



QST NFL



Sharing information of interest to Radio Amateurs in North Florida

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March 2021

Emergency Communications Exercise for Agencies & Citizen Volunteers Assisting Local, State, and Federal Authorities

Gordon Gibby KX4Z

(Gainesville, FL) The amateur radio communications team of the Florida Baptist Disaster Relief has created a multi-site radio communications exercise designed to bring volunteers and local authority agencies across northern Florida and beyond, together for two hours in the evening of Friday March 19, 2021. Invitations to Amateur Radio Emergency Service (ARES(R)) volunteer groups, county-level emergency managers, state communications experts, and volunteers in a federal radio system are being widely disseminated. Prospective radio trainees at the Jacksonville in-person disaster training on Mar 20 will be offered the chance to observe or participate in the exercise as well.

During exercise Whirlwind Boom, volunteers will practice transmitting formal reports about the utility, water, and safety situations in their county, all sent out of simulated disaster areas supposedly stuck by a swarm of tornadoes and then worsened by a terrorist bombing of a telephone system, without using cell phones, landlines, or the Internet – only radio transmitters and receivers. Many of the participants will make communications across hundreds of miles from portable radio gear powered by car batteries or small generators.

As part of the two-hour exercise, simulated survivor messages outbound to friends and family will also be transmitted by radio. The real spice however comes as groups receive secret messages advising them of unexpected handicaps that mimic what happens during disasters – and their tasks become even more complicated. Flexibility and ingenuity rise to the top at such moments in these exercises, which are structured in accordance with Department of Homeland Security training guidelines.

If you would like to obtain more information about amateur radio, or the work of disaster groups such as the

Florida Baptist Disaster Relief, or amateur radio service opportunities, contact Gordon Gibby
docvacuumtubes@gmail.com.

Further information can be obtained:
Contact Gordon L. Gibby MD,
docvacuumtubes@gmail.com, (352) 246 6183

Current Publications:

Participant Exercise Manual for this year's exercise:
[https://qsl.net/nf4rc/FBDR/2021/2021WhirlwindBoomExercisePlan\(Participant\).pdf](https://qsl.net/nf4rc/FBDR/2021/2021WhirlwindBoomExercisePlan(Participant).pdf)

ICS Incident Action Plan for this year's exercise:
<https://qsl.net/nf4rc/FBDR/2021/2021WhirlwindBoomICS201.pdf>

Florida Baptist Disaster Relief Jacksonville Training Information:
<https://flbaptist.org/event/disaster-relief-training-jacksonville/>

Participant Exercise Manual for last year's exercise:
[https://qsl.net/nf4rc/2020Conference/2020Hot&ColdExercisePlan\(Participant\).pdf](https://qsl.net/nf4rc/2020Conference/2020Hot&ColdExercisePlan(Participant).pdf)

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It is that time of year again!

By Scott Roberts, KK4ECR
NFL Section ASM, PIC

You know, they say that Christmas is the “most wonderful time of the year,” but I must say that sometimes I think that Field Day gives it a run for its money.

And with Field Day coming, it is time for EC’s and PIO’s to start preparing and promoting Field Day in out counties and with our served agencies.

All the information that you need to help make Field Day 2021 a success will be at <http://www.arrrl.org/field-day>. ARRL is working every day to update the information and will post the information there as it is ready. Keep in mind that the 2020 Rule Waivers have been extended for Field Day 2021 as you make plans to promote and invite public officials, served agencies and the general public to Field Day.

Scholarships for Amateur Radio Operators Available

Ken Simpson, K8EK

Did you know that many college scholarships are available for amateur radio operators? These are available for Associate Degrees, Bachelors Degrees, and for graduate degrees.

One of the many organizations that give scholarships to hams is the Quarter Century Wireless Association (QCWA). This year QCWA will be giving a total twenty three \$2000 scholarships, for a total of \$46,000.



For QCWA, it started with a single \$500 scholarship presented in 1978. Through 2021 QCWA will have awarded 578 scholarships totaling \$711,350.

QCWA uses the Foundation for Amateur Radio (FAR) to collect scholarship applications, process them, choose the recipients, and mail the checks. FAR not only processes QCWA scholarship applications but also applications for about 15 other ham organizations.

The bottom line is that with a single scholarship application to FAR, you can apply for about \$150,000 worth of scholarships. These scholarships are only available to licensed amateur radio operators, so your chances are greatly increased.

Applications are accepted until April 15 for the 2021-2022 school year, but you are encouraged to apply as soon as possible.

Visit the FAR web site at
<https://www.farweb.org>

or to
<https://www.farweb.org/far-overview/scholarship-information>

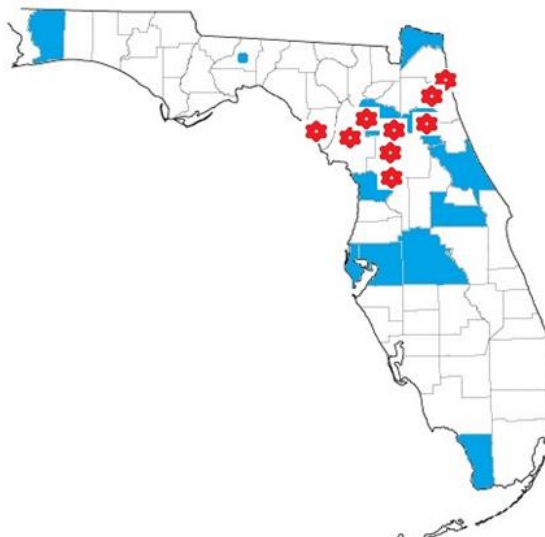
If you are a college student, do this NOW. If you know a college student who could use a scholarship and is also a ham, please give them this information.

Ken Simpson, W8EK@FLHam.net or W8EK@arrrl.net

March 19th Exercise Whirlwind Boom 2021 Provides Training Opportunity For All Volunteers

by Gordon Gibby KX4Z

As I write, all the Covid-19 numbers are steadily dropping (thank goodness!) and attention turns to more training for volunteer communications. We discovered a special opportunity when the served agency Florida Baptist Disaster Relief elected to move their heavy communications trailer to their Jacksonville weekend training session the weekend of Mar 19-20. Agencies have significant expenses and logistical issues with real training, so I wanted to take this opportunity to give their newly-formed comms team a workout, introduce prospective hams at the training to all the capabilities, and engage as many disparate communications groups who serve Florida into a combined exercise. That was the genesis of **Whirlwind Boom 2021**. ARRL officials have been kept apprised throughout all the planning and Karl Martin, NFL SEC is fully supportive. The Exercise was even noted in the most recent issue of the ARRL ARES(R) Letter. Further, Robert Little of the FDEM plans to be engaged acting as the division of emergency management of the mythical state of "**Roflida**." Ross Merlin of SHARES plans to activate their Southeastern Net as assistance. Various individuals and ARES(R) groups are expected to join in the fun; more and more groups are being contacted.



