



# QST NFL



*Sharing information of interest to Radio Amateurs in North Florida*

Volume 8 Issue 11

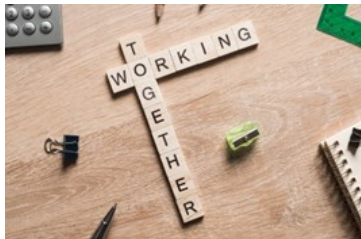
[www.arrl-nfl.org](http://www.arrl-nfl.org)

November 2021

## It's All About Working Together

By Scott Roberts, KK4ECR, NFL Section ASM / PIC

This past weekend, 24 Amateur Radio operators from 7 counties came together and worked the PGA Tour Cycle to the Shore Event. This is an annual event that starts at the North Florida Regional Airport in St. Augustine and ends at the Hilton Hotel in Daytona on the first day. Then, on the next day the riders return to the airport in St Augustine. It is a 150-mile ride and, this year, there were approx. 1,000 riders.



As I have written in past articles, the job of a PIO is to build relationships. These relationships are not just with our served agencies, the media, and the public; they are also with other Amateur Radio organizations and clubs. Without these relationships, it is difficult, if not impossible, for us, as amateurs, to work together when disaster strikes.



When served agencies, or organizations request your support for an event in your county, try to enlist the help of other, nearby counties to help as well. Building these interop relationships will prove to be beneficial when serious assistance is needed.



My thanks to those 24 operators who helped in the PGA Tour Cycle to the Shore!

## Did you know?

Arc Thames, W4CPD



The NFL section has a **Facebook** group? Be sure to [check it out](#) and join to stay connected!



If you have an event you want to share with the section, or an article you'd like to write for the **ARRL NFL website**, [arrl-nfl.org/](http://arrl-nfl.org/)? You can [Contact the webpage manager](#) using the Contact Us link on the website. We'd love to be able to share your event or article with the section!



You can email your **QST NFL** input to [n4gl.marty@gmail.com](mailto:n4gl.marty@gmail.com), Marty Brown, N4GL, Editor.

All submissions are subject to editing prior to publication.

## What's Inside....

[Page 2 Panhandle Hams are Energized!](#)

[Page 5 FCG FCP RadioSport Highlights](#)

[Page 7 QRP SWR/Wattmeter/Dummy Load Kit](#)

[Page 9 Loften HS Amateur Radio Club](#)

[Page 11 Alachua County S.E.T. Success!](#)

[Page 12 Jacksonville Radio News](#)

[Page 13 School Ham Radio Club Receiver Project](#)

[Page 14 LARA—Night Out Event](#)

[Page 15 Santa Rosa County Activities](#)

## Florida's Panhandle Hams are Energized!

DJ - KI4ZER, DJ Stewart

We start off this very productive month for Ham Radio at the Walton County Amateur Radio Club where its members are gearing up for Coffee, donuts and Dogs in January (date to be announced). This will be dubbed as a come one, come all free Tailgator (yes that's right, a gator) to share the love of the hobby and put faces to names for many who dedicate their time to develop and train in with the efforts of the Walton County ARES. Keep an eye on their website and Facebook pages for updates! We hope to see you all there and trade, swap, sell or demonstrate your gear! For more on the Walton County Amateur Radio Club please visit: <https://wf4x.wordpress.com/>



During the opening week of October we also partook at the Playground Amateur Radio Club and their Tech Night covering tower and equipment safety. This was great timing as they embark upon the journey to put up their replacement tower following suffered damage from Hurricane Sally last November which resulted in the deconstruction of their 30 plus year old apparatus to eliminate a vital safety concern. For more on the Playground Amateur Radio Club please visit: <http://w4zbb.org>



Keeping up with the pace and energy in the Panhandle, the North Okaloosa Amateur Radio Club held their business meeting the following Thursday discussing the successes of their inaugural Swapmeet which by all accounts turned out a great many amateur Radio operators and vendors alike in Downtown Crestview on the 8/9<sup>th</sup> of October 2021. This was a stupendous event and has been lauded by all who attended. Look forward to this becoming an annual event as they plan their 2<sup>nd</sup> Annual Hamfest in October of 2022! Also discussed was the repair of the Club Station and ensuring proper grounding and bonding to be repaired following inspections and identification discovered during the spring as a result from damages suffered from Hurricane Sally. Work is to begin shortly and the Station will be at full operating capacity in the near future! For more on the North Okaloosa Amateur Radio Club please visit: <https://w4aaz.org/>



As if the above was not enough, the North Okaloosa amateur Radio Club along with many other organizations which benefit the community were officially recognized at the Crestview chamber of Commerce for their efforts in the city's Government Week! This week long event recognizes all organizations which enhance the quality of life throughout Okaloosa County. For more information on this event please see the press release at: <https://www.crestviewbulletin.com/story/news/politics/government/2021/10/07/crestview-has-full-schedule-city-government-week/6010615001/>



