The GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society

February 2026 https://www.gars.org/ Volume 53, Issue 2

Inside

www.GARS.org

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TechFest
Gwinnett Amateur Radio Society

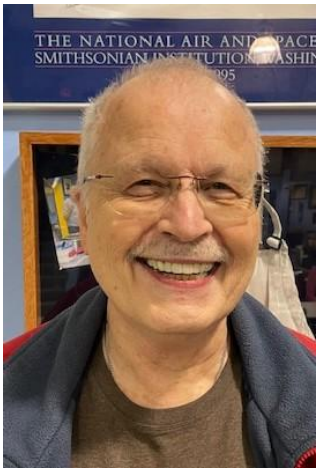
GARS January Exhibition of the Technical aspects of Amateur Radio
Held at the Gwinnett County Fairgrounds

The next TechFest is February 21, 2026

GARS Meeting: HF Rigs – Show-n-Tell – Multiple Rigs and Presenters
Tuesday February 10, 2026 at 7:00 PM

President's Message

From the President…



We have had 2 winter events in Georgia already this year and it has only been 1 month. The one on Jan 31 caused our TechFest to be rescheduled to February 21st. So far, nothing has changed in TechFest other than the date but check the website and subsequent emails to see if any of the forums or displays have changed.

GARS was going to participate in the ARISS school contact at Walnut Grove Elementary in January and that was rescheduled to the last week of March due to Astronaut availability on the space station.

The February meeting is our yearly GARS officer election meeting. There are 2 of us returning in our current positions and 1 changing position and 2 new candidates. All the positions are open for nominations during the February meeting and then the present members vote for the person they think will be best to help GARS continue for another year.

I would like to give my heart filled thanks to Richard Kitz KM4SWL for serving as our VP and all of the things he brought to the club including his surveys, initiatives to make GARS more inviting and his help with the Education group and also as my backup when needed. Also thanks to Harold Brown KI4FPR for being our Secretary and helping transport the trailer, manning the GARS tables at TechFest & Stone Mountain hamfest, being a Field Day station captain and helping at the Dog Show. Also his meeting presentation that he made it through before being taken to the hospital for a pace maker. Both Harold and Richard will be missed as Officers as we move on this year.

The candidates are listed in another part of the GARzette (sneaky way to get the rest of the GARzette to be looked at!). I am one of the candidates and will gladly serve another year as President.

There are some upcoming GARS events to start thinking about. TechFest of course since it is coming in a few weeks. With the new initiatives this year it should be a good TechFest. The new initiatives are a people's choice chili bake-off winner and a contest for the best radio voice.

The Dog Show is coming up in March and it is not too early to start thinking about helping GARS provide the parking and entry logistics. Some of the shifts are in the early morning and others start mid-morning. This may be the year I volunteer to help out – I hear it is a good time by all who help.

In May will will be having another Meet the Members contest and this time it will be for a week – so start getting connected to all of the GARS repeaters.

We also have a new IT Chair for GARS – Neil Derryberry WD4NET who is also our Elmer Manager. Thanks Neil for taking on this position for GARS. Neil is looking into our Google usage for calendars and emails to see if there is another option.

73,

Bob – K4CQO

Club President / GARZette Editor

GARS Repeaters and Other Communications

2 Meter Repeaters	6 Meter Repeater	
147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2	53.110 (-1 MHz) No Tone	6M Operational in Buford 147.075 Operational in Snellville 147.255 Operational in Snellville 224.580 Operational in Grayson 442.100 Operational at Goshen Springs Rd, Norcross 442.325 Operational in Buford 444.525 Operational in Snellville
1.25 Meter Repeater	**Other Resources:**	
224.580(-) MHz Tone 100.0, 1.6 MHz Offset	APRS	
70 Cm Repeaters	144.390 -- 1200 Baud W4GR	
444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100		Link remote receivers being added

Notable Web Links

Ham Radio Glossary: https://noji.com/hamradio/glossary.php a very comprehensive listing provided by Noji Ratzlaff KNØJI. On his site there is also a lot of information about getting started in ham radio.

Need Help – Let GARS Elmers answer your questions

Send an email to elmers@gars.org with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

About the GARzette

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution, etc., Dave Bruse, W4DTR, who distributes the newsletter electronically, and Mark Pritchard KN2TOD who delivers the GARZette to our local HRO store.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.
For additional information view our Website at: http://www.gars.org [PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]
Newsletter Email: editor@gars.org Editor: Bob Hoffmann, K4CQO

GARS Meetings & Workshops

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046.

Meetings and Workshops are OPEN to all, feel free to share your invite with others.

When GARS meetings are available on **Zoom** the **login** info will be posted to http://www.gars.org prior to the meeting. Members are able to attend the GARS Executive Zoom Meeting on the 1st Tuesday of the month – send an email to the GARS President (president@gars.org) for information to attend.

GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- February 10th – Starter HF Rigs – Various Speakers led by Kevin Scott K4GTR
- March 10th – Starter Antennas for HF – Various Speakers led by Kevin Scott K4GTR
- April 14th – Multiband Antennas for HF – Various Speakers led by Kevin Scott K4GTR

Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hands-on Workshops)

- February 17th – Starter HF Rigs
  - Road Map of GARS Events for 2026 - Dallas N4DDM
- March 17th – Starter Antennas for HF
  - Dog Show March 25-29th - Glen W3WWT
  - GA QSO Party April 11-12 - Dallas N4DDM
- April 21st – Multiband Antennas for HF
  - Dog Show After-Action Review - Glen W3WWT
  - GA QSO Party After-Action Review - Dallas N4DDM
  - Dacula Memorial Day parade preps - Michael KR4CVF

GARS Meeting – February 10, 2026
HF Rigs – Show-n-Tell

These are some of the presenters to show off their favorite brand of HF rigs and by bringing it in and explaining the key figures of the unit.

Yaesu FTM300 (APRS, YSF) – Ed W4BSR
IC-7600 – Neil WD4NET
IC-7300 and a **IC-705** – John WB4QDX
Kenwood TS-430, **IC-7000** – Dallas N4DDM

GARS Workshop – February 20, 2026

GARS workshops provide further information about the presentation given the week before on a one-on-one basis with the various presenters and there are also Elmers present on a variety of subjects to help with any questions you may have about ham radio – including help you're your equipment that you can bring in.

Elmers are always present at the GARS Workshops. Feel free to bring your questions to the Workshop. If your project is small enough to bring to the meeting, let us know in advance so we can bring tools, test gear, etc.

GARS would like to thank Tom Crowley who provided both a presentation on HT antennas and provided member's antenna analysis at the workshop the following week.

GARS Happenings

20 Years ago in the February 2006 GARzette:


The GARZETTE

- In 2006 GARS meetings were held on Wednesdays
- The January program was about programming you rig – sounds like our upcoming programs to give hints on what all of the controls do on various rigs that are scheduled in the this and coming months

You can always browse the GARzette archive at http://www.gars.org/newsletters. 73, Bob, K4CQO, GARzette Editor

Health and Wellbeing – Sandy Jackson, KJ4DRO

Look for this resource on Email (https://gars.org/contact/) and use it as a means to convey information about a GARS family member or Silent Key notification.

Net Managers Corner

Monday Night 2 Meter "Want, Swap, Sell, and Information Net"
Thursday Night 440 Buford Repeater Net

GARS NEEDS MEMBERS
TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only five operators who serve as the NCS for the GARS net every Monday night. In no particular order, they are:

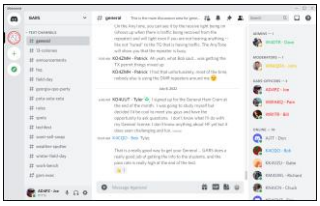
Ray – N4GYN David – KA4KKF Kevin – W4KIB Bill - WD4AMC Chuck – KK4TKJ Ed – W4BSR

To volunteer to help as a NCS for the 440 Net contact Jim O'Brien KQ4RNA.

As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The "Want, Swap, Sell Information Net" begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact (Chuck) via Email (Click Here to Email our Net Manager) to help support the effort that makes GARS the great club that it is. See you on the Nets!