Part of the training effort is to get volunteers more accustomed to the Incident Action Plan format, and then draw them into fun simulation, moving realistic traffic and dealing with realistic "handicaps" known as "injects" in FEMA-

| Anyone is welcome to join this Exercise. Friday March 19, 7-9 PM EST. You can read the detailed plans in either or both of two documents, and also register online. | |
|---|---|
| Concise Incident Action Plan | https://qsl.net/nf4rc/FBDR/2021/2021WhirlwindBoomICS201.pdf . |
| More detailed document known as an "Exercise Plan" in FEMA-speak : | https://qsl.net/nf4rc/FBDR/2021/2021WhirlwindBoomExercisePlan(Particpant).pdf |
| Registration form for volunteers (registration is strongly encouraged, but not required) | https://docs.google.com/forms/d/e/1FAIpQLSfeOZg8ehrWL_Brg45aKAq3lmlVglvgrgY98bwup2ycwMF3BQ/viewform?vc=0&c=0&w=1&flr=0&gxids=7628 |
| You can also find these links in the calendar at our web page: https://www.qsl.net/nf4rc/ | |

(If you'd like to create such exercise plans for your local group, word-processing versions are available that you can modify for your local needs.)

Levels of Participation

Volunteers in this exercise can simulate deployed shelter communicators connecting back into their local leadership over FM repeaters, or as county-central level volunteers connecting to state nets and radio assets by HF, or as individual units just reporting to volunteer.

Continued on next page...

Resource Net

New in this Exercise will be the use of an ARRL EC-001 concept known as the "Resource Net" -- where random volunteers can check in, and get briefed by the knowledgeable net control, who will explain the Exercise, and then "bestow" upon them a mission and send them off to the Command Net. Frequencies for both these nets are published in the ICS-205 referenced above.

Getting The Message Through

Building a bit more "structure" into emergency communications, the Exercise has defined forms for volunteers to use to move situation reports both at the local shelter and county levels. Traffic movement can be by voice, or any data format that both volunteers can manage. Every possible comms trick will be in use at the Florida Baptist Disaster Relief trailer, for sure! The newly-formed team there is busy building their plans to respond to the inevitable INJECTS the Exercise will throw at them. Volunteers who are SHARES-connected are encouraged to utilize SHARES as well as amateur resources throughout the 2-hour exercise, which is broken into three "sessions. We also expect a 60 meter interoperability frequency that can be leveraged. Registration into the Google Form listed above will make it much easier for you to receive "injects."

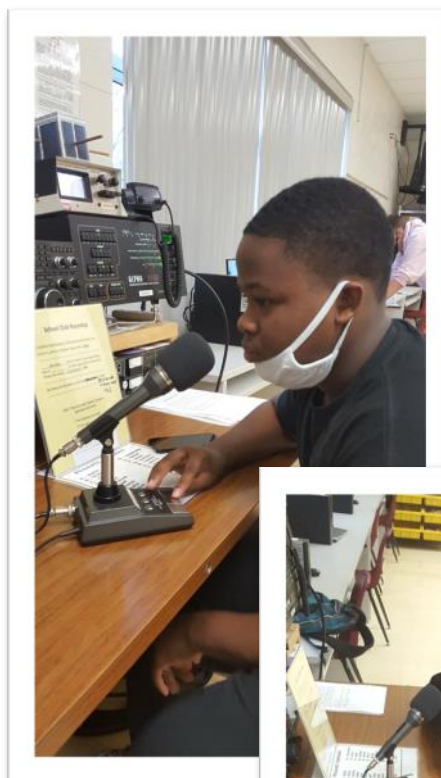
Come join in the fun as we all get spring training started for this year's volunteer communications needs!

Loften HS Participates in School Club Roundup

Bob Lightner, W4GJ

Students at W. Travis Loften High School in Gainesville, Florida participated in the biannual ARRL operating event, [School Club Roundup](#). Using our club call sign, [K4WTL](#), our 40-student club members racked up 500 QSOs during the week-long event, operating a total of 10-hours. The club is located in our [Fire/EMS Academy](#) and we train our students proper operating techniques, the use of phonetics and we prepare them for their Technician class license.

| | |
|------------------------------------|-----------|
| Total CW QSOs: | 50 (40M) |
| Total Phone QSOs: | 371 (20M) |
| Number of U.S. States worked: | 38 |
| Number of VE Prov/Ter: | 6 |
| Total DX: | 16 |
| Number of clubs worked: | 1 |
| Total number of Schools contacted: | 7 |
| Final Score: | 45,687 |



Jacksonville Amateur Radio News

Billy Williams, N4UF

Jerry Tabor, N2GLF discusses HF mobile operation, base stations and selecting the right equipment on Thursday, March 11th at the North Florida Amateur Radio Society (NOFARS) meeting. It starts at 7PM at Hogan Baptist Church, 8045 Hogan Rd.



Jerry's program will also interest newly licensed and prospective operators. He will speak about his mobile operation and show similarities between base and mobile stations. Selecting the right equipment is the first step toward effective HF operation.

Three contestants took part in the QLF contest at the February meeting. Organized by John W4IJJ, the competition required using one's foot to send Morse Code. Jack Driskell, KB4B sent one minute of correct solid copy at 11 wpm. Chris Russell, KF4AAF and Jerry Tabor, N2GLF both sent in the 8 to 9 wpm range with a few errors. Good showing by all.

Topics at future meetings include safe generator operation, RF transmission lines, using antenna analyzers, pros and cons of renewable energy, basic HF antennas. Plus CBS47/Fox30 Chief Meteorologist Mike Buresh with his annual talk on hurricanes and local weather.

The Gate River Run is Saturday, March 20th. This 15K racecourse winds along the St. Johns River before crossing the Hart Bridge to the finish line near the football stadium. Duval ARES again provides a spotter network along the route to assist those needing help. Contact John, W4IJJ if you can assist.

A week later, the Jacksonville Radio FREE Flea is Saturday, March 27th from 7AM until noon in the big parking area at Terry Parker Baptist Church, 7024 Merrill Rd. Admission and tailgate spaces are free.