In Walton County we were participating in the monthly Walton County ARES meeting and had some special guests! The Assistant ARRL SEC and the Walton County Emergency Management Logistics Coordinator joined in on the fun and even gave briefings on planning and coordination for State and County level events! The ARES EC took note of newer attendees wanting to be trained and refreshed on Radiograms and set forth in action to release information for the proper passing of traffic! A skill that unused could cause confusion and distorted messages if not properly executed. Also discussed was an upcoming testing session on the 18<sup>th</sup> of November. For details on that and more, please visit: <https://n4ema.wordpress.com/>

Moving to the next adventure we were taken back to the Playground Amateur Radio Club in Fort Walton Beach for their Business meeting and discussed heavily was the continuation of tower restoration projects which are taking place starting on 31 October at High Noon (HiHi). Also discussed is their upcoming spring Hamfest on March 18/19 2022! This should be a great event and many are very excited as this is their 52<sup>nd</sup> Annual show! They also discussed upcoming testing and advancement. For more information please visit <http://w4zbb.org>

Continued on next page...



**W4ZBB** Playground Amateur Radio Club  
--- --- --- --- ---

## The 52nd ANNUAL PARC Hamfest

March 18-19, 2022  
Friday 4p-8p  
Saturday 8a-2p

NWF Fairgrounds  
1958 Lewis Turner Blvd  
Fort Walton Beach, FL 32547

Admission: \$7  
Tables: \$15  
Tailgating encouraged! \$10/spot  
RV Parking \$30 per night, 30A, water, sewer included.

Contact: hamfest@w4zbb.org  
(850) 359-9186



So what else do we need to discuss?! Why not a Hamfest! We had the distinct pleasure of attending the Deep South amateur radios Clubs event on 23 October 2021 and what a great event this was. Vendors of all types were in attendance and many Hams who had not gotten a chance to ever meet face to face finally caught up with each other off the air! This show was exceptionally organized and you could feel the energy in the room as many purchased, traded, swapped and bartered great equipment! We are looking to more events such as this and many others! They even made the local news! For their club site please visit: <https://k4dsr.com/> and for the news story please go to the following link: [https://www.fox10tv.com/deep-south-amateur-radio-club-hosts-hamfest/video\\_8224a1e7-f1ce-580c-aa29-e92705aa7280.html](https://www.fox10tv.com/deep-south-amateur-radio-club-hosts-hamfest/video_8224a1e7-f1ce-580c-aa29-e92705aa7280.html)



We thank you for reading our write up this month. There is always more and keep reading for other events we were involved in but did not have the space! We hope that you are tuned into all of the media being put out there on the internet as well as on the air! We hope to hear from more of you soon and as always, 73s and Ham On!

	<div>SILVER SPRINGS RADIO CLUB 2021 HAMFEST Saturday, December 4, 2021</div>	
<div>FIRST CHRISTIAN CHURCH 1908 EAST FORT KING STREET, OCALA, FL 34471 DOORS OPEN AT 7:30 AM</div> <div>SPECIAL NOTE: Because of COVID-19, all attendees are encouraged to use their own judgment regarding use of face masks/coverings while attending the hamfest. Table layout is designed to promote social distancing and limited occupancy. SSRC will follow all official COVID restrictions.</div>		
<div>Grand prize and door prizes Grand prize ticket is separate from door prize ticket. Admission ticket stub good for door prizes only. Both are available at the door only! Additional door prize tickets \$5 each. No online sales.</div>	<div>Grand Prize</div> <div></div> <div>YAESU FTM-300DR</div>	
<div>VE Testing One session only at 10:00 AM Bring two forms of ID &amp; FRN + FCC Reference copy, if upgrading Test Fee is \$15 cash. Test slots are limited. Pre-register at K4GSO.US</div>	<div>Commercial Vendors Tower Electronic Signman Of Baton Rouge Hamworld J T Communications Paradan Radio Nitefire Electronics And others</div>	
<div>Active military and first responders in uniform and kids under 12 free. Must buy tickets for Grand Prize.</div>	<div>Flea Market &amp; Tailgate Inside flea-market tables in Fellowship Hall</div> <div>Separate Tailgate area in parking lot on a first-come first-served basis. No advance reservations. (Bring your own table and chairs)</div>	
<div>Ham Food and drinks available for purchase from Scout Troop 439</div>	<div>TALK-IN ON K4GSO VHF 146.610 PL-123</div>	
<div>General Admission \$10 Tailgate – Car &amp; Driver \$20 Additional Tailgate Space \$10 each Additional Person \$10</div>	<div>MORE INFORMATION ON THE SSRC WEBSITE: WWW.K4GSO.US/HAMFEST</div>	

