



QST NFL



Sharing information of interest to Radio Amateurs in North Florida

Volume 9 Issue 11

www.arri-nfl.org

November 2022

From the Shack of the Section Manager

Scott Roberts, KK4ECR (kk4ecr@gmail.com)

It is truly an honor to be YOUR Section Manager. Every month I have the privilege of speaking with our members and learning the things that concern them in our section.

One of the topics that has come up more than once is that many of the non-ARES™ clubs feel left out. My goal is to change that perception. We are ALL Amateur Radio operators...we should ALL be members of ARRL (more on that in another article). Being a member of an ARES™ group does not make any of us a better person than someone who is a member of a local club – we are all a TEAM!

I am available to speak at all ARES™ and Club groups equally. We all make up the Amateur Radio community and are all equally important.

Okay, enough on that...

You will begin to see the logo/banner on anything that comes out from our section. I am in the process of getting some items to help promote the Northern Florida Section to all hams in our section.



**Northern Florida
Section**

<http://www.arri-nfl.org>

Come join the FUN!!!

In November, I will be speaking at two of our awesome clubs:

- 2 – Orlando Amateur Radio Club (in person)
- 15 – Silver Springs Radio Club (joining by Zoom)

If you have an upcoming meeting at which you would like me to speak, please let me know. I will do my best to attend in person or by Zoom for as many as I can. If I cannot make it, I will try to get one of the Assistant Section

Scott Roberts, KK4ECR

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904-759-7812 — Cell

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5481 — Hamshack Hotline



Managers or our Section Emergency Coordinator to attend. I hope everyone has a great month!

Thank you for allowing me to be YOUR Section Manager.

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If you have input for QST NFL, or would like to be added to (or removed from) the reminder list, contact Marty Brown, N4GL, Editor, n4gl.marty@gmail.com

All submissions are subject to editing prior to publication.

From the Section Emergency Coordinator

Arc Thames, W4CPD

As we head into the holidays, I wanted to extend a sincere thank you to all the ARES volunteers and leadership throughout the section. The level of professionalism you exhibit in working with your served agencies and the work you do to support your communities is greatly appreciated.



It's important to remember that those relationships with our served agencies are critical to maintain. Our team members volunteer to help provide communications services to those agencies at the request of the agency. Please remember that it's not about me, my club, your club, ARES, RACES, or AUXCOMM. We do what we do to support those served agencies and the citizens of our communities. It's critical to remember that, in times of emergency, we report to that agency we are serving. Our titles with ARES or any other volunteer organizations don't matter when we walk into the door of a served agency or volunteer to deploy with a team. Always have a servant's heart and know what you are doing has a huge impact on your community.

If you aren't already volunteering, our local county ARES teams need you! If you're interested in learning more about ARES in your county, visit the [County Emergency Coordinator](#) list on the section website to find the contact information for your county's Emergency Coordinator. Many of our counties offer monthly or quarterly training so it's a great opportunity to learn.

Section ARES Report

In September our section reported 3,646 hours of volunteer time to various ARES duties within our section, much of this resulting from Hurricane Ian. Thanks to the counties and EC/AEC's for reporting their time. The information provided by our team is consolidated and then forwarded to the ARRL.

	Number	Person-Hrs
Exercises this month:	9	56.00
Training events this month:	26	320.00
Public service events this month:	9	136.00
Community service events this month:	2	102.00
Emergency events this month:	39	2,034.00
SKYWARN events this month:	1	100.00
Meetings this month:	27	535.00
Unclassified events this month:	83	363.00

Call signs of DEC's/EC's reporting:


W4CPD K4SOP KK4ECR KC4NVU KN4PFZ WE4MJ W4CJB K4BJS KB4HAH W4KKJ AI4NF KA3OGG KA4LEC KO4KUS

Unfortunately, I received no feedback last month regarding the continuation of the monthly radiogram challenge so we will continue to suspend it at this time and kick it off again next year. It was noted to me by one of the Section Traffic Managers that overall traffic counts were down greatly as a result of not having the challenge. I do encourage you to continue practicing your traffic handling skills. The holidays are a great time to send a radiogram to friends or loved ones and let our traffic system get exercised.


If you have a local club newsletter, website, or social media presence, please share the monthly challenge out to help us spread the word. Full details can be found on our section website, arri-nfl.org.

A replacement date has not yet been set for the statewide communications exercise but please do continue to hold on to those inject packets for those teams that had signed up.

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SILVER SPRINGS RADIO CLUB
2022 HAMFEST
 Saturday, December 3, 2022
FIRST CHRISTIAN CHURCH
 1908 EAST FORT KING STREET, OCALA, FL 34471
 DOORS OPEN AT 7:30 AM



Grand prize and door prizes
 Grand prize tickets separate from door prize tickets. Admission ticket stub good for door prizes only. Both tickets available at the door only! Additional Grand Prize tickets \$5 each. No online sales.

VE Testing
 One session only at 10:00 AM
 Bring two forms of ID & FRN + FCC Reference copy, if upgrading
 Test Fee \$15 cash.
 Test slots are limited.
 Pre-register at K4GSO.US


Active military and first responders in uniform and kids under 12 free.

Must buy tickets for Grand Prize.
 Additional Grand Prize tickets \$5 each.