Willy, AC4WZ reports nine new Technicians, five new Generals and two new Extras resulting from the Jax Laurel FCC session on Feb. 6th. Orange Park 2021 testing dates include March 13th, May 8th, Aug. 14th, and Nov. 13th (all Saturdays) at Orange Park Library at Kingsley & Plainfield Aves. ARRL-sponsored testing starts at 9AM and pre-registration is required. Contact k4ifg@arrl.net

KM4LFT notes "the Piedmont Amateur Radio Club announces the creation of an HF Winlink Gateway for Central Georgia and the Southeast U.S. K4PAR accepts VARA and ARDOP modes at a center frequency of 7103.8 khz. PARC welcomes all our ARES colleagues in the Jacksonville area to connect on K4PAR, and, if successful, add to your favorites list."

Good turnout at Winter Field Day with over 30 participants and a variety of bands & modes on the air from the Hogan Baptist Church campus.

Thank You for Your Support!

Marty Brown, N4GL, Editor, **QST NFL**

Six years goes by in a hurry! It seems like yesterday that I emailed former SM, Steve Szabo, WB3OMM, and said I'd be glad to take over the section newsletter. And it has truly been my pleasure.

I want to thank all of you who contribute and/or read QST NFL each month. I'm continually amazed at the quality of input I get each month, and the consistency with which my loyal contributors send me information.

There's still work to be done, and I'm asking you for your help to get the word out.....

1. Spread the word about our website www.arrl-nfl.org and **QST NFL** on your club, net, web-site, newsletter or at a meeting.
2. Send a write-up and picture of your next club activity or personal project.
3. Make sure you, or the appropriate member of your organization is on the email reminder list.
4. Contact: Marty Brown N4GL, n4gl.marty@gmail.com

Five Flags ARA Begins Spring Term

Eugene Bannon, kb4hah

The Pensacola Five Flags Amateur Radio Association (FFARA) in conjunction with Pensacola State College (PSC) has initiated our Spring Term "Amateur Radio Introduction & Upgrade" class (R06254). We are on the main Campus on Tues & Thurs Nights from 6-8:30PM. We are listed in the ARRL.

The class is made up of 8 men and 7 women, 3 of which are returning students that want to upgrade their license from the previous class. THE others have found our class from various methods. Including the ARRL website. ([American Radio Relay League | Ham Radio Association and Resources](#)). Others have found us by word of mouth, and yet others have found us through the PSC spring class catalog. We are hoping to by the end of the course we will have either new hams or upgraded hams that are excited to join the ham radio community. We are enjoying the class and looking forward to operating with all of them in the future. I have enclosure a class picture of our student and instructors in action.

In the North-west corner of Florida, the local area YL's are starting to gather on the air. We are having our weekly "Ladies on the Air" Net each Sunday nights at 7 PM on the 146.70 Santa Rosa County ARES repeater. This is an opportunity for our local ladies to gather on the air and to exchange experience and socialize with each other without the interference of the OM's. We are looking forward in listening to this net every Sunday evening. Here are some of the present & future participate of this net.





Duval Amateur Radio Emergency Service

P.O. Box 441381
Jacksonville FL, 32222
www.duvalaresjax.org

February 3, 2021

Duval County ARES hosted a Winter Field Day event January 30 and 31. Thirty one Hams and community members stopped by to operate radios, discuss amateur radio, view antenna displays, or complete ARES position task book training objectives. Our 2021 event was outdoors at Hogan Baptist Church ballfields and picnic area. Four amateur radio stations were setup around the ballfields and pavilion providing phone, FT8, Winlink, satellite and JS8Call communications. Several Duval ARES members tested new antenna designs and were very satisfied with the antenna's performance. A FT-817 QRP station and a FT-991A 100 watt station were powered completely by solar power, including computers. We also covered several position task book training objectives. Making significant progress towards getting our members fully qualified. A special thanks to Pastor Copeland, Hogan Baptist Church for supporting Duval County ARES.

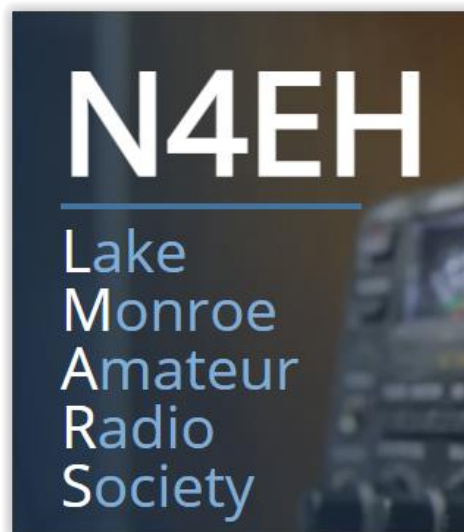
Lake Monroe ARS Hosts Special Event

Rich Fischer, President, Lake Monroe ARS

LMARS will host a Special Event between February 27th and March 6th to commemorate Florida becoming the 27th state March 3rd 1845. Call sign **W4F** will operate multiple modes in the General Class portion of HF excluding WARC bands between 10 AM and 10 PM Eastern time. We may include the 6 Meter band as well.

Our exchange will be the state, local temperature (Deg F or Celsius), and name.

For more information: <https://www.lmars.org/>



**Alfred LaPeter Jr.,
W2AS, (sk)**

Al, who was awarded the LMARS Meritorious Service Award last October, lost his battle with cancer January 21st 2021. Al was 94.

NEW PORTABLE SETUP

By Elbert Wilkinson, KQ3K
January 27, 2021

THE CHALLENGE:

I like the challenge of portable operations. Over the last couple of years I have been on a quest to minimize the equipment requirements yet obtain the best operating capability as possible.

Lugging around a laptop with its limited battery capacity and higher 18-19v power requirement was not an ideal solution. There weren't many other options although a 12v laptop would have fit the bill. That's when I pivoted to the Raspberry Pi for portable operations.

However, there were some challenges to overcome. Among them were different power requirements for the Pi, separate monitor, cables and setup. That does not include the power source and setup for the radio either. Then there were the different software packages in Linux or Raspbian Buster. Some worked flawlessly; others not so well. So, what else could I do to improve this situation?

THE IDEA:

OK, I confess...I like to watch amateur radio porn on YouTube. It's embarrassing to admit it, especially when the XYL catches me in the act late at night. I've been seeking treatment, but it doesn't help. I keep seeing new things to play with. One of the "tubers" I like to watch is a really smart guy, K6ARK, who posted a video last week, [Pi-Free Portable FT-8](#), as an alternate solution. He was using a small Windows 10 tablet in the field and making contacts. That got my attention!

