QST NFL

Newsletter for the Northern Florida Section

Come join the FUN!

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From the Shack of the Section Manager

Scott Roberts, KK4ECR (kk4ecr@gmail.com)

IMPORTANT: Join Us: SE Division Town Hall on the recent ARRL July Board Meeting

Here's your chance to get answers straight from the source. We're holding a follow-up Town Hall Meeting open to the entire ARRL Southeastern Division, and you don't want to miss this one.

The ARRL Board of Directors met this past July, and a lot came out of that meeting. Several items on the agenda affect every one of us, from policy decisions to changes that could shape the hobby for years to come. Instead of letting that information sit in a report nobody reads, we're bringing it straight to you. Come ask questions, hear the details, and have your say.

This Town Hall is open to every amateur operator in the SE Division, **even if you are not a member of the ARRL.** Whether you've been licensed for forty years or forty days, your voice matters, and we want to hear it.

Registration is required. Reserve your spot now:

https://us02web.zoom.us/meeting/register/lqBmyc8dRMef_ABbaOvePA

Mark your calendar. Grab a cup of coffee. Show up ready to talk. This is your section, your division, and your hobby. Let's talk about where it's headed.

Five Things Every Ham in North Florida Needs to Know Right Now

Over the last couple of months, members have asked about these issues, so I thought I'd take the time to address them here.

A handful of problems are piling up in the hobby right now, and they touch almost every operator in our section. Some of you deal with these already. Others haven't hit them yet, but you will.

I want to walk through the five biggest ones. Not to scare anyone. Just so you know what's coming and what ARRL is doing about it. Let's break it down piece by piece, in plain language, no jargon.

1. Antenna restrictions are still choking us

This is the big one. If you rent, live under an HOA, or bought a house in a neighborhood with deed restrictions, you already know the pain. You can't put up a tower. Sometimes you can't even run a wire in your attic without someone complaining.

Here's the frustrating part. Federal law already protects your right to communicate. The Amateur Radio Service exists partly because Congress and the FCC decided trained operators matter during emergencies. But private HOAs and landlords don't answer to the FCC. They answer to their own bylaws. So a federally licensed ham can hold every privilege in the book and still get told no antennas, period. Not on the roof. Not in the yard. Not hidden in a tree.

ARRL has been fighting this fight for years. Right now the tool in Congress is the Amateur Radio Emergency Preparedness Act. Senators Wicker and Blumenthal, along with Representatives Pfluger and Courtney, brought it back again this session. It would remove the roadblocks that keep hams from putting up the antennas we need to actually help our communities during hurricanes, tornadoes, and fires.

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Here's why this matters to every one of us in Clay County ARES. You can have the best radio in the world sitting on your desk. If you can't get an antenna in the air, you're just an expensive paperweight during an activation. If your county or your neighborhood is talking about HOA rules, or if you know a legislator, this bill deserves your attention.

I hear the same story over and over at hamfests. A guy gets his license, buys a decent rig, then finds out his HOA won't allow so much as a wire antenna strung between two trees. Some folks work around it with stealth setups, indoor antennas, or portable operations from a park down the road. Those workarounds help, but they're not a real fix. They're a patch on a problem that Congress needs to solve. Until this bill passes, or something like it, we're stuck relying on creativity instead of federal protection. Bring this up with your county commissioners too. Emergency management offices tend to listen when they realize their backup communications plan depends on volunteers who legally can't put up an antenna at home.

2. Nobody's sure which radios are even legal to use anymore

Over the past year, a flood of cheap imported radios showed up online and at hamfests. Some of them aren't FCC certified for the amateur bands they claim to cover. The FCC noticed and put out an Enforcement Advisory. Part of that advisory told hams who already own these radios not to use them.
ARRL pushed back hard on that. Their lawyers told the FCC there's no solid legal basis for telling a licensed operator they can't use a radio they already bought, just because the radio itself wasn't properly certified by the manufacturer. That's a different problem than punishing the seller.

Where does that leave you? Honestly, in a gray zone. If you bought a radio in the last year or two from an overseas seller for a steal of a price, it's worth checking whether it carries proper FCC certification. ARRL promised a white paper to spell out their position and give members real guidance. Watch for that. Until it lands, the safest move is to buy from dealers who can show you the certification, not the cheapest listing you find at 11pm.

A lot of these radios show up as cheap handhelds marketed for "amateur and business use" on sites that ship straight from overseas warehouses. They work fine on the bench. The problem is on paper, not in performance. If the FCC decides to crack down harder down the road, the operators holding uncertified gear will be the ones stuck explaining themselves. Ask around at your local club meeting. Someone probably already knows which brands and models raised red flags, and it's a five minute conversation that could save you a headache later.

3. The FCC backlog is still catching people off guard

Remember the government shutdown last fall? It lasted 43 days and it broke more than just news headlines. The FCC's license systems, including the ULS database, the license manager, and CORES, went dark or ran on and off for weeks. Applications piled up. Renewals piled up. New licenses piled up.

The FCC had to extend renewal deadlines for anyone whose license expired or was set to expire between October 2025 and March 2026. If that was you, you got extra time. But here's the catch. A lot of hams didn't know about the extension and panicked, thinking they'd lost their license and their call sign. Others assumed everything was fine and let renewal slip past the new deadline anyway.

The lesson here isn't complicated. Check your license expiration date today. Don't wait for a reminder email that might get lost in a backlog. If you're within six months of expiration, file the renewal now while the systems are running normally again. Our own ARRL VEC team processed thousands of applications once things caught back up, so the queue is moving. Just don't assume "the government will handle it" is a plan.

Shutdowns and backlogs aren't rare anymore. They seem to happen every couple of years now, and each time the FCC's systems take weeks to fully recover. Build a habit around this. Mark your license expiration date on your calendar a full year out, not thirty days out. Print a copy of your license and keep it somewhere you can find it fast. If you're an exam volunteer or a VE team lead, remind your candidates that the paperwork side of this hobby matters just as much as passing the test.

4. The rulebook hasn't kept up with the hobby

Part 97, the rulebook that governs everything we do on the air, was written for a different era. A lot of it still makes sense. Some of it doesn't fit how the hobby actually works today.

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ARRL sat down with the FCC's Wireless Bureau to push for real changes. Their biggest ask: let Technician-class licensees use digital and voice modes on parts of the HF bands. Right now, a brand-new Technician license mostly limits you to VHF and UHF, plus a small slice of HF. That means a new ham can talk across town, but not across the country, until they upgrade.

ARRL argues that's backwards if we want to grow the hobby. New operators get hooked when they make that first long-distance contact. Cutting off HF access for new licensees means a lot of them lose interest before they ever chase that DX contact or check into a long-haul net. ARRL also wants to simplify how digital modes get classified, since the current system uses old emission designators that don't match how modern digital modes actually work.

None of this is decided yet. It's a proposal sitting in front of the FCC. But if it goes through, it could change how we recruit and train new hams in every county in our section. Worth mentioning next time you're helping someone study for their Technician exam. Tell them what might be coming.

Think about how many people we lose after they pass their Technician test. They get excited, buy a handheld, check into a local net a few times, then drift away because local VHF traffic gets quiet outside of nets and emergencies. Give that same person a taste of working a station three states away on HF, even with a limited slice of the band, and the hobby suddenly feels bigger. ARRL isn't asking for the moon here. They're asking for a door to open a little wider so new licensees stick around long enough to fall in love with the hobby the way most of us did.

5. Commercial companies want a piece of our spectrum

This one flies under the radar for most hams, but it matters. Satellite and telecom companies are eyeing amateur bands as a place to expand. Just this spring, the FCC granted AST SpaceMobile limited use of five channels in the 430 to 440 MHz band, which is amateur spectrum, for their satellite telemetry and tracking work when their satellites aren't over the US.

That specific grant is narrow. It's not a land grab yet. But it's a pattern worth watching. Every time a commercial player gets a foothold in a band we use, it sets a precedent for the next request. Spectrum is like real estate. Once you give some away, it doesn't come back.

ARRL tracks these petitions closely and comments on nearly every one that touches amateur bands. That's part of why your ARRL membership dues matter, even if you never notice the work happening behind the scenes. Someone has to show up to those FCC meetings and argue our side. Right now, that's ARRL's Washington counsel doing the heavy lifting

What this means for North Florida

None of these five issues will get fixed by one person complaining online. They get fixed by organizations like ARRL showing up, again and again, in front of regulators and lawmakers. And they get fixed faster when members like you understand what's happening and back the effort.

Here's what I'd ask from each of you this month. Check your license expiration date. If you've bought a cheap imported radio recently, look into whether it's properly certified. If your neighborhood or county has antenna restrictions, let your Emergency Coordinator know, because that's exactly the kind of local detail we need on file for ARES planning. And if you get the chance to talk to a state or federal representative, mention the Amateur Radio Emergency Preparedness Act. It's stalled in Congress before. It doesn't have to stall again.

Amateur radio survives because people keep showing up for it. That's true for Field Day, that's true for SKYWARN nets, and it's true for the policy fights nobody sees happening in Washington. Stay informed, stay licensed, and stay on the air.

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From the Section Emergency Coordinator

Arc Thames, W4CPD

Hurricane Season: The Quiet Work Before the Storm

One of the hardest parts of hurricane season is that most of the important work happens before anything is happening. There is no activation. No storm track everyone is watching every six hours. No shelters opening. No net control calling for check-ins. No one asking for reports from the field. Just quiet preparation.

That is where ARES operators need to stay focused. It is easy to get motivated when there is a named storm. Everyone starts checking radios, charging batteries, looking at antennas, testing generators, updating software, and asking what the plan is. The problem is, by that point, we are already behind. ARES works best when operators are already prepared before the first conference call, before the first advisory, and before emergency management starts asking what support is available.

That does not mean everyone has to be ready to deploy across the state at a moment's notice. That is not realistic, and it is not what most activations require. What it does mean is that each of us should know where we fit.

Some operators may be able to support a shelter. Some may be able to work from an EOC. Some may only be able to operate from home. Some may be able to help with Winlink. Some may be able to monitor repeaters, relay traffic, or serve as backup net control. Some may only be available after their family and home are secure. All of those roles matter.

But they only matter if we know about them ahead of time. This month, I would encourage every ARES member to take an honest look at your own readiness. Not just your equipment, but your availability, your training, and your ability to be useful in a real event.

Can your local ARES leadership reach you quickly? Do they know what you are willing and able to do? Are your contact details current? Have you checked into a net recently? Have you sent a Winlink message this season? Do you know what repeaters or simplex frequencies your area would use if things got busy? Those are simple questions, but they make a big difference.

Hurricane response is not the time for confusion. It is not the time for self-deployment. It is not the time to show up somewhere with a radio and no assignment. Our value comes from being organized, trained, calm, and ready to support the mission we are given.

Sometimes that mission is exciting. Sometimes it is sitting quietly at a shelter for several hours with very little radio traffic. Sometimes it is passing one important message at exactly the right time. Sometimes it is simply being available in case the primary system fails. That is emergency communications. It is not always dramatic, but it matters.

We also need to remember that our attitude is part of our readiness. During a storm, people are tired, stressed, hot, overwhelmed, and dealing with real problems. Emergency managers, shelter staff, public safety, volunteers, and citizens do not need radio operators adding more noise to the room. They need people who can listen, follow directions, write things down, communicate clearly, and stay calm. That is how we build trust.

Every time ARES supports an event, a drill, a shelter, or an activation, we are either strengthening that trust or weakening it. The served agencies we support need to know that when amateur radio is requested, they are getting people who understand their role and can be counted on.

So this month, do the quiet work. Update your contact information. Check in with your EC. Make sure your family plan is solid. Review your local communications plan. Test the radio you would actually use. Send a Winlink test message. Look at your calendar and be honest about what you could support if a storm came next week.
ARES does not start when the repeater gets busy. It starts now, in the quiet part, when preparation still has time to matter.

Monthly Radiogram Challenge

Want to practice using the national traffic system (NTS)? instructions on using the NTS on our website at arrl-nfl.org/nts/ For the month of August, please send me (W4CPD located in Pace, FL) a radiogram via the NTS with your answer to this question "Will you answer the all if needed this hurricane season?"
Thanks to the following hams for participating in last month's challenge:
Susan- KG4VWI
Mark – KX4LEO

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Out of the 33 appointed ARES Emergency Coordinators we have in the section, we only received monthly reports for 13 last month. If you're an EC and are having trouble submitting your reports, please reach out to me. This information is so critical to knowing who of our teams are still out there and also hearing about the incredible work that's being done. Last month ARES volunteers provided 938 hours of service to our communities. Thanks to the following counties for providing their reports: Alachua, Bay, Citrus, Duval, Madison, Santa Rosa, Seminole, St. Johns, Sumter, Suwannee, Walton, Washington

	Number	Person-Hrs
Exercises this month:	17	394.50
Training events this month:	17	123.70
Public service events this month:	0	0.00
Community service events this month:	3	39.00
Emergency events this month:	0	0.00
SKYWARN events this month:	2	22.00
Meetings this month:	17	266.60
Unclassified events this month:	13	92.50

Call signs of DECs reporting:
K4BHP, K4BJS, K4SOP, KD4EZW, KD4IMA, KF4ZZ, KM4BTW, KM4QQO, KX4LEO, W4UFL, WA4MN, WE4MJ


ARRL Special Service Club
North Florida ARC, NF4RC
This certificate indicates the club's commitment to improve the visibility of amateur radio as a positive force in the community by assisting in emergencies, and providing and encouraging training; as well as to further club activities for the betterment of the membership and the amateur radio service.
ARRL SPECIAL SERVICE CLUB
ARRL The National Association for Amateur Radio
7/13/2026
Effective Date
Josh Johnston, KE5MHV
Emergency Communications & Field Services Director

NFL Officials

Section Manager
Scott Roberts KK4ECR

Assistant Section Managers
Kevin Bess KK4BFN
Helen Straughn WC4FSU
DJ Stewart KI4ZER
Joe Bassett, W1WCN

Section Emergency Coordinator
Arc Thames W4CPD

Section Public Info Coordinator
Jim Bledsoe, KI4KEA

Section Technical Coordinator
Frank Haas KB4T

Section Affiliated Club Coordinator

Section Traffic Manager
Helen Straughn WC4FSU

Section Official Observer Coordinator
Robert Leasko WB8PAF

Section State Government Liaison
Darrell Brock N4GOA

NFL Committees

Webmaster, www.arrl-nfl.org
Kari McClure, NW4R

Newsletter, *QST NFL*
Earl McDow, K4ZSW

QST NFL *is a monthly publication of the ARRL Northern Florida Section.* ***QST NFL*** is intended for wide distribution within the NFL Section, including club Leaders and all licensed Amateurs in Florida. A current issue of this publication can be found at the ARRL Southeastern Division web site, Northern Florida Section. www.***ARRL-NFL.org*** Opinions expressed by contributors are their own, and may not express the positions of the ARRL.

Submissions may be made to the editor: Earl McDow earl.mcdow@gmail.com.

All submissions are subject to editing prior to publication.

Looking for Something?

Gordon Gibby, KX4Z, has taken the time to index the articles from all the 2021 issues of ***QST NFL***!
https://arrl-nfl.org/wp-content/uploads/2021/12/2021QSTNFLIndex.pdf

What's Inside…

NFL Section Member of the Month!