Don't forget about our Discord utility for GARS announcements, news, activity spotting and more. See http://www.gars.org top of the home page. This is a sample of Discord. →



Upcoming GARS TechFest February 21, 2026

GARS Member Spotlight

Featuring **GARS** Members
The Stewart Family: Three New Hams, One Shared Journey

Mario P. Stewart, KR4CUK, Tee Stewart, KR4GKY, and Michael Stewart KR4CVF

Presented By Richard Kitz, [KM4SWL] with the assistance of AI (ChatGPT)

One of the most rewarding things to see in amateur radio is when the service becomes a family activity, and GARS has been fortunate to welcome exactly that with the Stewart family. Mario, Michael, and Tee Stewart all earned their licenses in 2025 and have quickly become active participants in club events and activities.

Though each brings a slightly different perspective to the service, their stories share a common theme: learning together, asking questions, and getting on the air without being afraid to make mistakes.

Getting Started

All three Stewarts were inspired to pursue amateur radio by Harold and Pam Brown, and each credits HamCram as a major influence in getting licensed and understanding what the service can offer.

Mario Stewart, KR4CUK, was licensed in April 2025, motivated by a general interest in emergency communications and a desire to really understand radio from the ground up.

Michael Stewart, KR4CVF, and Tee Stewart, KR4GKY, both licensed in 2025 as well, followed closely behind, turning the learning process into a shared family experience.

Rather than relying on a single Elmer, the Stewarts describe learning through trial and error, YouTube videos, books, and lots of questions—a very modern path into the amateur radio service.

Stations and Operating

Despite being newer hams, the Stewart shack is impressively equipped.

All three primarily operate Yaesu FT-991A radios, supported by 10–80 meter end-fed antennas, dual-band VHF/UHF antennas, and a growing collection of handhelds.

Mario also operates additional HF rigs, including a Yaesu 1000MP and FT-891, along with an Icom 5100. Most operating time so far has been on 2 meters and HF voice, with Field Day providing a major on-air milestone for the entire family.

On the Air and In the Club

The Stewarts didn't stop at getting licensed—they jumped right into club life.

They have participated in Field Day, Stone Mountain Hamfest, Tech Fest, the Memorial Day Parade, SET emergency communications, and QSO Party activities.

Michael currently serves as Dacula Memorial Day Parade Co-Chairman, and all three cite Field Day as a standout experience, especially making their first HF contacts on 10 meters.

For Mario, Field Day 2025 marked his first real run of contacts. For Michael and Tee, it was the moment amateur radio truly clicked.

Lessons Learned (and a Few Laughs)

Like most new hams, the Stewarts have already accumulated some good stories.

Mario spent a month getting an end-fed antenna into a tree, crashing a drone, destroying slingshots, scattering fishing line and lead weights across the yard, and even involving a bow and arrow—all while nursing a torn rotator cuff.

Michael remembers trying not to laugh while checking in on the repeater and being asked how to spell family members' names.

Tee recalls walking down the street with a Baofeng just to see if he could hit the repeater. Each agrees that getting on the air isn't always graceful, but it is always worth it.

Advice for New Hams

The Stewarts consistently emphasize slowing down and not rushing purchases.

Their collective advice is to listen more than you transmit at first, ask lots of questions and ask them repeatedly until you understand, look at many different station setups before buying equipment, not be intimidated by technical conversations, and not be afraid to build, experiment, and make mistakes.

Mario especially highlights the value of assigned Elmers and structured mentoring, suggesting that newcomers should not have to wing it after getting licensed.

Looking Ahead

Future plans include exploring DMR, D-STAR, FT8, Meshtastic, and possibly CW, adding more antennas, improving station layouts, increasing operating time, and continuing to grow as operators and contributors within GARS.

Beyond the Radio

Outside amateur radio, the Stewart family stays busy with photography, film production, and helping veterans.

They also bring prior experience, including military radio use, into their amateur radio journey, reinforcing the service aspect of amateur radio.

Closing Thoughts

The Stewart family represents something special in GARS: new hams who jumped in together, learned together, and immediately gave back. Their enthusiasm, honesty, and willingness to ask questions are exactly what keeps amateur radio healthy and growing.

We are glad to have all three of you on the air and in the club.

Busy Time for the Education Committee

The proposal process for ARISS contacts requires a large educational component that wants schools to somewhat modify their curriculum to include more lessons on space and radio. They must report back to ARISS on a bi-weekly basis listing their activities at all grade levels.

At Walnut Grove Elementary, this took on several different dimensions. My first experience with the school involved explaining at a very high level how we communicate with MARS Rover. What I didn't know was that this effort qualified me to become an "expert," and included in a play they were preparing for their robotics competition. Pictured is my "mini-me" Rick fully equipped with a GARS shirt, yagi antenna and radio. Having attended two of their competitions, I believe the play is what's separating them from the competition. They will be entering the State Competition on 2/7/26 at Georgia Tech. I know they'll succeed. Check out their robot and trophies at TechFest.

Next up, we worked with a few of the students and built a "fox." Our plan was to use the new fox and an older one in a series of fox hunts for 4th and 5th graders a few days later. Much thanks to Master Fox Hunter Richard Kitz for his help and instruction. If you look real close, in the picture, you can see the fox.

My favorite event as we approached Christmas was a radio contact, we made with Santa Claus and the kindergarten classes at Walnut Grove. I was pleasantly surprised by the look in the eyes of the students when Santa Claus came on the air and spoke to them. A select few had the chance to ask questions. I can't thank Santa (John Davis WB4QDX) enough for taking time away from the workshop at the North Pole for this QSO.

Planning for our ARISS contact, scheduled for the last week in week in January, was set back when an astronaut on the ISS had a medical emergency. When Crew 11 came back early, it left only one astronaut to complete all the work normally planned for five. The ARISS contacts had to be reshuffled, landing our contact in the week of March 30th. So, planning continues and stay tuned.

The Education Committee is moving into what I call STEM Night season. STEM Night involves showcasing our hobby, along with other STEM related participants, for the students and their parents. This is great "community outreach," and in some cases generates much interest in Amateur Radio and ARISS. Paul Kelly (Morse Code), Tom Crowley (Radio Astronomy), Richard Kitz and I (Repeater Operations). will be setup at Walnut Grove Elementary on February 19th followed by Woodward Mill Elementary on April 2nd.

Ralph Pickwick KJ4CNC
Education Committee Chairman

The Basics by Bob Schmid, WA9FBO

Enclosures for Electronics

de: Bob Schmid, WA9FBO

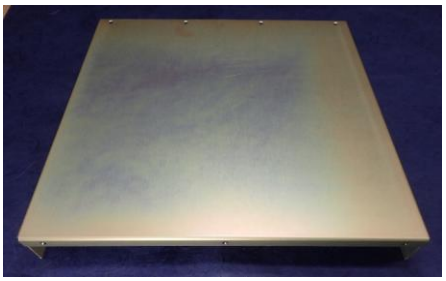
Interested in having a custom enclosure made for your electronic product?

A good material is 5052-H32 aluminum alloy sheet. It's strong, light, formable, and commonly used for aircraft, marine, and commercial-grade parts.

You've heard that aluminum forms a thin layer of aluminum oxide when exposed to oxygen in the atmosphere, and that this layer protects the aluminum from further oxidation and corrosion. But that's only true of **pure** aluminum. Aluminum **alloy** offers less protection, so we can choose to *passivate* the parts. That is, we make them passive, or corrosion-resistant.

One way to passivate aluminum alloy is with *chromate conversion coating*, sometimes referred to as chemical film or by the trade names *Alodine* or *Iridite*. This process chemically oxidizes the surface, resulting in a very thin oxide conversion layer. It is neither a plating process nor an anodizing process (anodizing is an electrolytic process that forms a thick, non-conductive oxide coating).

Chromate conversion provides excellent corrosion resistance, good electrical conductivity (as opposed to aluminum oxide, which is an insulator), and good adherence for paint.



However, because chromate is used to pretreat aluminum prior to powder coating, it's not considered a finish coat by the sheet metal industry. Color and darkness are not guaranteed and can range from a light yellow or gold to a light reddish brown. Variations come from the material being treated and the concentration, temperature, and duration of the bath. Darker films offer more protection, but if a clear finish is desired, the color can be bleached out with a rinse.