Ham Food and drinks available for purchase from Scout Troop 439

General Admission	\$10
Tailgate – Car & Driver	\$20
Each Extra Tailgate Space	\$10
Additional Person	\$10

Grand Prize


 YAESU FTM-300DR

Commercial Vendors
 Tower Electronics
 Signman Of Baton Rouge
 Hamworld
 J T Communications
 Paradan Radio
 Nitelife Electronics
 And others

Flea Market & Tailgate
 Inside flea-market tables in Fellowship Hall

Separate Tailgate area on "first-come first-parked basis."
 No advance reservations.
 (Bring your own tables and chairs)

TALK-IN ON K4GSO
 VHF 146.610 PL-123

CHECK BACK FOR MORE INFORMATION ON THE SSRC WEBSITE:
WWW.K4GSO.US/HAMFEST

SPECIAL NOTE:

By attending the SSRC Hamfest, you are acknowledging that an inherent risk of exposure to COVID-19 exists in any public place where people are present. You assume all risks related to exposure to COVID-19 and agree not to hold the Silver Springs Radio Club, First Christian Church, or any of their directors, officers, employees, vendors or volunteers liable for any illness or injury.



Stone Mountain Hamfest, November 5-6, 2022

Mickey Baker, N4MB, ARRL Southeastern Division Director, n4mb@arrl.org

The first weekend in November brings one of the largest Hamfests in Georgia!

Location and hours

- Gwinnett County Fairgrounds
2405 Sugarloaf Parkway
Lawrenceville, GA 30045
- Sat: 8 a.m. - 4 p.m.
- Sun: 8 a.m. - 2 p.m.



The ARRL Forum is 9AM on Saturday in the Big Forum Room.

I hope to see you there - please come by the booth and introduce yourself!

Successful RV Campground HF Antenna

by Gordon Gibby KX4Z

Nancy (KM4YGI) and I try to go camping as much as our busy semi-retirement will let us -- and I always try to carry along some ham radio. Usually the IC-7300 go-box. I've had many problems trying to get an HF antenna that works in the tight confines of a single RV trailer campground spot -- generally limited to little more than 20 feet wide and a little longer than a travel trailer and a pickup truck.

The 30-foot fiberglass telescoping mast on the travel trailer allows some options, but I've had real problems with RFI in the shack disabling USB-ports of the data computer, and difficult matches on some bands that escaped even the LDG-600 auto-tuner.

I finally gave up on trying 80 meters and looked into end-fed non-resonant options. Non-resonant wire lengths are suggested to avoid peaking impedances either way. I settled on 35.5 feet. Without a 9:1 unun, I used one of my 4:1 Guanella homebrew efforts (FT-240-41 cores, 10 turns on each). On others' property one doesn't dare pound in a 9 foot ground rod for fear of hitting a utility! So a short "dog leash" spiral screw has to suffice.

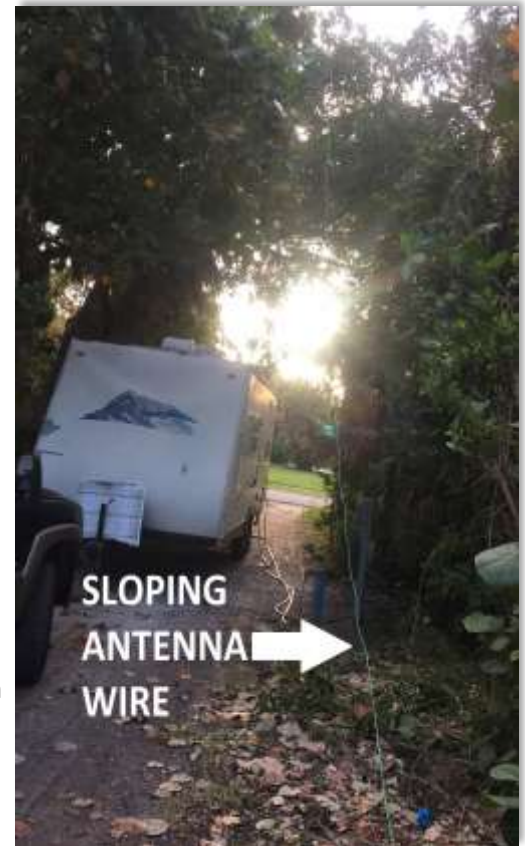


At Fort De Soto Park, Pinellas County, near St. Petersburg, I tested this setup. Moist ground provided a better-than-expected ground. I added 18 feet of RG58 coax to allow some outer-shield counterpoise in case common mode escaped the Guanella Balun, and then inserted a 1:1 "current choke" Balun (bifilar 12 turns around an FT-140-41 core). Then 50 feet of RG8X to the bulkhead entry to the travel trailer.

RESULTS: Surprisingly, it was able to tune up (with the auto-tuner) on every ham band from 7MHz up to 10 meters. And with no observable USB-port crashing! I was able to connect to WINLINK RMS Gateways in Florida, Georgia and farther away as well. Abundant FT8 was received. The slope of the wire was roughly 45 degrees to a convenient tree bough above the camper that I surmounted with slingshot when no vehicles were passing. No need for the mast! Simple nylon string was enough to hoist the wire. I didn't even try 80 meters, but this was one of my better "RV-Spot Compromise Antenna" outcomes and would work reasonably well for an ad-hoc disaster antenna.