We are always accepting nominations for the NFL Section Member of the Month. To submit a nomination, please email Section Manager Scott Roberts at kk4ecr@gmail.com. Include the nominee's name, call sign, county, reason for the nomination, and a photo of the nominee. Arc and I will review the nominations and contact you with any questions

Digital Library of Amateur Radio & Communications

Marty Brown, N4GL

Digital Library of Amateur Radio & Communications is now archiving ***QST NFL*** issues. DLARC is a project of the Internet Archive (the not-for-profit online library best known for The Wayback Machine.) DLARC is growing to be a massive online library of the past and present of ham radio and related communications. It is funded by a grant from Amateur Radio Digital Communications. You can see what we have so far at https://archive.org/details/dlarc .

Three years of QST NFL are now online, and I am working with the curator, Kaye Savetz, K6KJN, to eventually get all the issues that I have edited since 2014. DLARC can also scan paper issues. So if you have any stashed in your attic, let me know.

"Big Red" Goes To Heaven...But Didn't Take Me For The Ride

J. Gordon Beattie, Jr. W2TTT

A Little Background About "Big Red"

For those who know me or who may have read some of my musings over the last few years, you may recall that I had a red 2019 RAM Promaster 3500 EXT which had been fitted out with insulation, walls, a desktop, storage bench, several 19 inch racks, solar power, batteries and all kinds of wired and wireless networking and Amateur Radio equipment. It served me well for lots of fun activities, some serious ones and even some work!

Here are some photos of Big Red in its heyday. It was a long beast and sometimes "fun" to park. The one with the pretty girl, my wife Nancy N2FWI was taken while we were on our way to Live Oak to move in back in September, 2020.

The photo with the white masts holding up antennas was taken at the Burlington MA campus of Northeastern University while doing some coverage measurements on 902 and 3300 MHz. Yes, those are antenna bulkhead connectors with no leaks or rust after seven years!

The ceiling was unfinished tongue and groove clear pine.

The End Came Quickly

Well on a lovely sunny Friday afternoon which was May 1st, while driving from the University of Scranton to my 50th High School Reunion I slowed down to accommodate a driver entering the middle lane on Interstate 80 in New Jersey and was immediately slammed in the rear by a dump truck! The rear windows' glass exploded all the way to the front seat and the impact got my full attention to getting out of the way of further harm. I came to rest safely but quite shaken up. Honestly, I've been hit on hockey rinks and nothing like this was familiar. My left shoulder blade was sore and swollen for a couple of days and then largely cleared up save some lingering soreness when trying to extend my range of motion. This is being addressed and God blessed me as this could have been much worse. The truck was drivable on local streets and I was able to park it in a factory lot where a friend works until the insurance company dealt with it.

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And Back To My Radio Roots

It was totaled, but I did make the second night of reunion activities at Xavier High School in New York City on Saturday with a school tour and a class Mass followed by a cocktail hour and banquet. I had a lot for which to be thankful and it was great fun to be with old friends, but it was at Xavier where I got my ham license fifty-one years ago! As a Freshman, I was the second member of the Radio Club. The President was a Senior and there were no other members. Within a month we corrected that situation and documented about twenty members, mostly doing some shortwave listening, playing with electronics and going through piles and shelves of donated equipment to see what we could use. We had a Hammerlund HQ-180 and a National HRO-60 with a box of plug in band modules. These worked pretty well but for a transmitter we only had a Harvey Wells Bandmaster Deluxe! It operated from 160m to 2m - often at the same time! With only one licensed ham at the time it sat on the shelf safely away from where it could pollute the bands! The cleaned up room, the activity and a few good words from our Faculty Moderator Fr. Karl Beck, S.J. backing up our requests for a budget from Fr. Jim Kernan, S.J. caused us to actually gain status and funding for improvements. Over the next few years the Radio Club grew and split into three clubs: the Amateur Radio Club, a Broadcast Club and a Radio-Electronics Club with three separate spaces. In any case, it was a local ham who lived in an apartment house next door to the school who administered my Novice and Technician exams in early 1975. Other students arrived through the years, some with licenses and some who earned theirs in school or in their neighborhoods. In those days it took months to get your license but they each arrived a few weeks apart in July of 1975. So for my Senior year we had several hams in each class and it kept going for years thereafter until someone finally noticed the large bundle of RG-8/RG-213 going out the fourth floor window and up to the roof where we had a short tower on one end and a mast on the other. It provided an amazing view of the new World Trade Center twin towers!

Saying Good-bye To Big Red

Getting back to "Big Red"... I drove it very slowly to a friend's business parking lot and on Sunday, my youngest son Jeremy KC2VBS, a former Scout of mine Joe KC2SRJ and Dave N3UXK all came together to field strip anything of value from Big Red before it was condemned to the crusher. All three of these gentlemen are Eagle Scouts and each took charge of a segment that suited their skills. Jeremy worked the insides with me, while Joe jumped on the roof to strip the antennas, four foot mounting plates, solar panel and roof rack and Dave addressed the ladder, safety for Joe and organized things into bins. It was all done in three hours with most of the salvaged items packed into a rented Pacifica. (They have a lot of chutzpah calling that a "minivan!)

During the next weeks the insurance companies did their work and claims were filed, checks issued and doctors consulted. It will take time to clear it all up, but everthing is going pretty well.

Enter The Great Pumpkin

Once back home in Florida, I hugged my wife for an eternity and unloaded it all the next day. I had other business trips, so I was distracted but this gave me time to reflect, pray and consult. Nancy stated that I wouldn't be happy without a truck so I prayed on that, but with a sense of gratitude for the outcome. I thanked God for sparing me and continue to do so several times a day. The local car dealer did a regional search and came up with nothing except "creepy white vans" and an offer to order one to my liking for delivery in 4-6 months at a price that had me wondering if I had been transported to a Mercedes dealer! After more prayer, consulting and research I came up dry. Then one day between meetings I had a few free minutes and so I checked online with the CDJR dealer in Culpeper, VA and by God they had an orange - NO... **ORANGE** 2025 RAM Promaster 2500 leftover at a very reduced price. I called them and asked lots of questions. It was real and over the next week they dropped the price another $5K and so I committed to getting it. A few days later I drove up in a rental car and picked it up and drove it home via a friend's house in North Carolina where the first modification was installed. It was a trimmed and painted 2x2 on which I will mount phones, control heads and tablets. We bought longer screws and countersunk them for a clean installation.

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Decorating The Great Pumpkin

Once the new Promaster 2500 arrived home Nancy dubbed it, "The Great Pumpkin". The name stuck immediately with friend's and family so there was no further discussion because, "It's The Great Pumpkin Charlie Brown." So at first I shrugged, just like Charlie Brown would do, but then I embraced the label because its **ORANGE** made me smile 😃! It's great in parking lots with a sea of dull and boring white, silver, gray, beige and black vehicles. **ORANGE** is a happy, cheery and bright color and that suits me just fine!

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Next Steps - Oh So Many!
Well, the dump truck company's insurer has been very cooperative and is simply requiring reasonable documentation for the upfitting that will need to be done. Insulation and adhesive have been purchased, a pair of office drawers for a desktop were donated by Dave N3UXK and an industrial hard foam floor was purchased and installed. This truck is about sixteen inches shorter, but has steel walls with no windows. This presents a challenge with respect to the vehicle's shorter length while giving a cleaner platform into which things can be built.

Field Day provided a dry run "test fit" for a desk using a 2x8 foot piece of 3/4 inch plywood reinforced by some 2x4s - all saved in the barn. This made me realize that the final desk will need to be 30 inches deep and not 24 inches. The eight foot length seems about right.

Once the insulation and cable bulkhead connectors are installed, then walls, ceiling, desktop, racks, storage and the whole rooftop complex of antennas and solar can follow. Once they are done, equipment can be installed and operations can begin. It will take awhile, but it will be better in the long run. So Big Red is dead. Welcome The Great Pumpkin!

When a “Problem” Becomes a “Benefit”

Shannon Boal, K4GLM

An amazingly successful Gainesville Amateur Radio Society GOTA station during SFD was a success due to using a previous “problem” to our antenna advantage. GARS VP Shannon Boal, K4GLM, recounts the tale of tech and team triumph:

“At the May and June GARS general meetings, it was decided to make GOTA (Get on the Air!) a priority for this year's field day. The "spark plugs" driving that GOTA decision were Vicky and Kevin Miller. Mike Martel and Tom Warren had a field meeting with folks about four weeks ago, and I came away tasked with producing an antenna system that would allow simultaneous operation of two 20-meter stations. That was so that the GOTA station would have an effective band, without penalizing the EOC station.

The city of Waldo, and our new city manager, Amanda Brown (KG5JZS), hosted us. GARS funded this. Components were sourced from California, Nebraska, New Hampshire, China, and England. I designed the system and built the parts.

I used Jim Carr's observation, at an antenna building class four years ago, that the light tower prevented us from communicating with the 820 repeater. It blocked the signal.... (Light bulb moment!) I sat in a ham op's presentation at Hamcation two years ago, reviewing his work in isolating antennas on his farm in Ohio. I cannot remember his name!

Our system of simple dipoles was painstakingly built, tuned and tested, with many hours of work from our club members. Terry Gordon, Kevin Miller, Tom Warren, Vicky Miller,Debra Boal, Mike Martell, Jim Carr, Bill Sewell, Andy Bryson, Eddie Dempsey, Larry Rovak and others all worked long hours in the sweltering outdoors, adjusting and testing. Slingshot operators slung and hauled lines. Drone pilots Jim and Don dropped lines in tricky, inaccessible locations.

All of that effort, to make that simple thing sing. And Sing It Did: clean, clear signals! New hams at the GOTA station were not frustrated by the difficulty of lousy conditions. An outstanding CW operator, Lorilyn Roberts was still operating when a crew inadvertently lowered the dipole antenna. So, she switched to the hexbeam directional antenna and found.that the dipole system was actually better! There are more chapters that can be written on the support and raising of the off-center-fed antenna; the new remote-auto-tuner-vertical, and the fantastic food....GARS considers the number of people making GOTA station contacts a crowning achievement of the event. de K4GLM, Shannon Boal”

GOTA Antenna Project and Dipole Innovation for Summer Field Day

Shannon Boal, K4GLM

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Scott working 10 meters SFD 2026

Shannon and Debra on 89 meters SFD 2026

Jim Carr teaching modulation to Rick SFD 2026

2026 Summer Field Day CW Reflections

Lorilyn Roberts KO4LBS

July 10, 2026Lorilyn Roberts109 Views0 Comments2026 Summer Field Day, CW, GARS, ham radio

Lorilyn Roberts KO 4LBSlogging CW Contact SFD 2026, Waldo, Florida Summer Field Day this year in Waldo, Florida, was one for the record books. We had some amazing visitors, and I say this partly because I love seeing women and young people stop by to learn about ham radio. What struck me in particular this year was that the visitors weren't anxious to leave. They wanted to stay. It wasn't just a quick perusal; it was engagement.

I probably spent 30 minutes with a ten-year-old boy, Abraham, and his dad before they went down and made a bunch of contacts on GOTA. I let Abraham play around with my paddle connected to the ICOM 7300 in the off-air mode so he could hear his dits and dahs, and I suggested some websites to help him learn CW.

I also strongly encouraged Abraham's dad to get his son involved in ham radio, citing how it could help him with STEM subjects in school, and that I knew someone who earned his ham radio license at seven, later graduated from the U.S. Naval Academy, and became the largest shareholder in Western Digital.

10-year-old Abraham with CW practice key

The personalities in the GARS (Gainesville Amateur Radio Society) Club work well together, and the group is balanced, making it easy to include everyone. We have some new members who have jumped right in and are contributing in amazing ways.

I focused on CW and had some unique experiences that will help me as a ham radio operator. I'll give one example that will stick with me for a long time, as this is what Summer Field Day is all about. I had just worked someone on CW, and the reverse beacon showed he was operating at 29 words per minute. When I finished the contact, the next operator was sending at about seven words per minute.
Without missing a beat, the operator slowed down from 29 WPM to match the caller's speed. It took a while because the "newbie" struggled, but they made the contact, and then the "pro" went back up to 29 words per minute, and things moved on.

What grace, what patience, what an amazing CW operator. That will stick with me.

I think as a club, GARS has embraced that kind of camaraderie where we are there to help each other. We aren't trying to impress other clubs with how many points we score or how good we are. In the world of ham radio, where it's so easy as a newbie and even with some experience to feel inadequate, that can speak louder than training sessions, charts, videos, and buying the next great radio or antenna that's just been released. It's simply about relationships, helping each other be the best at what we enjoy, and contributing where we can.

The other highlight of the weekend for me was making a contact with a special expeditionary CW group in the Aleutian Islands off Alaska's coast. I had just shared earlier in the day that I had never made a contact in Alaska. Then, a couple of hours later, I did.

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I was curious as to how unusual that was, on 15 meters, so I asked ChatGPT this question:

How difficult would it be to reach the Aleutian Islands from Gainesville, Florida, on 15 meters using CW?

ChatGPT responded: “Reaching the Aleutian Islands (approx. 4,600 miles away) from Gainesville, FL on 15 meters using CW is **moderately difficult**. It is a major DX path that is entirely possible but relies heavily on solar conditions, optimal timing, and precise signal beaming.”

One of the most amazing things about CW is that you can literally reach anybody, anywhere in the world.

I imagine the CW ops out there in the middle of the Bering Sea were as excited to reach someone in Florida as I was to reach them on a rare DX operation.

For those who are curious about the details, I did this late Saturday afternoon, EST time. In Alaskan time, it would have been early evening, which is considered the optimal time for that DX contact. The solar conditions must also be optimal. I used a Begali paddle at 25 wpm on 100 watts, and the wire-dipole antenna specially erected for Summer Field Day. The antenna worked extremely well, so kudos to the team that put that up.

Mike Martell and Evert building a VHF-UHF antenna SFD 2026

Later I asked who did that magnificent work on the antenna, and I was told Shannon Boal, K4GLM, designed it; Jim Carr, KC4MHH; Terry Gordan, K4TMG; Tom Warren, KC8DHX; Debra Boal, KI4CVS; Bill Sewell, KR4EKZ; Andy Bryson, KO4MLY; Eddie Dempsy; Larry Rovak, WB2SVB; Vicki Miller, W0VIX; and Kevin Miller, N1KLM, who set it up in the blazing summer heat.

A little side humor: I was still using that antenna on Sunday when a couple of operators started taking it down. Fortunately, somebody caught it in time. I didn’t know that was even happening, so I switched to another antenna, though it wasn’t quite as good. That dipole was phenomenal.

Terry, Jim, and Evert testing an emergency antenna build

A surprising thing happened on Sunday afternoon: suddenly, nobody could hear anything on the radio. Any guesses as to why? Turns out, somebody downstairs started vacuuming. When they stopped vacuuming, everything returned to normal. I don’t think I ever would have figured that one out, so there is always something new to learn.

I want to thank everyone who made it such a success, especially the overnighters, Tom Warren, KC8DHX, and Shannon Boal, K4GLM, who allowed me to stay on the air late. And again, a warm thank you to the hams who came in a week early to set up that awesome dipole so I could make that Alaska contact on 15 meters.