Due to these process variations, imperfections such as light or dark streaks are common. They don't affect the cabinet's ability to protect and shield the circuitry inside.

Let's say we want to design a rackmount enclosure. We might stop at chromate as the final finish for the chassis and cover because they're hidden by the front panel. (The part in the photo is not sanded, but that's something that could have been done for a grained appearance.)

We can powder coat or anodize the front panel in any of a wide range of colors, then silkscreen the letters and symbols in a contrasting color.

For a sleek look, we can make the front panel free of visible fasteners. In that case, we attach the chassis box to the front panel with threaded inserts pressed into counterbored holes on the back of the front panel.

To make the cabinet RF tight, we avoid large individual holes and slots and maintain a generous overlap between the chassis and cover for good electrical contact. And because paint is an insulator, we mask the area behind the front panel mounting ears before painting so the front panel can make good contact with the rack cabinet.

Today's sheet metal shops require a CAD drawing (not a sketch on the back of an envelope). And when it comes to specifying tolerances, remember that we're neither machining nor 3D printing, but rather punching and bending sheet metal via multiple machines. The tolerances are much looser – typically 0.005" for hole-to-hole and 0.015" for bend-to-bend distances – but it can vary with the shop.

The All-American Five

From Crystals to Tubes

Early AM broadcast receivers were crystal sets—cheap, simple, and not needing batteries—but everyone had to huddle over their own headphones.

In 1914, Edwin Armstrong's **regenerative receiver** made vacuum-tube sets more sensitive and selective, leading to loudspeaker listening for groups.

FIGURE 1 – TRF RECEIVER

The first commercial tube receivers of the 1920s were usually **TRF (Tuned Radio Frequency)** designs (Fig. 1)—effective but bulky and finicky to tune.

Armstrong's 1918 introduction of the **superheterodyne** principle simplified tuning and greatly improved selectivity; by the 1930s, this design had become the standard in consumer radios.

Radios ran on either household power or batteries, and depending where you lived, that could pose problems. Many areas in the U.S. received DC rather than AC power, and radios with transformers wouldn't work on DC.

Batteries presented their own challenges. Many radios required multiple types: an "A" battery to heat the tube filaments, a "B" battery for plate voltage, and sometimes a "C" battery for grid bias. These batteries were expensive and could ruin carpets with acid stains.

Speakers were another important part of early radios. Many used electrodynamic speakers, where the B+ plate voltage powered a large electromagnet inside the speaker, which also helped filter the radio's power supply.

Floor-model radios of the 1930s were big, beautiful, and often treated like fine furniture. But they were also out of reach for many households. Manufacturers wanted something smaller, lighter, and more affordable that the average family could own.

America's Little Workhorse Radio

Over the next decade, refinements in tube design and cost-cutting brought the ultimate mass-market radio—the compact, affordable, and wildly popular All-American Five (Fig. 2). Its patriotic-sounding name fit perfectly, since the basic circuit became common just before World War II. Manufacturers made millions of these sets, and they turned up in kitchens, living rooms, and garages all across America.

FIGURE 2 - ALL AMERICAN

How They Cut the Cost

One of the biggest tricks was wiring the **tube filaments in series** so their voltages added up to match the power line. No filament winding, no transformer—perfect for AC *or* DC operation.

A typical postwar AA5 used these tubes:

1. **12BE6 – Pentagrid converter** (local oscillator + mixer) – 12.6V filament
2. **12BA6 – IF amplifier** (455 kHz) – 12.6V filament
3. **12AV6 – Detector + first audio** (diode detector and triode preamp in one envelope) – 12.6V filament
4. **50C5 – Audio output** (power amp driving the speaker) – 50V filament
5. **35W4 – Rectifier** (provides the B+ plate voltage from rectified line power) – 35V filament

Total filament voltage: about **122.8V**, just right for a 120V mains supply.

Other Cost-Saving Measures

The **455 kHz intermediate frequency (IF)** was a practical compromise—small transformers, good selectivity, stable tuning, and far enough from the AM broadcast band to minimize image problems.

By the 1940s, most sets used a **loop antenna** built into the back panel, eliminating the need for an external longwire.

Improved magnets made it possible for **permanent-magnet (PM) speakers** to replace electrodynamic types. Because PM speakers didn't require an electromagnet, they were smaller, lighter, and less expensive, though their volume output was generally lower.

Miniature tubes replaced bulkier loctal or "G-type" tubes, saving space and cost.

The pentagrid converter tube handled both oscillator and mixer duties, eliminating an entire stage.

Keeping the User Safe

The design posed a shock hazard: Without a power transformer, the chassis could be at dangerous voltage depending on plug orientation. Plastic cabinets and long plastic shafts on knobs kept fingers away from the potentially "hot" chassis.

Some makers floated the "B–" (power supply return) from the chassis using a small capacitor or resistor. This helped reduce hum and leakage, and made it easier to retrofit a polarized cord later.

The Downsides

Wiring the filaments in series wasn't perfect. If one tube filament opened up, the whole set went dark—just like one bad bulb in an old string of Christmas lights. And with some designs, the 35W4 rectifier had a filament tap to supply a low voltage for a dial lamp. If the bulb burned out, the surge could damage the rectifier. Fortunately, many drugstores had a tube tester, and they kept common tube types in stock. You could test your own, buy a replacement, and be back in business in minutes.

Plate voltage derived from the line was lower than with transformer-powered sets. With modest audio power and small speakers, these sets were limited to tabletop listening.

Some models powered the dial lamp directly from a **third wire** in the power cord. The cord could get warm in use, leading to the nickname "curtain burner".

Variations

Some higher-end models added a tuned RF stage (sort of an "All American Six") for better sensitivity. Some kept using octal tubes into the 1940s before switching to miniatures.

An **Automatic Volume Control** feature fed a DC voltage from the detector stage back to control the gain of earlier stages, preventing loud stations from blasting your ears.

Conclusion

The All American Five was a brilliant compromise: simple, cheap, easy to make, and "good enough" for millions of households. They brought radio into homes that couldn't have afforded it otherwise, and they stayed on the air for decades.

Hammarlund HQ-215 Receiver - Part 2

Vintage Amateur Radio

de Bill Shadid, W9MXQ

A new beginning for Hammarlund

In our last installment, we discussed the introduction of the Hammarlund HQ-215 Amateur Radio Band Receiver. While not revolutionary in the marketplace as a receiver, it was revolutionary for Hammarlund as a design. This was the first all solid-state receiver from a manufacturer that had been making competitive receiver since well before World War II. When I was licensed in 1964, Hammarlund was a major market performer with their established and respected HQ-110A and HQ-170A Amateur Radio Band and their HQ-100A, HQ-145A, and HQ-180A General Coverage Receivers.

At this time, in 1969, very few competitive radios were solid state in the popular prices amateur radio marketplace. In fact, the HQ-215's main competition was the popular, and high performance, Collins 75S-3C. As related before, the 75S-3C was the same as the 75S-3B except that the "C" model provided 28 band positions of 200 kHz span against 14 positions in the "B" model,. The HQ-215 with 24 of the 200 kHz span ranges was closer to the 75S-3B feature set.

At the same time, while perhaps a quantum leap in technology for Hammarlund and their focus on vacuum tube products, it missed the growing market fervor for a transceiver, or at least a matching transmitter that would transceive with the HQ-215 in control for frequency.

Hammarlund HQ-215 HF 80-10 Meter Ham Band Receiver (1969)

W9MXQ

To support the idea that a transceiver or transceive capable transmitter was a necessity, Hammarlund appears to have at least recognized the need for a transceiver but not much is left for history to reference. One source[1] indicates that in 1964, Hammarlund produced 25 prototypes of an HXQ-300 Transceiver that covered 160-10 meters that had an input power of 300 watts SSB and 275 watts CW at a target price (in 1964) of $750.00. Supporting accessories included an AC-300 AC Power Supply//Speaker at $99.50 and a DC-300 DC Power Supply for $109.50. Actually, the source indicates this to be a transmitter, but Hammarlund had established "HX" as its transmitter model prefix and "HQ" as its receiver model prefix. It seems more logical that "HXQ" would be a transceiver[2].