And Fort De Soto Park is a wonderful place to visit or camp! We saw gorgeous sunsets, and enjoyed overpriced sugar-cone ice cream at the cute little park store! Reservations can be made about 190 days in advance: <https://www.pinellascounty.org/park/camping.htm>



W.T. Loften High School, K4WTL, Gainesville

By Bob Lightner/W4GJ Trustee

We now have 51 students in our HAM radio club! The past fortnight we have participated in two week-long special events; National Fire Prevention Week (1,069 contacts) and ARRL School Club Roundup (680 contacts). Our students are becoming great operators, learning the proper skills and following the Radio Amateurs Code.

We also have been working on our ECOMM Trailer, getting it ready for remote operations. The students painted the inside of the trailer and are now in the process of installing a wood-laminate floor. We need to purchase a small window A/C unit and an L.E.D. overhead light. Our Computer Art Academy is helping to put graphics on the sides of the trailer. Here's what it looks like (See attached photos).

QX for us on the HAM bands and listen to our FB operators. We work Phone and CW on the popular HF bands when they are open.



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W.T. Loften High School Ham Club, K4WTL



Jamboree On the Air (JOTA)

Ken Lyons, KN4MDJ / Trustee for wB4SA

<https://www.facebook.com/RadioScoutingUS/posts/pfbid02QJcmCXcDZoXJNReu3FSBvvF87Cyfo6U4FgGFEzYgChWs-DdnXtYpsULtgNyd1ptkGI>



On October 14-16, our single JOTA site represented 8%-12% of the US national numbers of participants because we are doing JOTA during a scheduled scouting event at max camp capacity. At the end of November we'll find out the 2022 results from BSA National and WOSM (world scouting).

Our normal setup would include several EmComm trailers and at least a dozen hams from across central Florida, however due to the hurricane, all local resources had been diverted for hurricane Ian relief so it was just 3 hams, a helper, and 4 scouts to manage this year's event. Many less CQ calls but we kept everyone busy and many looked over the shoulder of others that got that special treat of getting on the air.

Our local CFL JOTA-like weekends are wrapping up this week. We demoed ham & CW on: Sept 24, Oct 1 (Canceled due to hurricane IAN), Oct 8, 15, 22, 29...so well over 6,000 scouts this month. The hurricane affected a number of things for us, including reduced staffing as many volunteers and equipment were redirected to south Florida, also attendance was reduced in the first few weeks. However many scouts were able to get on the air through DMR and our educational displays and fox hunt were a hit with the youth. Leaders and parents were pleased to learn about STEM scholarships and how licensing can lead to career paths.

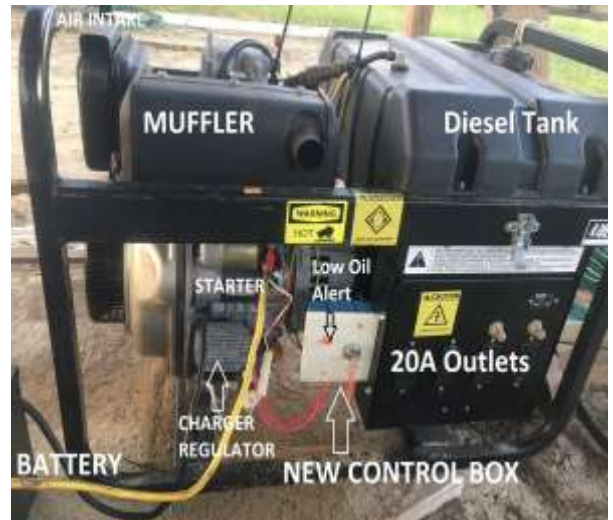
Alachua County Diesel Generator - Part Two

by Gordon Gibby KX4Z

Background:

I wanted a diesel generator available for our Alachua County ARES(R) / NFARC club for Field Day and deployments, because of their stoutness, less-explosive fuel, and near total lack of any HF radio frequency interference. An odd-ball 5kW generator powered by a 10HP diesel became available with a dubious running history at about 50 cents or less on the dollar. A lot of work was required to fix the fuel system...see <https://qsl.net/nf4rc/2022/NewsletterArticleGenerator1.pdf>

FINAL TIMING: In October I tackled the timing of the fuel injector for the last time, and determined it was truly at or slightly before 15° before top dead center, and the spec is more like 12-14 depending on source. Based on information from the manual, I decided to add yet one more 0.3mm copper shim -- and the timing now measured just about perfect. Back on went the protective hood over the spinning fan blades! Back on went the pull-start spring assembly.

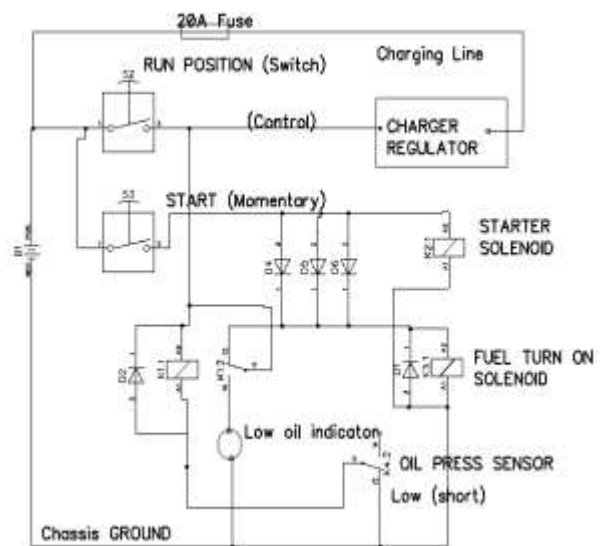


Now the challenge was to create a control panel to connect to the Molex connector with unmarked control wires.

