



QST NFL

Newsletter for the Northern Florida Section

Come join the FUN!

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April 2023

From the Shack of the Section Manager

Scott Roberts, KK4ECR (kk4ecr@gmail.com)

The mission of the ARRL is to **advance the art, science, and enjoyment of Amateur Radio**. This is accomplished through 5 pillars:



The ARRL Five Pillars consist of **public service, advocacy, education, technology, and membership**. These pillars have been used in our materials and information to support other guiding principles, as a rallying call, and to define the organization. Each pillar underscores ARRL's broad authority and association as Amateur Radio's witness, partner, and forum.

The "pillars" were introduced at the 2005 ARRL National Convention as graphic depictions of the organization's underpinnings and referred to as the "pillars of our association" (source: July 2005 *QST* editorial, by Dave Sumner, K1ZZ). The original four pillars were public service, advocacy, education and membership. In its original conception, "technology" was shared across the other "four pillars." Responding to feedback citing a shortcoming in the original theme, "technology" was introduced as a fifth pillar at Dayton Hamvention in May 2008 (following review at the March 2008 Executive Committee Meeting in Memphis, Tennessee).

The five pillars are a relatively new contribution to ARRL—and have contributed additional relevance and revitalization to the organization's already strong brand. The pillars and their associated brand-values

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integrate naturally across our communications, including: media and public relations, membership and sales, events, and recruitment.

Let's look at the first pillar this month: **Public Service**. One of the most important roles that amateur radio

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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: Marty Brown N4GL.MARTY@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>

operators play is providing emergency communication services during disasters and other crises. Amateur radio operators have been called upon to assist in many emergencies, such as natural disasters, terrorist attacks, and other crises. In these situations, the ability to communicate is critical, and amateur radio operators are often the only means of communication when other systems fail.

In fact, the importance of amateur radio in public service cannot be overstated. Not only do they provide vital communication services during emergencies, but amateur radio operators also play a significant role in community events and public gatherings. For example, amateur radio operators often assist with communication services during marathons, parades, and other events where large crowds are expected. They ensure that event organizers, law enforcement, and other officials can communicate effectively and coordinate the event smoothly.

The ARRL recognizes the importance of amateur radio in public service and encourages its members to be trained and prepared to assist in such situations. The ARRL provides training and resources to help amateur radio operators prepare for emergencies, including courses on emergency communications and the use of specialized equipment. Additionally, the ARRL works closely with government agencies and other organizations to ensure that amateur radio operators are able to provide effective and efficient communication services during emergencies. Through its efforts, the ARRL has helped to establish amateur radio as an essential component of public service and emergency preparedness.

With the increasing frequency and severity of natural disasters and other emergencies, the role of amateur radio operators in public service has become even more important. As a result, the ARRL and other organizations are working to expand the role of amateur radio in emergency communications and to encourage more people to become amateur radio operators. By doing so, they hope to ensure that communities have access to reliable communication services during times of crisis and that amateur radio operators continue to play a vital role in public service and emergency preparedness.

NFL Section Manager Introduces New Feature!

NFL SM, Scott Roberts, KK4ECR, recently introduced the "NFL Section Member of the Month" series, to recognize an outstanding member who has gone above and beyond to further our great hobby.

If you know someone who deserves recognition, please submit their information to Scott at, kk4ecr@gmail.com, or SEC Arc Thames, W4CPD, arc.thames@srcare.org. Please include name, call sign, the name of the club or group, the name of the person making the submission, a description of why they deserve to be the NFL Section Member of the Month, a photo of the person, and a bit of background.

Check out our first **MOTM** in this issue on page 3.

NFL Section Member of the Month—George Briggs, K2DM—April 2023



George K2DM and his XYL, Karen K4ZDM

George has played an integral role in the recent success and growth of The Villages Amateur Radio Club (TVARC). Currently serving his third term as President, the club now boasts over 200 members. George is a consummate leader and mentor.

As President, he actively encourages new members and new hams to participate in events such as Field Day, Radio on the Square, and Radio Rodeo. The latter two are public events that showcase ham radio and TVARC to the wider community.

George has a profound understanding of the technical aspects of ham radio and is always eager to share his knowledge with others. His commitment to teaching the youth in the Camp Villages program about technology and radio is particularly noteworthy. George's enthusiasm for the hobby is infectious, and it is evident that he takes

great pride in passing on his expertise to the next generation.

Moreover, George's contribution to the TVARC treasury through testing, repairing, and selling donated radio gear is crucial. His efforts have substantially added to the club's resources, ensuring that it can continue to thrive and serve the community.

George's primary passion is DXing and contesting. He and Karen purchased some land just outside The Villages where they constructed a multi-two contest station complete with towers and Yagi's. George frequently invites newer hams to operate his stations, receive tutoring on contesting, and get encouragement to get on the air.

George, K2DM, has been proudly named **NFL Section Member of the Month**. His passion, dedication, and hard-working attitude make him an asset to any organization. George has left his fingerprints all over the ham radio community in The Villages, and he is certainly deserving of special recognition. He serves as an inspiration to us all.

K2DM was nominated by the following TVARC club mates: Bob Schwer K3ZGA, Nancy Schwer, KN4ULF, John Ellis NP2B, Jeanette Ellis KB4XO, Dennis McKinney N0SMX, Sharon McKinney KB0ZUQ, Mike Regan KM4ZTE, Rusty Schlagheck, W3US.



From the Section Emergency Coordinator

Arc Thames, W4CPD

The statewide emergency communications exercise that had been planned for October of last year has been rescheduled for Saturday April 22 beginning at 9A EST/8A CST. The exercise will last approximately 2 hours and the State EOC will be on the air. All information related to the exercise can be found on the nflemergency.net website. All of the past training we had provided and past meeting recordings are available for your review on that site. Additionally, we will have a quick refresher on Saturday April 8 at 10A EDT/9A CDT via Zoom, for which the link can be found on that site.



The exercise name is still "Service Denied" and will involve a statewide cyber attack that brings down traditional communications methods causing agencies to rely on amateur radio to communicate. If your team hasn't yet signed up to participate, we encourage you to do so via the nflemergency.net website. Any team, regardless of whether you're ARES, RACES, AUXCOMM, or agency sponsored is welcome to participate.

	Number	Person-Hrs
Exercises this month:	9	96.00
Training events this month:	19	169.00
Public service events this month:	9	58.00
Community service events this month:	4	77.00
Emergency events this month:	23	119.00
SKYWARN events this month:	5	50.00
Meetings this month:	23	297.00
Unclassified events this month:	128	407.00

Section ARES® Report

In February our section reported 1,278 hours of volunteer time to various ARES® duties within our section. 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

Call signs of DEC's/ECs reporting:

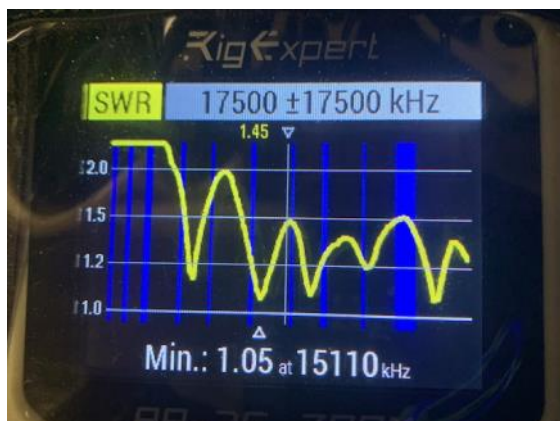
W4CPD N5CBP K4SOP N2HAY WE4MJ KN4PFZ KA3OGG
KK4ECR K4BJS W4KKJ KB4HAH KO4YOL W4CJB KO4KUS

CQ CQ BOTA

Adam Parker, NY5E

Just for a hoot, I thought it might be fun to “activate” my barn. I spend several nights out there each time we have a mare ready to foal, and it gets rather boring (and I’m sick of cleaning tack). I thought it might be fun to set up a portable station and so set to work at that end.

I used a fishing pole to throw a medium sinker up and over a nearby tree limb about 25’ up, and hoisted the Palomar 9:1 Unun up and set to work clearing small limbs for a clear path for the wire antenna. Antenna tested great, providing SWR’s lower than 1.5:1 from 40 meters to 6!



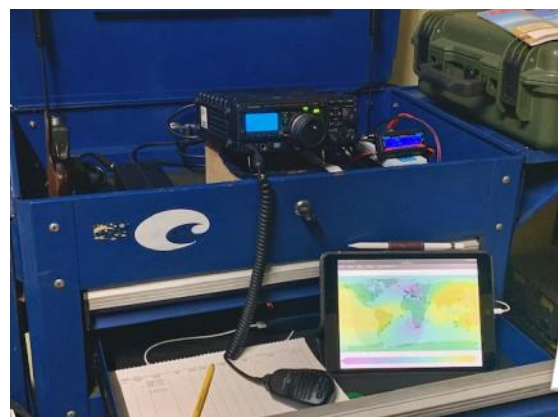
I set up a station in the tack room using the FT897D and its matching FC-30 tuner powered by a 7Ah LiFePo battery. On the first night, calling CQ BOTA, along with a quick explanation of the activity, I gathered 13 QSO’s over a 2 hour period operating at 80W output.

Having so much fun, I tried to make a few DX contacts, but managed just one Maritime Mobile station in the North Atlantic. All in all, not bad for a moderately powered quickie station!

The idea really seemed sensible at the time, as most ham radio endeavors do, and I think it’s working as not only entertainment for the long solo nights in the barn, but also to master skills and techniques necessary to get “up and operational” anywhere.