The only picture I can find on any possible remaining HXQ-300 seems to be a reworked KW Electronics (UK) KW-2000 Transceiver[3]. I will not show it here because it very well could be a fake. More research is necessary. Even if the design was taken from KW electronics, if this was a true prototype they would have at least removed the KW name from the front panel.

Later in this installment you will see reference to a sister receiver to this HQ-215 for which one prototype seems to have survived. It is a pity that none of the 25 prototype HXQ-300 Transceivers seem to have survived. Or perhaps they will someday appear out of one or more collectors' inventory.

Drawing Hammarlund's focus together, the HQ-215 Receiver (and presumably the HXQ-300 Transceiver) seem to have been designed to compete for United States Military and US government agency business. This was for HF SSB receiving and transmitting equipment used by the Department of State for embassy installations and for MARS[4] installations.

Over the years, Collins Radio Company had held onto that business with the Collins Gold Dust Twins in the 1950's:

1. 75A-4 SSB/AM/CW Receiver
2. KWS-1 SSB/AM/CW Transmitter

And, following on in the 1950's with the newer Collins S-Line:

1. 75S-2, 75S-3A, and then 75S-3C SSB/CW Receiver
2. 32S-2 and then 32S-3A Transmitter
3. KWM-2A Transceiver
4. 30L-1 and 30S-1 Linear Amplifier

The United States procurement operations had, over the years, encouraged others to match the specifications of the S-Line product from Collins and provide competitive bidding. While Collins had led the way in providing high performance equipment for use in the MARS application, government procurement will always attempt to assist in reaching lowest possible cost by ensuring that competitive bidding is possible. This occurs even when it was the same government agency that initially developed the product with the first manufacturer!

Hammarlund was not first in this competition. In the 1960's, the most prevalent setup for the United States Government buyers was a typical 75S-2 receiver and 32S-2 transmitter (equipped also with a 30L-1 Linear Amplifier, 312B-4 Station Console, and 516F-2 AC Power Supply). With some prodding by the buyers, another American Company, Radio Engineering Laboratories (branded RELiant – using the three initials of the company name as the first three letters of the word RELiant) came to the table with the R-119 Radio System – as shown here:

Left to Right in the RELiant S-119 Radio System:

(with equivalent Collins models in brackets)
RELiant L-103 Linear Amplifier (30L-1)
RELiant R-104 Receiver (75S-2)
RELiant T-104 Transmitter (32S-2)
RELiant M-135 Station Console (312B-4)
RELiant P-109 AC Power Supply for T-102 (not shown)(516F-2)

WQ9E

Radio Engineering Laboratories was also owner of Eldico Electronics who was their manufacturing arm. These radios and accessories were also marketed under the established Eldico brand using the same model numbers. That is, a RELiant R-104 Receiver was also sold as an Eldico R-104. Perhaps differing only as to government vs amateur radio customers.

I often saw the RELiant and Eldico versions of the Receiver and Transmitter at hamfests in my early years in ham radio (mid-1960's into the 1970's. I have never personally seen the Linear Amplifier, the Station Console, the Transmitter Power Supply, or the remotely mounted Power Supply for the Linear Amplifier. The Receiver and Transmitter would operate separately or transceiver off the Receiver VFO. This was just as the Collins would do. Presumably, but not verified, the Collins and RELiant/Eldico Receivers and Transmitters could be mixed and worked as a system using either brand for one and a different brand for the other[5].

So, compatibility seems to me to have been a requirement back when the RELiant products was proposed. Was the functionality of the overall system the compatibility requirement or was it interoperability by individual component? To this day, I do not know the answer to that question. However, It is reality that Hammarlund designed the HQ-215 Receiver to be compatible with the Collins 75S-3C Receiver in terms of conversion scheme and also in terms of in and out connection to the transmitter on the back panel of the HQ-215. If truly compatible, they would interconnect and even transceive using the HQ-215's VFO to drive the Collins 32S-(x) series Transmitter. I have always wondered if this would work!

So, testing interoperability has been a long-time goal for me. I had an HQ-215 once in previous times, but at that time did not have any Collins equipment. I wondered about this feature at the time. In the 1980's I had a complete Collins S-Line station but then had no HQ-215. I still wondered about this feature – and continued to think about it. Was there no way to test this theory? Well, now with both S-Line Receiver and Transmitter setups, KWM-2 and KWM-2A setups, and the recent addition of an HQ-215 allows me the opportunity for a proper test of this capability. Finally!![6]

Below is the setup for the test. . .

Test Setup – Separate and Transceive Enabled
Collins Transmitter and Hammarlund Receiver Setup
Left to Right
Collins 32S-3 Transmitter, 312B-4 Station Console,
and Hammarlund HQ-215

W9MXQ

The Collins 32S-3, on the left, is generally tied up with a Collins 75S-3 Receiver that is part of my station. The 75S-3, 75S-3A, 75S-3B, and 75S-3C look the same to their partner Collins Transmitter[7].

Rear Panel Interconnections are as follows:

Signal Lines Interconnecting the Transmitter and Receiver			
Connection Jacks on Collins 32S-3		**Connection Jacks on Hammarlund HQ-215**	
Connector Name	**Explanation**	**Connector Name**	**Explanation**
REC ANT[8]	Antenna to Receiver	ANT[8]	Antenna
XTAL OSC (J1) [9]	Inside the Cabinet	HF OSC [9]	HF Oscillator
VFO Output (J2) [9]	Inside the Cabinet	VFO [9]	Transmitter VFO
ANTI VOX[10]	Audio Sample	500 Ohm [10]	Audio Sample
CW SIDE-TONE[10]	Audio Signal	No Connection	
REC MUTE[10]	Mute Line	MUTE [10]	Mute Line

The lack of a sidetone connection was a disappointment – but not unexpected as these installation were mostly intended for SSB operation. And, after owning multiple Hammarlund receivers over the years I have to recall that the feature was never present.

So, after all these years of wondering did it work? Well, it kind of worked. I found initially that it worked fine. I made the connections, tuned the transmitter with the receiver feeding VFO signal to the mixer (and the HF Oscillator feeding output to the transmitter as well). All worked fine, I checked into MidCARS (7.258.0 MHz), and received a good report. After that I worked several other stations running POTA events then let the radio sit on standby for a few hours while I did other things. Upon return, the transceive function would no longer work. All other functions were fine – spotting, muting, T/R switching – but not transceiving. I have yet to find the issue. So, partial success. Worked beautifully then failure. I am confident it will work again. Likely some failure in the patching setup that feeds the VFO and/or the HF Oscillator back and forth. The radios work very well independently.

Forgetting the transceive issue – which is important to me, but not to everyone – the use of the receiver has been good. It has a lot of problems from sitting for a very long time. Two other hams will report in this article on the HQ-215 (actually, one is using the general coverage variant, the HQ-225, identical except for frequency coverage). You will hear from me and my experience plus you will hear from Clark Thompson, K9OA, and his HQ-225, and you will hear from Bob Bailey, W9DYQ, and his HQ-215. Clark and I use our radios mostly for SSB and AM phone. Bob is nearly 100% CW, so his take on the radio and his demands on its performance are from a different perspective.

Starting with Clark, K9OA, let's first look at outward differences in the two models. Keep in mind, as previously said, both radios are identical except for front panel silk screening, frequency coverage, and the standard filter that comes with the radio.

The HQ-215 comes with an SSB filter and can be equipped with filters for CW and AM. The HQ-225 comes with an AM filter and can be equipped with filters for SSB and CW. All three filters are the same – and both receivers can accommodate all three at once. The front panel shows a different lettering setup for the Preselector and for the BAND switch. The internal circuitry is the same but with different frequency offerings.

Actually, an HQ-215 could accommodate the same range crystals as the HQ-225 and cover those shortwave listening (SWL) ranges. At the same time, the HQ-225 could accommodate the same range crystals as the HQ-215 and cover those ham band ranges.