CONTROL PANEL:

The oil pressure sensor *closes* when oil pressure too low--and is grounded. The Fuel solenoid needs 12V to provide fuel. Relay K1 (ordinary automotive SPST 12V relay, contacts rated as much as 40A) provides the required inversion. Drawing no current normally, if oil pressure declines, the relay will activate and remove power from the fuel turn on solenoid. A typical 12V automotive LED indicator assembly (with built-in resistor) provides a visible "LOW OIL" indication. (See photo, where it is visibly lit.)

A 3-position (off/run/start) ignition key (hefty version found at an auto-parts store shelf) provides power to the fuel solenoid during RUN, and powers the starter solenoid to crank the diesel engine. Three 1N4007 diodes in parallel (overkill but allows plenty of current for the solenoid) allow power from the START position to momentarily turn on the fuel solenoid during cranking -- once cranked, the oil pressure sensor opens and K1 provides power for the turn-on solenoid. Snubber diodes were added to circuit around K1 relay and also around the fuel turn-on solenoid just to avoid unexpected high-voltage transients.



The control circuitry worked perfectly for these functions the first time installed.

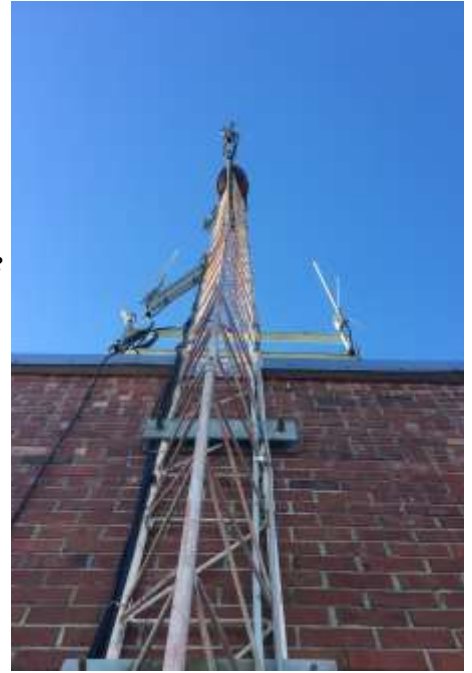
With some care, the final "control" wire from the charging regulator was connected to the RUN position of the ignition switch -- and the charger worked! A DC (hall-effect) clamp-on ammeter indicated charging of the depleted starting battery of as much as 13A DC. The frequency of AC output measured about 59.7 Hz. ***This is now a very usable generator! It starts quickly and runs strong!***

The remaining modification needed is to add a momentary switch to allow fuel-solenoid turn-on if the user wishes to crank manually with the pull cord, rather than advancing the key all the way to the START position.

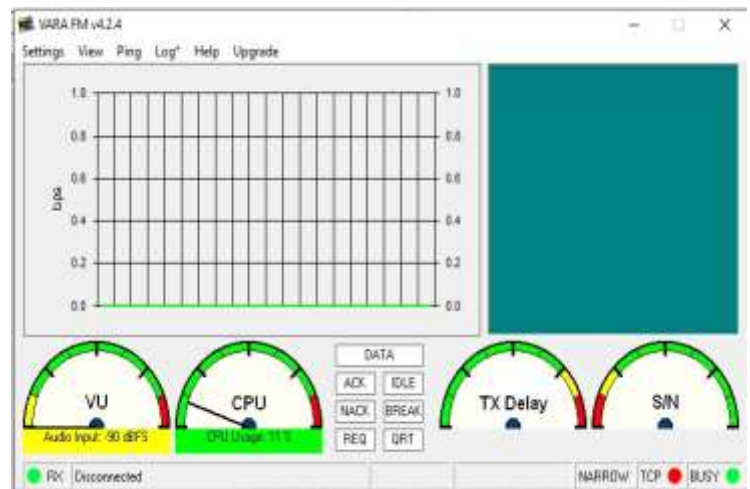
What's Happening in ALACHUA COUNTY

by Gordon Gibby KX4Z

Assessing Our Local Volunteer Hurricane Response. In October, our NFARC/ARES group began to assess what we learned from the Hurricane IAN deployment. We didn't hold a "hotwash" and soon we realized that this harmed our effort to develop an after action report/improvement plan, championed by Brett Wallace NH2KW. At our monthly meeting we had a lot of insightful and occasionally frank discussion. One of the great things about our group is that we *have lots of REAL experts* who can correct my incorrect views, and others' incorrect views of authority structures county-state etc., and have huge experience in military response systems. One of the big discussions was the importance of **post-storm communications support**. Although our general history in Alachua County has always been that we're "done" very soon after the storm passes (and in fact we demobilized on Thursday!) -- that is NOT always true elsewhere! Various members brought up historical disasters where the need for communications support went on for *days*, and even *weeks*. Craig Fugate KK4INZ pointed out we need to think more about the OUTER parts of our County: those are the places the cell-tower-trucks won't be going, and those are the places we could be asked to help provide connections to fire stations, etc., without working comms if there is real damage from an incident.