A SOLUTION?:

Wouldn't it be great to reduce all the clutter and run your ham radio software on a computer using only a common 5v2a micro-usb charger? The solution - an inexpensive 8" Windows 10 tablet on EBAY. It was ordered on Saturday and arrived Monday. Total cost delivered \$74.90. It came loaded with 4GB RAM, a 64 GB SSD, a separate micro USB power/charge port, USB -C, USB-B, micro HDMI, combination speaker/mic port and a SDHC micro card slot for storage expansion (I added 128GB), Bluetooth, wireless connectivity and an internal battery. How great is this...all for less than \$75? That's equal to or less than a new Pi4 excluding

the peripherals and it runs out of the box! Since it is Windows 10, my learning curve would be negligible.

The following outlines how I put the new setup together and results achieved. Read on to see what happened!



TABLET PROGRAMS:

This setup is designed for use with either an Elecraft KX2 or a Xiegu G-90 for QRP or portable operations. Both rigs are all mode HF SDR, have internal tuners and run off 12v. This setup could easily be adapted for a FT-817/818 or another low power draw rig. I ended up loading the following software on the tablet which pretty much replicates my home laptop.

Once the software was loaded but before installation, I went

| Software Package | Purpose |
|--------------------|---------------------------------|
| FL Rig | Rig control where needed |
| FI Digi | Digital modes |
| WSJT-X | Conversational weak signal mode |
| JTAlert for WSJT-X | Add-on to WSJT-X |
| JS8Call | WSJT-X based messages |
| WinLink Express | HF email programs |
| VARA | High speed WinLink add-on |
| RigExpert Antscope | Pairs with Stick 230 analyzer |
| N3FJP | Logging software |
| U-Blox | GPS dongle software |
| Dimension 4 | Time sync when in network |

to FTDIchip.com and downloaded the required drivers for the KX2 and G-90 CAT control. CAT control always works better with the correct drivers!

For brevity, details of the individual software installations will be omitted. This process is fairly simple and straight forward.

PUTTING IT TOGETHER:

Power in the field is always a concern. Fortunately, I had previously obtained several Bioenno 12v LifePo4 batteries to power the radios. All have Anderson Power

Continued on next page...

Pole connectors. In addition, I recently added a Panergy 25,000mAh LiPo power bank to recharge various USB devices which will now be used to power or recharge the tablet. A Bioenno 28w solar panel and charge controller will be used to recharge all the batteries if operating for an extended period of time.

Both rigs connect to the tablet via proprietary CAT cables. Audio connections are via off-the-shelf 3.5mm male-male spring cables connected to inexpensive USB stereo sound cards. These can be purchased for under \$10 on Amazon or EBAY. I paid \$3 for mine when Radio Shack went out of business. You could also use a Signalink USB if needed, but that is more expensive.

The tablet is a touch screen but I just happened to have a spare wireless mouse that makes it much easier to use. I may eventually switch to a small Bluetooth mouse which would free up a USB port.

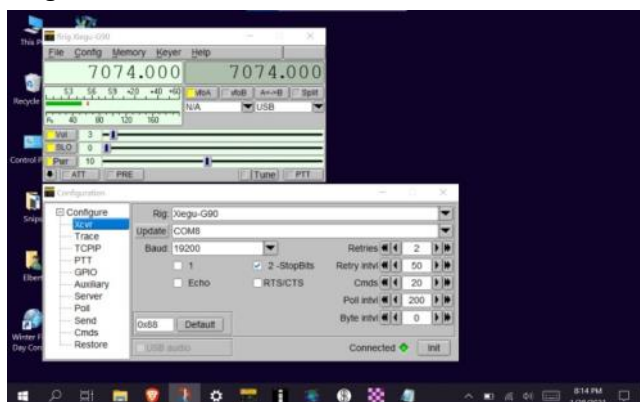
The keyboard is a Logitech Bluetooth 480K keyboard with a built in slot where the tablet sits. Also found in the bottom of a drawer was a 8" Bluetooth keyboard that pairs with the tablet and folds up for a much smaller compact unit. The also tablet has an onscreen keyboard that could be used but it would be tedious. Finally, I have a couple of USB hubs that can be plugged in to expand the peripherals.

MAKING IT WORK:

I was curious and hopeful all of this would work. There was no reason for it not to, but I had to find out.

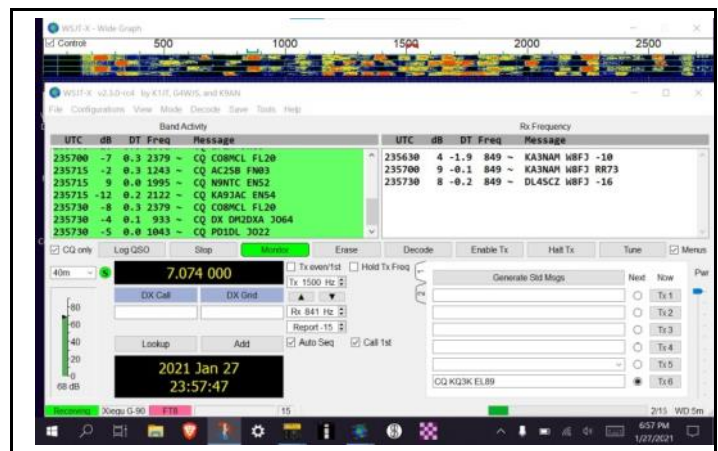
First, I started up FLRig for CAT control and configured the settings.

FLRig



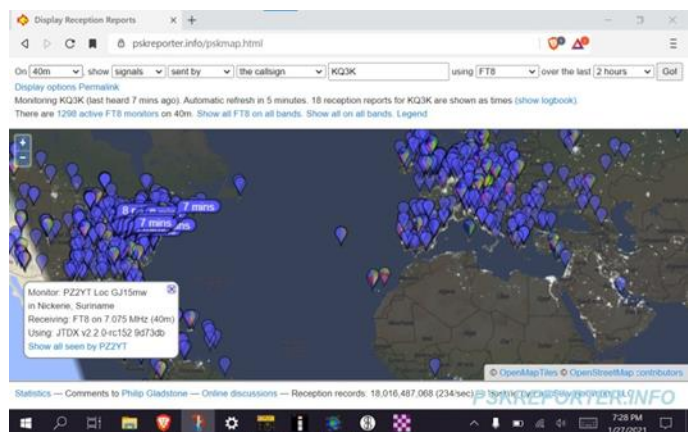
Next I started up WSJT-X, ran through the setup screen and tuned the G-90. I was operating from inside my office/shack, so Dimension 4 was providing accurate time sync.