Calling “CQ BOTA” causes a bit of a stir, but attracts attention enough to get spotted on a cluster and get noticed. I was scolded by one POTA enthusiast for “capitalizing on a valid concept”. I bid him 73 and gave him a 3x3 signal report, telling him he was fading into the noise!

I’m having fun on the radio AND working at the same time. Not sure it gets much better than that!!



Suwannee County ARES® News - April 2023

J. Gordon "Gordie" Beattie, Jr., W2TTT

Well March is a season where we shake off the Winter cold and welcome the warm growth of Spring, and so it is with the repeater situation in Suwannee County!

At the beginning of the month of March we had no repeaters available for ARES® or OEM use in Suwannee County, but we had developed an outstanding community of Amateur Radio stations using 146.55 MHz SIMPLEX for communications. Our weekly check-in and training nets were doing very well since we started them in the new year. Each week individual operators in Suwannee, Madison, Columbia, Gilchrist and Levy Counties, as well as a few stations in Georgia, regularly checked in and were interested in participating in EMCOMM should we or they find the community in a bad way. The net participation has averaged twelve stations during each week's check-in.

With that excellent start, we then took several big steps forward in rapid succession with several new additions to the Suwannee County repeater scene.

First came the new 443.775 MHz FM repeater with an offset of +5 MHz and a tone of 107.2 Hz. This repeater is located in western Suwannee County and is a Kenwood TKR-850, amplifier and four cavity TXRX duplexer. In the future it may evolve to become a DMR machine, but no specific plans are afoot at this time.

Second, came the installation of an entirely new 443.700 MHz (offset +5 MHz, tone 94.8 Hz) SARNET repeater provided by the dedicated team that provides a robust statewide communications channel via over thirty-five linked repeaters.

The third update to the repeater scene came with the resurrection of the W1QBI/R repeater now running as W2TTT/R on 145.27 MHz (offset -600 kHz, tone 123.0 Hz)

Repeater & Simplex Lineup for Suwannee County March, 2023:

- W2TTT/R 145.27 MHz Offset -600 kHz tone 123.0 Hz
- W2TTT/R 443.775 MHz Offset +5 MHz tone 107.2 Hz
- SARNET/LO 443.7 MHz Offset +5 MHz tone 94.8 Hz
- ARES® SIMPLEX 146.55 MHz Offset & tone none
- NATIONAL SIMPLEX 146.52 MHz Offset & tone none
- N4SVC/R 145.41 MHz Offset -600 kHz tone 100.0 Hz

also in western Suwannee County. This is the same Yaseu DR-1X repeater and duplexer that Dan ran. It is running in FM and the Fusion modes depending on what the user decides. It is recommended that FM user decode 123.0 Hz as well so that the Fusion signals will not break your squelch. This repeater may become linkable through the Allstar Link Network.



It is also recommended that stations at home monitor or scan 146.52 MHz SIMPLEX as many travelers through our area will often call on this, the National Simplex frequency.

It also recommended that local stations set up a small group of these frequencies along with other personal favorites in a scan group in their radios. If you are unsure how to do that, you can reach out to Gordon Beattie, W2TTT at 201.314.6964 OR W2TTT@ARRL.NET for help. We will try to get you set up over the phone, on ZOOM or in person.

Potential ARES® Projects

We have several future goals that can be accomplished by anyone interested in participating on the Suwannee County ARES®. Please give this a look, and even if you lack gear or expertise, we can help you help the ARES® team and the Suwannee County community.

1. Radio Duty at Emergency Operations Center on Wednesdays to cover the 9:00 am North Florida ARES® Net and 1:00 pm Statewide County and agency SARNET Call-up Net. This activity at the Suwannee County EOC was resumed in March following a long pandemic-driven hiatus with a small, but dedicated team. We could use some additional team members to rotate this task across a larger group. Contact Emergency Coordinator Mike Meador KM4BTW at MMEADOR@HOTMAIL.COM if interested.
2. Winlink stations - on HF/VHF at home or deployable. We need these to move messages reliably and efficiently and only three of us have set this up.
3. Winlink server - on HF/VHF at home or EOC. We have a PC for the EOC that could be interfaced to the IC-7300 via a USB cable. The PC needs to be reimaged and applications installed, configured and tested.

4. AREDN Mesh Network nodes around the county including cameras, weather stations, IoT sensors, Winlink access, Ethernet & Wi-Fi access, VoIP phones, etc. We have nodes to get folks started.
5. APRS iGate to digipeat on 144.39 MHz and feed messages onto the Internet. Location tracking and text messaging within Amateur Radio and the Internet are useful tools.
6. Allstar Link Network access for the 145.27 MHz repeater.
7. DMR upgrade for the 443.775 MHz repeater. We have the hardware.
8. Set up and deploy additional, and likely linked repeaters or remote receivers around the county. Again, equipment may be available if you have access to a site.

If you have interest in any of these projects, or would like to suggest others, please contact Gordon Beattie, W2TTT at 201.314.6964 OR W2TTT@ARRL.NET.

Suwannee County ARES Nets as of March, 2023

- Sunday 8:15 pm 145.27 MHz Offset -600 kHz tone 123.0 Hz
- Sunday 8:30 pm 146.55 MHz SIMPLEX Offset & tone none

Joining Suwannee County ARES®

If you are interested in joining the Suwannee County ARES® Team, email our County Emergency Coordinator Mike Meador KM4BTW at MMEADOR@HOTMAIL.COM and feel free to copy Gordon Beattie W2TTT at W2TTT@ARRL.NET.

Finally, as we roll into the stormy season, make sure that your personal go kits for yourself, your family and pets are refreshed and ready to go. Remind your non-ham neighbors to do so as well, and when there is a potential or pending danger, keep them apprised of the situation and share plans.



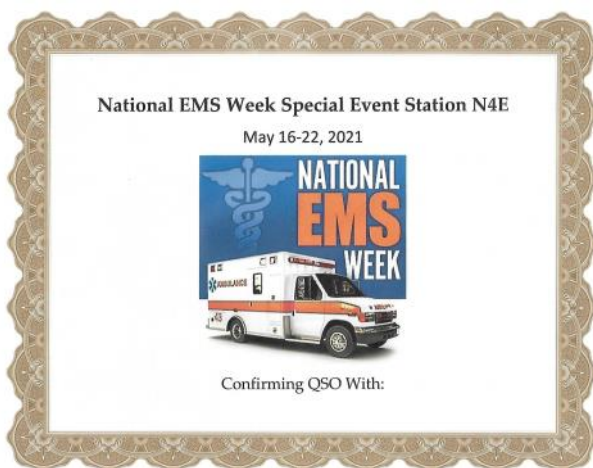
Loften HS Students Add Antenna to ECOMM Trailer

Bob Lightner

W4GJ, Trustee K4WTL

Students at K4WTL, W.T. Loften High School, put together a Cushcraft A3S with the 40-meter attachment to go on their ECOMM Trailer. They also wired up and tested a Yaesu G-800DXA rotor and control box. Luckily, neither unit let out any magic smoke. The rotor will rotate the A3S and the antenna will eventually be stored in PVC pipe on a roof mount--yet to be purchased.

We have some good operating events coming up; the [Florida QSO Party](#), and [National EMS Week](#). QX for our students on both SSB and CW. We will use the Special Event Call: **N4E** for NEMS Week. Only one other station will be active for this event, **VB3EMS**, (the London Amateur Radio Club.)



We are looking to raise money to purchase a Honda Generator to be used by our trailer. That's the next big-ticket item. Our 45 student-operators are anxious to road-test the trailer. All of the software and radios work FB, but we won't always be close to commercial power sources. Wish us luck!

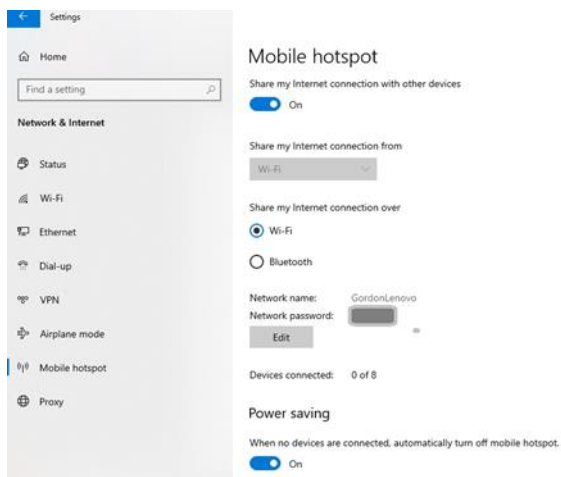
Tips & Tricks for Ham Radio Clubs -- Hybrid Meetings

by Gordon Gibby KX4Z

The limitations imposed by government and by concerned members of the public forced many amateur radio volunteer groups to suspend in-person meetings and move to online meetings. Zoom Corporation stock went from \$67.28 on Jan 7 2020 to a peak of \$559 on Oct 16, 2020! While their stock valuation has since returned back down to Earth, many groups have found their software easy to use and productivity-enhancing. In our Alachua County group, some of our members live as much as 45 minutes' drive from even a convenient meeting place for them -- and thus prefer to join us Online at times.

There's a downside to excessive Zoom use also -- we look for commitment and one proxy for that is the effort to join us when you live only a modest distance. Nevertheless, we also have elderly members and those with home situations providing 24-hour chronic care to family, so Zoom is helpful.

