



QST NFL

Newsletter for the Northern Florida Section

Come join the FUN!

Volume 11 Issue 11

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November 2024



From the Shack of the Section Manager

Scott Roberts, KK4ECR (kk4ecr@gmail.com)



As we navigate the vibrant world of amateur radio, we must continuously enhance our skills, knowledge, and community connections. This month, we delve into ten important topics that celebrate our hobby and emphasize our role in emergency response, education, and public service. Each of these topics plays a vital role in our community's and individual operators' growth. Let's explore why and how they are significant.

1. Emergency Preparedness and Response

In an age where natural disasters are increasingly common, being prepared is crucial. Amateur radio operators are often the first line of communication in emergencies, providing essential information when other systems fail. Enhancing our emergency preparedness skills ensures we can effectively support our communities and local agencies during crises. This includes knowing how to set up emergency communication networks, understanding local resources, and participating in drills with emergency services.

2. Digital Modes in Amateur Radio

The rise of digital modes has revolutionized the way we communicate. Modes like FT8 and DMR allow operators to connect over long distances with minimal power and under challenging conditions. Understanding these digital modes broadens our communication capabilities, making it easier to communicate during crowded band conditions or when voice communications may not be possible. Embracing digital technology keeps us current and enhances our effectiveness in various operating scenarios.

3. Building Your Own Antennas

A well-designed antenna can significantly improve your communication range and quality. Building your own antennas saves money and deepens your understanding of radio frequency (RF) principles. This hands-on experience fosters creativity and problem-solving skills and optimizing antennas for different frequencies can make all the difference in your operating success. Whether it's a simple dipole or a more complex Yagi, the satisfaction of crafting your equipment is unmatched.

4. The Importance of Mentoring New Hams

Mentoring is a cornerstone of our amateur radio community. By guiding new operators through their journey, we ensure the continuity and growth of our hobby. Sharing knowledge and experiences helps newcomers gain confidence and skills faster. Mentorship also strengthens our community bonds, creating a supportive environment where everyone can thrive. Each one of us has the potential to inspire and uplift the next generation of hams, ensuring a vibrant future for our hobby.

5. Contesting Strategies and Tips

Participating in contests is an exhilarating way to test your skills and challenge yourself. Contests not only promote friendly competition but also help operators improve their communication techniques and equipment proficiency. By sharing strategies and tips, we can encourage more members to join contests, fostering a spirit of camaraderie and growth. Whether you're a seasoned contester or a novice, there's always something new to learn and share in the world of contesting.

6. Exploring Satellite Communications

Satellite communications open a new frontier for amateur radio operators. Understanding how to communicate via satellites expands our capabilities and allows us to connect with operators worldwide. This unique aspect of our hobby also encourages technical learning about radio waves, orbits, and equipment setups. Engaging with satellite operations can invigorate your passion for amateur radio and highlight the endless possibilities within our community.

7. The Role of Amateur Radio in Public Service Events

Amateur Radio excels in supporting public service events, ensuring safe and effective communication. By volunteering at local events like marathons or fairs, we demonstrate the value of our skills while fostering positive relationships with community organizations. Our involvement not only enhances event safety but also showcases the importance of amateur radio to the public, encouraging more people to explore the hobby.

8. Understanding Radio Propagation

A solid grasp of radio propagation is essential for effective communication. Factors such as time of day, atmospheric conditions, and frequency selection all affect how signals travel. We can optimize our transmissions and reception by understanding propagation, ensuring clearer communication. This knowledge is crucial, especially during emergencies when every connection counts.

9. Ham Radio and STEM Education

Amateur radio serves as an excellent tool for promoting STEM education. By engaging with local schools and youth organizations, we can inspire young minds to explore technology, engineering, and science. Introducing students to the wonders of radio communication fosters curiosity and critical thinking skills, ensuring a new generation of innovators. Encouraging youth participation also revitalizes our community and ensures its longevity.

10. Upcoming Events and Opportunities for Engagement

Staying connected with fellow operators is essential for growth and learning. Attending local and national events, such as conventions and field days, provides opportunities to network, share experiences, and learn from each other. These events often feature workshops, presentations, and hands-on activities that can enhance one's skills and knowledge. By participating, one contributes to the vibrancy of our community and inspires others to get involved.

Each of these topics is integral to our amateur radio community's continued success and growth. As we explore these areas, we enhance our skills, foster connections, and ensure that our hobby remains vital and relevant. We encourage you to dive into these subjects, share your insights, and engage with fellow operators. Together, we can build a stronger, more resilient amateur radio community.

Thank you for allowing me to be YOUR Section Manager!

NFL SECTION TOWN HALL MEETING

Watch the NFL Section website for an announcement about our first NFL Section Town Hall Meeting. We will hold this meeting via Zoom. During this meeting, we will give updates on our section, cover a training tip, and answer questions from our members. If there is a topic you would like to discuss at this meeting, please email Scott Roberts at kk4ecr@arrl.org.

VISIT YOUR CLUB

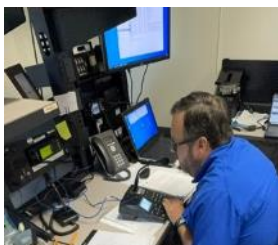
I'd love to be able to visit every club in our section. As hard as that may be to do in person, virtual visits can be much easier to schedule for some. If you would like me to visit your club in person or virtually, and speak, please email me so we can schedule it – kk4ecr@arrl.org.





From the Section Emergency Coordinator

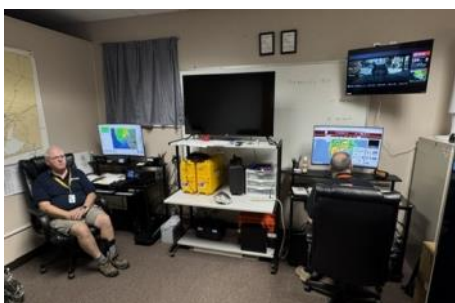
Arc Thames, W4CPD



Well, it's hard to believe we went through two hurricanes so closely together this year. I know many of our teams in the big bend and along the west coast have spent countless hours going through preparations, activations, and demobilizations (not to mention preparing and taking care of their own homes.

I'd like to extend a huge thank you to all of you that volunteered your time during these recent activations. I also want to thank our team in Leon County for their continued support of the State Emergency Operations Center as well as my local team in Santa Rosa County for being a backup communications

point and operating the HF net.



Mike-KB3SHN & Ralph-N3RLC operating from Santa Rosa County

As, hopefully, things calm down for the remainder of the year from an emergency communications standpoint, I encourage you all to use this time with your teams to prepare for next year. We've continued to see a consistent abuse of SARNET during activations to the point it almost becomes unusable, so I encourage you to brush up on your Winlink skills over the winter & spring as well as your HF capabilities. While I don't have the exact date yet, we are planning another statewide communications exercise in late March or early April.

I don't "endorse" YouTube channels but two that I highly recommend if you're interested in learning new skills are [Ham Radio Crash Course](#) as well as [Wave Talkers](#). Wave Talkers in particular do a lot of Winlink training so if you're lacking in skills there, I would certainly recommend checking out their channel.

During our "down time" I would like to re-vitalize our section "[Official Emergency Station](#)" program. My plans for this are to utilize those that apply and are approved as monitoring relay stations on HF when we activate our statewide HF net. We generally monitor predetermined HF frequencies at both the State EOC and now an alternate location as well but, depending on where the emergency is, we may not be able to hear every station. If you have a strong HF station and are willing to volunteer to monitor those frequencies, please [apply on our website](#). It's important to note, this isn't always the most exciting work as there may be hours that we have no contacts but it's an extremely important role to be filled. We do our best to stand down the HF net as soon as we know that there aren't any agencies relying on HF for communications to or from the State EOC.