WSJT-X



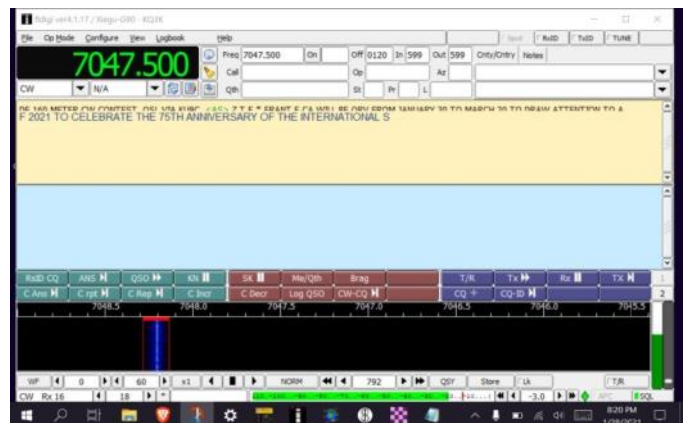
40m was open and here is my screen shot using PSK Reporter

PSK Reporter



Next, I wanted to see if WinLink Express and VARA could work from such a small windows based platform. I opened and configured Winlink. Then I configured VARA HF and started the session. I was able to quickly connect to a station and checked for messages. There were none, but it did work.

WinLink Express Using VARA



Continued on next page...

WINTER FIELD DAY – 2021

Portable Operations Report

Elbert Wilkinson, KQ3K, kq3k@cox.net

I was eager to try out my new portable setup during a longer test session. Winter Field Day to the rescue! The timing was perfect. With COVID rules in effect, I set up as a HOME station out in my garage using 100% battery power. The weather was perfect – cool with very low humidity. Welcome to Florida in the Winter!



On the left is my 10" Samsung tablet used to monitor the SSRC's results on [ContestScoresOnline](https://ContestScoresOnline.com). In the middle is my 8" Windows tablet with a Bluetooth keyboard. On the right is the Xiegu G-90 guarded by an adult beverage procured purely for its medicinal qualities to prevent dehydration.

I setup my Bioenno 28W solar panel in the driveway which was used to recharge the Bioenno batteries. I was fortunate to have 12V12AH, 12V6AH and 12V3AH batteries because the G-90 draws about 4.5amps on transmit at 20W. Battery changes were necessary during the operating event when they dropped to 11v.



I setup my Buddipole antenna in the front yard. The Buddipole was configured to operate for both 20M and 40M with minimal change-over effort.

20M was set up as a vertical which requires a 16' +/- elevated radial. 40M was configured as a dipole. Both tuned down to a 1.5 – 1.6 SWR which was close enough for me.



Vertical 20M element and 40M horizontal dipole



Another view of the Buddipole.

I chose to operate primarily digital modes during the WFD event although I did make four phone contacts. I started off on FLDigi using PSK31 and made 38 contacts. Logging with N3FJP software was seamless as expected.

Eventually I switched over to JS8CALL (JS8) which is a weak-signal conversational mode built on the WSJT-X backbone. Since its introduction several years ago, JS8 has been continuously improved. I had never before made any contacts on JS8 until this contest. It takes a little getting used to but after a while one gets the hang of it. I made 18 JS8 contacts and was pleased with each of them. JS8 interfaces with N3FJP for logging. Unfortunately, I didn't catch that on the setup so my contacts were manually entered. This has some good potential for POTA or other portable operations.

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JS8

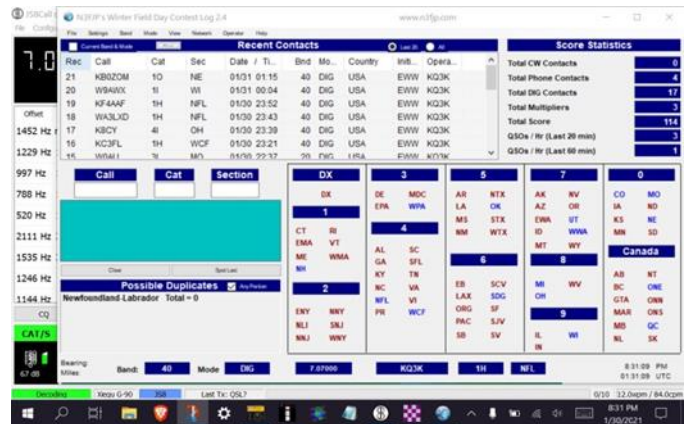
Screenprint of JS8 during live transmission.

SUMMARY:

I wasn't sure what to expect when I began this project. It could be a 7" tablet. However, I was pleasantly surprised with the build quality and handling of all the programs I loaded it up with despite its small size. Most of the attachments acquired for the Raspberry Pi work on the tablet. I suppose one could really add a lot more programs, but that would defeat the goal overall goal a small power miserly system dedicated for portable operations.

Now all that is needed are some more portable operating events to give the new setup a more robust test.

N3FJP



N3FJP for logging entry with JS8 peeking out from behind. It was easy to toggle between the two programs when operating and logging.

For a future article, I plan to substitute an HT for the HF rig to see if I can send email through the local Winlink VHF/UHF gateways. There is no reason it should not work. If an HT such as an Icom ID-51A or Yaesu FT2DR were used, one could also ditch the separate GPS dongle as these HTs also have GPS receivers. GPS is needed because both WSJT-X and JS8CALL require precise UTC time synchronization.



QSO Today Ham Expo

Coming to your desktop, laptop, and tablet:

March 13 and 14, 2021

and "on-demand" until April 12, 2021



What's happening? Santa Rosa County Edition

Arc J. Thames, W4CPD, Emergency Coordinator, Santa Rosa County FL ARES

The end of January brought us Winter Field Day and what a great time we had! Utilizing our Santa Rosa County ARES station call, K4SRC, we setup at Bear Lake Campground in north Milton, FL. This campground provides a great pavilion space that we were able to operate under that was also equipped with a full commercial kitchen. Being at a campground, several of our team members setup their campers for the weekend.



We setup four operating positions with several antennas including a folded dipole that was donated to us by Alpha Technical. This antenna operated extremely well and did not require an external tuner. We setup a G5RV as well using a triplexer and band filters to allow for fewer antennas to be setup. For band management, we utilized a printed sign in a slanted sign holder for each band. The signs were centrally located so when someone wanted to change bands they could easily swap.



We didn't advertise this event very much due to COVID concerns but we ended up having a ton of visitors. From people in the community that had just heard about it via word of mouth to people in the campground, the visitors kept coming. Many of our visitors ended up staying the majority of the day to learn as much as they could and hopefully we'll see some new hams as well as additional involvement from others in the area. We couldn't be happier with how many people came by!