But making it work can be difficult! **Howls of feedback, inability to hear anyone**, and blurry camera views abound on Zoom. Here are some tips that might improve your club's experience:



1. INTERNET Get a good internet connection. If your meeting place doesn't have cable or other high speed internet, look into whether your cell phone has good service and can provide "hotspot" service. This is typically only \$10/month with major vendors, and has huge benefits for ham radio leadership. I'd encourage that several of your top leadership gain this tool on their phones.

2. Member Internet Access. Your members may wish to research articles on the fly as your group is making decisions at meetings, so Internet access for them is also important. Again, a hotspot on your phone may be helpful. Some venues may have restricted internet access. In this case, you can take advantage of the ability of Windows to provide "Mobile Hotspot" services over either WIFI or Bluetooth. Settings | search for Mobile Hotspot.

3. AUDIO: The hard and fast rule is that ONLY ONE COMPUTER has audio input and output, and it has BOTH for the group. This is how you avoid feedback. So: find a computer that either has a great camera and a great microphone, or invest in a simple external USB camera (see below) and possibly a microphone that you can move toward the center of the group. Consider: <https://www.amazon.com/Microphone-Omnidirectional-Condenser-indicator-compatible/dp/B0779PKLV9>

4. VIDEO: If at all possible, get your computer screen projected to a large-screen TV or use an LCD projector with adequate brightness. That will allow you to show slides, share them at the same time, and even allow distant speakers to be seen.

5. ADEQUATE SPEAKER OUTPUT: My laptop has anemic audio output. A set of second-hand amplified PC speakers is inexpensive and makes a WORLD of difference for meeting participants to be able to hear people who are coming in on Zoom.



6. EXTERNAL CAMERA: Invest a small amount into an external USB camera that has a mechanical FOCUS. This will allow your zoom participants to actually be able to recognize who is speaking, because instead of being fixed at about 18", you can set the focus to the midpoint of your crowd. Here is an example of the type we have used -- anything similar should work: <https://www.amazon.com/gp/product/B08RDRKMHL> ***This will often give you another microphone possibility at the same time.***

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7. SLIDES. Our group uses pre-prepared slides for a good bit of our busy, jam-packed meetings. Get good at doing simple slide shows! We use free LibreOffice and its "Impress" slide software works fine for our group and can save out into .pptx in a pinch and display PowerPoint slides also. And it is free! It has a great feature that it handles multiple displays very very well, giving you one screen with the slide show, and another screen where you can see "next slide" as well. One trick is to use TWO computers for your meetings. The main computer does the Zoom connection and casts its screen to a meeting-sized display so everyone can see the slides. The second computer is where you actually do the presentation, with audio/mic disabled so you can just use that computer to show participants whatever needs to be visualized -- slides, a quick example of operating some software, or even a small movie. All of that goes into your Zoom channel and so both your in-person and online members get to see the same information. Always make certain that whatever is being displayed.....is also being shared with the zoom!! Its embarrassing to show a short video clip and then discover several of your folks never saw it.

8. Strongly consider **purchasing the entry level zoom capabilities.** My subscription is only \$150/year. We generally do NOT record our meetings to avoid extra fees, but you can on occasion and then capture them to local hard drives or move to another presentation service. I set up a meeting that can be activated ANY time, and thus our zoom address is always the same. We don't password protect or use any other exclusionary tactics -- just haven't had a problem. If we did have a problem, we might have to get more selective, but it just hasn't happened and we want to make it as EASY for anyone to join in and learn from what we're doing.

With these relatively simple tricks, your group can have a pleasant and productive Zoom hybrid meeting experience.



Limited Space Expedient Deployment HF Antenna

Part ONE: 9:1 Balun (UNUN)

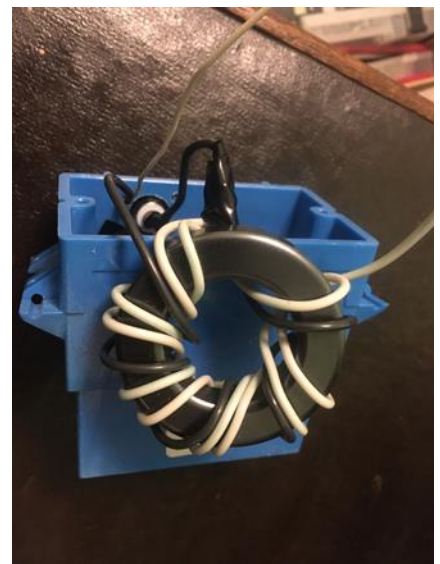
by Gordon Gibby KX4Z

Several of our Alachua County volunteer hams are fans of *very-simple-to-set-up* HF antennas. Leland Gallup AA3YB has an 18-foot vertical whip that can be stuck in the ground in mere moments, with added ground counterpoise and even a top extension wire if desired. He has used it successfully many times for exercises and POTA. While being eaten by mosquitoes, a quick-to-deploy antenna is a **must** (yes, there's a funny story behind that!). Brett Wallace NH2KW is a fan of a commercial multiband antenna with about 40 feet of wire and a very unique matching device at the base. Ron KN4ZUJ likes \$39 "painters' poles" as an expedient and very inexpensive "mast" for quick and dirty antenna supports. So we're always thinking about ways to create some of these devices.....for cheap!

Brett NH2KW kindly brought over his antenna base component and we put it on an antenna analyzer and were astonished to find that it was actually *a usable SWR* -- without even an antenna connected anywhere! We suspect there is some intentional loss resistance either in coils or formal resistors somewhere in there. This led to the question -- can we come up with our own construction project for our group, at pennies on the dollar of these commercial offerings?

Non Resonant End-Fed 9:1 Antenna

The tried and true solution to the expedient multi-band HF antenna problem is the **NON-resonant end-fed antenna** with a 9:1 Balun (actually a UNUN). These antennas generally require (1) some coax and possibly a ground for a counterpoise; (2) some form of tuner, the more capable the better, and (3) a 1:1 "choke" Balun (unun) at the transmitter end to squelch some of the common mode current these highly non-symmetrical antennas create. Multiple firms have **commercial offerings** in this range (see <https://www.balundesigns.com/9-1-ununs/> and <https://palomar-engineers.com/antenna-products/50-450-ohm-9-1-Transformers-c21480761> and the especially inexpensive <https://www.dxengineering.com/parts/ldg-ru-9-1> for examples. VK6YSF has several different



Continued on next page...

versions and lots of great building advice on FT-140-43 cores. (see <http://vk6ysf.com/unun9-1v3.htm>). So we scheduled a LabNLunch project to build 9:1 baluns (unun's) and I procured both FT-140-43 cores (1.40" diameter) and FT-240-43 (2.40" diameter) cores, for roughly 100- and 300-watt power level, deployable antenna baluns.

First Prototype

The prototype was built according to VK6YSF's instructions of 5 turns, trifilar, with suitable connections to create a 9:1 impedance transformer. Lacking three colors of #14 AWG solid wire, I made the lower 1/3 out of black wire (to be fed from 50 ohms) and then just went around twice (10 total turns) with white wire so when all goes in series it is the same 15 turns/5 turns ratio needed. Saved one solder join! He indicates spacing out the wires is key to getting the best high frequency performance, so I tried. Not easy with #14 AWG....for lower power #18 should be fine--and easier!

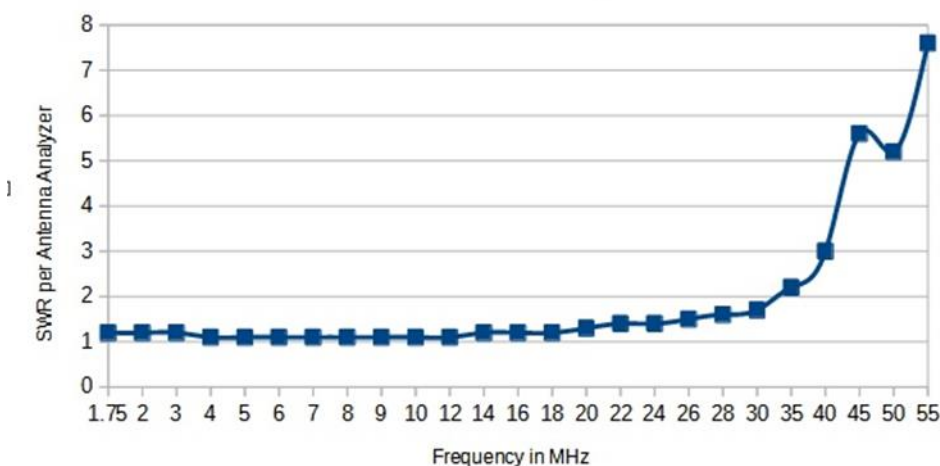
Turns Adjustment for FT-240-43

It turns out that on the larger FT-240-43 core, you get more inductance for the same 5 turns, and my results suggest that only 4 trifilar turns might be a better prototype to get beyond 30 MHz, but I still got good performance all the way to 30 MHz. In order to test the Balun, I used two 1Kohm resistors in parallel to make a 500 ohm "dummy load" and then measured the input SWR using a MFJ Antenna Analyzer. The results suggest quite reasonable performance from 160 meters up to just about 10 meters.



9:1 BALUN SWR RESULT (500 OHM DUMMY LOAD)

SWR via MFJ Antenna Analyzer



Note carefully that the graph is of the input SWR when the Balun (unun) is terminated by a 500 ohm resistive load, NOT AN ACTUAL ANTENNA. This merely suggests it should be usable in the HF bands.

Weatherproofing is very important if you're going to use this for long periods of time. SOLDERED CONNECTIONS are key. I chose to use nickel plated barrier terminals for the output after bad experiences with banana-jacks rotating, and to liberally coat them with dielectric grease, and put some on the Teflon SO-239 input as well. This technique has served me well for a few years.