We're still accumulating factual data about our own response, in preparation for Part II of our AAR/IP discussion. "Old-timers" who work for the county tell us that the 3AM/3PM "Essential Elements of Information," 5 AM/5PM Briefings, and 7AM/7PM new operational periods, that were so methodically practiced by the Alachua County emergency operations team this year were a **big thing**, a new solid cadence to local response. We have lots of room for improvements in our internal functioning, but in general we handled new duties well, received two "ovations" from the assembled Alachua County response teams (another first!) and learned new lessons of how we can function more cohesively as a group in our County response.



Ongoing Improvements.

- **VARA-FM:** Leland Gallup AA3YB and Vann Chesney AC4QS successfully tested peer-to-peer VARA-FM and found it is FAST. Newer versions support digipeating, but require WINDOWS computer for digipeater stations. The inexpensive EVOLVE III championed by Gordon Beattie W2TTT look perfect for the job, since they run on 12V and are less than \$100. (see <https://www.amazon.com/Evolve-III-Maestro-Book-Celeron®/dp/B0B3GHTDN2>) We're evaluating how we might use this to speed documents into the EOC. A little **mini-explosion** of interest in data techniques, and curious questions like "What is the difference between ARQ and broadcast?" resulted. Following the lead of Brad Swartz N5CBP Columbia County EC, we are moving our VARA-FM experiments to 145.010 MHz. We now have an RMS Gateway KX4Z-12 there, as well as a digipeater, and more infrastructure is on the way. It seems to automatically set the TX Delay (a key issue for AX.25 with cheap SDR transceivers). The ability of the "AUTO-TUNE" and "PING" features to help you optimize transmitter modulation levels is just amazing. If other modes such as AX.25 (soundmodem.exe KISS interface) had this, life would be much easier...

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- **New Communications Plan** - First time in 5 years, we're working on a solid backup plan that lays out actual layers, techniques, ICS documents for backup communications that handle emergency response as well as documentation, as much by radio as possible. A draft version is on our website.
- **Beatty Tower Digipeater** -- The photo above shows some of our Packet VHF and microwave antennae on the top of University of Florida Beatty Tower dorm, 164 ft AGL. The digipeater failed just before COVID, a hardware failure, possibly due to lightning. After many holdups due to COVID restrictions, Earl McDow K4ZSW and Susan Halbert KG4VWI have repaired the dual-frequency raspberry-pi AX.25 digipeater, tested, and are about to re-install in the dorm.
- **Dollar Bills** -- The County Commission was so impressed by our badged volunteers and presentation that they issued GIFT CARDS to them. Distributed at our October meeting, and practiced our ICS chain of custody documentation at same time.
- **Red Faces** -- Oops! We procured 2.5mm adapters for the "headphone" jack of our Yaesu radios....only to discover it was the GPS input! A bit of "read the manual effort!" and we now can successfully put headphones on our EOC voice transceivers...in the proper (unmarked) jack!
- **AVAST!** Somehow this virus checker got onto our non-networked ham-task VHF data computer -- and slowed it to a CRAWL. IT-specialist Jim Bledsoe KI4KEA figured this out and cleaned out the computer to work again. Hooray, Jim!!
- **Attrition & Growth** - One volunteer is moving away, another was so impressed they are going to get through our training steps to become badged.
- **Packet / VARA VHF Training** -- With newer volunteers, it is time for a comprehensive training on the "granddaddy" of digital protocols, AX.25. We'll use a few months' of our TECH NITES to go over each of the layered levels of this versatile system. And in the process we'll compare it to VARA-FM See: <https://qsl.net/nf4rc/CALENDAR.html> Most of our previous Tech Nites have PDF slide shows on our Educational Articles page: <https://qsl.net/nf4rc/EducationalArticles.html>



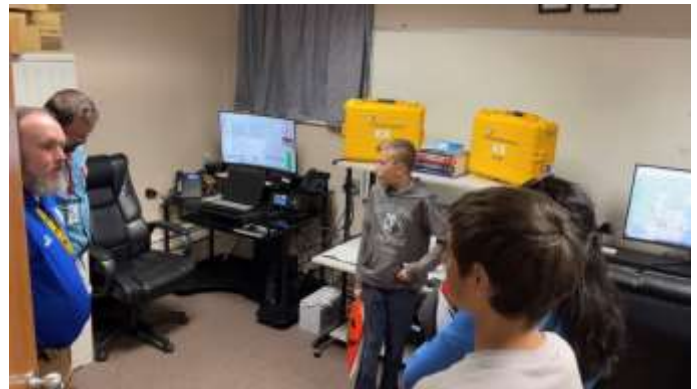
What's Happening? Santa Rosa County Edition

Arc Thames, W4CPD

In October our team participated in an open house at the Santa Rosa County Emergency Operations Center. Several members of our team volunteered to speak with visitors that came in about what we do to support the Emergency Management team during times of emergencies as well as what amateur radio is all about. Opportunities like these are a great way to showcase the hobby and ARES to our communities.

Our next meeting is Saturday November 12 at 9:00AM at the Santa Rosa County Emergency Operations Center. James-K9JHR will discuss tips and tricks on building a "go-kit." As always, a free breakfast will be provided, and license testing is available immediately following the meeting. If testing, please bring a photo ID, your FCC FRN number, \$15, and a copy of your existing license if upgrading.