I also want to give a shout-out to Terry Gordan (K4TMG), Mike Martell (KK4KRZ), Barbara Matthews (KO4TWZ), Debra Boal (KI4CVS), Ken Miller (KF4ULO), and Andy Bryson (KO4MLY), who helped me whenever I had a question or concern. They were “on it.” Thanks also to any I missed and for making the day such a huge success.

I had a blast on CW, eating all those delicious desserts, and sharing the day with such great hams. Let’s do it again next year!

Article by Lorilyn Roberts, KO4LBS, and photos by Mike Martell, KK4KRZ

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Suwannee County ARES® News

James Gordon Beattie Jr W2TTT

New Emergency Management Director

With the welcome appointment of a new County Emergency Director, Sharon Hingson and with Emergency Management standing up as a County agency directly accountable to the County Commissioners and Administrator, things are heading in a positive direction for county Emergency Management and for its ARES and CERT.

Suwannee County Emergency Management Director Sharon Hingson

Sharon served in Emergency Management previously and brings with her a wealth of community and emergency management knowledge. Look for more exciting developments in the next few months.

Antenna Work

Mike Meador KM4BTW, our ARES Emergency Coordinator has received a tentative "go ahead" to plan for a man lift to straighten out an issue with our fan dipole for 80/60/40m that impacts some bands. In the meantime, 40m HF operations are using the dedicated "temporary" antenna put up in 2022 in preparation for Hurricane Ian! It is more than a backup antenna in that it performs well and provides us with the option of being on two HF bands simultaneously. We will be doing some other antenna work at the EOC when we have the lift.

In a separate activity, the 145.27 MHz W2TTT/R repeater will be getting its coaxial cable replaced with hardline when the contractor comes to drop the tower before adding another ten foot section and replacement mast and standing it back up. Once these changes are in place, the coverage should be back to where it was a few years back.

OUCH!

Unfortunately, Mike's wife Marsha took a tumble and injured her leg and so the antenna work is on hold for now. Let's pray for both Marsha and Mike and wish Marsha a quick recovery!

Activity

The EOC station KK4RQY has been fairly active on many Wednesdays for the 9:00 am ARES Net and the 1:00 pm SARNET check-in. All radios and antennas are working except as noted above. The weekly County ARES Net at 8:30 pm ET on Sunday evenings is also continuing to operate with weekly check-ins from stations in Suwannee and Madison Counties and occasional check-ins from Leon, Jefferson and Columbia Counties. These activities provide each county with an awareness of who can operate within our county and to adjacent counties as well. We really appreciate the support from the operators within the county and our neighbors.

Welcome!

During one Wednesday morning session at the EOC, we noted a new ham in the community who responded to our test call on 146.52 MHz. Tom Ziko K4NAM who brings with him much ARES experience as both an EC and an operator came back on the air and surprised to hear anyone on Simplex! Tom has great skills with RF electronics and is also an accomplished musician! He is just getting his antennas squared away and will be more active soon. If you are south of Live Oak or have a good signal in that direction, try giving him a call on 146.52 MHz where he frequently monitors. Be patient and give him a few calls in case he's occupied and needs time to get to the radio!

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Sumter County ARES® Clubhouse

Mark Newby, KX4LEO Emergency Coordinator Sumter County ARES®

Sumter County ARES (SCARES) now has a clubhouse in Webster, Florida. SCARES makes the building and its equipment available to its members, associate members of the Red Oaks Amateur Radio Group and the Hog County Amateur Radio Association, as well as the general amateur radio community.

A 30-ft Rhon25 tower supports a Tram 1481 2m/70cm antenna. Standoffs are fixed to the tower that have pullies on both ends, making it easy to raise and lower our various HF antennas. There are three HF stations and one 2m/70cm station. With batteries and generator backup, stations in the clubhouse can function uninterrupted.

High-speed internet is available throughout the clubhouse, with laptops positioned at each work station. The network is configured to allow all laptops to share files and applications between them and an on-site server, convenient for contest logging.

The clubhouse is used for meetings, training, and of course contesting. For those who cannot attend in person, they can attend virtually through Zoom or livestream.

This project was made possible by contributions from many people. Some donated equipment and supplies. Some provided guidance through their knowledge and expertise. Yet others showed up to offer a helping hand.

For more information about Sumter County ARES and how to become a member, check us out at www.sumterares.org.

Introducing The World Beyond 50 MHz

Mike Hasselbeck WB2FKO

Doug K4LY of Inman, South Carolina (EM85) and Jason in Jacksonville Beach, Florida (EM90) have been experimenting with the highly sensitive Q65 mode of WSJT-X on the microwave bands. There is a 336 mile distance separating their stations, which are both running about 2 Watts of power on the 6 cm band.

On a recent evening, K4LY obtained decodes of 62 Q65 signals from K4JMX on 5.76 GHz including almost continuous decodes between 20:52 and 21:08 local time. Signals were observed to drift in the audio passband over the range of 897-907 Hz. A rainscatter map from the same time period strongly suggests this was the propagation mechanism. A concurrent map APRS network showed no evidence of enhancement on 144.390 MHz, which would appear to rule out tropo-scatter or tropo-ducting.

After 11 minutes of quiet, two more decodes were recorded at 21:19 and 21:23 due to either rain pockets or airplane scatter. The stations were configured to run automatically through the night. More decodes at K4LY followed at 21:55, 22:37, 23:09, 23:59, with more frequent decodes starting in the early morning hours presumably due to tropospheric scattering.

Signals were often loud enough that CW signals could have been copied. After many weeks of testing, they have determined that the best time of day for tropo-enhanced microwave propagation is in the first hour after sunrise. Doug and Jason hope that others will join their efforts to study the interesting and surprising behavior of microwave propagation in the region.

The group promotes both analog and digital modes on frequencies above 50 MHz. Monday evening is the traditional weekly regional digital operating event. Buddy WB4OMG (Polk County) and Mike WB2FKO (Alachua County) setup a dedicated email reflector at groups.io and named it VHFlorida. Activity is primarily on 144 MHz FT8, but schedules for higher frequencies including microwave are arranged in real-time in a chatroom managed by Jason Maddex K4JMX (Duval County) at k4jmx.com/chat.

Experimenting microwave Hams

Doug Allen K4LY

Microwavers alternately refer to the band as 5.7 gHz, 5760 mHz, or 6 cm, usually just saying 5760. We use 5760.100 for SSB/CW, 5760.174 for FT8, and 5760.170 for Q65.

Frequency accuracy is within a few Hz. K4JMX and I are both using the Icom IC-905 which has a GPS/GNSS receiver and receives highly accurate timing data directly from orbiting atomic-clock navigation satellites. The IC-905 has 10 watts output on 2M, 432, and 1296 and 2 watts output on 2304 and 5760. W4DEX uses the Icom IC-705 with transverters. The advantage of the IC-905 over every other transceiver is that the RF section mounts next to the antennas, mine at about 72' AGL. Coaxial attenuation is extremely high at 2304 and 5760 microwave frequencies, with even expensive coax in the neighborhood of 1/4 dB per foot, so the advantage of placing the RF unit next to the antennas is immense.

The overnight experiments that Dex McIntyre, W4DEX, and I have carried out with Jason, Maddox K4JMX, in Jacksonville Beach have shown that even two watts to a good microwave antenna is sufficient for occasional reliable contacts over the 300+ mile distance. The experiments have also shown that signals frequently peak in the hour following sunrise. The APRS real time propagation map that VHFers use, based on 144 mHz propagation, sometimes does and sometimes does not coincide with microwave propagation enhancement. The Hepburn propagation prediction maps, because they are basically weather predictions, have the typical reliability problems of weather forecasts, especially when looking at several days out.

Even small rain drops are very efficient at scattering 10 gHz, less so at 5760, requiring large rain drops, and even less so at 2304. Reflection from the surfaces of aircraft also sometimes provide usable scatter. Our experiments are providing information about propagation, and also about the different modes- SSB, CW, FT8, Q65, and their comparative signal strengths and reliability over our paths.

Dex, Jason, and I are barely scratching the surface. We have not yet done real time comparison of signal variations on different bands, and we have been limited to studying a single path, the SC/NC border piedmont southward across the piedmont and sandhill topography to Jacksonville Beach. We hope to study additional paths, and need to find others to run these experiments with.

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A 6 CM Night To Remember

Doug Allen W4LY

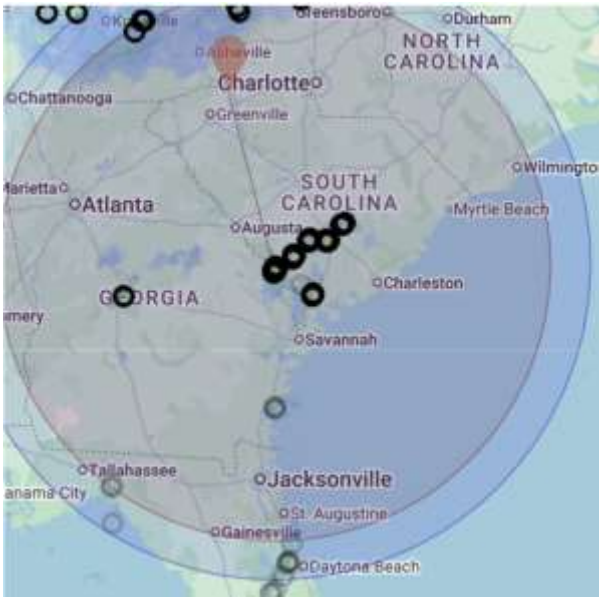
Extremely interesting night with 62 5760 MHz decodes total, 23 RS decodes almost continuously from 2052:45 local until 2108:45. The first seventeen decodes were at 897 Hz, then one at 900 Hz, four at 907 Hz, one at 900 Hz, and five more at 907 Hz.

Then 11 minutes later, two more decodes at 2119:45 on 840 Hz and 2123:45 0n 907 Hz. That 840 Hz decode is really low! Think these were RS or possibly airplane scatter.

I didn't go to the shack until 2140 when I saw all the decodes. I then looked at the RS program-

A line of cells had moved through our path near the halfway point. Those cells now had all moved east of our Inman, SC, Jacksonville Beach, FL, path. I'm pretty sure the first 23 decodes were all RS. I checked the APRS map. There was "no" color enhancement indication at all over 90% of the path between us. However, when I checked again this morning at 7 AM, there was yellow-orange over the path.

I went to bed at 2145, but now see on WSJT that 21 1/2 minutes after the previous decode, I had a single decode at 2155:15 followed by another decode 42 minutes later at 2237:15, and two more at 2309 and 2359. Not sure if additional popup cells had developed over our path? Then, over 75 minutes later, starting 0115:45, we began to get occasional tropo, I think, with 9 decodes that hour. Starting at 0222 we had continuous tropo with 17 consecutive decodes all on 897 Hz with SS of -26 to -14.



Then nothing for 4 1/2 hours until 0706:15 when I had 10 decodes the next 12 1/2 minutes.

Jason, the last two nights my frequency TOL was 200 Hz, changed from 100 Hz last week when I did not decode you, but you decoded me. I think that may have been the problem?

Fascinating results!

Conclusion

Our many nights of experiments confirm that 5760 tropo and rain scatter over a 300+ mile path is a fairly common event with our low power. Our 2 watts would have been marginal on CW, but was a piece of cake two nights ago on Q65 300a and last night on Q65 15a. The most common time for tropo enhancement has been the hour following sunrise. I think if others run overnight skeds like we have been doing, you will find surprising results!

Field Day with Columbia ARES®

Field Day was spent as a guest of Columbia County ARES with Gordon Beattie W2TTT providing the VHF station. It was done in a "bare bones" configuration with an empty cargo truck, a Promaster 2500 with an improvised operating desk and a station running on a 200AH LiFePo4 battery. The station consisted of an ICOM IC-7300 and HP laptop connected to a 50 MHz hex beam on a trailer-mounted roof tower with rotator and military poles masting. It also featured an ICOM IC-9700 on 146/446/1265 MHz with a triband antenna on some military poles. Both antennas were on a trailer parked behind the truck. Our best "DX" on 146.52 MHz was to Waldo in Alachua County. On 50 MHz we worked stations in an arc stretching from Texas through Canada and out to Maine. Columbia County EC Brad Swartz N5CBP led a well organized training event and a good time was had by all!

Operating position - rear door view

Operating position - side door view

RAM Promaster with tower, rotator, masts & antennas.

Reminders:
*Suwannee County ARES Net is on **Sunday evenings at 8:30 pm** ET on the W2TTT/R **45.27 MHz** repeater (**Tone 123.0 Hz, Offset -600 kHz**). All are welcome!*

If you are interested in getting involved with Suwannee County ARES please drop a note to:

Mike Meador KM4BTW at **mmeador@hotmail.com**
or
Gordon Beattie W2TTT at **w2ttt@att.net**.

Have a happy and safe 250th Anniversary of our great nation! Please offer a Prayer of Thanksgiving for the blessings that our nation has afforded us through Divine wisdom and for those who made, and continue to make, sacrifices to guarantee our freedoms and our opportunities.

Testing Antenna Switches

J. Gordon Beattie, Jr. W2TTT

Many of us develop our Amateur Radio stations to the point where we are blessed with choices of multiple antennas on HF or VHF-UHF. These could be for different bands or polarizations with omnidirectional or directional capabilities. Having options for one's HF or VHF-UHF antennas is wonderful and usually is solved with an antenna switch. Coaxial antenna switches of various sizes and qualities exist with between two and eight positions being common. Further, some are rated for HF and others for HF/6m or VHF-UHF. Ratings for frequency range and power level are key parameters to consider, but in the end, one needs to ensure that the port to port isolation is good enough to protect the receiver of one radio from the transmitted signal of the other.

Further, it makes no sense to select a yagi antenna to focus one's receiver signal while a "leaky" switch brings in a signal from your omni vertical 30 db down when your local noise floor that is S9+20 db. The "weak one" that you are hunting will be buried in the noise introduced from the omnidirectional antenna through the switch.

Of the two use cases, the more concerning situation is when one needs to share one antenna with multiple radios through that "leaky" switch. The use of an antenna switch as a radio switch presents some different challenges that are important to consider as the transmitted signal from one port can "leak" into the other port and into the receiver of the idle radio resulting in damage. A lack of port to port isolation is a big deal that can fry your receiver front end if there is insufficient isolation between ports.

Most hams will have an inline SWR or power meter, so rather than going through a detailed measurement process using nanoVNAs or more sophisticated instruments, I would recommend trying some basic tests before sharing your antenna with two or more radios. This little experiment will ease your mind and let you see if your switch has enough isolation to protect the radios from each other.

Using the highest frequency band supported by your radios and antennas do the following steps to test your switch.

1. Connect a radio to the "A" port.
2. Connect an antenna to the "C" port.
3. Put a through type SWR meter or wattmeter on the "B" port.
4. Connect a dummy load to the far end of the meter.
5. Set the switch to the "A" position.
6. Transmit with the meter sensitivity set high and gradually raise the sensitivity or switch to a lower power range.

If the switch has poor isolation, you will see some power on the meter connected to the "B" port. If you have a watt meter, you'll know how much power would flow into a second radio, but a simple inline SWR meter is sufficient to detect leaky RF across the switch ports.

As a further test, leave the switch in the same position, but swap the antenna and the dummy load and see if you can be heard by another local operator or if on VHF-UHF, see if you can trigger a real local repeater. If you can, even though the majority of the signal is going to the dummy load, be concerned for the safety of a second radio's front end and consider not using the switch as a "radio" switch.