Antenna?

BalunDesigns.com has a great page listing suggested lengths of wire for an end-fed non-resonant antenna of this type (see: <https://www.balundesigns.com/content/Wire Lengths for 4 and 9-1 ununs.pdf>) For 160-10 meter coverage, they suggest any of the following non-resonant lengths: 53 feet, 59 feet, 72 feet, 88.5 feet, 98.5 feet, 124.5 and some longer lengths. An expedient emergency HF antenna will probably choose one of the *shorter* lengths rather than the longer ones.

In PART TWO of this construction article, I'll go over some antenna possibilities and give some actual results.

Improving ARES® Service to a Served Agency: Alachua ARES® Developments

Leland Gallup, AA3YB

It is a common bit of wisdom that Amateur Radio Emergency Service (ARES®) volunteers need to be accepted by the agency or group they serve. Why? Isn't being a technically skilled amateur radio operator enough to be an effective help to a served agency? No...there has to be acceptance of the amateur radio group by the served agency. Acceptance of ARES® volunteers is an essential component of effective ham service. Acceptance means integration into a wide range of served agency activities. Without served agency acceptance, hams are very often shown the door in an emergency, and are unable to provide their services.

So how do you know if your ARES® group is really accepted by your served agency? If your group serves a county Emergency Management (EM) agency, how do you know if your group is a truly integrated part of Emergency Support Function 2 (Communications) with that agency? Integration is more than just going through the process of registering volunteers with the EM, more than undergoing background checks, and more than being "badged" for service at designated emergency shelters – as important as all those things are when serving a public authority like an EM. Acceptance means your served agency views you – in effect – as one of them.

Acceptance goes far beyond activating an emergency operations center radio room. It means ARES® volunteers doing *whatever* their EM wants them to do and doing what they are comfortable doing. It's not about communications alone. The path to agency acceptance begins with face time: face time with your EM department is absolutely critical for gaining acceptance and integration into EM operations. Face time is the way to establish personal relationships with EM staff. It means regularly showing up at the agency (this may require a lot of effort to achieve). It means learning how the EM does business. It means understanding the National Response Framework, the National Incident Management System, and the Incident Command System. It means acting and dressing professionally. It means following through with requested tasks and being reliable. Acceptance is like trust. It must be earned.

So what exactly can EM acceptance and integration of ARES® volunteers look like? I suggest one way you'll know is when your EM asks *you* for assistance – not just during an emergency activation when the skies are threatening, but during sunny weather "blue skies" – and not as communicators, but as support staff for *their* training events.

This is what is now beginning to happen for Alachua County ARES®. Alachua ARES'® served agency is the Alachua County EM. After years of effort, Alachua ARES®, is establishing acceptance and integration into Alachua's EM.

On March 1, 2023, Alachua County EM conducted what is called a "reunification" functional exercise conducted under doctrine of the Department of Homeland Security's Exercise Evaluation Program (HSEEP). An HSEEP functional exercise is one in which there is no "kinetic activity" as such. No equipment or personnel is moved from place to place. The "play" is one in which a variety of emergency support functions (ESF) would interact over the course of the exercise, and their performance would be evaluated against goals and quantified objectives. Exercise players work to fashion the connections among responders that would be so critical in a real event.

The exercise scenario was a fictional mass casualty incident (MCI) requiring fire/rescue, law enforcement, the Florida District 8 medical examiner, mental health services, local medical facilities and the Alachua EM. All of these emergency support functions (ESFs) would be expected to develop and carry out a way to meet the public's critical need for information – specifically, the whereabouts and condition of family members and loved ones. As is often the case in MCI's, the exercise scenario required the EM and ESFs to stand up a "reunification" center, to which concerned members of the public could go for information.

In late 2022, Alachua EM approached Alachua ARES® to provide volunteer EM support staff to help run the exercise. ARES® members would be "controllers," meaning that they would help the EM execute the exercise play and support "player" setup and coordination. Our members were NOT asked to provide communications support to the EM, but to act FOR the EM in making the exercise happen. This meant that ARES® would be a trusted agent for the EM, integrated completely with the EM staff, in dealing with a host of public safety, health, and government agencies.

In the event, five Alachua ARES® volunteers reported to the reunification site. During the hours of exercise preliminaries, the exercise itself, and post-exercise site breakdown, ARES® volunteers did whatever the EM's principal center

controller asked us to do. This involved site set up, player check-ins, exercise coordination, site breakdown, and the management of exercise “actors.”

Because the exercise “cause” was an MCI, the concept called for player interaction with fictional members of the public. To make for a realistic scenario, EM recruited students from the Santa Fe College Public Safety Academy to play the role of family members and loved ones trying to find out what had happened to the “victims” and others. In this capacity, their roles called for them to play out an array of emotional responses as they were given notifications – including fatalities. More than 20 such “actors” contributed enormously to the realism of the exercise, and our ARES® members were instrumental in making this all happen.

How did ARES® do? The emergency manager herself (who was the lead controller at the reunification center) praised our volunteers as self-directing professionals who did anything needed to assist in making the exercise work. Moreover, other ESF “players” at the center saw ARES® volunteers as professional, dedicated, highly capable “force multipliers” for the Alachua EM. The impressions made, and relationships established, on March 1 will stand us in good stead as we approach the 2023 hurricane season. This is what acceptance is all about.



The four Alachua hams that volunteered for this event are, from left to right: Brett, NH2KW; David, W4JIR; Wendell, KN4TWS, and Eric, KO4ZSD. The fifth Alachua volunteer was Leland, AA3YB, author of this article. These professional amateurs are a credit to hams everywhere. They look the part of pros because that is what they are.

The bottom line is simple...if you want acceptance for your ARES® group, start at the beginning – build personal relationships with your served agency. Be professional. Be aware that you serve THEM, not the other way around. Do whatever they want you to do that you feel you can do. Do it now, when the skies are blue, so that when the skies are dark you can truly serve your served agency.

And, oh, by the way, be skilled, trained, and competent amateur radio operators!



Creating a Relationships with a Served Agency—Escambia County

Gene Bannon KB4HAH

Escambia County Public Safety (EMA) is a strong supporter of Escambia County ARES and provides a dedicated room in the EOC.

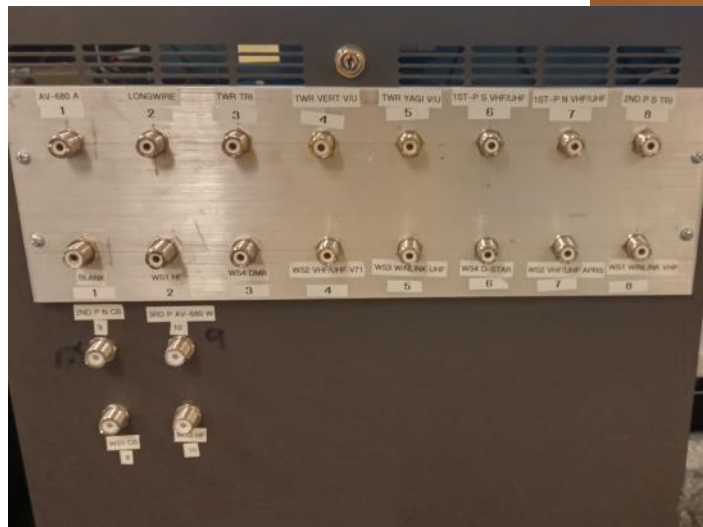
A view from the entrance, showing (Out-Effectuated-Area, In-Effectuated-Area, Digital, Supervisor's), all 4 of our workstations(WS) in the room.

KB4HAH in Blue shirt, Larry-N4TAC in red, Mike-N4DIA taking the pic, and an Escambia County EMS Employee (my Son), John-KO4DDF is missing).



Right—"Out-of-effectuated Area" Workstation (SARNET & HF with 2kw Amp) (pre-room upgrade completed last year).

Below—Our antenna patch panel to all the antenna's we can connect to in the rock-yard in back of the EOC (the Antenna Field)



Below—The **ARES Room** has a **Dedication Plaque** on the outside entrance for the public to see, to a North Florida ARES/ Amateur Radio Operator (SK) that provided major support to Escambia County and the Amateur Radio Community.

This room is dedicated in Memorial to Amateur Radio Operator

Rudy Hubbard WA4PUP



Mr. Hubbard served successfully for many years (1988-2006) as the Northern Florida Section Manager for the American Radio Relay League. Responsible for the oversight of amateur radio operations for over forty-four northern Florida counties from Orange to Duval to Escambia Counties; He was the principal Manager and coordinator of amateur radio communication support to all those county Emergency Managers throughout the North Florida region in times of disaster. Mr. Hubbard was highly instrumental in the coordination of amateur radio assets during hurricanes Erin, Opal, Ivan, and Dennis as well as several others hurricanes that struck the North Florida area during his years of service. He also coordinated communications support to South Florida as well as the neighboring states of Mississippi and Louisiana during the post-Hurricanes of Andrew & Katrina recovery as well as the many other post hurricane recovery events in the South Florida and the North Gulf Coast area during those years. Especially during the 2004 hurricane season, were 4 other Cat 2-4 hurricanes, besides Hurricane Ivan that struck the Florida Peninsula in 3-month time period that year. His support to those different counties Emergency Managers in and around his areas of responsibilities' were critical to the recovery of overall combine destruction seen. Mr. Hubbard was very dedicated to amateur radio and emergency communications and will be fondly remembered.

We are also on the EOC's tour route when Escambia County Public Safety does tours to important guests during their presentation portion of the Escambia County EOC. Thus, we have to ensure the room is public ready when we leave every time we use it.