Note: No real documentation exists for the Hammarlund HQ-225 Receiver. If it ever did, it is long gone. However, since it never got to the marketing stage, it is very possible that only some long-lost engineering notes were every put to paper. The general coverage circuitry of the radio lent itself well to

offering coverages in different portions of the spectrum with only front panel nomenclature being different.

Small note here, however, while the chances of finding an HQ-215 are very, very slim, there is only one known HQ-225 in the field and we believe that Clark, K9AO, has it. So, with a population of one – there is not much chance of finding one unless Clark lets his go!! At the same time, with the thinking that only a few hundred of the HQ-215 exist in the field, Bob, W9DYQ, and this writer seem to have two of these rare radios.

Here is how the two differ outwardly:

Hammarlund HQ-215 Receiver

W9MXQ

Hammarlund HQ-225 Receiver

K9OA

In the previous article, you saw the ranges of coverage for the HQ-215. I will repeat them here, somewhat abbreviated, for reference then go onto the coverage in the HQ-225:

Hammarlund HQ-215 Receiver Frequency Coverage:

A standard radio provided 11 ranges with 13 ranges remaining open for the installation of optional range crystals. Here is a breakdown of that selection:

- Range Note 1: 3.4 to 4 MHz – Three crystals supplied – none open.
  - 3.4 to 4 MHz covered, 3.4, 3.6, 3.8 MHz supplied crystals.
- Range Note 2: 4.0 to 5.8 MHz – All three ranges open.
- Range Note 3: 5.0 to 10.4 MHz – Two crystals supplied – three open.
  - 7.0 to 7.4 MHz. covered, 7.0 & 7.2 MHz supplied crystals.
- Range Note 4: 10.4 to 17.4 MHz – Two crystals supplied – three open.
  - 14.0 to 14.4 MHz. covered, 14.0 & 14.2 MHz supplied crystals.
- Range Note 5. 17.4 to 25.4 MHZ – Three crystals supplied – two open.
  - 21.0 to 21.6 MHz covered, 21.0, 21.2, 21.4 MHz supplied crystals.
- Range Note 6: 25.4 to 30.2 MHz – One crystal supplied – two open.
  - 28.5 to 28.7 MHz covered, 28.5 (28A) MHz supplied crystal.

Hammarlund HQ-225 Receiver Frequency Coverage:

Noting again here that no documentation exists for this model, a review of the front panel and the installed crystals would indicate that a standard radio provided 20 ranges with 4 ranges remaining open for the installation of optional range crystals. Here is a breakdown of that selection:

- Positions A & B are Open
- 60 Meter Band
  - 4.7 to 4.9 MHz
  - 4.9 to 4.0 MHz
- 40 Meter Band
  - 5.9 to 6.1 MHz
  - 6.1 to 6.3 MHz
- 41 Meter Band
  - 7.0 to 7.2 MHz
  - 7.2 to 7.4 MHz
- 31 Meter Band
  - 9.4 to 9.6 MHz
  - 9.6 to 9.8 MHz
  - 9.0 to 10.0 MHz (WWV)
- Positions C & D are Open
- 25 Meter Band
  - 11.7 – 11.9 MHz
  - 11.9 – 12.1 MHz
- 19 Meter Band
  - 15.0 – 15.2 MHz
  - 15.2 – 15.4 MHz
  - 15.4 – 15.6 MHz
- 16 Meter Band
  - 17.7 – 17.9 MHz
- 13 Meter Band
  - 21.4 – 21.6 MHz
  - 21.6 – 21.8 MHz
- 12 Meter Band
  - 25.6 – 25.8 MHz
  - 25.8 – 26.0 MHz
  - 26.0 – 26.2 MHz

In this writeup, Clark Thompson, K9OA, relates his experience using then Hammarlund HQ-225 Receiver. Clark's words are his own – unedited . . .

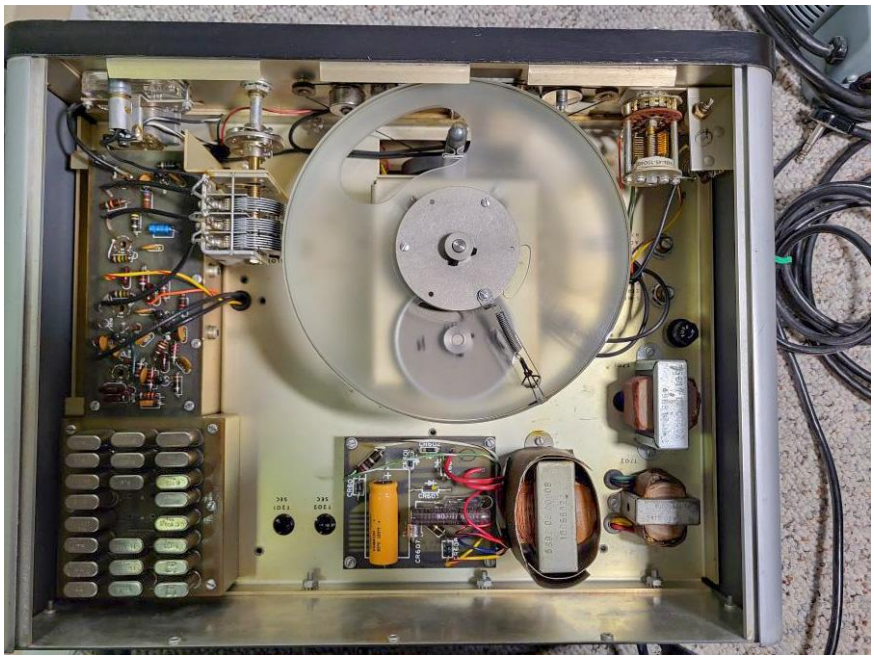
> I acquired this receiver in 2008 after responding to a classified ad in ER magazine. I have never used a HQ-215, so I can't comment on any differences in performance between the two.

The HQ-225 came supplied with only a 6 kHz wide mechanical filter, which is appropriate for listening to AM transmissions. (I later added a 2.1 kHz filer.) Overall, the receiver has very good performance. It is sensitive throughout its tuning range, and it is not excessively noisy. The AGC time constants are well chosen; I prefer it over my Collins 75S-3 on SSB. The front end handles strong signals quite well, considering the early solid-state design. I have not noticed any cross modulation or overload. The stability is excellent after a twenty-minute warm up.

The one area of performance where the HQ-225 is not up to par is the audio amplifier. Just as with the HQ-215, there is audible hum with the volume at low levels. This is not related to power supply filtering, but rather is the result of hum induced from the power transformer and also lead dress to the volume control. I found that placing a mu metal shield around the power transformer reduces the hum to a tolerable level.

Overall, the HQ-225 a very competent receiver. But the 200 kHz tuning ranges make it a bit cumbersome to cruise the bands. And unfortunately, there's not much to listen to any more on the international shortwave broadcast bands! ***K9OA***

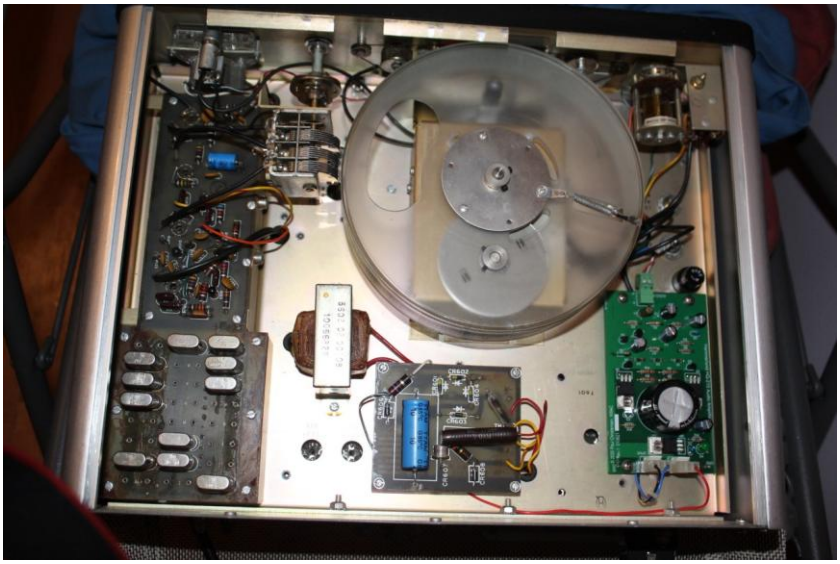
You saw the front panel earlier in this article – as a comparison with the front panel of the HQ-215 and HQ-225. Clark and I have since had several conversations on the two receivers. Here I want to show you how Clark attempted to mitigate the noise caused by the magnetic field emitted by the Power Transformer:



Bottom View – Hammarlund HQ-225 at K9OA – Front Panel at Top.
Note Mu-Metal shield material wrapped around the power transformer that is to the right of the Power Supply board.