In summary, I am not a fan of using simple coaxial A/B switches to connect two radios to one antenna unless the switches are specified and tested in advance.

In my shack, instead of switches, I have slowly but surely started to run antennas to the top row of a patch panel and radios and instruments to the lower row of the patch panel. This photo was taken after the patch panel was first mounted before any cables were routed through it.

Having antennas and radios on separate levels of the patch panel will reduce the tendency to connect transmitters to receivers.

Another related consideration is to make sure that your antennas are separated from each other and don't couple energy into another antenna and receiver when transmitting. Listening and watching the S-meter of the second receiver is a good start to giving you a warning of a potential overload issue. Often mistakes happen and damage occurs when new radios, antennas and amplifiers are introduced to a station. Carefully, testing of your station setup as it changes is essential to error-free operations. Hopefully, this article will give you some good ideas to help you along as your station grows in 2026!

Thoughts?

GARS Gets New People On The Air!

Barbara Mathews KO4TWZ

What a fantastic Gainesville Amateur Radio Society (GARS) field day: "Best Ever"! Operating from the Waldo, FL EOC Radio Room, we were led by SFD coordinators Mike Martell, KK4KRZ and Tom Warren, KC8DHX and a host of GARS members. We had 40 visitors that signed in, including Battalion Chief Kevin Rulapaugh of Alachua County Fire Rescue (a licensed Ham!), and the new City Manager of Waldo, Amanda Brown, KG5JZS, who has been an amateur radio operator "for years", but said "What I saw was a pretty incredible display of radio activity. I got to see a young person get coached up by Vicki at the GOTA station and make amazing contacts. A fantastic operation!"

Under the guidance of our GARS members, new technicians and visitors made their first HF radio contacts, and the generous attitudes of their contacts were awesome. The highlight of operation was when 10-year-old Abraham made 10 contacts on 40-meter phone under the guidance of new amateur Vickie Miller, WOVIX . At one point when Abraham was working a pile up, the operator said, "only the boy come back". On completion of another exchange, the operator said "Great, kid! GET ON THE AIRWAVES!". Abraham spent time with Lorilyn Roberts, KO4LBS, working with CW. Abraham and his dad, David, plan to take the technician test on August 1st. See GARS.club for testing details.

We had adults who were only recently licensed, getting on the air for the first time as well: good job Scott! Scott's young grandson came later, and with coaching worked the GOTA station like a pro. Seeing generations connecting and sharing excitement through Amateur Radio was the greatest success of GARS' SFD 2026. If you do not see the STEM connection, its because you aren't looking!

Our hands-on Summer Field Day project this year was making emergency roll-up VHF/UHF antennas from 300 ohm twin lead. Eight antennas were made where individuals learned to measure and strip braided wire and coax, solder connections and use an analyzer to test their antennas. We set up a small pulley system to raise the newly constructed antennas for easier testing. Adjustments were made and some antennas could be used on three bands. 2-meter, 70-centimeter, and 1.2 meters. All antennas had SO-230 female connectors which could be easily connected to PL 259 ended coax feed line.

Jim Carr, KC4MHH, having already supported the GARS antenna efforts with his drone expertise, supervised the antenna testing and provided advice on test equipment. When not testing antennas, Jim was at the white board explaining antenna theory, modulation, and many other radio concepts to eager visitors as well as new and experienced amateurs.

The GARS members were out in full force to improve and raise new antennas. The Waldo EOC off-center dipole was improved by raising one end by extending the existing support with a longer pole. The antenna team also deployed two additional dipoles at angles to existing antennas to minimize interference. The final antenna used a 95-foot steel light pole to hang a vertical antenna with radials which could work 80 meters. We had six antennas deployed with our Hex beam and filters able to handle three radios on different bands.

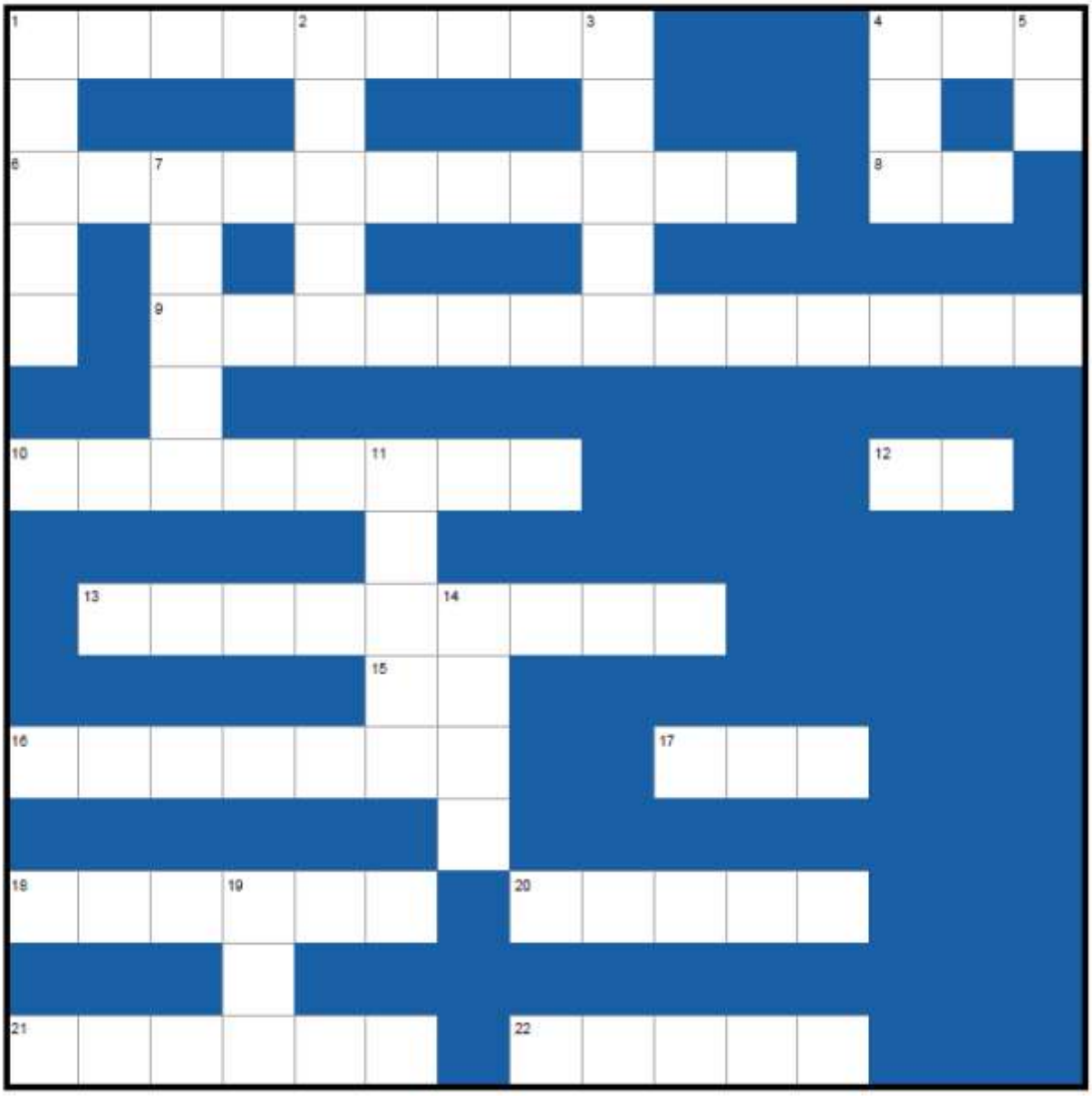
Since Waldo EOC is on the second floor with no elevator, we placed the Get On The Air (GOTA) station on the first floor connected to a newly deployed 20-meter dipole (the tested "separation" from the upstairs radio room allowed for both stations to operate on 20-m. This first floor access allowed visitors who could not climb stairs to still experience amateur radio. In fact, one of the GARS members fell the day before the event and could not climb stairs but was still able to attend and assist at the GOTA station. The GOTA station worked well with its separate logging software. We also connected a Voice Over Internet phone between the first floor GOTA station and the control station on the second floor so any instructions could be easily communicated.

In the EOC radio room we had four stations in operation with Phone, and CW, (besides phone FT8 was used at the GOTA station). We made contacts on 2-, 10-, 15-, 20-, 40-, and 80-meters. The large screen in the front of the room displayed our logging contacts as well as a panel showing stations, modes, and antennas connections. During the event when changes were made to any station, our Band Master Larry Rovak, WB2SVB, at station 1 (our control station) managed the changes and updated the large screen display.

In summary, members worked hard, we practiced and learned and are more ready for the next time of need. It reminds us that you never know who needs Amateur Radio and don't yet know it. Share with people about all the different kinds of radio practice, and how it might help them in times of trouble as well. Thank you to all from the community who joined us: GARS stand ready to get you on the air!

Ham Radio Crossword Puzzle

Fill in the grid using the clues below



ACROSS

1. Dit-dah communication system
4. Long-distance contact
6. Sends RF signals out
8. High Frequency (3-30 MHz)
9. Entry-level ham license
10. Your unique radio identifier
12. General call to any station
13. Joining wires with a hot iron
16. Radiates your signal into the air
17. Single _____ Band voice mode
18. Operating from a vehicle
20. Frequency ranges allocated to hams
21. Wavelength unit for ham bands
22. Matches antenna to transceiver

DOWN

1. Code named after Samuel F. B. ___
2. PL-259 connector attachment method
3. Coaxial feedline
4. International distress signal
5. Continuous Wave - Morse on air
7. Ham _____ - the hobby itself
11. Simple dipole material
14. Operator's unique keying style
19. Nickname for amateur radio operator

Fulfilling Experiences Inspiring Youngsters For Life Through Amateur Radio & More!

Gordon Gibby KX4Z

There is a whole world of opportunity out there for amateur radio operators to touch young lives for the better, helping today's youth gain valuable skills they will badly need. With the demise of "shop" classes, today's youth may know how to access social media, but have no clue how to do the simple repairs that we all need to keep our homes and vehicles going. You might be surprised at how clueless young people are about things like home wiring -- why is one wire black and another white? What is the difference?

Amateur radio is such a diverse hobby and teaches such a wide array of skills, that it forms a nice nucleus around which to build a modern version of "shop class."

Creating A Technology Course

I was able to offer an elective class on "Technology" to local students in Gainesville Florida at a small private school. I didn't see any really useful textbook available before I started. I literally created the course as I went along -- but I had help! Using existing amateur radio Technician license manuals gave me plenty of teaching material to get started. Even full slide sets! I added to these teaching-to-the-test materials, with xeroxed copies of chapters that enlarged each topic and put it more into perspective of how it helps young adults get along in the world without having to drown in debt to a myriad of professionals would would otherwise be needed to repair their appliances, etc. Throw in some exciting demonstrations of ham radio communications and electricity, and I could teach a huge amount of useful Technology via amateur radio.

Wide-Ranging Technology

Then I enlarged the class far beyond by adding in simple plumbing, house wiring, and even ventured into 3D-printing and micro-computers. Using a circular saw to cut lumber; understanding what a 6-32 screw is and common hand tools. As much as I could of all the skills you need to keep a house or vehicle going. The students especially loved the 3D-printing! That gave them "status." Everyone "knows" about 3D-printing, but very few actually have access to the equipment and have the true know-how. I brought in a small Bambu Labs printer for the school and had my students not only doing consumer-level printing (of already designed items)-- but we went much farther, teaching them to be productive ***creators*** of 3D designs. Their exam was to create a housing for an amateur radio toroidal 1:1 choke. They quickly had an app on their phones, and could send their creations directly to the 3D printer. https://www.tinkercad.com/ provides a free and extraordinarily simple 3D design platform that even elementary school students can use. There is a 9-minute video that basically teaches everything you need to know about TinkerCad -- watching it twice is a GREAT training tool for both instructor and students! https://www.youtube.com/watch?v=gOs6Mdj7y_4 It focuses on the ideas of "solids" and "holes" (of various geometric shapes).

A full-course Textbook

Teaching a course is easy provided you have a textbook to follow. So I wrote a full high-school level textbook (to be used alongside an amateur radio license manual of your preferred vintage) that gives not only reading material for the students, but also Projects and Questions for assignments. Further, I included the very latest Technician test questions straight from the VEC (good until June 30 2030).

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Teaching Isn't Hard!

It is easier than you might think to teach a single (elective) course in high school, particularly in private schools. I recommend that you adopt the goal of primarily ***serving the students***, rather than just seeking more licensed hams, or enlarging your local club. All of the other benefits will eventually arrive. Your students should be ready for the Technician License near the end of the first quarter. There are lots of ways you can get this course taught-- you can:

- teach it all yourself
- "team-teach" with a few buddies from your ham club (e.g. a week at a time)
- work with a professional teacher, filling in where your expertise shines.

Experienced amateurs don't realize how much they know! Armed with your lifetime of practical experience, you have enormous knowledge that can be transferred to youngsters. School administrators, seeing your interest in truly benefiting their students, are very likely to give you the opportunity, especially when you show up with a full proven textbook already in hand! Teaching at private schools is so easy! You don't have to have a license or anything more than a good clean crime-free background. For everyone's' safety, you're probably going to have a background check, just exactly the same as serving your local Emergency Management office. These are perfunctory and straightforward. You may even be welcomed at a public school in a helping capacity, or become credentialed through Florida (or other state) programs that allow 2nd career teachers to demonstrate proficiency through a test in any of scores of subjects.

Salary?

You can teach for free, or request a modest salary. I either teach for free or request simply "minimum wage." I also provide all of the materials for the class out of my home shop. You might get the school to pony up for the textbooks.

In the process of teaching a class like this, you also are going to learn a lot! You may not know everything when you get started. When I started, I had only modest experience in 3D printing, but I rapidly gained knowledge and using a simple 9-minute video, I was able to show my students how to use TinkerCad online web-based 3D design. (My previous experience was with far more complicated Blender.) Both myself and my students picked it up within an hour and were busy doing real 3D design!

Give Them An Inspiration

The ARISS (https://www.ariss.org/ Amateur Radio on the International Space Station) project gives schools a way to compete to have a live ham radio contact (2 meter FM) with astronauts aboard the International Space Station. In my county, not a single school has ever succeeded in this competition, but 1,700 schools all over the world have succeeded. In the process of teaching this course, learning 3D printing, and preparing for Field Day, I learned exactly how to set up reliable communications to the International Space Station (ISS). I put a bunch of that knowledge into the textbook. If your team is willing to coach students at your school for a full year, there is a very good chance that you can have a winning entry into the competition! That requires a school-wide commitment, but it is something worth explaining to school administrators as you detail how you can shore up their schools STEM environment with an exciting and challenging project that combines geometry, electricity, electronics, and robotics all into one!

The Mechanics

Teaching high school students is fun! Show up a bit early and have your materials ready for each class, exactly like you would for a Technician License Class. I like to give my students a "lesson plan" for each week, showing what I'm going to cover, and what their homework is for each night. I have some of those that I can share with interested teachers. I give a Quiz to the students every Friday and a test every few weeks. You usually want to have at least 10-15 graded assessments every quarter of a school year. Every school has their own computerized grade recording system, but they are usually fairly simple. In the early part of the course, just use Technician License Questions for your quizzes and tests -- couldn't be simpler!