TARS Participates in MagLab Open House

Chris Pandolfi KO4DN

President -Tallahassee Amateur Radio Society

On February 25th, Members of the Tallahassee Amateur Radio Society participated in the National High Magnetic Field Laboratory Open house in Tallahassee. Members set up a booth to demonstrate amateur radio and to answer questions about the hobby.

The MagLab open house not only showcased the plant, but had many hands-on science projects for the kids to participate in. Over 11,000 people came in attendance.

The team was able to get over 30 names and contact info in the visitor's log wanting more information on Ham Radio. Many licensed inactive hams did come by the booth request information on getting back on the air. A lot of fun and great conversations were had by all.

The team consisted of Phil Ashler N4IPH, Randy Pierce AG4UU, Phil "Chief" Fusilier KA5USN, and Adrienne Hendrix AJ4D.



Dixie Amateur Radio Klub

C.J. Peck, KO4PZE

Great things continue to happen here in the Tri-County Area (Dixie, Gilchrist, & Levi counties). Earlier this month members of the ARES group along with the Gilchrist County Emergency Manager witnessed changes starting to happen. Photo 1 shows the Emergency Manager installing the cross member on an old tower at the county EOC. Additionally, the cross member has pulleys installed on the end with rope. This will allow for rapid deployment of any dipole antenna. A 2meter antenna was also installed.

At the beginning of the month our club president (Mike Shaffer KD4INH) decided to go on a scavenger hunt. The purpose of this hunt was to locate lost club assets. As one might notice in photo 2, our tabletop podium has been returned to the club. Great work on tracking down our belongings, Mike.



At our club meeting this month we voted in favor of two upcoming events. On April 8th the club will be setting up a display and making contact with the community to explain Ham Radio. Additionally, we voted to move our field day location to the EOC.

Finally, on April 1st we will be holding our "Unofficial Quarterly Breakfast Gathering" at Bill's BBQ in Chiefland, FL. Please feel free to join us for this gathering.

Contact Information:

Orlando HamCation
Alejandro Malave
407-841-0841
PR@hamcation.com



Release Date:

March 16, 2023

FOR IMMEDIATE RELEASE

Orlando HamCation Announces 2023 Attendance Numbers

ORLANDO, FL – On February 10, 11, and 12 2023, Orlando Amateur Radio Club hosted the 76th annual Orlando HamCation at the Central Florida Fairgrounds and Expo Park in Orlando — an 87-acre lakefront fairground. HamCation experienced great weather during the show hours as the rain held off until after the show closed each night. This year's attendance was **21,830**. 2023 is the third largest attendance record for HamCation.

Orlando HamCation would like to thank our 2023 sponsors: ICOM America, Yaesu USA, and DX Engineering with their generous support. Please thank all our volunteers from around the world for their dedication to making HamCation the 5-Star event that everyone has come to love.

We would like to thank all the Visitors and Vendors for being part of a great show. We are already planning for 2024. We can't wait to see you at HamCation on **February 9 - 11 2024**.

Orlando HamCation www.hamcation.com



A Little Ham Radio Humor from SM KK4ECR

The Ham Radio Operator's Song

I'm an amateur radio operator, you see,
I talk to people near and far, with glee.
It's my hobby, my passion, my delight,
I communicate day and night.

I've got my rig set up just right,
With my microphone and my headphones in sight.
I tune in the bands, and wait for a call,
And when I hear a voice, I give it my all.

From Morse code to digital modes,
I've got the skills to handle the loads.
I speak the language of the airwaves,
And I know how to behave.

Sometimes I talk to folks from overseas,
And we exchange pleasantries with ease.
Other times, it's just a local chat,
But it's always fun, that's a fact.

So if you're ever feeling blue,
Just tune in and I'll talk to you.
I'm the radio operator, don't you know,
And I'm always ready to say hello.

I like to experiment with my gear,
To see how far my signal can steer.
I build antennas and test them out,
And when they work, I give a shout.

I've got a QSL card collection too,
From stations I've talked to, old and new.
Each one is a memory, a special connection,
And I cherish them with affection.

But sometimes, things don't go as planned,
And signals can be hard to understand.
There's static, interference, and noise,
And sometimes, it can be hard to rejoice.

But even then, I don't give up,
I tweak my settings and try to disrupt.
I persevere, with patience and skill,
And eventually, I get my fill.

So if you ever just need a giggle,
Turn on your radio and give the big knob a wiggle.
I'm the radio operator, as you know,
And I'm always ready to put on a show.

Walton & Okaloosa Counties!

DJ Stewart, KI4ZER, Assistant Section Manager, NFL , ARRL
President of W4ZBB, WF4X, W4AAZ

Hey and Howdy Hams!

Welcome to a recap of March for Okaloosa and Walton Counties in the Northwest Florida Panhandle! Our beloved hobby and team of volunteers is growing in droves and we sure are happy with all of the support we get and proud of each and every member that provides it! If you are looking for great energy in Amateur Radio, the organizations in our area are surely a great place to key in to!

Each month, Clubs and Organizations meet on multiple dates. There is no shortage of great ways to get involved, make new friends and meet operators from all walks of life! For instance:

The Walton County ARC meets for breakfast each month the Saturday before the 1st Tuesday of the month! They also meet on the 1st Tuesday of each month for their business meeting, and they are anything but boring! They put the fun in Defuniak, and they open with getting to know you, your interests and what you want to learn from the hobby! This is a great way to energize and motivate all who wish to join a club!

Thursdays in our area are packed the 1st and 3rd Thursday of each month with the Playground ARC, with their continuous informative sessions for free classes and technical training on the 1st Thursday, and their business meetings on the 3rd Thursday. More Thursday action has the North Okaloosa ARC meeting on the 2nd Thursday for their business meeting and the 4th Thursday for their very well formulated free classes and technical training!

The 3rd Tuesday of the month is the Walton County Ares meeting where they go over exercises, work that needs to occur with the EOC, supplemental plans for disaster relief, and free training on multiple modes of information exchange. They even build go boxes and actively test them!

Each Sunday, the Playground ARC meets for their Pile-Up where they assist other members and non-members alike as they can with projects, in-house objectives, Dx'ing, troubleshooting, radio installs, repairs, and experimenting!

With all of that you'd think there is no more time for anything else in the area, but you'd be mistaken! In the last month alone, the Walton County Arc met at a new breakfast location as the original spot decided to not offer breakfast any longer. They had visitors, returnees, and great chow! Their following business meeting put the fun in the front and took the time to get to know each person in the room and let them have the floor to introduce themselves, discuss their levels of interest and experience, and what the members expected from a club! What a way to revitalize interest and key in on the future of the hobby!

The Playground ARC hosted a tech night touting informative discussion on how to host a radio net! Before pressing into their 53rd Annual Amateur Radio Hamfest! What a wonderful event and a great showing by vendors and hams from multiple regions, states, and districts! They even had the ARRL DXCC Card Checker, testing, and a radio to give away every hour! Great job to that team who dedicated their spare time to put on an awesome show for all to enjoy!

Just before the Hamfest, the North Okaloosa ARC hosted their business meeting and introduced more plans for work to be done on their trailer, club enhancements and activities with the City of Crestview and the Main Downtown Mainstreet Association in support of the Blues, Brews and BBQ event! All of this while hosting a Technician Class conducting a five-session class for the Technician License in February and March. Sixteen students attended, including five YLs and seven youth (under 18). We changed our normal class night from Monday to Tuesday to avoid conflicting schedules with the Scout troops in the area. As a result, several of the youth students were Scouts using the class as a vehicle for Radio merit badge. At the end of the class, eleven of the students tested and eight passed as reported by Mike W4BZM. The teams' instructors included: KN4UDT, KM4VKY, KN4CGX, W4HA, KI5FR, KK4WDQ and W4BZM! What a great team and congratulations to all of those who tested and passed!

Speaking of classes, Bill, WD9GIU hosted a Technician License Class as well with the Walton County ARC and Walton County ARES. 14 People took their tests and 14 people passed! 13 of the 14 joined the Walton County ARC and almost doubled the club roster overnight! His instructors included: KJ4JAH, W4CJB, N4PRC, KF4ZZ, KX4LD, WD9JOY and WD9GIU!

With all that great and wonderful activity, you'd think the area would be tapped out. NOPE! Ted, KO4NKL came up to the North Okaloosa ARC from the Playground ARC to host an interactive discussion for Amateur Radio Etiquette! This presentation was a refresher for some and an introductory opportunity for new hams to learn in person how to have a QSO effectively. This presentation was by request of the Education and Advancement Committee after they made a trip down to the Playground ARC for a previous Tech Night in January touting how to host and teach a licensing class! Did you notice the precursor for all the area teaching, testing, interests, and newly licensed hams in the above remark?! Great job to all Clubs and Organizations that interacted and coordinated such an effort and brought new folks into the hobby!