K9OA

Just as a reminder, here is the HQ-215 at W9MXQ, again, showing the retrofit Audio Amplifier Board once set to be marketed by Paul Christensen, W9AC. Note the relocated AC Power Transformer and the now removed (displaced by the new circuit) audio transformers.



Bottom View – Hammarlund HQ-215 at W9MXQ – Front Panel at Top.

Note two missing audio transformers at the lower right where the new W9AC Audio Amplifier is mounted. Also note the relocated AC Power Transformer that is now to the left of the Power Supply board.

Now, here are some impressions of using the Hammarlund HQ-215 from my friend (since we were kids together in Central Illinois), Bob Bailey, W9DYQ. Bob is also a long time proof-reader and contributor to my efforts to make these articles as close to reality as possible. As he mentions, Bob is almost exclusively a CW operator who makes infrequent forays into the digital modes. So, Bob brings an analysis of the radio from a CW operator's point of view.

> I work primarily CW, so that will be a baseline. The receiver is pleasant enough with stronger signals. Controls are well marked, and responsive.
>
> I should mention that I operate the receiver on a 12Vdc supply. This seems to mitigate some of the issues caused by the design of the internal power supply that creates a good deal of noise making its way into the recovered audio. An important point to note I found in my radio that as I would adjust the dial/meter lamps to from off to full brilliance [pot at the left side of the readout window] the frequency would shift. I always felt that the power supply in the radio was based on a repurposed filament transformer and was insufficient to the task,
>
> With strong CW signals the RF and AF gains can be kept low enough to provide a reasonably comfortable listening experience. However, for weak signal work the radio is tiring to use. Both the RF and AF amplifiers are noisy, and the noise rolls in fairly quickly as the gain levels are brought up. The RF amp is hissy, the hiss is only partly eliminated with the 500 Hz CW filter. The AF amp has both a hiss noise and has a hum. As you bring up the Audio level the hiss will override the hum. So, for a weak signal you try to balance the RF hiss against the AF hiss. The best way to work with it is to set the audio level to what you like, then ride the RF gain as you would with older vintage gear.
>
> The receiver hears well, and the tuning rate is easy to use, it is slow enough that even with the CW filter online you will hear the weak signals before you tune through them. The band preselector is quite peaky, so fine tuning is required as you tune through the 200KHz band. Warm up is quick, with only a bit of drift in the first minute or two. Once it is stable the frequency from one band to the next is very close. For example, W1AW on 20 is at 14047 MHz, if you then select 40 meters you will have W1AW tuned in at 7047 MHz.

One weakness in the HQ-215 design is the lack of ability to properly align the optional filters installed in the radio. A look at the schematic diagram for the radio shows that the optional filters {as well as the stock filter] are missing any way to make necessary alignment of any field installed filter. This practice is not uncommon with the various manufacturers and at the same time shows why the Collins S-Line will outperform this radio – even when using the same filters.

Overall, it's a nice receiver to use, however it comes across as not quite a top shelf rig. It is a radio that has a lot more potential than it is able to deliver due to some unfortunate design issues. ***W9DYQ***

Finally, my own impressions of this radio.

My use of the radio has been mostly on SSB, with a good sampling of AM operation as well. I do not have the Collins AM filter as offered as an option from Hammarlund. However, listening on AM on the ham bands with the stock Collins SSB Mechanical Filter is more than adequate if a bit restricted as to bandwidth. I did operate the radio for several CW contacts – and for that I borrowed the stock Collins 500 Hz Mechanical Filter form my Collins 75S-3B to run my tests.

For SSB contacts I found the radio more than adequate with a lot of similarities to the Collins 75S-3B[11] (and sister 75S-3C) Receiver. Since I do not have the Collins AM Mechanical Filter [in] the 75S-3B, I could not swap it into the HQ-215. So, unlike Clark, K9OA, I could not duplicate the sound of his HQ-225 on AM.

On CW there is noise present in the i-f chain that is not present in an A-B comparison with the Collins 75S-3B. Where the Collins receiver is comfortable listening and operating he HQ-215 can become irritating. When I say that, remember that my HQ-215 benefits from the lower noise performance in my receiver due to the installation of the now unobtainium W9AC Audio Amplifier retrofit. Also, due to the more efficient use of power by the W9AC modified radio, the pulling of frequency by the high current drain of the stock power supply is not obvious. [Remember, that W9DYQ side steps the radio's power supply limitations by using an external DC power supply.

While I will probably draw the ire of my Collins S-Line friends, I prefer the rather imaginative analog readout on the HQ-215 when compared to the Collins offering in the 75S-3B (and all S-Line Receivers and Transmitters).

With respect to installing optional filters, the inability to align the optional filters in a particular radio – even one HQ-215/225 to another – is something that W9DYQ and I have discussed at length concerning optional filters for Swan/Cubic Astro series transceivers, the Swan 600-R and 600-R Custom receivers, and others.

Back to SSB use of the radio, I enjoy using it and find it comfortable with good sensitivity and selectivity. If I had any complaint it would not be tied to the basic design of the radio – rather to its ability to be stored for many years and brought back to life. My example of the HQ-215 seems plagued with problems with the bandswitch. The 24 position switch is on the delicate side and the switching of the many 200 kHz tuning range crystals has been problematic. ***W9MXQ***

Finally, I have some thoughts on Hammarlund's purpose here. Business remained in the late 1960's for US Government and Military use of HF SSB and CW communication equipment. Collins by that time had pretty much focused on the Collins KWM-2A Transceiver, but the demand for the 75S-3C Receiver and 32S-3A Transmitter did exist. Is that where Hammarlund was going? It takes on some credibility when the what appears to be il-fated HXQ-300 Transceiver was concerned. The missing piece of that puzzle is the completely non-existent matching transmitter. Such a transmitter would have been needed to fully compete with Collins. However, it is also true that even the transceive connectable transmitter was fast fading from the market by that time.

To be sure, several examples of the Receiver coupled with a standalone Transceiver existed after the

time (1968 to 1972, at the most) that the HQ-215 was on the market[12].

I appreciate that you read my articles. Remember that I am open to questions and comments anytime at my email address, W9MXQ@TWC.com.

A special note of thanks to my proofreader, Bob Bailey, W9DYQ. Bob is a lot more than a proofreader as he often adds commentary that makes it into the article. Certainly, in any technical article, it is good to have a second person review the thought process.

Notes and Comments:

[1] This comes from information found at https://www.hammarlund.info

[2] In years past, I think before 1970, I remember seeing references to a "soon to be released" Hammarlund HXQ-300 Transceiver. I cannot show this as an actual reference at this time.

[3] Info from https://www.hammarlund.org

[4] MARS is an abbreviation for Military Auxiliary Radio Service https://www.mars.af.mil/

[5] I cannot verify transceiver capability with different brands in this example.

[6] I do not make claims in these articles that I cannot test on my own. Articles are always from my own experience

[7] Here is the breakdown of the Collins Receiver models mentioned herein:

The 75S-1 – initial Collins S-line Receiver, dating from 1959.

The 75S-2 – as above but with added bandspread.

The 75S-3 – updated S-Line Receiver with Rejection Tuning – from 1961

The 75S-3A – as above but with added bandspread.

The 75S-3B – further updated from 75S-3 – from 1963

The 75S-3C – as above but with added bandspread.