As a quick side note, for Santa Rosa County, we have a new repeater on the air located in Munson, FL on the far northern side of our county. It's operating on 147.330 + DCS 023 and will soon be linked to our main 146.700 K4SRC repeater. We work a lot of events in the northern end of our county and we are thankful to our county Department of Emergency Management for providing this repeater and antenna. On the same tower, we have a new antenna setup for APRS as well and will have an Pigate/digipeater on the air there as well in the coming weeks. We've also relocated our K4SRC-10 packet Winlink gateway to our central tower so surrounding counties should now have great success connecting to it.

Don't forget, the new emergency communications courses are now available from the ARRL and align with the new ARES taskbook. The courses can be found online - <https://www.arrl.org/online-course-catalog> and the taskbook can be found via [this link](#).

Monthly ARES Statistics

The ARRL is still experiencing server issues, so we are still unable to provide the monthly report at this time.

NFL Officials

Section Manager

Scott Roberts KK4ECR

Assistant Section Managers

Kevin Bess KK4BFN

Helen Straughn WC4FSU

DJ Stewart K14ZER

Joe Bassett, W1WCN

Section Emergency Coordinator

Arc Thames W4CPD

Section Public Info Coordinator

Jim Bledsoe, K14KEA

Section Technical Coordinator

Frank Haas KB4T

Section Affiliated Club Coordinator

Section Traffic Manager

Helen Straughn WC4FSU

Section Official Observer Coordinator

Robert Leasko WB8PAF

Section State Government Liaison

Darrell Brock N4GOA

NFL Committees

Webmaster, www.arrl-nfl.org

Kari McClure, NW4R

Newsletter, *QST NFL*

Earl McDow, K4ZSW

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

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

All submissions are subject to editing prior to publication.

Looking for Something?

Gordon Gibby, KX4Z, has taken the time to index the articles from all the 2021 issues of *QST NFL*!

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

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NFL Section Member of the Month!

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

Digital Library of Amateur Radio & Communications

Marty Brown, N4GL

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

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

Loften High School

Bob/W4GJ, Trustee for K4WTL and N4F



Loften High School (in Gainesville) student operators participated in an annual Special Event called **Fire Prevention Week**, October 6-12. All 55 of our club's operators produced 1,155 QSOs in four days (shortened by hurricane Milton with school closed for two of those days). Using the call sign **N4F**, our students passed along important **Fire Safety tips** to each person they contacted. This year's Fire Prevention Week theme was Smoke Alarms. Two of the people we talked to thanked us for saving their lives last year. Both stations had smoke alarms = awoken them in the middle of the night and they were able to get their family members out of the house before the house was consumed in flames!



Every year our students look forward to this event because most are in the Fire/EMS academy of the high school. They spoke with several active and retired firefighters and the kids enjoyed the service and wisdom they passed along. **Hamfire.com** is the website for this annual event, which takes place every October to commemorate the Great Chicago Fire from October 1871.

If you would like to participate in this event as an operator, we would welcome your participation! All ten U.S. call areas participate (N0F - N9F) including one in Canada; VB3FIRE. One additional bonus station; KF2IRE also was active in this event.

Dixie Amateur Radio Club

Fred KO4YOL



Learn about Emergency Communications via HAM radio by getting on the Air!



ARRL Speakers

Talkin Frequency

**147.390 + MHz, pl
123,**

Nov. 9th Sat.

9 am - 1 pm

Trenton Train Depot

N. Main St. and
NW 4th AVE

Trenton Fl.

<https://www.qsl.net/w4dak/>

contact: Fred 352-214-6557

Email

fredko4yol@gmail.com



Raffel for prizes (some prizes may require an Amateur Radio License) for Donation

Hot Dogs and Drinks will be sold.

FCC Testing After Event at 1 PM

Tailgaters should arrive around 8 am for best spots

HF Station

Sponsored By Dixie Amateur Radio Klub

Suwannee County ARES News

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

This has been a month of cleanup and taking stock. The EOC and its antennas all survived. The SARNET repeater on 443.7 MHz and the 2m repeaters on 145.27 MHz and 145.41 MHz are all fine and for that we are thankful.

Battery Powered Readiness

The 145.27 MHz W2TTT repeater spent just over 90 hours on battery backup with no issues with the loss or restoration of power. There is a 200 AH LiTime LiFePo4 battery on the repeater and after the storm, a solar panel was deployed to ensure that the battery remained "topped up". It was not left out during the storm because of concerns over flying debris.

Similarly, there was a 40 AH Bioenno Power LiFePo4 battery on the household radio room at W2TTT/N2FWI and other 30 AH batteries kept their fiber Internet ONT (Optical Network Terminal) and Wi-Fi router and later AT&T Wireless Internet router and AREDN Mesh running for the duration of the outage. These were cycled through the repeater charging setup as needed to stay ahead of power loss. Further, there is a solar charged 100 AH LiTime LiFePo4 battery in Gordon W2TTT's van which can keep a deployable station on the air indefinitely.

Post Storm Assessment

Despite the challenges in the days following the arrival of Helene, and through the threat of Milton, channels were monitored in case of a post-storm emergency report. Individual stations around the county took some severe beatings, but most ended up remaining on the air, or were quickly restored. A few stations lost all antennas and only had handheld and mobile radios on the air.

Everyone seems to have had some property damage. This was only thirteen months after Idalia, and a few months after Debby. Recovery has become a never-ending process. It will be a long time to recover and rebuild.

Building to a 170 mph standard is something to seriously consider. The incremental costs are minor. Look into this additional margin of resilience and safety for yourself, your family, friends and businesses. Well-anchored, sturdy buildings and shipping containers are getting a revised look in many homes, not only for hurricanes, but for straight line wind events and tornadoes. Remember 2024 began on January 9th with severe straight line winds and tornadoes.

Operator Challenges

This month has also brought with it some medical challenges for Jerry AA5DK who runs monthly VE sessions at the Live Oak Public Library and for Nancy N2FWI who keeps an ear on the 145.27 repeater as a member of the ARES team. They are both on the mend, but please keep them and anyone else suffering through medical challenges in your prayers.

Net Operations

Between our EC Mike Meador KM4BTW and Gordon Beattie W2TTT, the various Section and Statewide nets have (mostly) been covered and the weekly Suwannee County ARES Net at 8:30 pm on Sunday evenings on the 145.27 MHz (Tone 123.0 Hz) repeater have been held. Stations in Suwannee County and beyond are welcome to join us.

Closing Thoughts

As we head toward Election Day, Veterans Day and Thanksgiving, let us count our blessings. Reach out to someone you haven't heard from in awhile and reconnect. Say thanks for your blessings; be there for someone who may not reach out themselves and just be there to listen - even if that's all you have to offer. These have been trying times, but together we are more resilient and get better.

Be well, prepared and be safe.

Happy Thanksgiving!

NWFL

Gene Bannon KB4HAH-

Let me tell you what's been going on over here in NWFL this month.

1. The **Milton Amateur Radio Club** & the **Five Flags Amateur Radio Assoc** complete a joint operation at the Pensacola Interstate Fair for the past week and a half (Oct 17th - Oct 26th). With **Hal Clark - W5HC** organizing, coordinating, and leading the many different parts of this operation, including ensuring we were able to maintain our regular Demonstration booth in the Hobby section of Bldg. 2 at the Pensacola Interstate fairgrounds. We conducted a demonstration booth where we had operational station working Amateur Radio stations on 40, 20, 10 and 2 meters / 70cm to the public using a special event call sign (W4F) as well as using W4UC. We also did a limited participation in the ARRL worldwide contest on the weekend of Oct 25/26 where we made contact with various amateur stations in South America and Europe. We end up with over a hundred visitors to our booth asking all sorts of questions about how amateur radio works during an approaching hurricane and other major disaster events, how they can get an amateur radio license and various other questions about amateur radio. Furthermore, we also checked into our local 2-meter net (**The Wire Rascals**) on Friday evening (Oct 25th at 7PM), demonstrating what an amateur radio net is and how we conduct an amateur net.