So, what is going to be next? Well, if you look at the calendar and the opening 5 tidbits of information for Okaloosa and Walton Counties you can take your pick of where you want to visit and find that fit for you! Many members are involved in all the area

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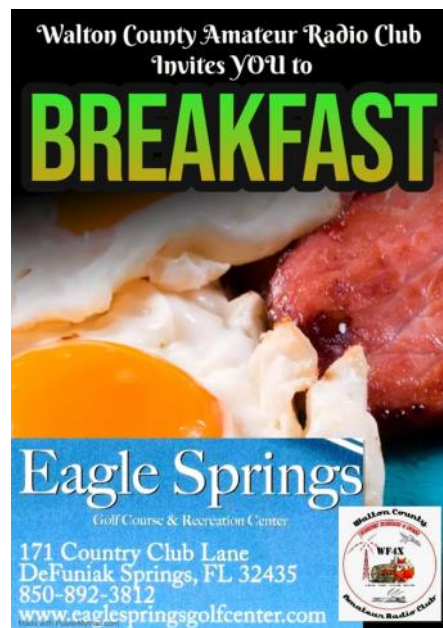
clubs, and we all project similar ideas for the advancement of Amateur Radio and encourage our social development within the entire area and beyond! Here are some things to consider:

- 1 Apr 2023, WCARC Breakfast, 0800, 171 Country Club Ln, Defuniak Springs, FL
- 1 Apr 2023, WCARC Hamshack Open, 1100 - ????, 312 College Ave, Defuniak Springs, FL
- 2, 9, 16, 23, 30 April 2023, PARC Pile-up, 1500, 17 First St SE, FWB, FL
- 4 Apr 2023, WCARC Monthly Meeting 1930, 312 College Ave, Defuniak Springs, FL
- 6 Apr 2023, PARC Tech Night, 1930, 17 First St SE, FWB, FL (see below flyer from KQ4HDO)
- 13 Apr 2023, NOARC Business, 1900, 4565 Live Oak Church Rd, Crestview, FL
- 18 Apr 2023, WCARES Monthly Meeting, 1900, 75 S. Davis Ln, Defuniak Springs, FL
- 20 Apr 2023, PARC Business Meeting, 1930, 17 First St SE, FWB, FL
- 27 Apr 2023, NOARC Tech Night, 1900, 4565 Live Oak Church Rd, Crestview FL

There are always other events going on and if you have any questions about what please use the club websites and contact forms to reach out for more information. They can be found at the web addresses below:

W4AAZ.ORG, W4ZBB.ORG, WF4X.Wordpress.Com, N4EMA.Wordpress.Com, ARRL-NFL.Org

Thank you to all that make this hobby a truly joyous experience! The support that you all provide by simply participating enhances the social climate of our communities and truly showcases the positive capabilities of the Amateur Radio interest! Be sure to follow the clubs and organizations on social media accounts and visit them in person for great interaction!



Recognizing
and Reporting
Severe WX

Brett Crossen
USAF Weather Forecaster /
MET Student MS State
KQ4HDO



Dixie Amateur Radio Klub 2nd Annual Ham Fest/Tailgate April 29th, 2023. Activities start at 9:00 am



Location Trenton Community Center 214 SE 3rd Ave, Trenton, FL 32693

Sellers Welcome We will have approximately ten indoor spaces available. Additionally, we will have limited tailgate spaces available. For the indoor space we are asking a \$5.00 donation.

Activities Include A 50/50 raffle, \$1.00 per ticket or \$5.00 for six tickets. Door prize tickets are \$1.00 per ticket or \$5.00 for six tickets.

Contact Info Curtiss Peck, email ko4pze@aol.com phone 352-246-2678, Fred Lewis, email neon-nite11@gmail.com phone, 352-214-6557



TailGate Party

April 29, 2023
8:00 AM Until 2:00 PM

Sponsored by the

Daytona Beach Amateur Radio Association

On site testing at 10:AM contact:
w2fa.kgw@gmail.com to reserve a space.
(We can't guarantee walk in availability.)

Location: The First Presbyterian Church of Daytona Beach, 620 S. Grandview Ave, Daytona Beach, FL 32118

[More Info](#)

CQMM DX CONTEST



Organizer and Coordinator:
(CWJF Group - PY4KL)

Start: 09:00 UTC - Saturday
End: 23:59 UTC - Sunday

2023 : April, 15 / 16

ATTENTION - Make a note of this date in your diary.

CQMM DX CONTEST

ATTENTION - Start : 09:00 UTC (Saturday)

CATEGORY	RECORDS ON THE CONTINENT (NA)		
	CALLSIGN	SCORE	YEAR
M0 / ST / AB	HP KC1XX	3.220.820	2022
	LP N6DZ	2.484	2020
S0 / ST / AB	HP AA3B	2.528.414	2021
	LP K1XM	677.160	2020
S0 / AB / QRP	N1IX	216.645	2015
S0 / SB / 80M	HP XE2X	9.595	2020
	LP VE9ML	25.375	2020
S0 / SB / 40M	HP NP2J	267.540	2021
	LP KM4SII	65.450	2020
S0 / SB / 20M	HP N2MM	609.760	2020
	LP N3UA	171.864	2020
S0 / SB / 15M	HP N2MM	376.585	2015
	LP N3UA	132.192	2022
S0 / SB / 10M	HP KP2B	92.829	2022
	LP CO8RH	58.640	2022
S0 / AB / YL	N2MM	609.760	2020

Scouting Update

Ken Lyons, Kn4MDJ, Trustee for WB4SA

Central Florida Council WB4SA (CFL)

WB4SA We are pleased to announce that our ARDC Grant "Solar Power educational display for Scout Ham Trailer" is complete. This enables us to expand our 60ft mobile mast scout ham trailer for a STEM educational display and enable off-grid usage without running a generator or using an outlet as it does now. The youth can see how off-grid power systems work using the panels, charge controller, battery pack, and inverters. Our program already displays ham and radio technology for over 10,000 youth each year and we also lead the nation in participants for the international JOTA/ Jamboree-on-the-air event. To date over 30,000 scouts have learned the basics of Morse Code/CW and can do SOS and their Names with several learning more. Nearly 2,000 of our scouts have earned the Radio Merit Badge and several dozen have become licensed. Our youngest Tech is 9 years old and youngest general is 13.



At the National Level

Radio Scouting, Inc. is proud to announce that we've accepted these new chapters:

- Pilipinas Testing Group W1PTG - A club dedicated to testing all in remote areas, working emergency services, and providing amateur radio classes to those who are underserved.
- Radio Scouting Tampa Bay N4RSI - A youth club serving Greater Tampa Bay Area Council, Boy Scouts of America
- Northwest Louisiana Radio Scouting (call pending) - A youth club serving Norwela Council, Boy Scouts of America

Discussions are ongoing for a few other councils that are interested in a common curriculum, grant, and resource assistance. Our goal is to assist smaller councils (BSA & GSUSA) to form a youth ham club and set up a permanent camp station under our organizational umbrella. A reminder for all scouting youth that we offer a free Explorer QRZ-1 when they get licensed.

www.radioscouting.us/donate

MERT Communications Update

Harlan Cook, KN4VRM, Coordinator



After 3 months of planning and equipment delivery delays, MERT Members finally started the Tower Re-cable project on March 20th. The teamwork was impressive along each step of the project. Even stripping the old cables off the tower took the entire first day as the wind had tangled the cords, electrical cable and communications cables into a true ball of knots. What a mess!

But five days later, the entire EOC Tower had been re-cabled. I sincerely thank the following Members for all of their time, work and expertise supporting this project in making it a total success:

20 – Monday - Kim Shulby (KM4JMZ), Bill Cummings (KC2ZRZ)
21 – Tuesday - Gary Neron (KS4TSX), Bill Cummings, Pat Davis (KQ4BRW)
22 – Wednesday - Gary Neron, Pat Davis, Bobby Gordon (KM4VCZ), Mike Condon, (W9MNC)
(23 – Thursday – Gary Neron, Gray Moffett (KC3DWY), Bill Sobel (K1WLS)
24 – Jonathan Reyes (WP3JJ), Kim Shulby, Gray Moffett



Harlan Cook (KN4VRM)
MERT Coordinator

A Special Thanks to Bill Gillespie (KW5BG) and Leon Jurczynszyn (K8ZAG) for their work all 5 days plus the pre-planning efforts starting back in January.

MERT Members support the Florida Sheriff's Youth Ranch Fundraiser Rodeo



Florida Sheriff's Youth Ranch Fundraiser Rodeo. Participants included (L-R). Preston Bowlin, MCSO Director of EM; Stephen Wall (MERT); photo center on horse MC Sheriff Billy Woods; next to him is Bill Davis (husband of Pat Davis); in back is Kraig Pritts (MERT); next to him is Pat Davis (MERT). Others not mentioned are Marion County CERT Community Members.

Doing good has no boundaries!

On Feb. 26th, three MERT Members joined MCSO officials and other Marion County CERT Members in supporting the Florida Sheriff's Youth Ranch Fundraiser Rodeo.

MERT Members Stephen Wall (KE6YXF), Kraig Pritts (KA2LHO) and Pat Davis (KQ4BRW) with husband Bill, assisted with traffic control and then received a personal tour of the Sheriff's Youth Ranch where young people get another chance at life.

QCWA Chapter 62 Ocala

Ken Simpson, W8EK

Ocala Florida Chapter 62 will hold its next meeting on Thursday, April 28. The China Lee Buffet has now reopened at its new location at 3933 E Silver Springs Blvd, Ocala, FL. This new location is about a quarter mile east of its old location, on the same side of Silver Springs (North side). We meet at 12:30 PM, but you are welcome to come earlier if you want. YOU are invited!

Chapter 62 also holds a net every week. We meet on 3940 KHz every Saturday morning at 9 AM local Eastern time. Please join us.

Interested in learning more about MERT?

..... <https://kg4nxo.com/>

Alachua County ARES®/NFARC Update

by Gordon Gibby KX4Z

Portable HF Operation

Brett Wallace NH2KW delivered our monthly TECH NITE (7pm First Thursday Zoom) discussion for March and got a LOT of discussion going on the subject of **how "portable" should we plan to be?** Brett brings a special perspective because of his incredible overseas military expertise. He prefers to see all of our go-boxes equipped with man-portable, very lightweight HF gear. We're going to have a lot of discussion, probably reach a consensus about how much/how many of this level of "back-packable" gear fits our county-oriented group -- but Brett certainly got a lot of discussion going!