[8] Regular Shielded Cable – RG-58 or RG-174 – RCA Phono Plug Ends – 36" to 48"

[9] Controlled Impedance – RG-58/U – RCA Phono Plug Ends – 36" long

[10] Shield Audio Cable – RCA Phono Plug Ends – 36" to 48"

[11] The reference in this and the previous article on the HQ-215 relates its design being based on the 75S-3C. The 75S-3B mentioned and 75S-3C are identical except for the number of available 200 kHz tuning ranges.

[12] Transceivers offered with matching/compatible receivers will be covered in future articles.

Hammarlund Still Lives in the Hearts of Collectors

W9MXQ in the Hammarlund Hullabaloo in 2021
Collins KWM-2 Transceiver with Hammarlund HQ-170AC Receiver
Next time – the HQ-215 will be in this event!!

GARS Open Positions – Help Wanted

These are some of the positions that are available. If you have a background in any of these positions or want to learn them, they are available for you to fill.

- Public Information Officer
- Marketing Chair
- Activities Chair – includes the following types of activities that can be sponsored by GARS

    1. Fox Hunt
    2. GARS Operating Contests
    3. Winter Field Day
    4. GARS Hamfest Volunteers

- Non-Chair Activities needed:

    1. Meeting Drink handler
    2. "X" discussion handler
    3. Raffle product coordinator (given a budget to get raffle items)
    4. Holiday Party activities

In order to offer your help with any of these, send an email to president@gars.org or contact the President (Bob K4CQO) at one of our meetings.

GARS Nominated Officers for 2026

February each year, GARS has its officer elections. In the February meeting (2/10/26) any additional nominees can be provided and the present members will vote for the GARS officers. The current list of nominees:

- President – Bob Hoffmann, K4CQO (current)
- Vice President – Glen Wendt, W3WWT (current Treasurer)
- Treasurer – Ralph Pickwick, KJ4CNC
- Secretary – Michael Stewart, KR4CVF
- Program Manager – Kevin Scott, K4GTR (current)

GARS Membership

New Members in January

Gavin Bacchus (KQ4SKO)
Michelle Bacchus
Deirdre Burn (KR4HLS)
Jimmy Hendricks (KR4IMC)
Christian Stewart (KR4IPH)
Tara Taitt (KR4IEQ)

New Members: 6

Total Members as of February 1, 2026
355

Join GARS members for our:

- weekly lunch bunch at 11:30 AM most Fridays
- weekly breakfast gathering at 8:00 AM most Saturdays

Friday weekly gatherings are held at the Chilli's at:
947 Lawrenceville Suwanee Rd
Lawrenceville, GA 30043

Saturday weekly gatherings are held at the Cracker Barrel at:

75 Celebration Dr
Suwanee, GA 30024

Birthdays in February

Marvin Atherton (KG4FHB)
Michelle Bacchus
Helen Brown
Byron Brown (KR4GES)
Michael Curtis (KK4WWB)
Juan Manuel Dominguez (N5JMD)
Tom Forkner (KQ4EWO)
Eddie Foust (K4AIH)
Paul Francis (KG4HCX)
Suzy Jones (KK4MWC)
Gail LaBerge (N4OCO)
Bruce Lindsey (K0GNB)
Edward Lodden (KX4KL)
Ann Marie Mc Dermott (KG4DKE)
Carlton McPherson (WA4ZUW)
Aaron Morris (KG4ALB)
Don Pace (KQ4LWU)
Bill Rudd (WS3V)
George Sensibar (W9RR)
Lori Silva (KK4NFW)
Luann Smith
Mario Stewart (KR4CUK)
Lee Stone (KT4LS)
Tara Taitt (KR4IEQ)
Emily Wagner (KN4GZJ)
Sharon Willet (KM4TVU)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – www.gars.org/gars/membership/. To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please contact the Membership Chair at Email (https://gars.org/contact/) with any changes to your Membership information.

Membership Chair: Dave Bruse, W4DTR
Committee Members: Pam Brown, KJ4RYV, John Aguirre, KQ4EJV

ARRL MEMBERSHIP

To update your ARRL membership information, please visit their website - http://www.arrl.org.

Local Ham Radio Meetings

In order to find a local Ham Radio Club meeting near you, please visit http://www.arrl.org/find-a-club. Contact the club for meeting information.

Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

https://gars.org/gars/donations-to-the-club

GARS on Social Media

Discord Request:
https://gars.org/discord

Groups.io:
https://gars.org/groups.io

Visit GARS on Facebook:
https://gars.org/facebook

Follow GARS on X:
https://x.com/GARS_Hams

Join GARS on YouTube:
https://gars.org/youtube

GARS Mail Address:

GARS
P.O. Box 492531
Lawrenceville, GA 30049

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 Harold Brown, Secretary KI4FPR

 Glen Wendt, Treasurer W3WWT

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 David Adcock, Webmaster KA4KKF

 Ralph Pickwick, Education Chair KJ4CNC

 Earl Whatley, Apparel Manager & Dacula Parade Co-Chair AF4FG

 Michael Stewart, Activities – Dacula Parade Co-ChairKR4CVF

 Bob Hoffmann, GARzette Editor K4CQO

 Eddie Foust, Repeater Chair K4AIH

 Mike Weathers, WAS / DXCC QSL Card Checker & Historian ND4V

 Chuck McCord, Net Manager KK4TKJ

 Steve Back, Technical / RFI Advisor WB2OGY

 Dallas Mellichamp, Workshop Leader, Field Day Chair N4DDM

 Sandy Jackson, Health and Wellbeing KJ4DRO

 Edwin Henderson, Multimedia Chair W4BSR

 Dallas Mellichamp, Georgia QSO Chair N4DDM

 Neil Derryberry, Elmer Manager & IT Chair WD4NET

 Edwin Henderson, TechFest Chair W4BSR

Open Winter Field Day Chair

Directors and Trustees

 Joe Biddle, AD4PZ

 Kyle Albritton, W4KDA

 John Davis, WB4QDX

 Bill Cherepy, WB4WTN W4GR Trustee

GARS Meeting Minutes

GARs General Meeting Minutes
January 13, 2026

Opening Meeting: Opened by President Bob Hoffman at 7pm (1900 Hrs) Information on exits, facilities, leaving directions, and safety. Did a "pass the mic" around for the group to say where they can be found on the air

Birthday Acknowledge: Listed in GARS Newsletter

Treasurer Report: Reported by Treasurer Glen Wendt

Membership Report: 361 Members.

Programs: Tome Crowley on getting the most out of your HT antenna.

Education: Ralph gave update on the ARISS School reschedule to week of March 30 and the Tech Ham Cram scheduled for April 11-12, 2026.

Upcoming Events: TechFest scheduled for January 31st. Technician HamCram, Officer Elections in Fruary

General Information: Field Day will be back at Harbins Park this year, not just GARS, but all exam testing has been down in 2025, GARS was the featured club in the February QST.

Closing: 9pm (2100)

Workshop Minutes - January 20th, 2026

Attendance: 20

Workshop Follow-up on how to Improve your HT Antenna

Presenter: Tom Crowley KT4XN

Brief Summary: This Workshop followed the GARS presentation of the same title

Tom demonstrated his inline HT VSWR meter and tested 20 or so HT antennas. The DMR crew talked about DMR hotspots.

Elmers are always present at the GARS Workshops. Feel free to bring your questions to the Workshop. If your project is small enough to bring to the meeting, please let us know in advance so we can gather the necessary tools, test equipment, etc.