Pictured from left to right (Brian- KM4BWW, Arc-W4CPD, Jon-KM4QQO, Jack-W4JPH, Paul-K7PCS)

We didn't hear a lot of activity on Saturday evening on the air and it had started to appear that way Sunday morning. What do you do when you don't think there's activity? Start calling CQ! Turn that silence into a pileup and don't be afraid to get the contacts moving. The second tip for success, female hams can get the contact. Our EC, Arc-W4CPD, had been trying to work a station for close to 10 minutes and couldn't get through. Arc asked his wife, Josie-WD4DCL, to try and she got through to the same station the first time. This was a special time for Josie as it was her first HF contact, but we also used Winter Field Day to celebrate her 40th birthday! You can watch the WFD summary video on YouTube at <https://youtu.be/0XuaEu0GjA4>



Pictured: Josie-WD4DCL

Speaking of female amateur radio operators, Ana-KN4ZEA from Pensacola, has started up a new net specifically for female operators. The net is hosted on the K4SRC 147.600 repeater in Milton, FL but can also be connected to outside of the local area using EchoLink node K4SRC-R or AllStar Link node 515591.



Another exciting announcement is the first of many, what we are calling, "Ham Hands On" events combined with a free tailgater. These events are open to anyone who wants to come!



We'll have several stations setup on HF, VHF, and UHF to help you understand how to send emails with Winlink over RF. This event isn't affiliated with any club or group and is open to EVERYONE! Ham license testing will also be available at 9:00AM. Thanks to Bob-W5CL for allowing us the use of his space at the Pea Ridge Flea Market (between Pace and Milton) and the Milton Amateur Radio Club for providing the license testing.

For more information on upcoming events or how to get involved, please visit srcares.org

Set Up a VHF/UHF Winlink RMS For Your County

by Gordon Gibby KX4Z

Disclaimer: *I'm not part of the WINLINK Development Team and my information here is my unofficial opinion.*

Lots of hams are beginning to understand how to send formal emergency or personal traffic via the WINLINK system. By making radio data connections to still-Internet-connected RMS (radio message server) stations that are located far away from a disaster area, radio communicators can move formal traffic (including modest-sized attachments) in and out of a disaster area. This best-in-class volunteer-driven system provides a nice complement to tactical nets, which provide immediate connections inside a disaster area.

Every County

In recognition of this powerful tool, the 2016 ARES® NFL Section Communication Plan highly encourages county-based WINLINK RMS stations with these words: "It is encouraged to have a WinLink 2K RMS station in each county or at least a digipeater to reach a neighboring RMS station in another county." (See: <http://archive.arrl-nfl.org/wp-content/uploads/2016/03/NFL-Section-Comm-Plan-FINAL-May-1-2016.pdf>)

So how do you do this?

It turns out it is pretty easy to do, the software is free, authorization is easy, and the connections are basically the same four-wire (mic, ground, push-to-talk, receiver-audio) that are very familiar to anyone who has ever operated a phone-patch, packet radio, or set up a voice repeater.

The advent of simple sound-card based systems, such as the Signalink, Navigator and others, have made the hardware literally "off the shelf." And you can still homebrew the simple transformer-isolation / audio-detection PTT if you wish. There are lots of tutorials out there to help you get the wiring working. (For example: <http://gsl.net/kx4z/DigitalConnections.pdf>)

Free Software: Although I like raspberry-pi Linux-type systems based on John Wiseman's linbpq software (<http://www.cantab.net/users/john.wiseman/Downloads/pilinbpq>), the windows-based RMS PACKET software from the Winlink Development Team is particularly easy to configure. The URL is: https://downloads.winlink.org/Sysop%20Programs/RMS_Packet_install_2-1-39-0.zip.

Decades ago most radio data was moved by hardware TNC's but recently soundcard-based systems using software to handle the lower network layers has become much more popular. RMS_PACKET can easily connect to UZ7HO's popular soundmodem.exe (http://uz7.ho.ua/modem_beta/soundmodem105.zip) to provide the packet AX.25 layer, or can use the extremely high speed VARA FM. The former provides legacy-compatible AX.25 packet modulation that works with digipeaters and nodes; the latter provides ground-breaking speed but is more limited in capabilities to be extended by other stations. Work on that part is proceeding.

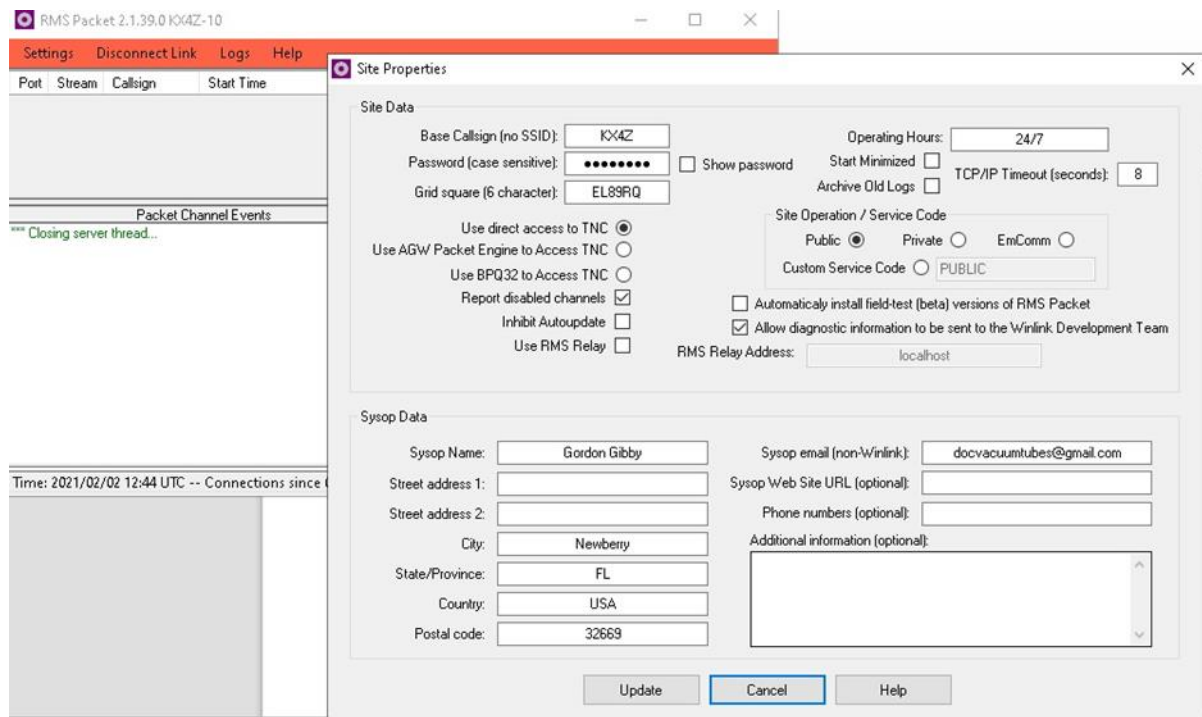
Some commitment needed....