H&W Exercise

Reid's public-service practice exercise (<https://qsl.net/nf4rc/2023/NVIS-VHFGTMOFunctionalExercise.pdf>) is moving closer to execution, with great improvements from "many counselors." Reid (K9RFT) is now teaching multiple volunteers who wanted a little more expertise with WINLINK. He does this teaching one-on-one and it fits VERY well with the ARES(R) Plan endorsed by ARRL Board of Directors for the Field Service. The proposed Exercise got a VERY enthusiastic reception at the ARES(R)/North Florida Amateur Radio Club (<https://qsl.net/nf4rc/>) meeting on March 8 with an unusually high 20 attending. Our crew is VERY interested in direct service to the public to complement our service to our County. Reid happily discovered at least 13 with both HF and VHF voice/data capabilities. Next he plans to present to the leadership board of the Gainesville Amateur Radio Society (<https://gars.club/>) and then their monthly meeting, before picking an exercise date, probably in May.

ADVANCED WINLINK TRAIN-THE-TRAINER TOPICS
April 8th 2023 7:00 PM in person (KX4Z's house) and Zoom
<https://us02web.zoom.us/j/89530741792>
Contact docvacuumtubes@gmail.com

Reid's WINLINK one-on-one training has been a huge "win" for our group and now seems to be expanding, due to the upcoming Exercise. Reid asked for a "Train the Trainer" series to go over the more exotic parts of WINLINK and how RMS stations are configured and operated. I put together a syllabus for that: <https://qsl.net/nf4rc/2023/WinlinkAdvancedTopics.pdf> and that meeting can be made available on zoom if there is interest (email me). A tentative date for that session is Saturday April 8, and we have sign-ups already.

Middle School CW

I was the "substitute" teacher for Lorilyn KO4LBS while she was on an overseas trip and had two middle school students show up for CW training. I spent almost 30 minutes just sending them simulated (and exciting!) *disaster messages* at about 10 wpm CW -- and they copied most of it! As you would expect, they got better during the session. It is exciting to see that Lorilyn has already gotten them way beyond the old Novice 5WPM level and they will soon close in on the old General Class 13wpm -- 6th graders!

Continued on next page...

Tower Trailer

Stewart Reissner KK4DXF presented some of his ideas for mounting our newly-repaired 30 foot alumatower *removably* on my 16-foot-bed equipment trailer with a hinge and support system that can be take apart. This got a LOT of discussion and Gordon Beattie W2TTT had very practical experience about problems we might encounter. Stewart can WELD, so this project may actually happen!

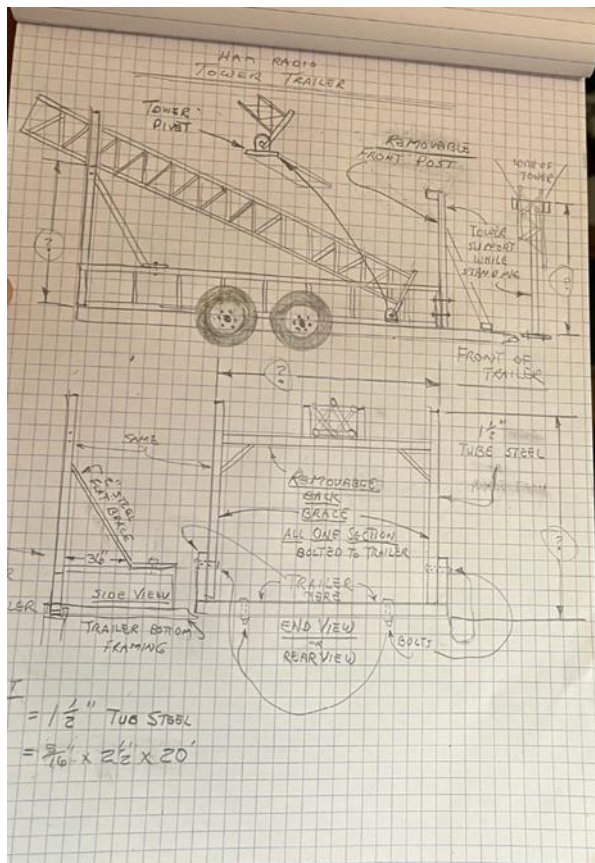
This tower trailer would complement the smaller 4x8 trailer that we have for generators and a telescoping 30+ foot fiberglass mast that can handle VHF or wire antennas.

Deployable HF Antenna

Brett's interest in deployable HF stations included a lot of interest in easily deployed HF antennas. So we set up a LunchNLab Mar 25, to build 9:1 baluns in either modest or high-power versions. (See related article). I've got data now on two different prototypes. More on this development next month. While some of these components can be had very inexpensively, other firm are asking \$200+ for rather simple systems. Our 9:1 Balun is about \$25 and the antenna wire is dirt cheap.

ARES(R) TaskBook and Alachua County EOC Taskbook

Starting a renewed emphasis on ARRL's training plan (<https://arrl-nfl.org/wp-content/uploads/2020/01/Florida-ARES-Training-Task-Book-2020-R1.pdf>) and our local EOC training so our volunteers know how to use the police radio and some of them are able to use ALL the systems at our EOC. (<https://qsl.net/nf4rc/2022/AlachuaCountyEmergencyVolunteerTaskbook.pdf>)



Automatic Link Establishment

Jim Grove (volunteer) and Ryan Simpson (employee) of the Flagler County EOC have spoken with James Kenny and Roger Lord of FDEM and are encouraging their contacts in the Region 3/5 exercise group to give ALE a try. I installed ion2g (<http://ion2g.app/>) on my NCS521 station with a "code plug" (frequency list) for the 7300 and various SHARES nets. FDEM thinks this is a worthwhile system along with SHARES WINLINK, and with decent NVIS horizontal antennas, it should be. Jim and I managed to make an ALE data connection, and we got scanning to work, but we couldn't make it "find" each other....at least not yet. This is going to take some more work. Now that SHARES Winlink allows low-cost high speed VARA, more and more counties are likely to join SHARES. Doug Lynch (Doug@doughlynch.org) or I can help. There are already three SHARES RMS stations in :Florida that support high speed VARA in addition to PACTOR.



Florida QSO Party April 29-30, 2023

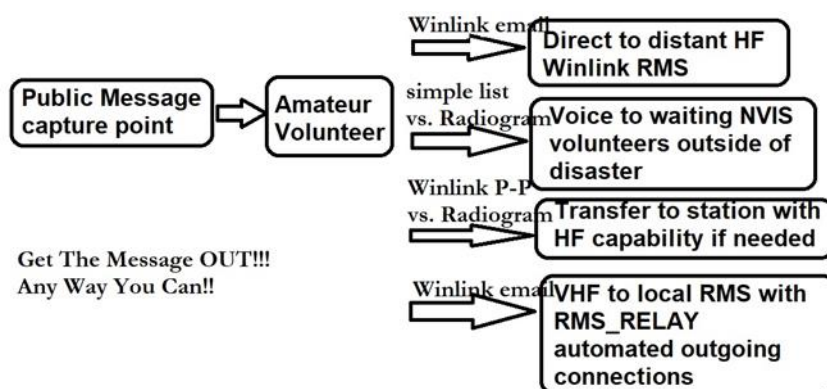
Since the Florida QSO Party was re-introduced to the contest scene in 1998, the FQP has become one of the fastest-growing and most popular State QSO Parties today. This is due, in part, to the tremendous effort by the mobile teams to activate as many counties as they can in order to allow those participating from out-of-state to achieve a county "sweep" working all 67 Florida counties. Florida stations operating from home are also valuable since that increases the chances that stations will work all counties! If you are a serious or casual participant from Florida or outside of Florida, the Florida QSO Party was designed to be a FUN operating event. Why not give it a try?



Gainesville Area NVIS Net Creates HSEEP Exercise to Strengthen Amateur Radio Direct Service to the Population

by Gordon Gibby KX4Z

Reid Tillery K9RFT, the indefatigable net manager of the Gainesville Area NVIS Net (3.970 MHz LSB 7PM 1st and 3rd Friday evenings of months) has come up with a smash hit of an HSEEP Exercise for Alachua County and surrounding ham volunteers! He found a way to very significantly strengthen a weak area of the Alachua County backup Communications Plan. We have always wanted to continue the grand tradition of amateur radio operators providing **outbound disaster communications directly for the population**, but so often it is easy to get focused on helping out our local Government professional response through our excellent Emergency Management group. We work extraordinarily closely with Alachua County EM but have had smaller success with planning for moving health & welfare traffic.



Enter Reid Tillery. Reid is fascinated with NVIS HF "antenna-to-antenna" communications of any form -- he is *all over* every technique from voice, to PSK, to NBEMS to WINLINK. Reid is a tireless one-on-one very patient instructor who has mentored so many local hams in the Alachua County area in the last two years. (The photo shows Reid in his favorite environment -- the outdoors, plotting a course!)