Contact Me

If you or your team or club is ready to try and really have an impact on students' lives, I can be a mentor in the background. Just send me a note docvacuumtubes at gmail.

The Textbook

I wrote the textbook including everything I taught in a one-semester (two quarters) course, and then added enough material so that you can turn it into a year-long course aimed at the International Space Station. It is available on Amazon for a very small price. https://www.amazon.com/Introduction-Technology-High-School-Students/dp/B0H5X7FH5T I used the https://hamradioschool.com/ Technician text alongside, and I quickly signed Stu's non-disclosure agreement to gain access to his wealth of PowerPoint slides, which made teaching that portion of the class super easy.

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The chapters in the text are:Prologue: The DANGEROUS Book For High School Students	
1	Introduction: Why You Need To Master Technology
2	The History of Amateur Radio and the Role It Has Played In American Electronics Technology
3	Getting To Know An Amateur Radio Transceiver
4	How Government Relates to You, the Radio Operator
5	Ham Radio Things To Do!
6	Electromagnetic Waves (Real Force Fields)
7	Signal Propagation
8	Processing Signals
9	Antennas and Transmission Lines
10	Electricity
11	Electronics

Alachua County "Local User" Test Exercise

Gordon Gibby KX4Z

"All Disasters Are Local" goes the mantra. Knock on wood, our local Alachua County team has never had to really deal with a local disaster, but we keep learning anyway. In a local communications-failure disaster, there might be a large amount of logistical information that needs to move around different points in the city. If internet/cell/trunked systems are overwhelmed or failed, WINLINK offers a low-bandwidth data solution to handle reports, attachments, and documents.

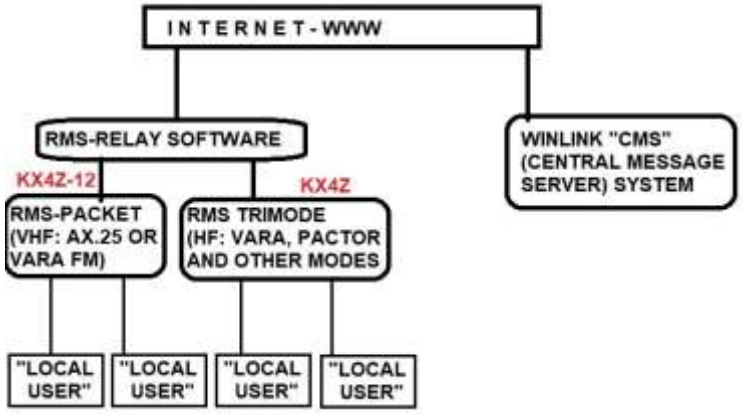

Illustration of how Winlink components interact to move messages. LOCAL USER designation instructs RMS_RELAY to cache messages to such stations locally, instead of forwarding them to the Internet-based Central Message Server for delivery.

But the normal technique for transport of messages involves a trip to the Internet, over to the Central Message Servers of Winlink (CMS) and then back down to some user (again via the Internet). But if the Internet is down, how is this going to work? Local users in our county might be forced to make connections to Winlink servers (RMS stations) in other states to find working connections to the Internet. That's impossible for hams who only have VHF access to Winlink (e.g. packet, or VHF-Vara FM). What is the solution?

WINLINK LOCAL USER

Winlink has a solution for that known as "LOCAL USER." An RMS "sysop" can specify local callsigns that should be considered truly "local." (There is also a setting for declaring any station coming in over VHF to be so designated; and there is a sun-setting provision.) This setting is carried out in a supervisory piece of Winlink software known as "RMS_RELAY." It instructs RMS_RELAY to keep all the messages addressed to the LOCAL USERS right there in its own cache, and not to forward it to the Internet-based CMS system.

RMS_RELAY can be used by both VHF and HF Winlink server systems at any given physical site (systems include RMS PACKET (VHF) and TRIMODE (HF)). Local WINLINK server KX4Z (HF) and KX4Z-12 (VHF, VARA FM) are both set up so that they communicate inside our home to RMS RELAY. That means they are linked inside our home by local WIFI.

EXERCISE

We scheduled a short simple exercise of this LOCAL USER system for a 48-hour period several days after ARRL Field Day. Eight volunteers signed up. At the beginning of the exercise, they were to make contact with either the VHF or HF KX4Z-stations, and were to receive an email "bulletin" giving them simulated disaster instructions. In this case, the instructions were to create perfunctory messages to every other participant in the exercise, and to send them via this LOCAL USER technique to those friends.

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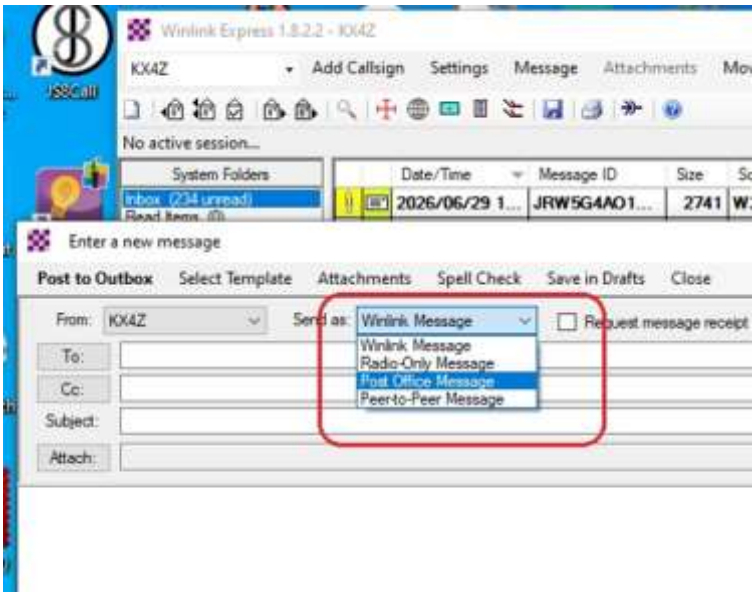
Local User Exercise Participants	
Earl McDow K4ZSW	Earl Sloan KI4OXD
Brett Wallace NH2KW	Tom Warren KC8DHX
Manish Sahni KZ4KC	Vann Chesney AC4QS
Kevin Rulapaugh KE4NVI	Craig White KO4ZRZ



It turns out that to designate a message for LOCAL dissemination only, you must (with our current Winlink software versions) make the selection of "POST OFFICE MESSAGE" when you create it. That is shown in a nearby illustration. Then you make a normal Winlink (not "peer to peer") connection to any of the KX4Z radios, and send it otherwise completely normally.

Of course, this only works for local messages being handled right inside our own area, with everyone using one set of RMS, all tied together under one callsign. **If you wished to do this in your city, you would want to have your own Winlink RMS in or very near to your city.**

All but one of the participants successfully picked up their "Local Message" instruction bulletin. (The other participant I think was out of town on business.) Participants got a bit of a review of how VHF and HF Winlink work -- in our county you generally need to use our Digipeater NF4RC-7 in order to reach my KX4Z-12 VHF VARA RMS station because of its position west of a ridge. Some users had trouble with that or were unable -- and thus went to HF to carry out the Exercise. This is exactly the right maneuver, and demonstrated the agility of the local WINLINK system, allowing both HF and VHF-only users to send messages back and forth in a local area, without needing any Internet at all.

RMS_RELAY caches messages for delivery to LOCAL USERS in a special location.
I was able to see the list of messages that participants or myself had uploaded
and were waiting for download by LOCAL USERS.

NOTE: My RMS_RELAY has access to an HF TRIMODE station. Had these users not been designated as LOCAL USERS, and Internet access been unavailable, settings on my RMS_RELAY would have caused it to begin to automatically attempt connections to other HF RMS's in an attempt to get their messages to a CMS for delivery.

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The results of the exercise were very encouraging based on filed Google Form reports from our participants

Participant Results	
Able to download Bulletin by some technique	7
Originated their own messages to other participants by VHF	3
Originated their own messages to other participants by HF	4
Received at least one message from another participant by VHF	3
Received at least one message from another participant by HF	4
Unable to carry out some portion of instructions	1

CONCLUSION

This was a very short exercise extending only over 48 hours and requiring only a few minutes' time by participants. Both the creator and the participants got a much better understanding of the "LOCAL USER" feature of the WINLINK system that RMS_RELAY makes possible. in the event of a true disaster, we might coordinate use of this feature so that selected stations were so designated. Alternatively, RMS_RELAY makes it possible to automatically add any station connecting by VHF to the LOCAL USER list. We aren't exactly certain whether that would be utilized at this point.

Emergency communications leadership would be well advised to become extremely familiar with advanced capabilities of WINLINK such as this one.

Everyone who was in town seemed to be able to receive and transmit messages around the group using this feature, avoiding the need to make any other connection outside our local WINLINK server. The disadvantage is the need for solid reliability of that station, however.

What's Up With Alachua County ARES®/NFARC

Gordon Gibby KX4Z

David Huckstep W4JIR packing up radio room for transport

The latter part of June and much of July has just been a whirlwind of activity. I'm writing this from Logansport, Indiana, where Nancy and I are camping, on our 3,000 mile summer-2026 travel trailer/ham radio vacation. Visiting family, seeing museums and sights and **escaping the heat**! This morning I almost had to turn on the propane furnace!

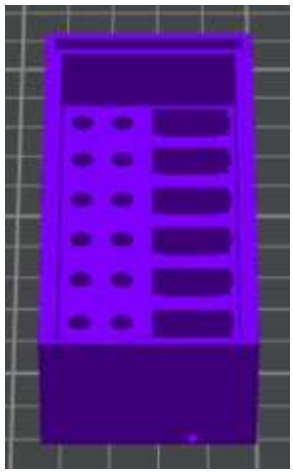
ALACHUA COUNTY EOC IS FINALLY MOVING

After months of construction contractor-induced delays, the Alachua County EOC is finally moving into their new quarters in the Fire Rescue Headquarters on 8th Avenue in the old Army Armory building. Brett Wallace NH2KW headed up much of the move planning, and David Huckstep W4JIR did a huge amount of packing. A moderate amount of our gear had already been moved out for Field Day, but then some of it returned before we heard the move planning. Brett & David took it all in stride! **THANKS, GUYS!!**

We don't have ANY antennas at the moment at the new EOC. We'll be dependent on our Field Day-type skills for quite some time, but we are "volunteers" not chiefs -- so we'll take all of that in stride as well.

Developing Basic Skills

A recent article in a ham radio publication encouraged **adding small "projects" to each meeting** to engage younger members. I've been trying this for a couple of meetings, so they aren't just boring "business meetings." At the July meeting we started on a PowerPole distribution box -- attempting to put just one fuse and one power-pole connector into a 3D-printed distribution case. Free cases were distributed to meeting attendees and the fun began! We had color handouts with assembly instructions: https://www.nf4rc.club/how-to-docs/power-pole-distribution-box-assembly/ (You can print these, too: https://github.com/docvacuumtubes/PowerPole-Distribution-Box)



Oops #1: Lots of members **don"t have important simple tools!** Everyone was asked to bring "gear for deployment" but just like Field Day, but several still didn't have needed tools to make simple repairs -- so we shared. (More need to acquire tools -- so we sent a list of inexpensive hand tools: https://groups.io/g/NF4RC/message/11530)

Oops #2: Loads of members don't know even simple skills like wire stripping, power-pole crimping etc. OUCH!! So Wow! What learning started happening! They were so engrossed in the project and learning so much that almost everyone stayed late to learn and get more done on their little "project!" A HUGE SUCCESS!!

- Understanding wire sizes;
- Learning how to strip insulation from wires.
- Learning how to crimp power pole contacts
- Doubling over conductors to increase size to crimp properly;
- Soldering where needed

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These tiny "projects" seem to be just what the doctor ordered to help build emergency repair skillsets in our group. In my opinion, our greatest benefit to our communities is not our radios (the police and fire have far more radios and certainly more expensive ones) -- ***it is our ability to keep going even when normal stuff quits.*** Clearly, the ability to FIX THINGS is part of that. So, we'll be doing more of these tiny projects!

==========

Our meeting projects need to be really, really SIMPLE SKILLS! Start at the very beginning!

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Self Evaluation of our Field Day Exercise

The Alachua County ARES(R) team finished out Field Day with a lot of contacts, a lot of fun, and a lot of growth in our skills. Better news media coverage than ever before. New-fangled antennas, especially the 40-meter inverted V beam. Not all of our members are the "competitive" type -- but some of us definitely are! Keeping track of our efforts and candid self-evaluation is part of our "due diligence" in growth. Here's how it went to ARRL:

Entry	North Florida Amateur Radio Club - NF4RC (when we enter from an EOC, we typically use our Alachua EOC Radio Club NF4AC)
Participants	14
Bonus points	100% emerg. power; media pub; Public information table; SM msg, formal messages; natural power; elected official; educational activity, youth participation, social media, Satellite QSO, GOTA station & coach
Total bonus points	2,315 (includes GOTA contacts -- 645 points)
QSOS	CW Digital Phone (not including GOTA) 494 423 169 Total QSOs including GOTA: 1086
Preliminary total score	6,321

We were down 2 participants from last year, but we tackled this year with a fresh new "incident commander." As a 5A, this setup was far more demanding than our 4F last year at our home EOC (which was unavailable). LESS problems with antennas than last year thanks to lessons we learned. Total contacts were down to 65% of last year with generally fewer hours of total operating. Total points down to 69% of last year. Biggest drop was in our "digital" which were WAY down. Our CW contacts ***increased*** (494 versus 417) as did our Phone (169 versus 132).

Voice Emphasis Paid Off

Prior to Field Day we held a LabNLunch and worked on voice operations, developing an ICOM 7300 card for attendees and discovering optimal compression settings. Looks like that helped our performance! Our CW ops both trained well in their own ways this year.

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For our group, **digital** has been a way to allow newer operators to be extremely productive on the air, but maybe we need more voice experience for them? With fewer operators this year, we had to divert skilled ops like Manish Sahni KZ4KC more toward coaching the GOTA, with a resulting reduction in total Digital. And Jeff Capehart broke a fibula just prior to Field Day so he didn't get to operate either.

Improvement Plan

Every exercise needs candid analysis and an Improvement Plan. We held our Hotwash and now have an approved AARIP. https://www.nf4rc.club/historical-exercises/2026-arrl-field-day-aarip/ Lots of things to grow and improve now! Team-building is hard! We have folks who just don't find this inviting -- why? We listed dozens of "improvement items" to work on in our AARIP. Need to covert more of our unlicensed volunteers into Technicians, and more of our Technicians into Generals! Our Tech and General Classes of the last year have been fruitful but more growth is still in the offing!

Improvement plans included higher speed physical networking out of the database server computer, and better pre- and intra-event network testing to catch failures earlier. Our GOTA planning needs improvement with better defined coverage and coaching. Better working together to do setup as a TEAM is also needed.

Grounding Systems

We had a lot of discussion about improving and simplifying our deployed grounding systems. We've done much better at transmission line lightning protection, but didn't have simple ways to ground our radios. We have a scheduled LabNLunch in September to build inter-connectable ground wires and easy ways to connect up. A direct result of our exercise and hotwash discussions!

It was also so encouraging to see other groups in our area having their own great Field Days!! The Gainesville Amateur Radio Society, Gilchrist ARES(R) and Columbia County group all had great fun. More Power To Ya!

