefits, especially during low sunspot periods.
- Higher bands (15, 12, 10 meters)—not so much. These tend to thrive during peak daylight, when the ionosphere is fully ionized.

Bands below 30 meters (10 MHz) are perfect for exploring gray line propagation and making exciting DX contacts, especially if you're targeting north-south paths during the dawn and dusk hours.

DXERS' DIRTY SECRET



Veteran DXers don't just hope for propagation—they hunt gray line like Sarah Connor hunts Terminators. They keep maps of the Earth's terminator (the line between day and night), check solar data, and set alarms for sunrise in exotic countries. While you're hitting the snooze button, they're snagging a QSO with Bhutan.

There's even software and apps that help you visualize where the gray line is at any given time, and, of course, there's the [Geochron Digital Atlas 2 4K](#) display. If you want to impress your ham buddies, casually mention that you're timing your 40-meter net check-in with the solar terminator over Mongolia. You'll either get admiring nods or perplexed looks.

The gray line displayed on the Geochron Digital Atlas 2 4K using Mercator projection. (Image/K8MSH)

IT'S ADDICTIVE

The thrill of gray line DX is real. You start off chasing a VK station at dawn. Next thing you know, you're setting alarms for 5 am every day, drinking extra-large cups of coffee, and telling your XYL you need "just five more minutes" on the radio. It's like the fishing trip that never ends, only your bait is a dipole, and your catch speaks Portuguese.

THE MAGIC HOUR

Gray line propagation is one of the most fascinating and rewarding phenomena in amateur radio. It takes timing, a bit of knowledge, and a lot of curiosity, but the payoff is huge. It's one of those things that reminds us why we got into ham radio in the first place: the thrill of reaching out across the world, with nothing but the sky to help us. And who knows? That next QSO might just be your best one yet.

So tomorrow morning, grab your rig, tune to 40 meters, and give it a shot. The world might be asleep, but the gray line is wide awake and waiting—today and tomorrow.





2025 FIELD DAY SEES BIG GROWTH IN PARTICIPATION AND PUBLICITY

Field Day 2025 was a big success, and the numbers prove it. According to ARRL Contest Program Manager **Paul Bourque (N1SFE)**, this year’s event brought in 4,369 official entries and over 31,700 participants—a solid increase over 2024.

“There’s growing interest in amateur radio, especially after last year’s hurricanes and other major events where radio proved essential,” Bourque said. “Field Day is a perfect opportunity to get involved with your local ham radio community.”

But it wasn’t just the operating that saw a boost. On the public outreach side, ARRL’s Public Relations and Outreach Manager **Sierra Harrop (W5DX)** reported that Field Day 2025 earned \$37.9 million worth of media coverage value. That’s nearly double the 2024 total of \$20 million.

This “ad value equivalence” (AVE) is how much it would have cost to buy that same amount of publicity through ads. It covers mentions of Field Day in the news and on social media from January through July. And it’s all thanks to the hard work of clubs and ARRL Public Information Volunteers.

“We had a tremendous response from clubs and ARRL public information volunteers this year,” said Harrop. “We gave them tools and support and they really took it to the next level in communities across the country.”

Looking ahead, ARRL is hoping for even more growth. The organization has designated 2026 as the Year of the Club, putting even more focus on supporting local ham groups and public outreach. If you’re interested in helping spread the word about amateur radio, consider becoming a Public Information Volunteer—just talk to your ARRL Section Manager to learn more.

With momentum building and more hams getting involved, the future of Field Day and amateur radio in general is looking bright.

Source: ARRL



GET TO KNOW... LYNN DAY -W4DAY

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?