In total, we had great fun demonstrating amateur radio and talking to folks about our hobby. We are also looking forward to holding the Spring Amateur Radio Class (Feb 11th - Apr 24th 2025) at the Pensacola State College (PSC) in hopes that some of the folks wanting information on how to get their amateur radio license (which we pass our flyer for the class to) will be registering for that class.

2. The Five Flags amateur Radio Association (FFARA) in conjunction with the Pensacola State College (PSC) is about to wrap up the fall term of our class. We had 26 students register

for the class and with that we have approximately 14–16 students who have attended a majority of the class sessions. The class will be completing the final 3 weeks of this term on the Nov 14th with the VEC exam on the final class. This week we will be having what we refer to as our Mini-Field Day. This is where the instructors will bring in antenna, rigs and associated equipment need to have a fully functional amateur Radio station. We then have the students put them together (**UNDER the Close Watchful** eyes of the instructors face it, it's our equipment they are putting together, and we want them back in working order afterward ha ha) with the goal of having a fully functional amateur radio operating station. Then we will have them get on the air, and for some of them, making their very first amateur radio QSO. That will be on Tuesday, Thursday, which is our Field trip to the FFARA club monthly meeting, so that students can be introduced to the local amateur radio community and get an idea of the things we ham get involved with in our local community. The following week, we will have our antenna construction class, where the students will be making their own 2 meter/ 70 cm antenna from the 5 (approximately 19") rods and UHF chassis mount we'll be providing them. They will have a live view of their progress when we have them on our antenna spectrum analyzer to see where it currently is and what they should do by trimming or bending the radials further to achieve an acceptable SWR for their antenna. The final week will be the wrap up of the class and of course the VEC session.

We are looking forward to having another successful group of students achieving their goal of getting their initial license or upgrading their current license.

So that is what has been going on here in NWFL of late.

Here are some pictures of our Pensacola Interstate Fair operations, we'll have to send you the pictures of our upcoming class session in next month's, Newsletter.



Better shot of Charlie and I at Pensacola Interstate Fair



Gene KB4HAH



James K9JHR & Spartacus



Opening Day 10/17/2024

Northwest Florida

DJ Stewart, KI4ZER, ASM NWFL ARRL, Pres. W4ZBB/W4AAZ

Happy Hamtober fellow Hams!

What a busy month October has been! Cooler weather here in Northwest Florida has allowed for many great outdoor events!



We started the month off with an awesome Technical Night! Thanks largely to KQ4FRB and KJ4FNB who were the leaders of the Club's involvement for concessions at the North Okaloosa Amateur radio club's Annual Hamfest! The

Playground Amateur Radio Club kept everyone well fed with a great menu and multiple options! This was the first time a Ham Club filled in for the Live Oak Baptist Church team and the absolutely did a wonderful job! Even the Club's Lead VE KM4DYA pitched in to slice the RF!

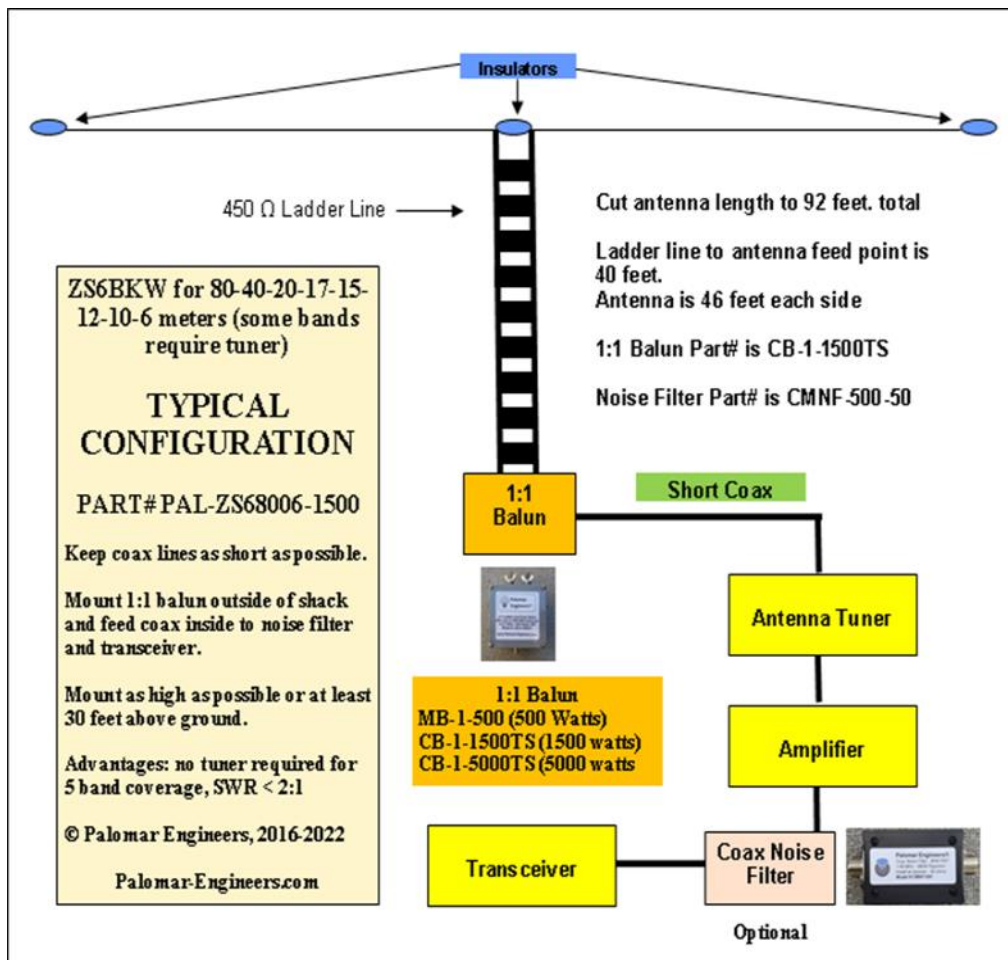
Jumping right into that very weekend, the North Okaloosa Amateur Radio club's Annual Hamfest was a great turn out and many had fun while finding many wonderful deals! Not only were the deals great, so were all the vendors and patrons! Of all the overheard stories and conversations occurring during the show, one of the best that was recounted was the start of the Whippersnappers formation in Okaloosa County who used to run steel whips and talk locally on 10 meters from a mobile stance! This was all pre-tones and pre-repeaters! What a fun jaunt down memory lane and educational as newer hams were engaged in the recollection of analog radio! Pictured below was during set up for Day 2, followed by the winners of the raffle and part of the team it takes to make the Hamfest happen!