Reid put together a "Functional Exercise" (in government jargon) to help all local hams practice effective "catchment" of outgoing disaster messages, and then emphasized "**Get The Message Out**" type thinking to move the traffic out of our simulated disaster zone by any means possible -- all the while working seamlessly with our existing systems for providing service to shelter communications, or any other duty assigned by the Emergency Manager. Exploiting the lower right-hand "corner" of our existing Comms Plan diagram, (see: <https://qsl.net/nf4rc/AlachuaCountyCommsPlan2022.pdf>) Reid called for multiple "HF HELPER STATIONS" volunteers, and found an important and fitting role for the growing City of

Waldo EOC Radio Room (for which the Gainesville Amateur Radio Society just scored a huge grant to equip). They will function as the linchpin of a wide HF network of stations moving outbound health and welfare traffic. Do you see the strong resemblance to the ARRL Neighborhood Ham Watch described in the NFL Section Comms Plan (see <https://arrl-nfl.org/wp-content/uploads/2020/05/NFL-Section-Comm-Plan-FINAL-May-1-2016.pdf>)?

:The Written Exercise Plan

<https://qsl.net/nf4rc/2023/NVIS-VHFGTMOFunctionalExercise.pdf>

Reid envisions local hams in distant towns of our large county developing **relationships** (there's that word again!) with their local fire stations or supermarkets so they become a "known & trustworthy quantity." That can allow them permission for a card table or other display to accept outgoing disaster messages at a government office, community central point, or "point of distribution" (e.g. distributing food, water, fuel) in a disaster. Then move those messages by ham radio!! Our great working relationship with the Fire Department will help, and Reid is already a volunteer, affiliated with his local Fire Station.

Continued on next page...

How to move the traffic? ANY WAY YOU CAN --

- (1) SIMPLEX HF: Reid plans to have out-of-disaster area volunteers who will take traffic by simple HF voice or data and then either make cell phone calls to addressees, or send email. Nothing prevents volunteers from NTS or other groups jumping in to provide service.
- (2) DIRECT WINLINK: Suitably equipped local disaster response stations can move the traffic immediately by hitting distant HF Winlink RMS stations.
- (3) VHF: Local stations without HF capabilities have multiple options -- move the traffic to dual-HF/VHF equipped volunteers for further processing, or connect to KX4Z-12 (VARA VHF RMS) or KX4Z-10 (AX.25 VHF RMS) -- both of which have RMS_RELAY automated connection, which will auto-initiate outgoing RMS connections from KX4Z on the HF bands with relentless efforts to push that traffic out.

Reid's motto is simple: **GTMO** "Get the Message Out!" (pronounced "GIT MO")

Evaluation

All Originations and Relays will be tallied (simple "tick marks" on a provided form in the packet) by participating stations, separated by voice & data techniques (both of which can be employed at will, whatever suits that station and situation) -- and will be reported at the post-Exercise HOTWASH (Zoom: <https://us02web.zoom.us/j/89530741792>). The Exercise Plan includes a page for simple and easy tick-mark entries. They can also be reported via a Google Forms link provided in the Exercise Plan <https://qsl.net/nf4rc/2023/NVIS-VHFGTMOFunctionalExercise.pdf> -- that link is <https://docs.google.com/forms/d/e/1FAIpQLSchqpdM79MfgrvFY5ImKVTmUb6TP3niLxuWfpxHCGERoaSung/viewform> and can also be found on the NFARC/ARES(R) web site: <https://qsl.net/nf4rc/>

Exercise Planning

Reid is working with all local Alachua County amateur radio clubs to set up the Exercise. He got a very enthusiastic reception at the NFARC/ARES(R) meeting where he presented the entire Exercise. Next he plans to speak to the Gainesville Amateur Radio Society. When a date is set, it will be widely announced. Registration is OPTIONAL (any help is gratefully accepted) but you can get yourself on the list via: https://docs.google.com/forms/d/e/1FAIpQLSfzDjC32xuyViO5V2ITfxGgxejaWOzYh_qBj_NbO7oL9cSKA/viewform

Pre-Exercise Training

The latest wrinkle is that Reid is offering 1-on-1 "Winlink University" training for interested volunteers. Graduation requires multiple transmissions of messages by normal client-server, Radio-Only and peer-to-peer techniques. He is also organizing a "Train the Trainer" series for those who need an advanced level of understanding of the Winlink RMS to properly train others. See: <https://qsl.net/nf4rc/2023/WinlinkAdvancedTopics.pdf>

**Portable Battery Adventures – A Journey**

J. Gordon "Gordie" Beattie, Jr., W2TTT

For the past fifteen years, I have been "playing" with Lithium-based batteries and also some batteries of other chemistries and in the process have had some "interesting" experiences. In the small and medium battery sizes, we had settled into NiMH batteries with reasonable success. Our HTs and small devices were happily running and recharging without a lot of fuss. For larger current applications we were using deep cycle marine batteries and when budgets would allow, we would use AGMs. Life was good.

Then we started to have the need for something lighter, perhaps even with a larger current capacity, but lower than a big deep cycle marine battery required. Enter the ability to build our own NiMH packs. This was great! You could carry enough additional battery around without having to worry about battery acid and if careful, you could recharge the pack right off of a 14 VDC power supply. In fact, in many field situations, you would simply "float" the battery across the DC power leads to provide surge current support for a 100 Watt HF rig or a 50 Watt VHF rig. Well one day I decided to charge one of my NiMH packs, a ten cell type, from my old Lambda 15 VDC 100 Amp bench supply. Normally, I had daisy-chained two RigRunners to that side of the desk and so there was a fair voltage drop that was perfect for charging this type of pack. However, I had "improved" my power distribution to get 14.3 VDC everywhere on the bench. This made my radio equipment - especially the 350 Watt solid state VHF-UHF amplifiers very happy! However, once charged up and left connected, it left my NiMH packs warm and very "unhappy". In

fact, they became so unhappy that the one pack exploded and threw shrapnel and carbon dust everywhere around and above the shelf. It was quite a shock to be sitting in the shack working when a piece of equipment explodes and somehow by the Grace of God doesn't kill or maim you! The cleanup was long, hard and seemingly never-ending. For months, I would find a streak of the carbon around on a short loop of coax, or under a piece of equipment. I did learn my lesson that stored energy could kill you.

So against this backdrop, I had the opportunity to try some Lithium Polymer batteries to provide compact backup power for HTs. They were designed for the RC community and worked well in this role. They were 7.4 VDC just like the HTs and came with special chargers. However, we still had a need for a bit more current capacity in a lightweight package for VHF-UHF and maybe HF radios and computers.

A prominent vendor was buying LiFePO4 cells and assembling packs that used a special balanced cell charger cable and they sold the charger that had the balancing circuitry. Life is again good. Well after months of solid use but with no trauma to the pack, it sat on my desk unused. One day after the pack had sat still for about 8-9 months, a friend came by and I proudly handed him the pack to see how light and compact it was. He held it for a few minutes and then said that it was warm, then HOT! Well my office and hamshack was on the third floor of our home, so I ran it down the stairs and out into the yard. By the time I got down there, the pack was smoking, then once outside it caught fire! Who knows why that pack after having sat idle for so long would suddenly catch fire. To be fair, the supplier replaced the pack at no charge and made changes to their QC processes.

All through this period the requirements for portable power for small, medium and large batteries evolved and settled into the very affordable and reliable (read: SAFE) SLA OR Sealed Lead Acid batteries. Their useful capacity was generally about half their Ampere-Hour rating and they weren't too heavy. Charging them could be done with a bench or station power supply with no fuss. We had dozens of them in sizes ranging from 6 AH to about 35 AH. They were used for 25 Watt APRS stations, AREDN Mesh nodes with cameras, HF radios and other deplorables. We still needed something with more capacity and less weight.

After these experiences, I have learned to be more careful and to also exercise patience when it comes to selecting and purchasing many things - especially batteries. I have also become quite opinionated - but with good cause! In the end, patience has saved me time, money and probably has kept me alive as well. In many cases, patience also allows enough time to pass for newer and better options to emerge.

So here are some resources that I and others like Jim K4DBC have found useful. If you are on a budget and are technically savvy, might be well served by looking at the Battery Hookup web site and getting on their mailing list. Even if you are not, you will see great deals on used, but standard LiFePO4 batteries. I have bought several things from them including a four pack of hard cased 35 AH batteries for \$223 shipped. Currently, that four pack is out of stock. They also sell cells and BMSs should you want to make your own battery as Jim has done on several occasions. You will also find batteries, hardware and cells of other chemistries and with a wide variety of capacities.

<https://batteryhookup.com/products/14-4v-19-2ah-276-48wh-with-24x-mh1-3200mah-cells>

For my future vehicle and station batteries I am either going to use these

<https://www.litime.com/> (also called "Ampere Time") or the metal bodied ones referenced in this article.

<https://groups.io/g/RVHFG/topic/92138201#>

I have a 200 AH Ampere Time battery with a 200 A BMS. So far it has performed well running a 2000 W inverter at over 1200 W with some lab grade measurement equipment on a field cart. I have also used it for high power operations when operating my radios and computers in a portable locations with great success. The decision in the mobile will be driven by durability/safety and then functionality and cost. Time will tell.

For small applications, I have bought the hard shell Bioennopower batteries in 9, 20 and 40 AH sizes. These get used in lunch-box-sized to briefcase-sized deployable go kit cases.

NOTE: Never buy the shrink-wrapped batteries if they will be outside or are going to be in motion. Moisture and jostling are not good for them and the hard shell batteries can handle those challenges better. Cost is higher with Bioennopower, but there is no nonsense with their products. Definitely worth the dollars spent if you have concerns over reliability and safety.

<https://www.bioennopower.com/products/12v-20ah-lfp-battery-abs-blf-1220as>

In summary, there are economical choices out there as long as you know what you are buying. There are also a good range of cost-effective, rugged and reliable options out there for use cases where you can't sustain failure.

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 and requirements.**

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!