For information on joining or participating in the Santa Rosa County ARES team, please reach out via email info@srcares.org, visit our website srcares.org, or [find us on Facebook](#).



Jon-KM4QQO and Alan-KW4MO speaking to a group of kids at the open house



Escambia County ARES Activates for IAN

Gene Bannon KB4HAH

Hurricane Ian Operations:

Even though Hurricane Ian did not directly impact the Pensacola Area, the Escambia County ARES team did activate. We provided supporting communications services to the Florida State ARES operations by monitoring the Florida Emergency net, taking multiple shifts as Net Control, and as Assistant Net Control station on the Florida Emergency Net (3.950 MHz). The ARES team also was monitoring and assisting on the Florida Statewide Linked "Florida State Amateur Radio Emergency NET" (SARNET) via the VHF/UHF network. When operating as NCS or Assistant NCS, the ARES team was using the callsign W4UC. At one point, W4UC was called on to be the VHF/HF WIN-LINK Gateway station for the Florida Emergency Net during the operations. Several of our members did man the EOC and ran or assisted with the monitoring or operating the EOC ARES station over the 3-day period. We had good communications into and around the affected areas as well as assisting in getting the information to other key stations outside the state about the information that was happening in the affected area. W4UC was finally secured on Thursday Sept 29th at 5PM CDT by the North Fla SEC. After the Florida Emergency ARES net operations was secured, we demobilized our operations and returned back to our normal ARES operations. The Escambia County Emergency management team also was called to deploy to Tallahassee to the Florida State EOC to assist and supervise logistics coordinating into and out of the Hurricane affected area. The Escambia County ARES was



not needed to deploy with the team and maintained a Communications Watch Station in the Escambia County EOC. I want to express my personal thanks to all of the Escambia County ARES team for their dedications to the community and for helping out the State of Florida when it needed it most, during this emergency event. Here are some of the operators that manned the EOC during the operations.



(L) Gene-KB4HAH as NCS and Assistant NCS operator for Hurricane Ian on Florida Emergency Net 28-29 Sept 2022



Mike-N4DIA as assistant operator for Florida Emergency Net Hurricane Ian Sept 2022



Larry-N4TAC as NCS and Assistant NCS for Florida Emergency Net Sept 28 2022

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Pensacola Interstate Fair Operations:

The Northwest Florida Hams came out to support the Amateur Radio Booth at the Pensacola Interstate Fair the last week and half of Oct (21st-31st). Several of the local clubs and hams manned the Amateur radio booth to show our hobby to the public. We have a HF and VHF/UHF station to demonstrate to the public how Amateur Radio can talk to the world as well as helping out during any emergency events in our community. We have several information posters as well as handouts for the public to look at and take. We also have the information posted about the "Introduction to Amateur Radio and Upgrade" class that is taught at Pensacola State College here in Pensacola main campus. There have been several inquiries about Amateur Radio, and we have really enjoyed showing off what we can do. The Hams have manned the booth every day since it opened and will be on there until we wrap up the operations on Saturday (Oct 30th). Hal-WA5HC as done a great job in coordinating these operations with the Fairgrounds management folks as well as with the local ham community. He has ensured that the booth is manned and help coordinate all the actives with that booth. It has been a real hit with the public as well as with the Northwest ham community. Here are some shots from that Fair operations. Here are some shots of our Fair Operations.



(L) Bill-WY8O Vic-N4VKT Shannon-KJ4PWA about to do the Wire Rascals Net from the Fairgrounds Oct 2022

(Below) Gene-KB4HAH operating the HF station at the Fairgrounds Oct 2022



Radio operations table at the Pensacola Fairgrounds Oct 2022



The public looking on our Saturday Operations at the Fairgrounds Oct 2022

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Santa Rosa Island Triathlon

The Northwest Florida Ham community came out to support our operations to Santa Rosa Island Triathlon race officials. We provided Emergency support services for the safety of all the race participants. It was concerning a beginning of the week prior to the race when Hurricane Ian decided it wanted to visit Florida for a vacation. We weren't sure if we were going to be able to support this event due to multiple issues that may require our attention to handle or be involved with more important issues/operations. But in the end, it turned out to be a beautiful day to conduct this event and operation. The water temp was just about right, even though having Hurricane Ian a few days before had caused a rough surf, but it still went off without a hitch. We started our operations at 5:30AM to ensure we had the room and space required to set up our operation. We got the Pop-up canopy up and put up the mast for the 2mtr Antenna and things progressed nicely. We got our operators on station and the race commenced on time. When the last swimmer was out of the water and transition to the Bike, we had our Mobile 1 Trail-Bicycle operator/station follow the last rider. Good thing, because out on the course that last rider ended up catching a rider with mechanical/tire issues with their bike at which point they became the last rider, and even then, that rider ended up catching another slow rider which again changed the status of the last rider yet again. Due to equipment problems with Rover 1 communications became intermittent, but it was worked through with all the other hams stationed at the various points throughout the course. Overall, the Race officials and the Participants were very appreciative for the operations and have again asked if we could support next year's Triathlon as well. We are already looking forward to that event next year.



Ham station nearly set up Mike-N4DIA
Norm-NO4ON Shannon-KJ4PWA Johnny-
Future ham Skip-N4XXO



(Above) John-N8JUC
acting as Race Director
Shadow



Mobile 1 starting his operation
Gene-KB4HAH



Mobile 1 with Gene-KB4HAH manning



Walton & Okaloosa Counties!