Guess what else was at the Hamfest?!!! A Special Event Satellite Station! KC5RFU brought out the Arduino set up and offered instruction, and demonstrations making multiple contacts and educated many people at the Hamfest generating interest in other modes! Some say Paul stole the show and they wouldn't be wrong! Check out the [video recap here!](#)



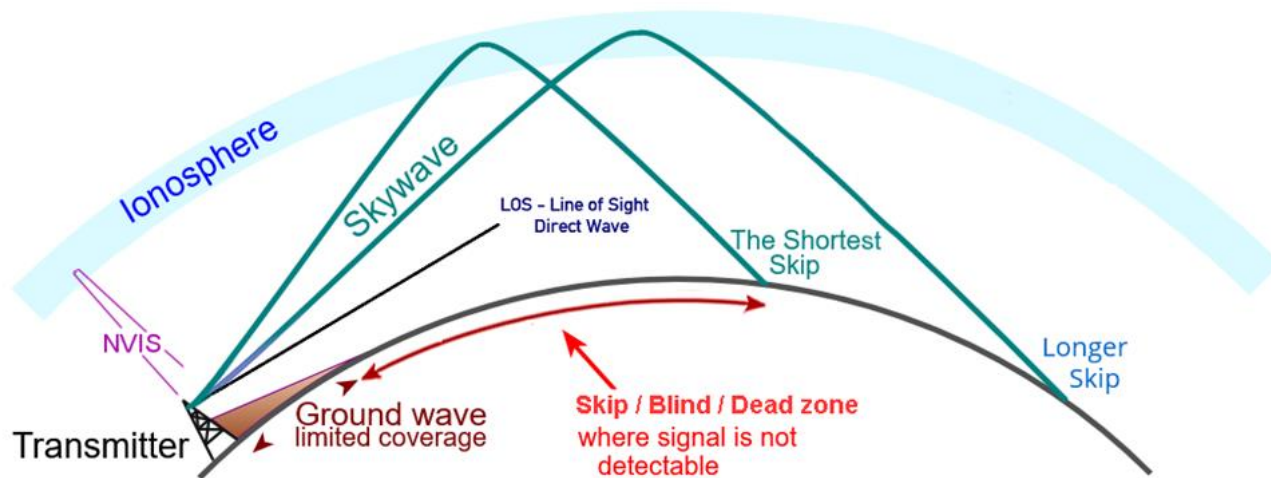
Followed closely behind came projects at members homes and base station installs! Getting new and old hams connected and setting their systems up correctly benefits those who cannot easily travel to a club due to time or other reasons allowing them to keep their hobby going at their leisure. In one such area, a new Diamond X200A was erected onto a collapsible 30-foot aluminum mast with 125 feet from end-to-end connection of direct burial LMR400. The SWR read outs were 1.0:1 and 1.2:1 respectively for 2M and 70cm. A long wire [ZS6BKW](#) (alternative to a G5RV) was installed as well and the results were shockingly at 1.4:1 across the available bands for the antenna capable of 10, 12, 17, 20, and 40 meters WITHOUT a tuner! Power is rated for this in stages at 500|1500|5000 but we found that 80w was enough to be heard on many of the HF Nets!



Moving forward from three great successes, the team at NOARC gathered again to have their meeting and begin preparation for their fall volunteer cycle! This includes but is not limited to giving back to the city that supports them with [events](#) such as parades, festivals, 5K runs, Bike rides, Community Flashlight Walks, and more! If you want to enjoy Amateur Radio and Volunteer with a community, NOARC and Crestview is the place to do it! Be sure to attend one of their meetings or reach out to their Activities director KN4UDS (also the VP) for more details! You won't be disappointed, and you'll be helping in a community that offers supporting return!



All throughout the month the Playground Amateur Radio Club has been hosting their usual Sunday Pile-Ups! This occurs at 3pm at their Clubhouse in Fort Beach Florida! As of late, the bands have been alive and well with Solar cycle 25 and propagation has allowed for some great contacts on minimal power! So, if you are looking for a Club station to operate and check of some of those "hard to get" contacts on phone/CW/Digital, come on down to the Playground and have a great time! While you are there, be sure to try out the Clubs Wires-X! 146.400 |01172 | 91172.



In club operations news, elections are afoot in both PARC and NOARC. At PARC there is a 1-year service commitment, and all positions come up at the same time. This is for President, Vice-President, Secretary, Treasurer, and Activities Director. At NOARC, there is a 2-year service commitment, and they offset the elections to every other year. This year the seats of the President and Treasurer are opening! So, if you are looking to get involved in club operations or think you know someone who is, become a member (if you are not already) and make the nomination. Nominations for NOARC are due Nov 14th at 7pm and nominations for PARC are due Nov 21 at 730pm. For a description of positions at NOARC, read the [Club By-Laws here](#) and for a description of the roles at PARC, read those Duties in their [Constitution here](#).



After all of that what is to come?! Everything related to Ham! There are more antenna raisings to come, maybe some tower work, club house and property improvements, experimentation, and fellowship! Don't forget about the upcoming FREE tailgate on Nov 16 2024 at 665 Denton Blvd NW in Beautiful Downtown Fort Walton Beach Florida! [SWAMPFEST!](#)



Be sure to put it on your calendar for an [Amateur Radio Holiday Party](#)! All Hams from anywhere in the world (and even the space station (if so inclined)) are welcome to attend! For details click this and contact KQ4FRB! This is going to be a great event as Hams get out of their element and host the gathering at Anglers on Okaloosa Island! Beach Views, the holidays, Hams, and RF! What more could you want? Come celebrate the year and honor the Hams of the Year and more! Celebrate the hobby with us and enjoy!

<https://www.eventbrite.com/e/playground-amateur-radio-club-hams-for-the-holidays-tickets-1052963471087?aff=oddtcreator>

Purchase your tickets Today!

Dec 15 from 4pm to 7pm at Anglers, Beachside Grill, 2nd Floor (there is an elevator!), 1030 Miracle Strip Pkwy SE, Fort Walton Beach, Florida, 32548



Getting High (in Frequency)

J. Gordon Beattie, Jr., W2TTT

Introduction

Recently, I was contemplating ways to stimulate activity on the VHF-UHF+ bands along the Gulf states. We have activity here in Florida and in the southeast, but along the Gulf coast one doesn't hear many stations on the higher bands above two meters. This is a shame because often there is propagation clear out to Texas and sometimes even Oklahoma, but activity is thin. What is needed is more ways to detect the availability of long range extended propagation conditions. Beacon stations can provide that awareness, but they need to be on the air. Let's explore some options.

How Can I Find Good VHF-UHF+ Band Conditions?

There are other ways to detect good band conditions. Various spotting networks and PSK Reporter Map can help if there is activity, but sometimes there isn't activity and therefore no reports!

The use of SARNET to monitor for long-range tropospheric enhancement conditions is sometimes seen late at night when Robert KK3S tries to "DX" into far away repeaters from his station in Jacksonville. This is fine, but "weak signal" modes, SSB, CW and various digital can be more effective.

There is a propagation map driven by APRS station activity data seen at the DXVIEW web site. This site reports and maps which stations "hear" each other on 144.39 MHz, but again this is based on FM carrier monitoring and not a narrowband "weak signal" mode.

<https://vhf.dxview.org/#>

Here is what's available at 2:47 am as I write this.

There is also the DX Info Centre Hepburn Tropospheric Forecast web site, but this is a bit of a forecast and not up to the minute.

<https://www.dxinfocentre.com/tropo.html>

These resources can be helpful guides to operating the higher bands. Beacon Stations

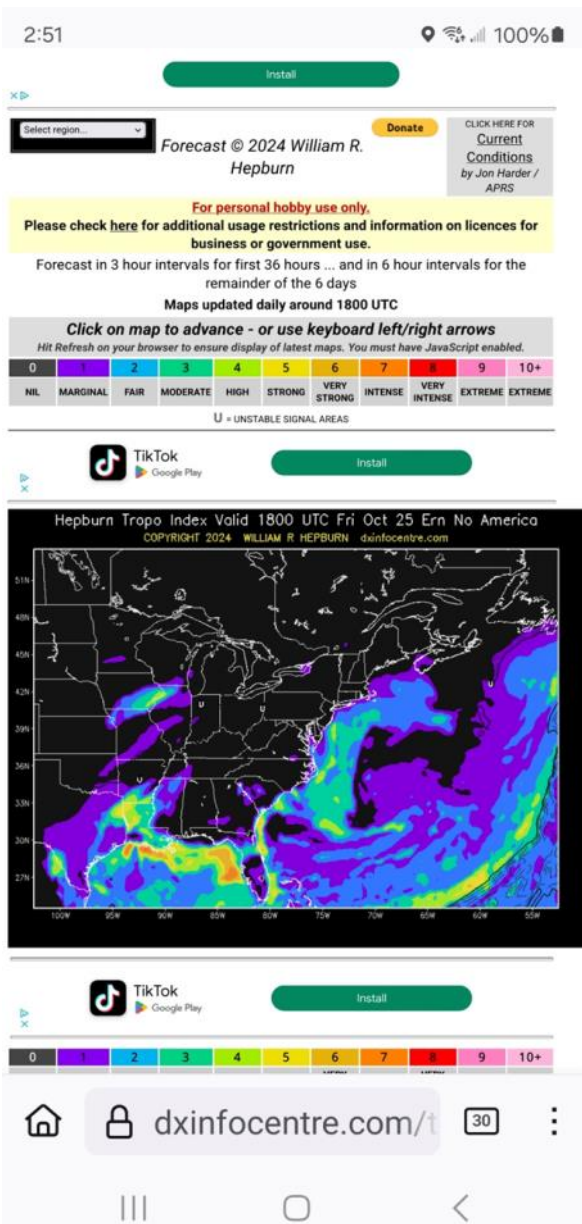
Most beacon stations transmit CW and start with a string of "V"s and then the callsign and a four or six digit Maidenhead Grid Square Locator. It might be something like,