Lynn Day, W4DAY, and I am a General

How long have you been licensed? One year and six months

What modes do you operate? Currently I am using FT8 and FT4 and and SSB on HT's

What interests you most about amateur radio? I enjoy POTA and chasing DX

What are some of your most memorable experiences with amateur radio? Working with Stephen (KK4YDY) on different projects that we are both doing, Field Day 2024, Winter Field Day 2025 and Field Day 2025

How long have you been a member of CARS? I joined CARS about a year and five months ago

What is your most memorable QSO? Connecting with JA0FIL in Tokamachi-city, Niigata, Japan on 7/1/2025. It is my first contact with Asia.

What is one piece of advice you would offer a new ham? After you getting your Technician license, continue on and get your General license and find good radio club and join.

What do you like to do outside of ham radio? I like shooting sports, hiking, camping and traveling.



RADIO ALPHA: ARRL LAUNCHES AMBITIOUS PROJECT TO PRESERVE



If you've ever lost yourself down a rabbit hole of vintage rigs, legendary operators, or forgotten modes, there's a new project that's sure to spark your curiosity, and maybe even inspire you to contribute.

[Radio Alpha](#) is the new ARRL® Museum and Research Library, and it promises to become the go-to source for amateur radio history. Think of it like Wikipedia, but for hams – curated by trusted volunteers, rigorously researched, and totally free to access.

This initiative is ARRL's answer to a problem many of us have noticed: there's a lot of ham radio history out there, but it's scattered – in blogs, personal websites, club archives, and dusty bookshelves. Radio Alpha aims to change that by pulling everything together into a clean, well-organized platform that documents the people, gear, groups, and inventions that shaped amateur radio as we know it.

At the heart of the project is noted historian and ham **Chuck Penson (WA7ZZE)** best known for his books on Heathkit and the Titan II missile.

"Somebody has to do this," said Penson. "Lots of people are doing it independently on their own – here's a website about the equipment I own, and here's some documents I scanned – there's a lot of that."

Radio Alpha is designed to preserve and expand those kinds of contributions – before they vanish forever. It's a living archive, one that welcomes input from the entire ham community.

"This database will be a living resource, regularly updated and expanded through ongoing research and community contributions, fostering a deeper appreciation and understanding of amateur radio's profound impact on communication, technology, and society," wrote Penson.

The best part? It's completely free to access. No ads. No popups. No clickbait. Just clear, accurate, thoroughly cross-referenced content that anyone – from lifelong hams to curious newcomers – can enjoy.

"ARRL has an organizational structure that allows it to take a long view on stuff like this," Penson said. "It is best equipped to handle a project like Radio Alpha."

WANT TO HELP PRESERVE HAM HISTORY?

Radio Alpha is actively looking for:

- Volunteers with writing skills
- Experts in specific brands or operating modes
- Vintage documents, photos, and manuals
- Hams with a passion for storytelling and preserving the past

If that sounds like you – or someone in your club – reach out to Chuck Penson at wa7zze@gmail.com.



CONTESTING

CONTEST CORNER SEPTEMBER 2025

ALL ASIAN DX CONTEST, SSB
0000Z, Sep 6 to 2400Z, Sep 7

OHIO STATE PARKS ON THE AIR
1400Z - 2200Z Sep 6

ARRL EME CONTEST
0000Z, Sep 13 to 2359Z, Sep 14

AFRICA FT4 DX CONTEST
1500Z-1800Z, Sep 13

ARRL SEPTEMBER VHF CONTEST
1800Z, Sep 13 to 0300Z, Sep 15

ARRL 10GHZ AND UP CONTEST
0900Z, Sep 20 to 0759Z, Sep 22

WISCONSIN PARKS ON THE AIR
1600Z-2300Z, Sep 20

DXPEDITION NEWS



T33TTT, Banaba Island - 80-6m SSB, CW, ft8



JW6VDA, Svalbard - HF Bands, SSB



9X2AW, Rwanda - 160-6m, CW, Digital and SSB





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: Mark Schulze - KO4IFY

Treasurer: James James - KE4HMS

Cherokee County Emergency Coordinator:

Rob Bruderer - W1JKU

Email: club.wx4car@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.

Newsletter Team:

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