DJ Stewart, KI4ZER, Assistant Section Manager, NFL ([Newly Appointed](#))
President, Playground ARC
President, Walton County ARC

We sure have a lot of fun at all our #HamVentures while promoting Amateur Radio! In our part of the South, we have peaked into the 'busy' season! Breakfasts, Contests, Tower Work, Parades and Hamfests oh my! Empowering our members and showing the new ones, the old ones and the in-between those categories of hams new tricks, learning, developing, and experimenting together! Our enjoyable hobby sure is an 'ionized gas'!

It is you the reader, the membership of the clubs and the lone operator that make this hobby what it is! We are so happy to be a part of this with you! Thank you for your time, support, recounts of history and willingness to move into the future!

Where to begin in October but with the Walton County Amateur Radio Club! Breakfast on Saturdays preceding the first Tuesday of the Month's Business meeting is just a wonderful time! If you have the chance to check this out all are welcome and the food ranks high on the 5/9 scale as well! Check the [calendar at WF4X](#) for more!

The Walton County Amateur Radio Club Business meeting proved fruitful as they settled on a date (with much cooler weather) to continue work on the club station and tower! Soon their Club Station will be fully back on the AIR! They also got back the completed redesign of their logo! This was due to the original file being lost. No strangers to adapting and overcoming, they found a way to get it remade and useable for all kinds of swag, apparel and more! This crowd has also grown exponentially! From just a few members this time last year to a packed house! They opened with a presentation on how to grow your Ham Radio Club by WD9GIU and take note if you get to see this presentation! This team sure did!



BUT WAIT!! There is more to report from them! They did a POTA activation at K-1861, Eden Gardens State Park in Northwest Florida! What a superb time on all battery power with multiple modes, bands and participants! On lookers arrived and inquired as to what was going on as well! Be sure to see them in person!

Moving into the next week we saw the Playground Amateur Radio Club signal in for their weekly Sunday Pile-Up! And Pile-up they did making contacts all over the ITU Map! They also promoted and advertised for their upcoming 'Boondocks Swampfest'! Be sure to come to this FREE tailgate event as this club is motivated, energized, and ready for you to come and participate with them!



March 2023 is the PARC's 53rd Annual Hamfest! See the flyer below and go to W4ZBB.Org for more!



The big news this month is the North Okaloosa Amateur Radio Club's Hamfest! Talk about a great production and representation of the Amateur Radio Hobby! Major National Vendors, Regional Vendors and Local Vendors as well! The event also doubled as Jamboree on The Air (JOTA) 2022! But most importantly, the attendees! From multiple states and far away locations, Hams poured in the door to see this highly anticipated event and witness all it had to deliver! Without you this event would not be possible. This NOARC Team as a whole and supporting Clubs that enabled this show to take place represented the best that Amateur Radio has to offer in the area and is only growing bigger! Oh, and that food! What a menu! Pulled pork! Brisket! Beans, taters, cole-slaw, pop, tea, lemonade and even cookies, pie and other treats! The best menu at a Hamfest we have seen in a long time as sponsored, planned, prepared, and served by the AWANA's of the Live Oak Baptist Church in Crestview Florida! When this crowd gets together next year you will not want to miss this show!

A large thank you to all organizations that supported the event:

- City of Crestview Florida, Parks and Recreation
- City of Crestview Florida, Office of the Mayor
- Playground Amateur Radio Club
- Walton County Amateur Radio Club
- Southern Amateur Radio Union
- Okaloosa County ARES
- Walton County ARES
- Okaloosa County Florida Department of Corrections
- Live Oak Baptist Church
- Tower Electronics
- The Sign Man of Baton Rouge
- Ham World
- Sol-Tac Flashlights
- American radio Relay League
- The Boy Scouts of America



Continued on next page...



The Playground people caught up at their business meeting and made plans for more club enhancements for sustainable operations supporting the members, the community and outreach interest to grow and mentor new hams! Following the meeting, the team at PARC devised a plan to repair the Beam which saw one element tilt. Some bolts needed to be tightened up as a result of wind load. The fine folks at Sunbelt Rentals kindly jumped in to assist PARC with a boom lift to save the beam from having to come completely down and then be put back up again! This was a tremendous feat as you will see in the pictures below and the Club is operating once a gain at full capacity! So CQ that DX PARC and enjoy those QSO's! This came in handy as a partial beam teardown did not have to happen and kept the station functional! Members from the club came to support, inspect and assist in the repair that needed to occur as a result of wind load. Mother nature sometimes takes her toll and fortunately this issue was caught and fixed before anything became a real problem! Safety is the rule, and this team is on top of it always!



Simultaneously we had other members head on out to Mobile Alabama for the Deep South Amateur Radio Club's Hamfest! This is a great event to attend and serves as inspiration for events in multiple areas across the Southeast Division! If you have never been to this event, we encourage that you include it on your must attends at least once to experience the volume of activity and energy that is hard to match!



Continued on next page...