"V V V DE W2TTT EM80JH",

which is then repeated continuously with short pauses in between each cycle. In the UK, some beacons are using CW and one of the digital modes incorporated into WSJT-X in the sequence along with other information about the site, ownership or power level. These provide a reliable reference signal to test propagation, your station's receive system and also to help calibrate your rotators direction.

What is needed for a Beacon Station?

First and foremost, one needs a decent, but modest antenna. This is usually horizontally polarized and omnidirectional, although a modest yagi or other directional antenna may meet the need in some areas. This is then connected to a relatively low-powered transmitter that has an embedded keyer memory or a computer to drive the transmission. Usually less than 10 Watts of power is fine. The simplicity of this got me thinking that I could probably put together something based on the radios and transverters that I have here and when heard by other stations, they could let me know to get on the air to work them.



Start Small and Easy, then See

I decided that there are two quick possibilities here at W2TTT:

1. Put the ICOM IC-9700 up on a halo antenna that I have and run 10W on my IC-9700 at twenty-five feet. The radio is rated for 75W so the low power won't beat up the radio. There is a memory keyer internally, but I don't know if I can loop it forever. If not, I have Raspberry Pis and small 12V Evolve III laptops that can key the radio. Battery backup is not a problem here. Later on I can decide to remove the IC-9700 and replace it with a dedicated beacon transmitter.
2. Similarly, I could put the IC-905 into part-time beacon service on 2304 MHz or 5760 MHz, but at 1W which is half-power. The question of horizontally polarized, omnidirectional gain antenna came to mind. While I could build one, I thought about going through my AREDN Mesh modes to determine if I may have some spare directional and omnidirectional MIMO antennas that I could possibly use with my IC-905? The immediate answer came in the form of two Ubiquiti 2.4 GHz and 5 GHz 2x2 MIMO antennas that come with horizontal and vertical ports and provide +13 dBi of gain.

The issue with them is one of two degrees of "down tilt" in their antenna patterns. This is fine for Wi-Fi and AREDN Mesh networks where communications is on a direct ground to ground station path. For tropospheric enhanced communications we need a ground to sky to ground communications path so what can we do with these antennas?

INVERT THEM!

The Inverted Antennas

The 5 GHz version is a Ubiquiti model AMO 5G13 and comes ready to cover the 5760 MHz/5.760 GHz band. When we invert the antenna, we will compromise the water resistance of the antenna and ultimately fill it with water or corroded it internally. To solve this, we will slide it into a PVC pipe with a cap on top and a plastic screened drain on the bottom to let air circulate and to keep insects and "critters" out.

The bulkhead SMA connector will come into the side near the top. We will keep connections short and also adapt the male RP-SMA pigtail from the antenna to a conventional SMA. We will also need to "sweep" the antenna's SWR to make sure that the PVC "radome" hasn't turned the antenna to an unacceptable level of "return loss" or SWR. I will use a VIAVI Solutions ONA-800 to perform these measurements before and after being placed into the PVC pipe.

Now for the 2304 MHz/2.3 GHz band things are a bit more complicated. First, the Ubiquiti AMO 2G13 antenna is reminiscent of a "bazooka" or "recoilless rifle" which is BIG and will require some "shopping around" to test fit. The box store home improvement stores won't stock the size we'll need for this. Further, the antenna is only specified down to 2390 MHz. Its radiation pattern is a bit unknown at 2304 MHz and its return loss, or SWR is as well. It is likely that there will be some broadbandness to the antenna. It is likely to move down a bit in frequency due to the PVC tubing. Again, we will sweep it before and after and we will see where it ends up. With these frequency excursions, we can also anticipate some differences in the antenna pattern, but that remains to be seen.

What Else?

For both of these antennas, we will need to build and experiment. There are a few more considerations to keep us "on our toes".

Once inverted, the overall elevation pattern is centered at 7 degrees which is fine for an omnidirectional antenna. I could not find a specific rating for power handling, but did read somewhere that they handle 10 Watts of power just fine.

As mentioned before, these antennas have RP-SMA Male connectors that require an adapter to a standard SMA Male-Male cable that will connect to the 2.3 GHz and 5.7 GHz antenna ports on the IC-905 RF unit. You can find decent RP-SMA Female to SMA Female adapters on Amazon in multi-packs for a few dollars.

Finally, cable connections need to use SHORT lengths of high-quality, low-loss cable. RG-400 or UT-141 are good examples. RG-400 can be found on Amazon as well.

What is MIMO?

Several people have asked, "What is MIMO?"

These are 2X2 MIMO antennas with one "chain" being horizontal and the other vertical, but there are more variations.

The term, "MIMO" means "Multiple In, Multiple Out" which references the ability to receive or transmit signal streams, called, "chains" in different polarizations at the same time. In the case of the antennas that we have on hand, these are "2x2" MIMO where there are two polarized ports: one vertical and the other horizontal.

You may see other configurations where the "2x2" MIMO is +/- 45 degrees for the same 90 degree shift in these antennas. This is common in cellular systems. Further, other configuration possibilities include "3x3", "4x4", and even more. You may have seen such configurations in better Wi-Fi routers and access points.

These MIMO antenna elements enable increase data speeds, extended ranges, improved reliability or some of these in balance to meet design objectives of the radio system.

There are also larger (e.g. 8x8) MIMO arrays where different signals for different users are dynamically driven to create multiple "beams" on one or more simultaneous communications channels. These are "smart" antenna and radio configurations that can dynamically create up to eight beams to support eight different, but simultaneous communications channels from sixty-four element arrays arranged in an eight by eight matrix.

Closing Thought

As the beacon project evolves, we will write some updates. In the meantime, I can be available for a sked on the higher bands even though my weak signal station's antennas are, for now of a portable nature. It would take me fifteen minutes to get on the air "Rover" or "POTA" style!

Godon.BeattieJr@VIAVISolutions.com

Get On The Air!



Arduino Winkeyer Emulation Relay Output for Boat Anchor

Heathkit SB-102 Transceiver (SB- HW- Series)

Gordon Gibby KX4Z

Venerable SB-100/101/102 and HW-100/101 transceivers use fairly high (- 55 VDC) **negative** Morse code key line voltages. Shorting these voltages to ground removes cut-off bias from control tubes and keys the transmitter in CW mode. This high **negative** voltage will **destroy** many modern CW electronic keyers that have solid-state output circuits, which were designed for small **positive** voltages (0-12VDC or so).