73 Dallas N4DDM
Workshop Chair

Events – GARS and others

ARRL CONTESTING INFO

From ARRL Contest Calendar
> For more information click the links <

January 2026
1 Straight Key Night
3 Kids Day
3-4 RTTY Roundup
17-19 January VHF

February 2026
9-13 School Club Roundup
21-22 International DX – CW

March 2026
7-8 International DX– Phone

April 2026
19 Rookie Roundup – Phone

May 2026 (no ARRL Contests)

June 2026
6-7 International Digital Contest
13-15 June VHF
20 Kids Day
27-28 Field Day

July 2026
11-12 IARU HF World Championship

August 2026
1-2 222 MHz and Up Distance Contest
15-17 10 GHz & Up – Round 1
8-9 EME - 2.3 GHz & Up
16 Rookie Roundup – RTTY

September 2026
12-14 September VHF
5-6 EME - 2.3 GHz & Up
19-21 10 GHz & Up - Round 2

October 2026
TBD Collegiate QSO Party
31-Nov 1 EME - 50 to 1296 MHz
19-23 School Club Roundup

November 2026
7-9 Nov Sweepstakes–CW
28-29 EME - 50 to 1296 MHz
21-23 Nov Sweepstakes–Phone

December 2026
4-6 160 Meter
12-13 10 Meter
20 Rookie Roundup–CW

For more information:
http://www.arrl.org/contest-calendar

HAMFEST CALENDAR

[Please confirm the status of a Hamfest before making plans

02/13/2026 - 02/15/2026 - Orlando HamCation, SW Division Convention
Location: Orlando, FL
Type: ARRL Convention
Sponsor: Orlando Amateur Radio Club
Website: http://www.hamcation.com

02/21/2026 - Gwinnett Amateur Radio Society TechFest
Location: Lawrenceville, GA
Type: ARRL Hamfest
Sponsor: Gwinnett Amateur Radio Society
Website: http://techfest.info

02/21/2026 - Hernando County Amateur Radio Association Hamfest
Location: Brooksville, FL
Type: ARRL Hamfest
Sponsor: H.C.A.R.A.
Website: http://www.hcara.org

02/21/2026 - Highlands County Amateur Radio Club Hamfest
Location: Sebring, FL
Type: **ARRL** Hamfest
Sponsor: Highlands County Amateur Radio Club
Website: http://highlandsamateurradio.com

02/28/2026 - Dalton Hamfest
Location: Dalton , GA
Type: ARRL Hamfest
Sponsor: Dalton Amateur Radio Club, Inc. W4DRC
Website: https://www.qrz.com/db/W4DRC

02/28/2026 - 12th Annual TECHCON
Location: Tampa, FL
Type: ARRL Convention
Sponsor: ARRL West Central Florida Section
Website: https://arrlwcf.org/wcf-special-events/wcftechconference/

03/14/2026 - MARCIFest
Location: Bradenton, FL
Type: ARRL Hamfest
Sponsor: Manatee Amateur Radio Club, Inc.
Website: http://manatee-arc.org

03/06/2026 - 03/07/2026
BirmingHAMfest, ARRL Alabama Section Convention
Location: Trussville, AL, AL
Type: ARRL Convention
Sponsor: Birmingham Amateur Radio Club
Website: http://birminghamfest.org

03/07/2026 - Flamingo Net Flea at U. of Miami
Location: Coral Gables, FL
Type: ARRL Hamfest
Sponsor: Flamingo Net ARC
Website: http://FlamingoNet.8m.net

03/14/2026 - MARCIFest
Location: Bradenton, FL
Type: ARRL Hamfest
Sponsor: Manatee Amateur Radio Club, Inc.
Website: http://manatee-arc.org

For more information: www.arrl.org/hamfests-and-conventions-calendar

When searching by division, use Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC

GARS Events Calendar for 2026

TechFest	February 21 2026
Winter Field Day	January 24-25 2026
Dog Show Fundraiser	March 25-29, 2026
Spring Technician HamCram	April 11&12 2026
Georgia QSO Party	April 11-12 2026
North metro area Fox Hunt	April 2026
Memorial Day Parade	May 25 2026
ARC/KARC Hamfest	June 6 2026
Field Day	June 27-28 2026
Summer General HamCram	August 2026
Fall Technician HamCram	October 2026
JOTA	October 2026
Stone Mt. Hamfest	November 6-7 2026
Holiday Party	December 2026

GARS Recurring Calendar

- 2nd Tuesday of the month at 7 pm (except December)
  Monthly Club Meeting
  690 Airport Rd, Lawrenceville, GA 30046
- 3rd Tuesday of the month at 7 pm (except December)
  Monthly Workshop
  690 Airport Rd, Lawrenceville, GA 30046
- 3rd Sunday of the Month at 3 pm
  GARS Ham Exam Session
  690 Airport Rd
  Lawrenceville, GA 30046
- Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater
- Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater
- Every Thursday at 7:30 pm: GARS 440 Net on the GARS 442.325 MHz repeater
- Every Friday at 11:30 am, GARS Lunch at Chilli's
- Every Saturday at 8:00 am GARS Breakfast at Cracker Barrell

GARS Calendar for February 2026

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 **7:30 PM 2M Net 147.075(+) MHz Tone 82.5**	3 **7:00 PM Exec Meeting**	4	5 **7:30 PM 70cm Net 442.325(+) MHz Tone 100**	6 **11:30 AM Lunch at Chili's**	7 **8:00 AM Breakfast at Cracker Barrel**
8	9 **7:30 PM 2M Net 147.075(+) MHz Tone 82.5**	10 **7:00 PM Meeting EAA 690 Hangar**	11	12 **7:30 PM 70cm Net 442.325(+) MHz Tone 100**	13 **11:30 AM Lunch at Chili's**	14 **8:00 AM Breakfast at Cracker Barrel**
15 **3:00 PM Ham Radio Exams, EAA 690 Hangar**	16 **7:30 PM 2M Net 147.075(+) MHz Tone 82.5**	17 **7:00 PM Workshop Meeting EAA 690 Hangar**	18	19 **7:30 PM 70cm Net 442.325(+) MHz Tone 100**	20 **11:30 AM Lunch at Chili's**	21 **8:00 AM Breakfast at Cracker Barrel TechFest at Gwinnett Fairgrounds**
22	23 **7:30 PM 2M Net 147.075(+) MHz Tone 82.5**	24	25	26 **7:30 PM 70cm Net 442.325(+) MHz Tone 100**	27 **11:30 AM Lunch at Chili's**	28 **8:00 AM Breakfast at Cracker Barrel**

Local Ham Radio Exams & Meetings

GARS Ham Radio Exams

GARS Exam Sessions are held the 3rd Sunday of the month

Preregistration is REQUIRED, Doors open at 2:45pm, exams start promptly by 3:00pm. For more information and to preregister, please visit https://gars.org/exams/

GARS VE-Team
VEC: W5YI-VEC
EAA 690 Hangar
690 Airport Rd
Lawrenceville, GA 30046

GARS VE Team Leaders
E-mail: exams@gars.org.

December 2026 Results

The GARS VE Team exam session results from December 21st:

1 new Technician:
- Meghasai Modugula – KR4JCR

6 new Generals (2 of which are new hams passing both General and Technician):
- Warren A Cameron KM4FQH
- ROLLIN W GUYDEN KF4KZA
- Jackie O Newsome Jr – KR4JCS (passed both)
- Tyeisha Rainford KR4GOW
- Stephen Wagner – KR4JDH (passed both)
- Tyler A Waldrop KJ4ESU

Special thanks to the Volunteer Examiners who made this exam session possible:

W4DTR - Dave Bruse
KJ4CNC - Ralph Pickwick
KM4SWL - Richard Kitz
WB4QDX - John Davis
KC4EG - Elmer Gappi
W4VNA - Lynn Hatker
WB2OGY - Steve Back
K4BYE - James Cheshire
WS3V - Bill Rudd
NG4H - Bill Beguhn
K4CQO - Bob Hoffmann
KQ4DWZ - Douglas Hooper

Thanks & 73, Bill Beguhn NG4H (Team Lead)

Local Ham Radio Exams

In order to find an exam session near you, please visit http://www.arrl.org/exam_sessions/. Contact the information in the listing for further information.

MAINTAIN YOUR LICENSE

You can update your Amateur Radio license information with the FCC at their website for free - https://www.fcc.gov/wireless/universal-licensing-system. License renewal is subject to the $35 FCC fee.

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In order to have your ad included, contact editor@gars.org. Current ad prices per year are:

Business Card	$50
1/4 page	$125
1/2 page	$150
Full page	$200

For swap items, post and see items on GARS groups.io (https://groups.io/g/GARS).

Ready to take your Ham Radio Exam?

Go to https://GARS.org/exams/ to learn more, and to register for an upcoming exam session.