We find ourselves at the Pensacola Interstate Fair next! This even is annual and has been attended all throughout the last period of October by hams from all over the Northwest Florida Ham Radio area! We had the distinct privilege to participate in this event (as we did last year) and show the public what is that we with not only portable communications equipment, but how we interact socially and thrive in serving the public while being a strong resource to communicate with offices of official authority and representation in the state! A Large Thanks to Hal Clark WA5HC for putting this together!



do

This has been a great month with a great many activities! November appears to be no less in terms of Serving the Communities and engaging communally! Be sure to read the list of events and opportunities to participate with these teams below! I promise you will not be disappointed and be thoroughly impressed with the formatted structure and inclusion that all clubs offer while giving back to the communities they call home!



NOARC Hosts Tech Night—Wi-Fi Antennas

Vice President, North Okaloosa ARC

NOARC hosted a Tech Night discussing Wi-Fi Antennas! This example of utilizing common household items (common as found in nearly every ham shack) increases the range of a Wi-Fi enabled device's range with a directional antenna and increases the signal input/output by up to 10 Db!

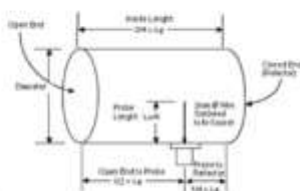


Building the Cylinder (Can) Waveguide

<http://fellegis.hu/elektro/antenna/cantenna.html>

We chose to build the antenna for 2.45GHz, or channel 7, as this is close to the center of the 13 channels available to us (US) designs use channel 6 (2.43GHz), as they have 11 channels). I have included a key length calculator in the form below. **Non-rectangular waveguides use a different formula (see Rectangular Waveguide).**

Frequency	2.45	GHz
Wavelength	122	mm (Inside Measurement)
Wavelength	122	mm (Outside Measurement)
Max. Frequency	3.623	GHz
Min. Frequency	3.345	GHz
Cut Off Frequency	3.530	GHz
Probe Length	15	mm
Open End to Probe	38.5	mm (Open End to probe center)
Probe to Reflector	10.3	mm (Probe center to Reflector)
Inside Length	57.8	mm (Reflector to Opening)



The final product only needs to be accurate to about 1mm as this will only shift the frequency within the range of the 802.11 spectrum. A smaller cavity length will shift the frequency response to that due to a higher channel. A longer cavity length will shift it down.

Methods and madness

I measured to 1mm using vernier calipers, on the assumption that error in cutting might bring that closer to the 1mm error mark. There are only one to make, and you can't go too wrong, i.e. the probe (ON-Socket) position.



HamCation Needs You!!

Michael Cauley, W4ORL, General Chairman

The largest hamfest in the southeast US, 2nd largest in the world needs your help! HamCation is managed and operated by volunteers. Without volunteers, HamCation would not be able to happen each year. It takes hundreds of volunteers each year to help run HamCation and 2023 is no exception.

For more information, to include a description of each volunteer position needed and its duties, and to sign up, go to: www.hamcation.com/hamcation-volunteer Be sure to read the directions as each volunteer needs to submit the form and we asked that only one area is selected each day. If you want to volunteer in more than one area in a day, please submit a form for each position You will then be contacted by the Chairman of the area you volunteer for to create a schedule based on your availability and our needs.



FCC Testing Information

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 monthly 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
- Central Florida Fairgrounds Craft Building, 4603 W Colonial Drive, East Gate off Fair Villa Road
- Info: testing@orac.org, Robert Cumming, 407-333-0690

Santa Rosa County FL ARES Testing (Walk-in)

- Information and dates can be found at srcares.org

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.

Suwannee ARC, Live Oak, FL

- Last Saturday of the month
- Suwannee Regional Library
- Contact Gerald Guy, geraldguy@gmail.com

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://k4tlh.net/faq/license-testing/>

West Volusia Amateur Radio Society

- Second Saturday of each odd numbered month
- 9:00 AM
- Elks Lodge, 614 S. Alabama Avenue, Deland, FL
- Info: <https://westvars.org/testing>

This information is subject to change. Check with the testing venue to confirm the testing session.

Remember: Bring photo ID, CSEs, copy of current license, exam fee in cash, \$15 exact change. Large print exams are available.

NFL Web Site

For net, hamfest and other events go to www.arrl-nfl.org. Webmaster Kari McClure, NW4R, maintains an up-to-date and detailed listing of all NFL nets and activities.

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 Information Coordinator— *Jim Bledsoe, KI4KEA*

Section Technical Coordinator – *Frank Haas KB4T*

Affiliated Club Coordinator –

Section Traffic Manager – *Helen Straughn WC4FSU*

Official Observer Coordinator – *Robert Leasko WB8PAF*

State Government Liaison – *Darrell Brock N4GOA*

Statewide Digital Radio Resources

Did you know we have designated ARES DSAR Reflectors & a DMR Talkgroup?

· **DSTAR Reflector 046**

o REF046A – Florida Statewide

o REF046B – NFL ARES

o REF046C – NWS Mobile, AL SKYWARN

· **DMR Florida State ARES TG 31127**

Feel free to link your local repeaters to help create a digital repeater network through the state!

Looking for Something?

Gordon Gibby, KX4Z, has taken the time to index the articles from all the 2021 issues of **QST NFL**! The link below takes you to a pdf of all the articles in alphabetical order. This link is also on the arrl-nfl.org website newsletter tab.

<https://arrl-nfl.org/wp-content/uploads/2021/12/2021QSTNFLIndex.pdf>



Newsletter of the Northern Florida Section of the ARRL

Marty Brown, N4GL, Editor

n4gl.marty@gmail.com

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