North Florida Amateur Radio Club NF4RC created to support Alachua County ARES(R)	https://www.nf4rc.club/ https://groups.io/g/NF4RC/topics
Alachua EOC Radio Club NF4AC created to support Alachua County ARES(R)	Our 2nd club - call sign for EOC
Zoom Link for meetings, Tech Nites	https://us02web.zoom.us/j/89530741792

Building a "Poor-Man's" Amateur Radio Satellite Ground Station

Part VIII: Field Day Success!

Gordon Gibby KX4Z

Version 2 of the Satellite Rotator System, using 3D printed parts for the elevation rotator. Commercial simple Yagi's.

Over the last year or so I've been working and writing about creating a "Poor Man's Satellite Ground Station" -- using the least expensive techniques possible with my limited VHF/UHF experience. There have been multiple different sub-projects, some more successful or useful than others. In the end, it actually ended up being easier than I had expected, once I got everything physically solid. The 2nd edition of the elevation rotator (using 3-D printed parts) and the improved (portable) mounting base made for big increases in reliability.

For many of you with lots of satellite expertise, this is easy! For me, this was a huge accomplishment after a lot of work!

Field Day Murphy's Law

At Field Day 2026, the 70cm transmitter portion of my venerable IC-810H went on the fritz (likely an internal bad connection) -- but the 2m transmitter and 70cm receiver still worked fine. There were high passes available in a cluster early on Sunday morning. At 4AM in the morning, I completed my goal of a Field Day Satellite contact, on CW using RS-44. I even came close to an FM phone contact also over the ISS.

FM Chaos Versus Linear Peacefulness

For those who haven't listened to these satellites, there is a night-and-day difference between the FM voice satellites and the "linear" satellites. FM voice repeater satellites have exactly ONE channel and the strongest signal "wins" -- but that can and does change syllable by syllable! During Field Day, hearing even a complete transmission is extremely rare in my (very limited) experience. There are so so many transmitters vying for that single receiver channel that you hear a phrase here from one ham, and then a word there from another, and yet another word from someone different. It seems like a madhouse!

By contrast, the RS-44 linear satellite offers oodles of kHz of space, and plenty of room for multiple SSB and CW connections. My phone transmitter just doesn't sounds so strong on the downlink, but I can always hear my CW. Even though my Doppler shifting isn't perfect, it is easy to copy my own signal as soon as the satellite is above 5-8^{o} elevation. There is very little interference except for the occasional station QSY'ing across the band "finding" themselves. Been there, done that! (Now all the offsets are stored in my SATPC32 software and generally I hear my CW signal immediately.)

View of the Sky

For Field Day our team wasn't able to use our EOC, so to comply with the rules (can' use fixed location), I literally moved the entire station physically and re-connected everything. My new antenna location was primarily blocked to the SW, with a good view of the sky from NW through South. Therefore passes east of me were stronger. My antenna is only 5 feet off the ground and "lugable" but robotically controlled, so I can completely concentrate on communication.

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Simpler Setup

It all turned out to be easier than I had expected. (*In fact, I coached the Columbia County team a bit, and one of their intrepid members actually accomplished an APRS Packet satellite connection, a first for them also on Field Day!*) Getting a solid set of modest-gain yagi antennas was huge: I didn't even use circular polarization, just horizontal inexpensive Yagi's. (Circular polarization is still planned.) The homebrew rotator was solid and the homebrew controller also solid by now. Cables were sorted out and connectors solid, allowing portability.

Coax: I worked the coax down to about 40-50 feet of line to each antenna from the dual connections of the IC-820H, most of which was LMR400 level coax, with a bit of RG8X to reach the 70cm antenna. The 2m Yagi is more substantial and was actually fed with the length of ultra-flex LMR400-type coax directly, dragging the coax along the ground as the antenna rotated! I used a cut-up gallon jug to cover the mast-clamping portion of the Yaesu G-450 azimuthal rotator to avoid coax getting caught up by the exposed bolts.

No Preamps

It turned out I didn't need the preamps at all (so far). Some satellites are so strong that I even get significant S-meter readings on my ancient IC-810H sub-receiver on high passes, but generally I can "hear" the satellites and there are always signals that I can copy.

No Sequencer, Either!

Because I was able (so far) to avoid the preamps the sequencer effort isn't yet necessary. I've still got it in reserve, however.

Doppler & Antenna Control

The only program I've gotten to handle everything for my ancient IC-820H so far is SATPC32, which downloads TLE (two-line elements; Keplerian constants) for the satellite locations, and also the transponder frequencies. It is able to CAT- control Icom transceivers for Doppler shift (both T & R in duplex) over CI-V (open collector) but has limited addresses -- so I had to adjust the CI-V address of the ancient IC-820H. SATPC32's rotator control includes a number of rotators & connections that seem outdated, but it includes a DDE output that can be read by WISP-DDE (https://wisp-dde-client.software.informer.com/) which can make the USB-connection to the Arduino Nano of my homebrew dual-axis rotator controller board. With both rotator and Doppler under control, I can put my attention on just making the contact!

Simple plywood satellite ground station go-box. Ancient radio lower left; homebrew K3NG Arduino Nano rotator controller upper right. Power supplies lower right. Sequencer (upper left) not necessary without preamps. Signalink would allow digital (primarily for tropospheric FT8 at present).

Physical Go-Box

As is our practice in Alachua County ARES(R) I built a homebrew "go-box" for satellite activities that put everything in one place and made connections more "permanent."

Field Day CHAOS

Field Day was very chaotic for our team this year -- with our EOC "half-moved" we did a huge 5A setup and at times we only had 3 people working to hoist the HF beam and tower, our new 40m wire inverted v beam, wire up all the stations, try to install lightning grounds, more antennas in trees, and on and on.... So I missed several of the earlier passes doing PIO and other duties.

Satellite Sheet

One of the things that helps me out a lot with satellite passes is a sheet that I created that allows me to list pertinent details for every interesting pass (above say 10o) for the next couple days for all the satellites with which I am familiar. A portion of that sheet is reproduced here:

Continued Next Page

RS-44 (V/U) INVERT	Uplink 60KHZ LSB 145.935-145.995 CENTER 145.965 (UTC) (LOCAL)		DOWNLINK USB 435.610-435.670 CENTER 435.640 CW: 435.605 BCN		NOTES: CW WORKS FINE CANT GET SSB TO HEAR -- too weak??		
	AOS UTC	AOS LOCAL	Pass DUR	AOS AZ	MAX EL	AZ M	LOS AZ
27 Jun	1939	1539	18	9	25	85	143
	2132	1732	19	344	42	272	196
28 Jun	0811	0411	19	153	28	84	22
	1003	0603	21	203	43	266	357

Using the Pass Prediction page of the Amsat web site (https://www.amsat.org/track/) , I just fill in all the useful passes for my desired satellites. Then I number them consecutively by time so I know when to look for what. With my 70cm transmitter out-of-whack my choices were more limited -- but beginning at about 4 AM on Field Day Sunday there were several interesting passes, so a 3:30 alarm clock got me into position, even after the frustrations of the Field Day first day faded into restful sleep 3 hours before.

The Countdown!

RS-44 came up over the horizon and signals appeared -- just not CW signals!! Hooray! I heard phone going on, but my signal is pretty weak there. Finally a CW signal appears from W2RC and we make contact (I forget who called CQ) and easily exchange messages (they: 2A NLI -- turns out we worked them on multiple bands including SAT) for a completed Field Day contact! Hooray! One huge goal of FD 2026 accomplished and now I can turn attention back to HF bands as people on the East Coast begin to awaken and 40m and then 20m CW come alive!

Appreciation for AMSAT & Others

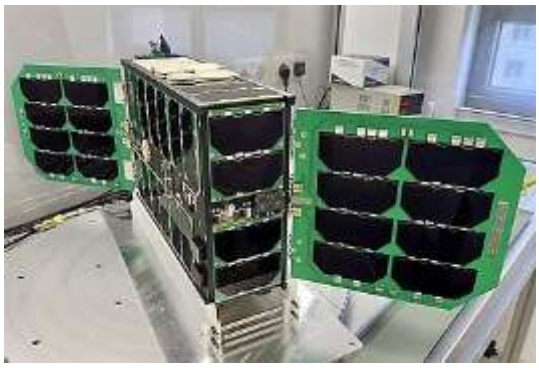
I'm very appreciative of all the incredible work that so many have done to put a dozen or more amateur radio satellites in orbit!

No	Title	URL
1	Building a "Poor-Man's" Amateur Radio Satellite Ground Station Part I: Intro.	https://arrl-nfl.org/wp-content/uploads/2025/05/01-QST-NFL-May-2025.pdf p 14
2	Work Toward Inexpensive Satellite Elevation Rotator (This is the Version 1 of the elevation system; Version 2 was a significant improvement)	https://arrl-nfl.org/wp-content/uploads/2025/04/01-QST-NFL-April-2025.pdf p 13
3	Creating Printed Circuit Board for K3NG Rotator Control	https://arrl-nfl.org/wp-content/uploads/2025/04/01-QST-NFL-April-2025.pdf p 15 Also see github repository for schematics, Gerbers, stl's etc: https://github.com/docvacuumtubes/K3NG-based-Arduino-Nano-Computer-Controllable-Rotator-Controller
4	Github with 3D printed parts for Version 2 Elevation Rotator (Looks like I may not have done a write up on this version yet)	https://github.com/docvacuumtubes/ElevationRotatorVersion2
5	APRS Packet Satellite HOWTO	In preparation I also have "how-to" sheets for Linear satellite contacts, and for FM-satellites (where I have limited experience)

Want to Get Satellite Bonus in Winter/Summer Field Day?

How To Make Contacts Through APRS-Style 1200Baud AX.25 Satellites

Gordon Gibby KX4Z



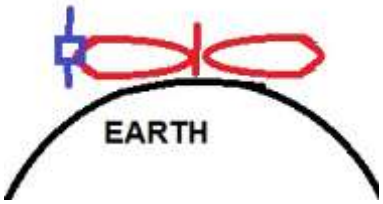
SONATE-2 satellite. Https://space.skyrocket.de/doc_sdat/sonate-2.htm Built at the University of Wurtzbburg.

Our Field Day/Winter Field Day team struggled to make satellite contacts, because the FM Voice satellites have only one channel, and the strongest signal wins -- *even syllable by syllable* -- making it extremely difficult to make a coherent contact. We have mostly given up on them as a result -- but the linear (SSB/CW) satellites are full of free and empty space, and the PACKET APRS satellites are available also. One of our members (Susan Halbert KG4VWI) gave a try at connecting to the ISS 2meter digipeater a year ago and succeeded! We just didn't know how to take advantage of that. Now we do! It isn't hard, and using these techniques, our friends in Columbia County got their Satellite Bonus on an APRS satellite during 2026 Field Day. (We chose to use linear.)

Both the ARRL and the Winter Field Day Association offer juicy rewards for your team to develop this technical capability. And your members will grow in their understanding of radio and physics and software in the process! This can be a big win-win for strengthening your group.

Digital (APRS) Satellites

There are several "digital" amateur radio satellites in orbit, using 1200baud to 9600baud digital techniques. The ISS 1200-baud digipeater has some problems recently, so I am using the 1200-baud SONATE-2 APRS digipeater. 145.825 MHz (+- Doppler) 1200 baud APRS (AX.25)



The low-angle omnidirectional radiation from a vertical VHF antenna will likely work just fine with a distant, low-elevation pass of a satellite

No need for a fancy satellite ground station! This can be done rather simply using:

1. Simplest Antenna: 1/4 wave ground-plane VHF antenna works (or an Arrow hand-held with someone pointing it)
2. Readily available mobile transceiver: Using mobile VHF transceiver with some memory channels and 30-50 watts output
3. Popular Signalink or Digirig to do packet send/receive

Even the 1/4 wave vertical above will likely work with passes that are up to a maximum elevation of 30 degrees or so. With the manually pointed yagi, you can handle anything, even to directly overhead. The biggest limitation for me is that I only handle 1200-baud. There are many other 9600 baud satellites.

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SOFTWARE Setup

1. In order to easily track satellites and know when and where they will show up, download and install GPREDICT. https://sourceforge.net/projects/gpredict/ You'll need to configure a "module" (collection of satellites) and be sure this includes SONATE-2 at a minimum. Learn how to download the nasaall.txt or another to get updated TLE (two-line-element) Keplerian constants.
2. In order to have accurate time available, we use Dimension4, http://www.thinkman.com/dimension4/download.htm but there are others. You need to have very accurate time.
3. To easily send messages to an APRS-style digipeater, download and install UISS. https://www.qsl.net/on6mu/uissdownload.htm This is the software that can send and receive the APRS packets and EASILY allow you to put your "message" in a text line and send it. This software automatically includes SOUNDMODEM. If you aren't familiar with that already, read up on it and get it working with your radio and digital interface. (One help is our document: https://www.nf4rc.club/how-to-docs/data-comms/understanding-soundcard-issues/ but there are many others on the web.) Be certain that you can transmit both "low" and "high" tones in the CALIBRATE option and hear them properly in a monitoring radio. Set your TXDELAY so you definitely are transmitting the initial portion of your packet. *For many radios this may require 500 milliseconds. The Columbia county group had trouble until they set this properly. An experienced packeteer can listen to your signal and tell you if the beginning is "clipped," requiring more delay. You should be able to communicate effectively with a ground APRS station.*

ANTENNA POINTING

Using an omnidirectional 1/4 wave vertical (NOT a collinear "high gain") you don't really worry about pointing If you are using a hand-held Yagi, then use the little control on the right hand side of the GPREDICT to bring up the drop-down menu and select ROTATOR so you can pick you satellite, and TRACK it -- then you will get moment-by-moment azimuth and elevation coordinates to guide you in where to point

Using the Pass Prediction option on amsat.org, https://www.amsat.org/track/index.php plan in advance at what azimuth the satellite will rise above the horizon, where it will reach a maximum elevation, and where it will "set". Practice these motions before each pass.

UNDERSTANDING DOPPLER CORRECTION

Packet type satellites are store-and-forward systems that operate on one frequency alternately transmitting and receiving. They are not cross band repeaters; this makes them different and somewhat easier to use than the voice FM satellite repeaters.

As the satellite RISES above the horizon it will be coming toward you. Signals from the satellite will appear at a higher than expected frequency -- by perhaps as much as 5 to 8 kHz. Your own transmitter will need to be the same amount LOWER in frequency so that your signal will arrive at the right frequency at the approaching satellite.

Those offsets will decrease as the satellite gets nearer. Then, as the satellite begins to move AWAY, the frequency offsets will flip. You will receive the satellite at a LOWER frequency, and will need to transmit at a HIGHER frequency.