Our locally-implemented Arduino Winkeyer emulator, using the famous K3NG Arduino code, (see:

<https://blog.radioartisan.com/arduino-cw-keyer/>)

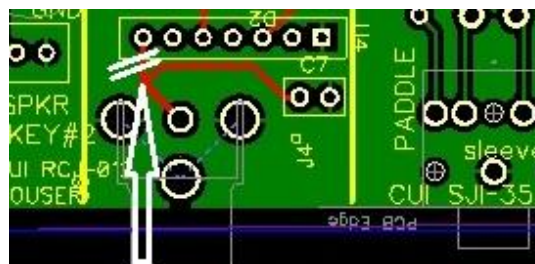
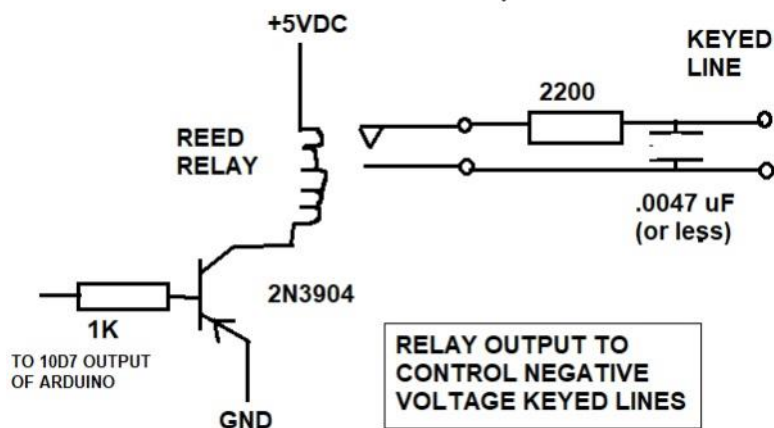
optionally includes a reed-relay output for very fast keying, even of

<https://www.nf4rc.club/how-to-docs/arduino-k3ng-winkeyer-emulator-locally-developed-morse-code-keyer-manual/>

negative voltages. (see:) Unfortunately, reed relays often use very fragile ferromagnetic contacts, which don't handle higher currents very well. In my first tests with an older SB-102, the reed relay contacts "spot welded" together! This can be irreparable, requiring replacement of the reed relay -- but some sharp raps on the plastic case and it came unstuck. This was probably caused by inrush current from charged capacitors on the keyed line, possibly even the rf bypass capacitor I included in the design.

Testing revealed that at least up to 6800 ohms, the transceiver would key properly; it doesn't require a full short to ground at the key. I cut a trace on the top of the printed circuit board and added 2200 ohms directly in series with the reed relay contacts. This successfully prevented further "welding" and appeared to key the transmitter fully. I also made the RF bypass capacitor (0.001 uf to 0.0047 uf) be on the transceiver side of the series resistor, so the capacitive inrush current is slowed by the resistor.

With these changes, I finally had a fine working electronic keyer once again for the ancient refurbished SB-102! I built one of the "\$75 Paddles" and used it for a first new contact with a ham in Nashville TN who gave me great report on the outcome.



Cut PCB trace here and bridge with 2200 ohm resistor



Sumter County ARES

Amateur Radio Emergency Service

501(c)(3) Tax-Exempt Non-Profit Organization



Sumter County ARES Responds to Hurricane Milton

Hurricane Milton was a destructive storm that affected hundreds of thousands of Floridians. It will be recognized as one of the most consequential storms to make landfall in Florida. The devastating effects of this storm can be seen everywhere in Sumter County. Trees were toppled. Many roads are impassable because of flooding, downed power lines and fallen trees. Residents have suffered costly property damage, many of whom may never totally recover. In the face of all of this, members of Sumter County ARES, (SCARES), stood ready to serve their communities through amateur radio.



The SCARES Emergency Coordinator, (EC), announced Alert Level 3, "Monitoring", on Tuesday, October 8th. SCARES members maintained contact with the EC for updates and assignments. The Emergency Coordinator kept SCARES members and our local amateur radio community informed through email, announcements on the local repeater, and through posts on the Sumter County ARES website. SCARES member and Sumter County SkyWarn Coordinator ignored sleep to keep us informed about storm conditions throughout the event.

Amateur radio operators who are registered volunteers with Sumter County Emergency Management also activated, staffing two local shelters and the radio room in the EOC. These volunteers in the radio room provided us with continual updates about conditions and response efforts in Sumter County. They additionally maintained communications between the local EOC and State EOC, as well as communications with their volunteers in shelters and deployed ARES personnel.



SCARES members responded to requests from members of our own local amateur radio community to assist them in storm preparation. Our own Planning Section Chief, Operations Section Chief, and Emergency Coordinator took turns monitoring the local repeater to respond to information requests and to relay storm-related information to the EOC and others.

The Sumter County ARES Incident Commander, (AIC), announced Alert Level 2, "Activation and Deployment", at 4:00 AM on Wednesday, October 9th. At the request of Sumter County Emergency Management, SCARES members responded in the field to provide communication between the EOC and National Guard teams who had also been deployed for rescue and damage assessments.

Sumter County ARES facilitated the delivery of formal Health and Welfare traffic between local storm-affected individuals and loved ones.

From this real-life incident we learned the importance of pre-planning, training and exercises. We learned what we did well, and areas we need to improve upon. On behalf of the Corporate Officers and Command Staff of Sumter County ARES, I want to thank these members who volunteered their time, energy and equipment to respond to Hurricane Milton and the needs of our county.

Ron Fournier, N8BKB
Gene King, KI4LEH
Greg Madore, K1MGR

Verne Bethlach, K4VEB
Spike McKenzie, N4EBF
Gil Chapin, WB2UTI

Jeff Taffuri, KO4NCC
Hank DuPont, KQ4DAF
Gabriel Leon, KG4LEO

Mark Newby, KX4LEO
Emergency Coordinator

Alachua Ham Building Project Round 2: Late September Lab'N'Lunch Packaging the Arduino Winkeyer Emulators Gordon Gibby KX4Z

On Saturday, September 21, 2024, our intrepid crew re-assembled to attempt finishing our Arduino CW Winkeyers, including mounting them in plastic project boxes with access to the connectors, and building cables to connect to ham transceivers. We had the usual issues with folks out sick etc., but still had a rowdy crew of six working together -- and Eric Pleace concluded he wanted to build his own Winkeyer as well as having helped Wendell. This is amazing -- we have actually used up ALL TEN of the boards I ordered from PCBWAY.COM



I had a "drilling instruction" document - <https://www.nf4rc.club/how-to-docs/arduino-winkeyer-packaging-instructions/> and we had the xeroxed "template" for drilling. This helped a lot. Some of our members were apprehensive about handling the Ryobi portable drill -- but they turned out to do quite well!

A fair bit of "soldering work" still had to go on to get boards to completed status. The command and memory buttons were designed for "point to point" hand-wiring, and this proved to be confusing, as our members have trouble reading schematics and understanding how to translate into wires between objects. Great learning opportunity! Several needed a refresher course on resistor color codes and how they work ("Better Be Right Or Your Great Big Venture Goes West" 0-Black 1-Brown 2-Red 3-Orange 4-Yellow 5-Green 6-Blue 7-Violet 8-Green 9-White) ; Eric Pleace KO4ZSD was great at teaching this! Hugh Minnich was a very patient instructor helping people with the point-to-point wiring.

In a future edition, I should work on putting surface-mount pressure buttons on the "back" side of the board -- this isn't hard at all and I should have thought about it.



Participants learned about brass standoffs, and picked ones to get the input/output connectors low enough to be on the bottom part of the project box. Then our participants learned how to use machinists' calipers to measure the proper depth for holes to access the connectors. We drilled "pilot holes" with 1/8" bits, and then used wood-spade bits to make 1/2" holes for phono-plugs and 3.5mm jacks. 1/4" bits with a bit of "wobble" admitted the speed potentiometer and the push-buttons. A ton of learning went on here!

Cutting the rectangular hole for the 2x16 character LCD display was yet another learning experience -- for me as well! We used a small circular cutter on a mini-Dremel tool to cut each of four straight lines and then pushed out the cutout. Errors can be covered up with an electrical-tape "bezel" or Eric may make up 3-D printed bezels in the future.