RMS system operators need to understand it requires some commitment. Prospective "sysops" should already be very familiar with winlink operation, and with general packet or VARA techniques, setup and operation. There are some other commitments required by the WINLINK folks which can be reviewed here: https://winlink.org/content/join_gateway_sysop_team_sysop_guidelines You're providing an important training and service opportunity, and your station needs to be pretty solid and you need to be on top of the Winlink advances. With that said, you can then easily get approval via an email to Steve Waterman (k4cjsx@comcast.net) who is a friend of mine. If you need help, I can help! Once you are approved for operating a VHF/UHF RMS station, your WINLINK call/password are approved for connection to the central message server system (CMS) via Internet. From there you can begin to configure the software.

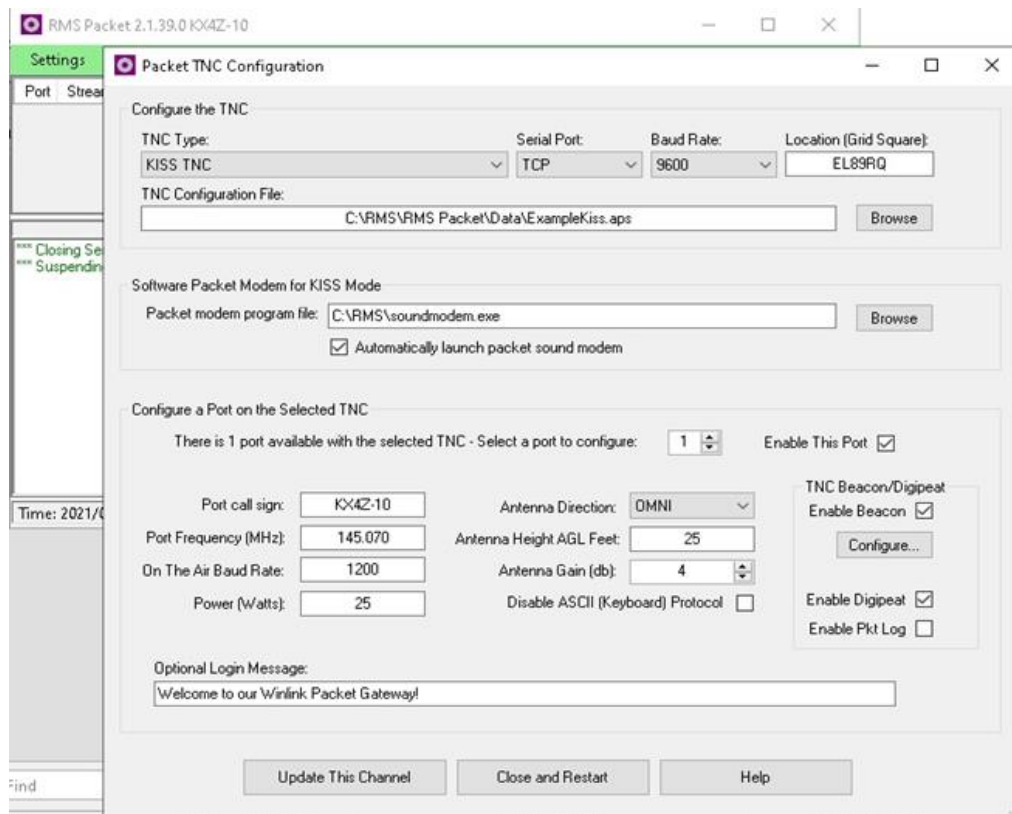
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You'll use **soundmodem.exe** (the other half of the equation) for packet communications via a soundcard – RMS Packet.exe can automatically start it for you. There are two important setup screens:

1. Settings | Site Properties:



2. Settings | Packet Channels:



Continued on next page...

Figure: Settings | Packet Channels. Although you typically set the frequency of your radio by simply adjusting its dial, you need to tell the RMS_Packet software your frequency so it can be reported out to potential users. You also select to use a “KISS TNC” via “TCP” – the connection is made internally in your computer’s tcp/ip ports.

Port Connections

How does RMS_Packet software connect to soundmodem.exe software? Over a TCP/IP port connection, which is specified in a couple of lines of configuration in its .ini file and somewhat transparent to the setup:

```
[TNC Properties]
TNC Type=KISS TNC
Serial Port=TCP
.... (other lines not shown here)
TCP Host=127.0.0.1
TCP Port=8100
```

Bottom line: So you should configure your soundmodem.exe to enable tcp/ip connections over the same port, 8100 in this example. (See: <https://www.qsl.net/nf4rc/UnderstandingAudioChannelConfiguration.pdf>)

Packet vs. VARA FM

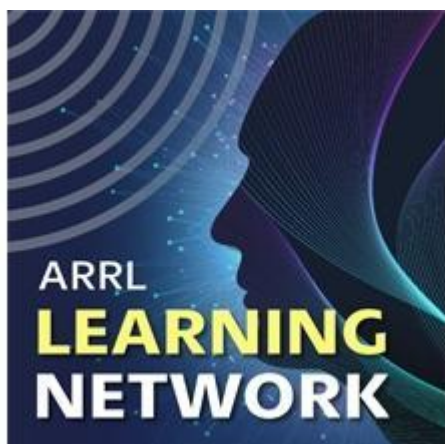
I currently recommend that RMS stations using AX.25 (packet) enable the digipeating option. VARA FM, while much faster, currently has a somewhat more complicated “digipeating” option which will be likely further improved over time. Very compact, fast, local servers would benefit from VARA FM, whereas large systems designed to serve one or more entire Counties might sacrifice speed to get the advantages of robust digipeating options.

Standard modulation level adjustment

From this point, one just needs to adjust the receiver audio gain so that soundmodem decodes signals well, and adjust the transmitter audio gain on the Signalink / computer for good push-to-talk reliability and correct modulation levels. Basically, set the audio so that it is just below where the perceived audio on a monitoring radio ceases to get louder is a reasonable approximation. For more information, see <https://www.qsl.net/nf4rc/UnderstandingAudioChannelConfiguration.pdf>

Conclusion

Setting up a local ARES® VHF/UHF Winlink RMS server is a good way to begin to add additional capabilities to a local volunteer group. As your “sysops” gain expertise, they may naturally migrate to also offering an HF RMS server as well. When that’s done properly, VHF users can get the advantages of automatic HF ability to “jump out” of a disaster area even when the local internet/cell phone is completely obliterated.