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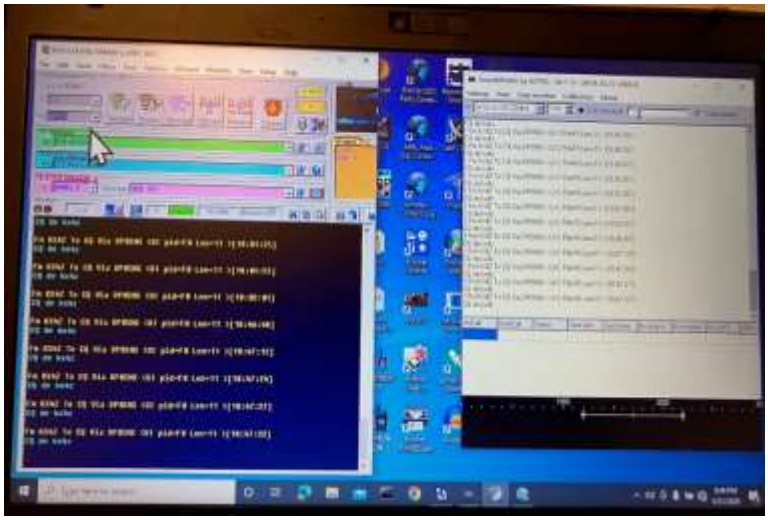
Pick about 5 total "pairs" that fit and memorize them for each satellite, so you have an "approach far, approach near, zero, retreat near, retreat far" frequencies memorized. Then as your satellite moves through the arc, just progressively run through the memorized channels. Of course, there are fancier ways to address Doppler correction, but this simple technique works well for FM 2 meter satellites.

APRS COMMUNICATIONS

Potentially using a second computer, the program UISS is used to provide APRS-style communications. It will automatically bring up SOUNDMODEM to provide the modem function.



SOUNDMODEM

Within DEVICES be sure that the CODEC from the Signalink is selected for both input and output within MODEM set the TXDelay to 500-600 milliseconds

Operating UISS & Making A Contact

- Check to be sure you are using the desired amateur radio callsign for your station.
- Set the target to be CQ or QST as desired
- Set the digipeater to be the desired station-- for SONATE-2 the digipeater's call sign is DP0SNZ. (That is delta-pappa-zero not delta-pappa-oscar.)
- Verify that the squelch on your is at minimum (fully counter clockwise) and that the audio is loud enough to show on the waterfall of SOUNDMODEM.
- Verify that the DCD Threshold of Soundmodem is set way to the LEFT. If you set it to the right, you won't be able to transmit.
- Test transmission by clicking on MESSAGE or using a drop down to send the header-only.
- Start by setting your system to transmit to "CQ" via <digipeater callsign of your selected satellite> and make your "text be" CQ DE <your callsign> <your locator or Field Day Exchange>
- Watch for returning packets from the satellite Digipeater with its callsign followed by an asterisk (*) indicating your packet got digipeated. This is crucial -- and once achieved, you are now able to make a contact! (Because none of the ground stations can hear each other, the AX.25 listen-before-transmit is fairly useless and collisions between ground stations definitely will occur. That means you won't always be successful.)
- You can also answer another station calling CQ by writing a text to answer them in the usual Field Day or other method. Change the TEXT for each back and forth communication! Easy to make a contact!

I wouldn't make any argument that this satellite would be part of my emergency comms plan -- but the process of your group learning how make APRS communications through it will very likely grow the technical understanding of your group! And you can get use those skills to your advantage in Winter Field Day or ARRL Field Day next year! Good luck to your group!

Playground Amateur Radio Club! NOARC

DJ Stewart KI4ZER Assistant Section Manager, NFL, ARRL

In the Sunny Heat of a warm Florida June, all the beans counted and the buckets of RF proved fruitful for the North Okaloosa Amateur Radio Club and for the Playground Amateur Radio Club! NOARC operating from Fred Gannon in Niceville Florida and PARC operating from Liza Jackson Park in Fort Walton Beach Florida! Why the post in July? Because Last month we sent out a recruit new members version of our input to the NFL-ARRL QST!

Let's talk about July! What a great month for Ham Radio and what wonderful people we came across in the journey! Not only on the bands, but in person, at events, and even at the local market! True story!

So what's new? Well everything from an active AllStar Link Node being put up to cleaning up and getting Club shacks in order to allow room for improvements! NOARC pulled off a clean sweep with its Team taking care of business beating the heat (kinda). It was still hot, early, in the summer morning but not as hot as it gets and NOARC braved the temps to literally empty the shack in preparation for a new design, layout , and operational capability! NOARC is up to some great things and YOU need to stop in, check them out, and join in on the fun!

PARC, no stranger to doing projects is the redoing Station 1 of 4! A new desk, cable management, systems organization, and shack maintenance are underway to advance the Organization for generations to come! But wait, we mentioned AllStar right? Sure did! AllStar Node 687390 will get you to W4ZBB 146.790 in Fort Walton Beach Florida from anywhere on the planet! This capability takes licensed Hams from their computers, tablets, phones, and smart capable devices to every corner of the world! Tune in, make friends, and communicate! Don't know how to use AllStar? Don't fret, easy instructions are at the end of this article!

So much more than shack clean-outs are concurring! Like what DJ?! Glad you asked! Regular gatherings, antenna projects, experimentation, 3D printing, General Licensing Classes, test sessions, crazy experiments, public events with the community showcasing Ham Radio, and DX Contesting! You can literally feel the RF [energy] radiate (or is that just the sun beating down on our necks?). Speaking of those things, we took time on a Monday to talk about the Panama City Amateur Radio Club's "Beginners Academy". Each Monday Night PCARC gathers ONLINE to go over the next discuss, mentor, Elmer, and learn from each other! Join in from their website at: W4RYZ.Org

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But aren't there things coming up? We thought that hams took the summer to slow down and enjoy the manufactured air? Sure, who hasn't liked HVAC since 1902 (look it up)?

Listen, HVAC didn't stop Marconi so don't let it stop you! Here's a short list of greatness:

Each Sunday, PARC Sunday Pile-Up at 3 pm 17 First St SE FWB FL! Pile on in!

Aug 6th 730 pm, PARC Tech Night, same address as above!
Aug 13th 700 pm, NOARC Monthly Meeting, 4565 Live Oak Church Road, Crestview, FL!
Aug 20th 730 pm, PARC Monthly Meeting same location as listed for PARC!
Aug 27th 700 pm, NOARC Tech Night, same address listed for Crestview!

Well that's all well and fine but what events are coming up?! Do you like Club sales? PARC is cleaning out its drawers, cabinets, closets, and treasure chests! Come on out to the Playground Amateur Radio Club Saturday August 15th 2026 from Noon to Three and take your pickens of the goodies that are sure to inspire, aide, and motivate you for that next adventure in Ham Radio!

But hang on!! Get your tables, get your tables here! The North Okaloosa Amateur Radio Club HAMFEST in Crestview Florida at 1446 Commerce Drive is Oct 10th 2026! Set up day is Friday October 9th with NO SHOW and the one and only main show is October 10th 2026 from 800 am to 100 pm! SPECIAL GUESTS! NOARC WELCOMES THE RV RADIO NETWORK! No bull! Come meet them, shop, swap, sell, trade, and barter your weekend away and one of the most anticipated shows of the year this coming October! For more details, go to: W4AAZ.Org See you all there and we cannot wait to get our hands on what makes the Grey Line Propagate! RF in a can!

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OK one last hook on a short article, Earl [K4ZSW] does great work making sure this product is ready and sent out! Give Earl a pat on the back! Without volunteers like Earl, we are only operating line-of-sight Thank you Earl! Come on up to Okaloosa County and meet us! If we are ever in Gainesville, you bet your bottom dollar will signal hunt for you! - Thanks for the kind words. Quality articles for input are a great help.

Team,

We are proud to announce that you can now connect to 146.79 W4ZBB from your devices via the Allstar Node! Please read the whole email before you click!!

Follow the directions from N2VLV and KI4ZER! You need to register for an Allstar Link account with an official copy of your FCC Liscense. Register and follow the instructions: https://www.allstarlink.org/

TO GET AN OFFICIAL COPY OF YOUR LISCENSE: You must login w FRN.

instructions:
https://fccprod.servicenowservices.com/wireless?id=kb_article_view_public&sysparm_article=KB0017039

ACTUAL LINK TO DOWNLOAD ELECTRONIC AUTHORIZATIONS -Be Patient, its the FCC Website:
https://wireless2.fcc.gov/UlsEntry/licManager/narli/printlicenses.jsp?action=actionPrint

1st: N2VLV put together a great presentation outlining multiple paths to success! https://jchonig.github.io/pres-allstar/hotspot.html

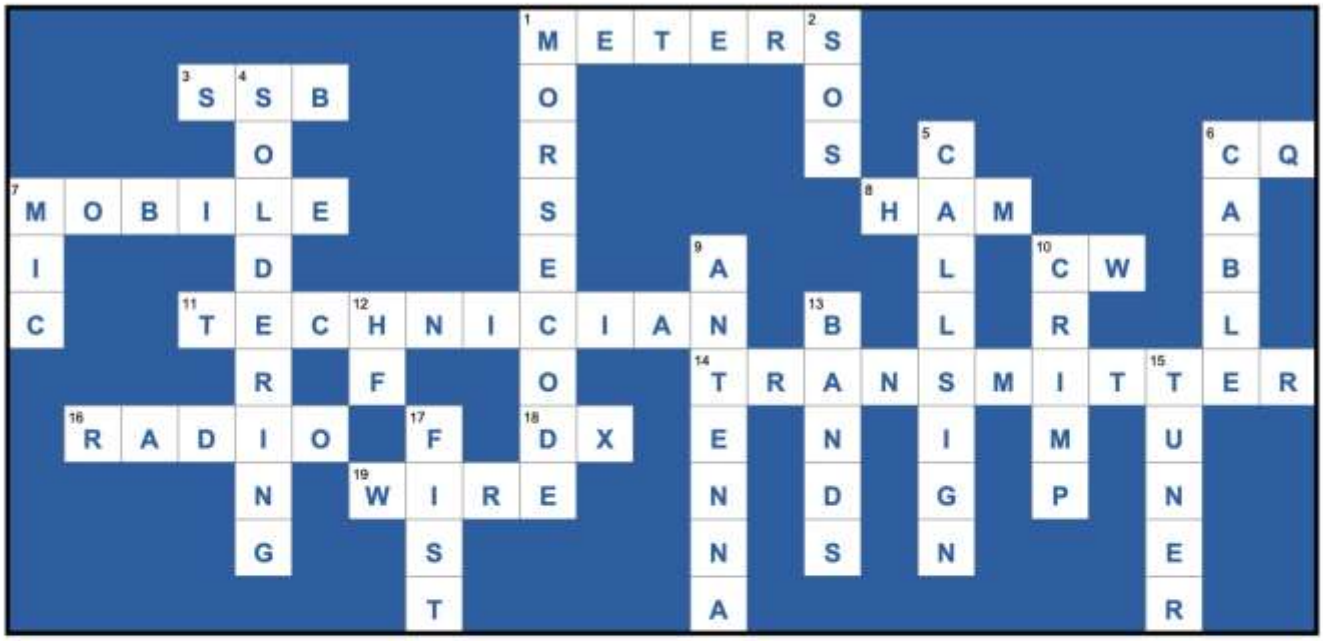
2nd: KI4ZER assisted with some instructions identified via other web resources with step by step instructions!

Download DVSwitch Mobile App for Android or ios!

Directions for phones:
https://msuarc.egr.msu.edu/how-to-use-allstar-instead-of-echolink-on-phones/

Node: 687390
Playground Amateur Radio Club—Fort Walton Beach Florida W4ZBB.ORG

Ham Radio Crossword - Answer Key



ACROSS

1. Wavelength unit for ham bands
3. Single _____ Band voice mode
6. General call to any station
7. Operating from a vehicle
8. Nickname for amateur radio operator
10. Continuous Wave - Morse on air
11. Entry-level ham license
14. Sends RF signals out
16. Ham _____ - the hobby itself
18. Long-distance contact
19. Simple dipole material

DOWN

1. Dit-dah communication system
2. International distress signal
4. Joining wires with a hot iron
5. Your unique radio identifier
6. Coaxial feedline
7. You talk into this
9. Radiates your signal into the air
10. PL-259 connector attachment method
12. High Frequency (3-30 MHz)
13. Frequency ranges allocated to hams
15. Matches antenna to transceiver
17. Operator's unique keying style

MERT

Marion County Sheriff's Office
Division of Emergency Management

COMMUNICATIONS UPDATE

August 2026

MERT's primary role is to support all open Evacuation Shelters throughout Marion County (FL) during declared Emergency events. We also support the Emergency Operations Center Incident Commander & staff, all cities in the county and other EMCOMM groups (CERT, HEC, ARES & MBA) with voice, image & data communications locally, statewide and across the United States.

"Call MERT… When all else fails!"

Next Bimonthly Meeting

Saturday, Sept. 19th, 10:00 am at the EOC

All are Welcomed!

Meetings conducted in Jan, March, May, July, Sept. and Nov.

Coordinator's Corner

Harlan Cook (KN4VRM) MERT Coordinator

Every month, MERT demonstrates that readiness isn't built during emergencies — it's built in the steady, disciplined actions we take together long before those events arrive. I call this the… "Little steps to BIG steps."... process.

The steady consistency of our volunteers continues to be one of MERT's greatest strengths. Whether it's joining our weekly training nets, developing Winlink digital skills, supporting shelter operations, or using a SHREK kit for practice, these habits form the backbone of our reliability.

Readiness also requires us to adapt and evolve. Over the past two months, MERT has navigated several important changes — new uniforms, EOC access changes, 48-hour annual participation obligation and the implementation of annual medical and background checks. These revisions reflect the evolving standards of the emergency management and security environment, both locally and nationally. They also refine the responsibilities that come with volunteering at the Division of Emergency Management. While change is never simple, I'm very proud each of you have met each requirement with professionalism and a shared commitment to maintaining the highest level of operational integrity and readiness.

This month, that reliability is strengthened even further through the steadfast support of the MCSO Division of Emergency Management. Director Bowlin and his entire staff have again demonstrated their deep commitment to our mission with the purchase of two new repeaters (KG4NXO 70 cm D-Star and the KJ4CLL open FM unit at the Baseline Transfer

station), replacing units that have served the county for more than 15-years. In addition, we received replacements for 12 SHREK kit power supplies. The new solid-state switching supplies replace units also 15-years old. As we know, these are all critical components in our long-term modernization effort (which still has more to do), and with their installation, our network reaches a new benchmark in operational dependability.

"You do not find the happy life. You make it!" — Camilla Eyring Kimbal

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This investment underscores a shared belief: readiness grows when commitment is shared. Our volunteers bring consistency, awesome skills, and unwavering dedication. Our Div. of Emergency Management leadership brings trust and the resources that allow us to perform at our best. Together, we continue building a communications capability that our community can count on — not just in moments of crisis, but every day.

Thank you for remembering the spirit of our intentions is shown in the results of our actions. Your presence matters. Your skills matter. Your voice matters. Please answer the call when it comes.
With sincere appreciation,

Harlan Cook KN4VRM MERT Coordinator

Deputy Coordinator Update - MERT Equipment Procedures

MERT has always encouraged members to check-out items in its inventory for use at home (or elsewhere) for purposes such as familiarization, training, troubleshooting, and other related activities. We are fortunate that the MCSO Division of Emergency Management continues to support this practice encouraging members enhanced skills.

Ray Woody (WB6FKJ) Deputy Coordinator

As stewards of MCSO property, we must follow reasonable procedures to make sure we can account for the whereabouts of all property at all times. This is also important in times of an unanticipated activation which may necessitate the immediate return of certain items.