We had a minor boo-boo on my part when we discovered that no matter how many memory buttons you wanted (1, 2 or 3) -- you still needed 4K worth of resistance from the "buttons" pad to ground. Some of the keyers appeared "haunted" with only 3K....problems disappeared when we added in the right number of 1K ohm resistors. I corrected an error in the schematics and in the instructions as a result.

When all was said and done, we were able to send pretty much everyone home with a working keyer and some left with loaned-out "paddles" until they can make or buy their own. I have learned how to make an acceptable \$7 Paddle out of a stamped steel tie part from Home Depot -- we may have yet another Lab'N'Lunch to build some of these. Our members learned a lot about how to wire up 3.5mm and 1/4" phone plugs also! This was one of our best hardware projects ever!

Alachua County NFARC/ARES(R) October Update

Gordon Gibby KX4Z

Our hardy band of volunteers has now gotten a real workout, with our 2nd and 3rd 2024 hurricane deployments, for Helene and then Milton! During Helene, Alachua County had up to 55,000 households without power, but only a smattering of residents in shelters. Our volunteers staffed three shelters and the EOC and had a tiny bit of "margin."

- **Big Surprise:** During Helene our trusty Gainesville Amateur Radio Club 146.820 repeater lost power, along with the powerful TV station at which it was based, and our secondary repeater along with it!
- **Big Discovery:** The Univ of Florida radio club 146.910 repeater worked just fine for connecting all of our shelters!

Another advance during Helene was testing out the Winlink Field Situation Report, which can generate GIS-maps with status data. When we got back home, we all had a lot of cleaning up and repairing to do after Helene.

We discussed, and approved an AARIP with a couple dozen Improvement Plans from Helene: <http://www.nf4rc.club/aarip-helene/>



Jim Carr KC4MHH (L) and Jon Simonds KC4NWK (R) standing beside some of the impressive repeater bank @ TV-20 receiving tower. They generously make multiple repeaters available for disaster service.

After figuring out yet a little bit more about WORDPRESS, I have updated a page on our website that lists the AARIP's that I've found so far for our served Incidents: <https://www.nf4rc.club/incidents/>

<https://www.nf4rc.club/draft-aarip-hurricane-helene/>

Then came Hurricane Milton and suddenly we had hundreds and hundreds of travelers with no possible hotel rooms and dwindling gasoline, flocking to our shelters, which reached a combined total of 621 overnights. The County had to open a 4th shelter; Eric Pleace, KO4ZSD, rose to the occasion and staffed the sudden opening. But our power losses were much less severe, less than 4,000. And all our repeaters survived. As part of our training/updating during Milton, we tested Jon Simond's UHF repeater KC4NWK and found it has astonishing reach! So we're up to four great potential VHF/UHF repeaters we can utilize.

Our draft AARIP for Milton will be discussed at the November meeting. It is available on the web, and already indexed by Google: <https://www.nf4rc.club/hurricane-milton-draft-aarip/>

Potential County Reimbursements

Alachua County has invested well over \$100,000 into equipment and infrastructure for our group of volunteers -- but our volunteerism and signed ICS-214's are making it possible for the County to get "return on investment" because of generous federal matching funds to local county disaster efforts. Using \$15-\$20/hour for our time and assuming 8:1 match, we came up with

#	Incident	Deployed Hours	Estimated Reimbursement
1	2022 Hurricane Nicole	72 deployed hours	\$ 8,640
2	2023 Hurricane Idalia	41 deployed hours	\$ 6,500
3	2024 Hurricane Debby	165 deployed hours	\$24,000
4	2024 Hurricane Helene	178 deployed hours	\$28,480
5	2024 Hurricane Milton	138 deployed hours	\$22,080
TOTAL ESTIMATE		456 deployed hours	\$89,700

these estimates for potential reimbursement:



\$7 Paddle construction

Technical Growth

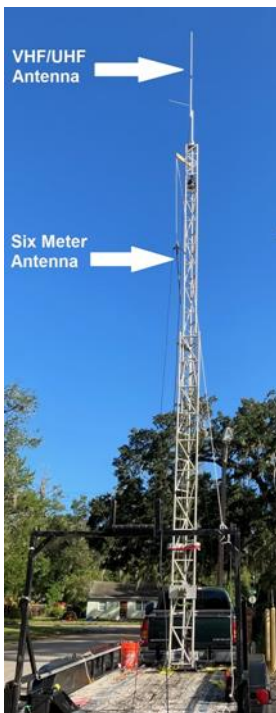
As detailed in <https://www.nf4rc.club/how-to-docs/lab-n-lunch-projects/labnlunch-sept-2024-packaging-winkeys/> we held another Lab'N'Lunch in late September and pushed many of our Winkeyer projects to completion. We also have a design for a homebrew \$7 paddle! Technical growth and radio assets don't have to be expensive!

Starlink To The Rescue!

Reid Tillery K9RFT is a go-getter for building local community radio groups, with a very successful household GMRS net in his Melrose community. His current exploit is a Starlink Mini (see: <https://www.starlink.com/us/roam>) with a moderate purchase price, and a \$50/month fee for usage *anywhere* -- and the service can be turned "on" or "off" month-by-month. Reid has his Starlink working from a LifePO4 battery and is working on an inverter option to run from available car batteries also. He points out that by putting community cell phones on "WIFI CALLING"

a ham volunteer can use one Starlink to allow a lot of people to make disaster phone calls. What a great resource!

Planning For New EOC



David Huckstep W4JIR has garnered Alachua County Fire Rescue support for a 50-foot aluminum, telescoping, tilting tower emplacement at the new EOC building being renovated from the Army Reserve World War II building. This is months or a year away. We felt obligated to document what radio coverage we might obtain with such a tower, for line-of-sight VHF/UHF communications. Saturday Oct 12th, we trailered our full 33-foot tower to the new site, strapped on a good dual band antenna, got it up to 30+ feet and actually tested our reach. We can reach very significant portions of the county using VHF simplex FM!

Amazing 6-meter SSB

Then we tested a simple 6-meter inverted-V antenna pulled up on the sidearm to 25 feet or so and were astounded to find using SSB, we could reach PAST the county line to well-equipped 6 meter stations. It turns out single sideband has many dB's of advantage over FM due to the techniques used for demodulation, as well as concentrating the signal in fewer kHz. You can read all about our test here: <https://www.nf4rc.club/new-eoc-tower-recommendation-empirical-test/>



Dave Huckstep W4JIR, Manish Sahni KZ4KC, and Eric Pleace KO4ZSD, New EOC Antenna Test. Dave wanted his license plate in the photo!

Upcoming Public Events

This is new for us, but our ARES(R) group is getting older and we need to attract even more volunteers! So on Veteran's Day November 11th, we're going to be hauling our generator/telescoping mast trailer out to the **Alachua County Veterans' Day** festivities (Veteran's Park on Tower Road, Gainesville) and demonstrate ham radio & Winlink messaging and more. We'll be doing the same kind of display December 7th at Life South's wonderful **Santa Delivery** community attraction. The Gainesville Amateur Radio Club (<https://gars.club/>) has been representing ham radio for years at these great community events, and we're going to start, also!



The Playground Amateur Radio Club's 3rd Annual Swampfest Tailgate!

If you have not attended this YOU ARE MISSING OUT! While it's a tailgate, the Playground Amateur Radio Club with 53 years of full scale Hamfests under their Mic and Key uses the same energy, enthusiasm and skill to bring you a fall tailgate just before Thanksgiving! What's more,

The PARC Team hosts it all FOR FREE! No Charge for spots! Just show up and have a good time!

Donations are accepted for food!



Hernando County Amateur Radio Association Testing

Jim Kvochick K8JK

*Laurel Testing, no charge/FREE
2nd Thursdays of the month, 6:00 PM*

We encourage you to register electronically for the testing session by pointing your browser to www.hamstudy.org and selecting "Find a Session" on the right hand menu.