ARRL Learning Network

From the ARRL Letter

ARRL's Learning Network is a webinar series to help introduce members to the variety of activities and opportunities enjoyed by radio amateurs. These live presentations will be given by member-volunteers, for all members. Like ham-fest forums and radio club presentations, the webinars are intended to help participants get more active, involved, and engaged in amateur radio. Presentations are 30-minutes each to accommodate attendee's busy schedules, followed by a 15-minute period for questions-and-answers. For additional information contact ARRL's [Lifelong Learning](#) department.

Friendship ARC

Ken Simpson, W8EK, W8EK@FLHam.net or W8EK@arri.net

The Friendship Amateur Radio Club had an honest to goodness face to face, old fashioned type of meeting on February 8. It was held at the Holy Faith Episcopal Church in Dunnellon. It is likely that this will be the location of our meetings for a while, since the sheriff has not yet opened up their facilities for meetings.

Although attendance was about half what we would normally have had in "Pre-Covid days", we had a quorum and transacted business. Among the business transacted was election of officers.

Elected were: President - Ken Simpson, W8EK

Vice President - Ned Davis, WB4BKO

Secretary - Sue Simpson, N8AJU

Treasurer - Russ Doren, KN4RD

The Friendship ARC intends to continue to hold real, in person meetings. The next meeting will be on Monday, March 8, at 1:30 PM at the Holy Faith Episcopal Church in Dunnellon. Please join us!

Quarter Century Wireless Association

Ken Simpson, W8EK, Chapter President & National Director

Ocala Chapter 62 of the Quarter Century Wireless Associate held a meeting on Thursday, February 25 at the China Lee Buffet on East Silver Springs Blvd in Ocala.

Chapter 62 of QCWA meets on the fourth Thursday of the even numbered months at 12:30 PM. Mark your calendar now!

Although attendance was not as large as normal, a good meeting was enjoyed by all of those present.

Since we had not had an official business meeting since February 2020, several items of business needed to be taken care of. The first was to have a one-year moratorium on dues. If one paid their 2020 dues, then their 2021 dues are also paid; if 2020 dues were not paid, then 2021 dues need to be paid.

Normally a contribution to the Sheriff's Boy's Ranch is made about Christmas time. It was voted to do the same again, but just a couple months late.

Two silent keys were recognized.

Al LaPeter, W2AS, from Orlando, became a silent key in January. He was member of Chapter 62 but was also President of Chapter 45 in Orlando for a long time. A contribution will be made to the national QCWA scholarship fund in his memory.

Al Reeves, W1JHU, of Ocala, became a silent key in January. He was active in various ham radio activities. Both will be missed.

President and National Director Ken Simpson discussed some of the things from the national director's meetings, including the QCWA Scholarships. This year twenty three \$2000 scholarships for a total of \$46,000 will be given to amateur radio operators.

Chapter 62 of QCWA holds a net on 3940 KHz every Saturday morning at 9 AM local time. Please join us!

The next meeting of Chapter 62 will be on Thursday, April 22 at 12:30 PM at the China Lee Buffet.

FCC Testing Information

4 Corners Radio Club, Davenport FL

Cancelled due to Covid 19

- Info: WA2FRW@aol.com

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)

Cancelled until further notice due to loss of venue because of COVID 19

- For more information and registration, contact Bob Cumming, W2BZY, 407-333-0690 or w2bzy@cfl.rr.com

Milton Amateur Radio Club, Milton FL

- Second Thursday of each even numbered month
- 6:30 PM
- Walk-in
- West Florida Hospital Rehab Institute, 8383 N Davis Hwy, Close to Johnson and N. Davis
- Info: Chuck, N4QEP, merlinman3@yahoo.com

Orlando ARC FCC Testing (OARC)

Cancelled until further notice due to loss of venue because of COVID 19

- Info: <https://oarc.org/events-ve-testing>

QCWA Chapter 45, Orlando FL

Cancelled until further notice due to loss of venue because of COVID 19

- Info: WA2FRW@aol.com

Santa Rosa County FL ARES Testing (Walk-in)

- Saturday, March 27, 9:00 AM at the Santa Rosa county EOC, 4499 Pine Forest road, Milton FL
- Saturday, April 17, 9:00 AM behind the Pea Ridge Flea Market, 5186 US-90, Pace, FL
- Additional information and dates can be found at srcares.org or by emailing info@srcares.org

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

- First Tuesday of the month prior to the meeting
- Saturdays available with advanced notice
- N4SVC, 9707 58th Street, Live Oak, FL 32060
- www.suwanneearc.org for more information

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>

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

**Due to the COVID 19 re-
strictions on gatherings,
please check with the or-
ganizations listed for
changes or cancellations.**

NFL Web Site

For net, hamfest and other events go to www.arrl-nfl.org. Webmaster Brian McClure, NW4R, maintains an up-to-date and detailed listing of all NFL nets and activities. If you need to make a change to an existing net or activity, or add a new one, you can contact Brian on the website.

NFL Officials

Section Manager – Kevin Bess, KK4BFN

Assistant Section Managers

Joseph D. Bushel W2DWR

John C Reynolds W4IJJ

Dave Davis WA4WES

Jeff Capehart W4UFL

Neil Light KK4VHX

Ray Crepeau K1HG

Steve Szabo WB4OMM

Scott Roberts, KK4ECR

Section Emergency Coordinator – Karl Martin K4HBN

Section Public Information Coordinator – Scott Roberts KK4ECR

Assistant SE Coordinator – Dave Davis WA4WES

Section Technical Coordinator – Frank Haas KB4T

Affiliated Club Coordinator – Appointment Pending

Section Traffic Manager – Helen Straughn WC4FSU

Official Observer Coordinator – Robert Leasko WB8PAF

State Government Liaison – Darrell Brock N4GOA

Statewide Digital Radio Resources

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

- **DSTAR Reflector 046**

- REF046A – Florida Statewide

- REF046B – NFL ARES

- REF046C – NWS Mobile, AL SKY-WARN

- **DMR Florida State ARES TG 31127**

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



Newsletter of the Northern Florida Section of the ARRL

1. Spread the word about our website www.arrl-nfl.org and **QST NFL** on your club web-site, in a newsletter or at a meeting.
2. Send a write-up and picture of your next activity.
3. Make sure you, or the appropriate member of your club is on the email reminder list.
4. Contact: Marty Brown N4GL, n4gl.marty@gmail.com

QST NFL is a monthly publication of the ARRL Northern Florida Section. **QST NFL** is intended for wide distribution within the NFL Section, including club Leaders and all licensed Amateurs in Florida. A current issue of this publication can be found at the ARRL Southeastern Division web site, Northern Florida Section. www.ARRL-NFL.org Opinions expressed by writers 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.