As most members know, MERT already has a process in place for this purpose. It involves completing a "Material Check Out" form with all of the requested information (borrower's name, ID, and phone number, date and time removed, description of equipment, MERT Tag Number if applicable, Serial number if applicable). For verification purposes, this form is also signed and dated by a Coordinator, Deputy Coordinator, or any MERT Manager / Trustee / Liaison. It is then placed behind the first tabbed section of the "Equipment Sign Out Book", which resides on the radio room bookcase shelf adjacent to the SHREK Kit notebooks.

When the item is later returned, the bottom portion of the check-out form becomes the check-in form, to be completed by the borrower. For verification that the item has been returned, the check-in portion is also signed and dated by a fellow MERT member. It is
placed back into the "Equipment Sign Out Book" in the second tabbed section.

This system generally works quite well for us, but it's easy to fall out of practice if we aren't careful. We need to make a collective effort to stick to it. A key practice that will help in this regard is to "avoid verbal instructions". Let's make sure we always complete the form at the time of check-out, and again at the time of check-in, with verification signature. Otherwise, with everything we have going on, it is too easy to forget, and things end up slipping through the proverbial crack.

To assist with and encourage this consistent practice, the following minor changes are being made:

- ⇒ The current Equipment Sign Out binder will change to a larger bright yellow binder making it readily visible in the radio room.ase.
- ⇒ The current tabs in the notebook are not labeled. New divider tabs will be used in the new binder and labeled as follows: "CHECK-OUT", "CHECK-IN", and "FORMS".
- ⇒ The prior "Material Check Out" form has been updated to include a section at the bottom for describing any "Malfunctions – Missing Items – Other Issues". The new updated form is titled "MERT Equipment Check-Out & Check-In Form".

We encourage members to keep some copies of the "MERT Equipment Check-Out & Check-In" form with them. However, there will always be many blank forms in the binder.

"The spirit of our intentions is shown in the results of our actions" *– Harlan Cook*

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As has been our practice, there is no specific time limit for returning borrowed items. Return the item when you are done using it for the purpose for which it was checked-out. If an activation occurs which requires early return of specific equipment, we will know whom to contact.

Harlan and I thank all members for their diligence and support on this important matter.

Ray Woody WB6FKJ
MERT Deputy Coordinator

SHREK Safety and Power Supply Upgrades

Last month, MERT volunteers undertook two major upgrades which will enhance our future Shelter support efforts for years to come.

⇒ New First Aid Travel Kits - To raise the focus on safety and in helping support all volunteers should the situation arise, 16 Basic First Aid Travel Kits were built for the SHREK kits, HF Go Kit and the NVIS Antenna Go Box. These packs include basic first aid bandages, gauze, a roll of bandage tape and two packs of triple antibiotic ointment. Let's thank Safety Manager Nick Kiddey for suggesting these upgrades! All units were installed during the July 22nd meeting.

(L) The new First Aid Travel Kits and the very visible location in each unit – see lower left pocket of lid.

⇒ New Power Supplies - I'm also tickled sharing the new solid-state Switching Power supplies have been delivered. The new units are much lighter and have the capacity to power two radios should emergency situations arise. They also include both voltage and amperage meters and are much less weight over the original power supplies.

The new Samlex SEC-1235M Power Supplies are the same power capacity but **11-pounds lighter** than the 15-year-old Astron power units.

Strengthening Safety Across MERT Operations

As part of a broader effort in revitalizing MERT's awareness and focus on safe operations, we have begun implementing a series of practical upgrades designed to reduce risk, modernize our equipment, and reinforce a culture where safety is not an afterthought but a core operational value. These improvements span both our primary facilities (radio room and repeater sites) along with the SHREK units we take to the shelters we support, ensuring that volunteers have reliable, protected, and hazard-resistant power systems during activations.

The new SHREK power supplies have recessed DC power connectors reducing possible short circuits.

One of the most visible enhancements is the introduction of new power supplies equipped with protected DC outlets. These units provide cleaner, safer power for radios and digital equipment, significantly reducing the chance of accidental shorts, exposed contacts and cable strain. Their ruggedized design also makes them better suited for deployment in shelters, where conditions can be unpredictable and equipment is often handled by multiple operators.

These new supplies are part of a modernization plan that ensures MERT's technical backbone remains dependable, resilient, and aligned with best practices in emergency communications.

"Wherever you turn, you can find someone who needs you. Even if it is a little thing, do something for which there is no pay but the privilege of doing it. Remember, you don't live in the world all of your own."— Albert Schweitzer

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Improving Legacy Equipment with Practical Safety Additions

Safety improvements aren't limited to new hardware. In the radio room, Safety Manager Nick Kiddey has taken the initiative to enhance our existing power supplies by installing protective boots on exposed DC power posts. This simple but highly effective upgrade shields connectors from accidental contact and adds a layer of protection for volunteers working in tight spaces around energized equipment.

Nick's work demonstrates the spirit of continuous improvement that keeps MERT strong—small changes that collectively make a big ifference in operational safety.

These upgrades reflect a broader commitment: ensuring that every volunteer, whether in the radio room or deployed to a shelter, operates in an environment where risks are minimized and equipment is designed with protection in mind.

We thank Director Preston Bowlin and his entire staff for their support in revitalizing our hardware systems while also improving the operational safety for all volunteers.

One Member's Journey to Improved Capabilities

Royce Hagerman's amateur radio facility is getting major revisions to his tower, antenna and shack. We look forward to learning more in the future.

Member Royce Hagerman (KD7SNN) is undertaking a major upgrade of his radio system and sent the photos below on his progress. Wow! When asked why?... he shares "To have a great comm center that I can use to talk everywhere I want to. To have a secure and bullet proof set up. Or…. cause I can?" Royce's ever present funny bone comes through again. So far, the results are really impressive. The last photo shows his impressive grounding and surge protection system. More soon on his work and results. Very impressive results so far Royce!

New Uniforms for MERT

With the changes to the MCSO volunteer program, MERT members received new uniform shirts in celebrating their membership and support to the Div. of Emergency Management.

Harlan and Ray present Nick Kiddey W4NFK his new uniform.

Cindy Sheffield K9LRX receives her new uniform.

"You do not find the happy life. You make it!" — Camilla Eyring Kim-

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MERT Advisor Logan Stamp (Div. of Emergency Management) presents Jeanne Herman KC1CYE her new uniform.

MCSO Volunteer Coordinator Sarah presents Kim Shulby KM4JMZ her new uniform.

Advisor Logan Stamp presents Fred Herman N1HFH his new uniform.

Ray Sherwood WA9MID receives his new uniform.

(Left) Royce Hagerman KD7SNN receives his new uniform from Logan Stamp, Emergency Management Coordinator with the Division of Emergency Management.

Member Recognitions

Nick Kiddey W4NFK receives his Certificate recognizing his appointment as MERT's new Safety Safety Manager. Nick has already made several positive contributions to MERT's safety program. Thank You, Nick!

MERT welcomes new member Greg Wilemon AE4AE who receives his Level 1 ID badge at the July 1st meeting.

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(Left) MCSO Volunteer Coordinator Sarah Jenkins presents Jeanne & Fred Herman their Level 2 ID badges at the July 1st MERT meeting. Congratulations!

Marion County AUXCOM/EMCOMM Meeting Overview

Every other month, members of MERT, the Hospital Emergency Communication Team, ARES, MBA Disaster Relief, CERT, amateur radio operators, and invited guests come together to share news, updates, and lessons learned from their respective organizations. These meetings provide timely, relevant information on recent activities, upcoming events, and operational priorities across the county.

Beyond simple information-sharing, the AUXCOMM/EMCOMM meeting plays a critical role in strengthening Marion County's emergency communications capabilities. By bringing all support organizations into the same room, the meeting fosters cooperation, builds relationships, and encourages a shared understanding of each group's capabilities and needs. This collaboration directly supports inter-operability—ensuring that when an incident occurs, our teams can communicate effectively, coordinate resources, and operate as a unified response community.

The meeting also serves as a platform for expanded training. Participants gain exposure to new technologies, best practices, and real-world experiences from partner organizations. This cross-training helps volunteers broaden their skill sets, helps in being mission-ready, and better understand how their role fits into the larger emergency management framework.

In short, the AUXCOMM/EMCOMM meeting is more than a gathering—it is an essential part of Marion County's preparedness cycle. It strengthens partnerships, enhances technical readiness, and reinforces the shared commitment we all have to serving our community during times of need.

As one of Marion County's core emergency communication partners, MERT plays a central role in shaping the direction and effectiveness of these AUXCOMM/EMCOMM meetings. By consistently sharing technical expertise, operational insights, and lessons learned from deployments and exercises, MERT helps elevate the overall capability of every organization in the County. Our commitment to preparedness, training, and interagency cooperation reinforces the county's resilience and ensures that when communication matters most, Marion County's emergency communications volunteer teams are ready,

Dave Welker W2SRP HEC Coordinator
shares an update on the hospital team activities
Including primary and simplex frequencies used.

Hayden Kaufman N2HAY ARES Coordinator
presents a deck on the benefits of the cooperation
by all Marion County AUXCOMM/EMCOMM teams.

"Your talent determines what you can do. Your motivation determines how much you're willing to do. Your attitude determines how well you do it" — *Lou Holtz*

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More photographs from the AUXCOMM/EMCOMM

Mark Weible, MBA Disaster Coordinator details who and what the Disaster Relief team does in Marion County should they be needed after a disaster.

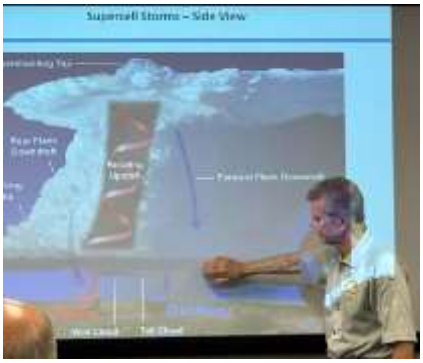
Members from different organizations review a new Raspberry Pi Controller Hayden Kaufman created in use as a Winlink Gateway.

All amateur radio operators and the public are welcomed to attend.

Weekly July Meeting Update

Wow! July was packed with many discussions and presentations ranging from learning about Winlink Gateways, Digipeaters and SSID's; where are the Marion County Gateways and Digipeaters…. to Deputy Coordinators Ray Woody's presentation on "What I did on my vacation."

While this time of year is always focused on our key responsibility of renewing our skills and knowledge of responding to any emergency activations and the procedures we follow consistent with ICS and NIMS training supporting the Division of Emergency Management, we've also had some fun discussing new technologies like Meshtastic and focusing on improving our safety awareness. I am so very proud of all our members and thank them for the time and support they've provided! YOU are the BEST!!



(Left) Deputy Coordinator Ray Woody (WB6FKJ) shares his experiences participating in a 10-day "Storm Chaser" college course hosted by the College of DuPage. His "class" travelled over 4,400 miles researching live weather events in the north U.S. plains. On top of that, he was required to submit a 10-page report. As we know Ray would, he received a A+ grade!

Division of Emergency Management Director Preston Bowlin announcing his retirement effective September 4th, 2026.
MERT will have more on this significant event in the September "Communications Update".

"The most worth-while thing is to try to put happiness into the lives of others. - Robert Baden-Powell

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THIS IS YOUR LUCKY DAY, IF

CQ, CQ….. Calling anyone, anywhere… if you own an older Kenwood Handi-talkie portable radio.

MERT received a Kenwood Charger and several battery-packs and is looking to give them to any radio operator having a radio they fit. We believe these radios are compatible: TH-22A, TH-22E, TH-42A, TH-42E, TH-79A, TH-79E, TH-79AKSS

Kenwood KSC-14 Rapid Charger with five PB-34 and PB-34xh batteries.

Please email MERT.AUXCOMM@gmail.com if you can use them!

MERT has a new email - Please note it for the future - **MERT.AUXCOMM@gmail.com**

All amateur radio operators and the general public are welcomed to attend all MERT meetings every Wednesday from 9:00 am till Noon at the
Emergency Operations Center (EOC)
692 NW 30th Ave., Ocala, FL.

"If you think you are too small to make a difference, try sleeping with a mosquito" — Dalai Lama

FCC Testing Information

Daytona Beach Amateur Radio Assn (DBARA)
- Monthly, third Monday, 5:30 PM, prior to meeting
- Lehman Building, Embry-Riddle Aeronautical University
- Registration Required
- Info: https://dbara.org/testing/

Hog County Amateur Radio Association, Bushnell FL
- First Saturday, 11:00 AM
- Cross Connection Church, 1451 West County Road 476, Bushnell, FL 33513
- Info: sumterVE@gmail.com

Lake ARA, Leesburg FL
- Monthly on the 3rd Saturday, prior to meeting. (Except December)
- 8:00 AM
- LARA Clubhouse (11146 Springdale Ave, Leesburg – off of CR 473)
- For more information and registration, contact: Dave Templeton N4NG, 386-804-2806 n4ng@icloud.com in advance of the meeting.

Lake Monroe ARS FCC Testing, Sanford FL (LMARS)
- Third Saturday of every month
- Seminole County Sheriff's Office, 100 Eslinger Way, 1st Floor, Sanford, FL
- Registration Required
- For more information and registration, contact Bob Cumming, W2BZY, 407-333-0690 or w2bzy@cfl.rr.com

Milton Amateur Radio Club, Milton FL
- Check date at miltonarc.org
- Walk-in
- Bagdad United Methodist Church
- Info: Chuck, N4QEP, merlinman3@yahoo.com

Orlando Amateur Radio Club
- First Wednesday
- 5:30 PM, Walk-ins allowed
- ARRL/VEC
- William Beardall Senior Center 800 S Delaney Ave Orlando FL 32801.
- Info: testing@OARC.org Robert Cumming, 407-333-0690

Santa Rosa County FL ARES® Testing (Walk-in)
- Information and dates can be found at srcares.org

Testing information is subject to change. Check with the testing venue to confirm the testing session and requirements.

Seminole County
- Every month on the third Saturday
- 9:15 AM
- Seminole County Sheriff's Office off SR 17-92, on 100 Eslinger Way in Sanford, FL
- Info: Bob Cumming, W2BZY, w2bzy@cfl.rr.com

Silver Springs Radio Club, Ocala FL (SSRC)
- Go to http://k4gso.us/class/ to signup for classes
- Go to http://k4gso.us/test-signup/ for testing. Testing is held on the 2nd Tuesday of odd months at 7 PM.
- Note http://k4gso.us/ncvec605/ is requested to be filled out before you show for testing. It is best to download the form and open it as a PDF so you can fill in the blanks.

Tallahassee Amateur Radio Society (TARS)
The Tallahassee Amateur Radio Society (TARS) has begun limited License testing. Please refer to the following for the updated testing dates and requirements for individuals wishing to take exams. https://www.k4tlh.org/getting-started/license-testing

West Volusia Amateur Radio Society
- Second Saturday of each odd numbered month
- 6:00 AM
- St. Johns Lodge #37, 2557 N. Spring Garden Ave, Deland FL
- Info: https://westvars.org/testing

Gainesville Amateur Radio Society
- 1st Saturday of even numbered months
- Tech day two weeks after testing
- https://gars.club/Testing.html

Hernando County Amateur Radio Association (HCARA)
2nd Thursday of each month at 6:00 PM
For details and to register—http://www.hamstudy.org and go to **Find A Session**
Exam cost is free. FCC charges do apply

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