FCC will charge and collect the \$35 fee for the Technician License, but no FCC fee for upgrades to General and Extra.

Held at:
Hernando County Emergency Management
Emergency Operations Center
18900 Cortez Blvd., Brooksville, FL 34601

Myths and opinions, A Ham Operators Take.

Bryan Phillips (K4BHP)

If you have been reading the last several articles I've written for our newsletter, it's safe to say in the realm of amateur radio, I am still one of the new kids in class. Along the way I've been able to learn new things and meet some awesome people who have become not only my friends but very amazing mentors. It is in these times I am reminded of one of my college classes, and one of the doctors who taught it. This doctor was from Alabama, and while most doctors at the college had newer vehicles this doctor was always humble and drove an old truck. But it was during the beginning of the course I remember him sitting in his desk chair, leaning back and saying "the only difference between you and I, is I'm older and have more schooling, but at the end of the day you and I are the same, and we're all in this together." At the end of the day, in this hobby we too are all in this together.

However, with this in mind, as I have sought advice, opinions, thoughts, into a project, a piece of gear, or an idea, I've seen a great deal of myths, opinions, and thoughts concerning amateur radio. Some for the good, while others left me scratching my head a little. I am sure that many have seen an article or topic that closely relates to this, but what does it mean when the same reasons are given? Could it be something to look into and devote an effort from the amateur radio community?

Myth and Opinion Number One: "Repeaters are dead."

On more than one occasion this is one of the main issues I have seen people bring up on amateur radio today. A repeater is on the air, but instead it is supposedly dead and silent. The opinion of "nobody uses it", "repeaters aren't worth it", "HF is where the fun is, not on the local repeater", just to name a few. In the rough year and a half since getting licensed, I have found repeaters are like a community, the spot where all the local operators talk and relax. While traveling, I have had many QSO's with locals while passing through. The end result is always the same. Welcome, join us or join in anytime, or when you pass back through look me up (which I usually do). I remember one time when traveling through Mobile, Alabama, I announced I was listening, and before long I was in a QSO with a local for a good 20 miles or more of I-10 heading to my family in Mississippi. The end result, "safe travels and hear you soon, 73!" As an operator, once in a blue moon, I'll hear someone reaching out on our repeater in Lee while they're traveling through Madison County on I-10. And as hospitality and kindness have been shown to me on repeaters while traveling, I try to do the same. Letting them know the repeater is there, it's alive, safe travels, "hear you soon on your way back through, 73!" What I wonder is if people avoid the repeater, or seldom check in to see who all is listening. The repeater isn't the one who is silent, maybe it's the operator who is silent. It's just waiting to get you on the air. But are you willing to?

Myth and Opinion Number Two: "Ham radio is for old people."

This is the one that not only have I read about but also been told by people, which comes as no surprise. On more than one occasion I have been asked why I'm a ham operator because of my age or when someone found out I was an operator, they were surprised. On one occasion I was told they were surprised because when they saw ham clubs, it was mainly "old people" (their wording not mine). I chuckled, and said that's not the case with me. But why this idea or opinion? Why is there sometimes an age-related stereotype? A quick Google search into the average age of ARRL members shows the average age is 68 years old, a decent leap from my age of 37. However, given that, I still have to disagree with the notion that amateur radio is reserved for older individuals. Mainly because for those who are younger, when introduced to amateur radio, I see wonder and an attraction to those who either try it, see it or hear it. For example, this past summer I took my youth group on a youth retreat to St. George Island. While there I packed my Ft-891, end fed and Wolf River Coil. One evening I was POTA hunting and found a station in Pennsylvania, Matthew (KB3UZP). While logging him, I asked if it was okay to put one of my youth members on the air to let him try out the radio. He said sure put him on. I handed off the mic and told him what to say. When finished, the youth member was amazed that he talked that far on a piece of speaker wire in a pine tree. Afterwards, Matthew and I exchanged Facebook messages, and became friends there. That's not the important thing though. The important thing was after the QSO, I had a youth member asking what they would need to do to get on the air, and seeing the spark of amateur radio take, in their life. With that mentality, amateur radio can become something that bridges generations. Young and old, all sharing the airwaves together.

Myth and Opinion Number Three: "Ham radio is expensive."

When I got into amateur radio, the choice of equipment was somewhat overwhelming. I wasn't sure which brand of mobile to get, or if the saying was true, less is more. One of my mentors when I asked them what brand to get their comment was as follows. "First, if it gets you on the air then mission accomplished. Second, nobody has the means to see what brand you're transmitting on. There isn't a display that says whether you're transmitting on a seventy-dollar radio or seven hundred dollar radio. Twenty-five watts is the same no matter the brand. Then third, buy what you can afford, and don't make your family suffer. I have seen people buy equipment that robbed their family of what they need rather than what they want." My gear isn't as flashy as others, but then again, I started with a hand me down Baofeng ht. Since then, I have had the opportunity to discuss gear with others who were in the same predicament as I was. My advice was the same as that which was given to me. Get what you can, have fun, and get on the air.

Myth and Opinion Number Four: "I could never learn the exam materials to get licensed."

This is one that when I have read it on a forum or group post, I can sympathize with. I didn't come from a radio background. With the exception of my HT, I used on Fire/Rescue, my exposure to amateur radio was nonexistent. I remember studying for my tech license and thinking, I will never memorize this, little alone go for another license one day. The night I passed my technician exam, the sense of accomplishment was great, and in some ways, I was content not going any further. But then after getting onto ten meters, I found myself wanting other privileges. Since then, I have gone on and continued my amateur licensing journey. In this, if anybody has ever studied for the tech, general or the extra exam it is not an easy feat. As of the writing of this article, the current license totals on the ARRL site are listed below:

Technician Licensees	368,155
General Licensees	184,515
Extra Licensees	156,086

By looking at these numbers, it's safe to say as the license goes up, the licensees go down. But no matter what, not including licenses such as novice, or advanced, there are still people with the drive and determination to do what it takes to get on the air. The license study process can be difficult, especially as you go up. Trust me, I know, I studied in every moment of spare time I could. However, I also ask the reader to trust me when I say, it is worth it, to challenge yourself, and that you may be surprised at what you are capable of if you put in the effort.

However, as I mentioned earlier, I have seen several articles such as this where someone asked something similar. At the same time, I won't consider myself an expert in this discussion, just merely addressing them from my perspective. But in the end, there may be a question you may relate to. What are some myths and opinions involving amateur radio that you have heard, and do you agree or disagree with them? I hope that these observations stir thoughts and reflections of your amateur journey like they have done for me. Only time will tell if these myths and opinions remain, or if the path of amateur radio moves along with the ever-changing world around it. 73! K4BHP.



FCC Testing Information

Daytona Beach Amateur Radio Assn (DBARA)

- Monthly, third Monday, 5:30 PM, prior to meeting
- Lehman Building, Embry-Riddle Aeronautical University
- Registration Required
- Info: <https://dbara.org/testing/>

Hog County Amateur Radio Association, Bushnell FL

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

Lake ARA, Leesburg FL

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

Lake Monroe ARS FCC Testing, Sanford FL (LMARS)

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

Milton Amateur Radio Club, Milton FL

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

Orlando Amateur Radio Club

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

Santa Rosa County FL ARES® Testing (Walk-in)

- Information and dates can be found at srcares.org

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 sign up 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://www.k4tlh.org/getting-started/license-testing>

West Volusia Amateur Radio Society

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

Gainesville Amateur Radio Society

- 1st Saturday of even numbered months
- Tech day two weeks after testing
- <https://gars.club/Testing.html>

Statewide Digital Radio Resources

Did you know we have designated ARES® DSAR Reflectors & a DMR Talk group?

- **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!

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