## FCP RadioSports Highlights, November 2021

Stan Zawrotny, K4SBZ, Administrator, Florida Contest Group Frequent Contester Program

November is a busy month for major contesting with a major contest occurring every weekend. However, with the holidays starting at the end of the month, there are only a total of nine significant contests this month. The state QSO party season is over for the year, freeing up a lot of weekend time. WA7BNM Contest Calendar lists 109 RadioSport activities for November worldwide, still more than enough to keep you busy depending on your interest – phone, CW or digital. You don't have to wait until the weekend to play – there are many small activities scheduled throughout the week in the evenings. The minor events are too numerous, too short, or too focused to warrant attention here. The more significant ones (those that count for the Frequent Contester Program) are described below. Contest names are linked to their rules page.

### Preview of November Weekends

#### November 6-7

November starts off big with the [ARRL Sweepstakes CW Contest](#). This is one of the highlights of the year for many contesters. The goal for many seasoned SS operators is to complete a "clean sweep" by contacting all 84 ARRL and Radio Amateurs of Canada (RAC) Sections. Some Sections are harder to contact than others. Northern Territories (NT) is always a challenge, but there's a slim chance that snagging NT could be easier this year. Gerry Hull, W1VE (also VE1RM), is hoping to operate as VY1AAA for both weekends, using "J" Allen's, VY1JA, Yukon Territory station remotely from the US. The exchange for the SS is a bit complicated, so be sure to check the rules before entering.

Almost assured to be crowded out by the Sweepstakes, is the [Ukrainian DX Contest](#). This is a worldwide DX contest with everyone working everyone, but DX, especially Ukrainian stations, count more than US stations. The exchange is RS(T) and a serial number.

#### November 13-14

Many leading contesters claim the [Worked All Europe DX Contest \(WAEDC\)](#), RTTY to be the most challenging contest of the year. Being a true-blue DX contest, only intercontinental QSOs between DX and Europe are counted. Therefore, the number of DX QSOs here may be similar to the amount of DX usually worked in the CQ Worldwide DX Contest. Moreover, the unique feature of QTC-traffic adds much fun and another operating challenge to the contest. Sending QTCs can greatly enhance your score. The RTTY contest has special rules that permit everyone to send QTCs. If you have never passed QTCs, be sure to check the rules. The RTTY special rules also apply to multipliers. In addition to DXCC entities, the special call areas of several countries, including the US, also count as multipliers. To repeat, check the rules.

The [Japan International DX Phone Contest](#) permits everyone to use DX spotting. Multipliers are the different Japanese Prefectures and islands. The exchange for DX stations is signal strength plus CQ zone.

CW operators can also get in on the weekend's DX activities with the [OK/OM DX CW Contest](#). The use of DX clusters is also permitted in this contest. Multipliers for non-OK/OM stations are the OK/OL/OM districts. The exchange is signal report and a 3-digit serial number.

#### November 20-21

This weekend, the phone ops can try to complete a "clean sweep" by contacting all 84 ARRL and Radio Amateurs of Canada (RAC) Sections in the [ARRL SSB Sweepstakes Contest](#). Some Sections are harder to contact than others. Northern Territories (NT) is always a challenge, but there's a slim chance that snagging NT could be easier this year. Gerry Hull, W1VE (also VE1RM), is hoping to operate as VY1AAA again this weekend, using "J" Allen's, VY1JA, Yukon Territory station remotely from the US. The exchange for the SS is a bit complicated, so be sure to check the rules before entering.

CW ops and phone ops not otherwise engaged in the SSB Sweeps can point their beams toward Bulgaria for the [LZ DX Contest](#). This is a worldwide contest with extra points given for QSOs with LZ stations. Multipliers are ITU zones and LZ districts. The non-LZ exchange is RS(T) and ITU zone.

Top band CW ops can work any country in the [All Austrian 160 Meter Contest \(AOEC\)](#). Because the RSGB 1.8 Mhz CW-Contest is held from 1900-2300 UTC, there should be more activity during those hours. The exchange is RST and serial number. Multipliers are DXCC entities.

#### November 27-28

There is a major contest again this weekend with the [CQ Worldwide DX Contest, CW](#). Along with its SSB counterpart in October, this is the largest amateur radio competition in the world, drawing over 35,000 participants from around the world. The exchange is signal report and CQ zone. Multipliers are the combination of each CQ Zone and each DXCC entity. This is a full 48-hour contest. There is also a club competition. The CQ club eligibility radius is 250 miles.

## About Participating

Before participating in any of these contests or events, please familiarize yourself with the times, bands, exchanges, rules, etc. associated with the event. The [WA7BNM Contest Calendar](#) can provide most of the information, as well as a link to the contest's home page, which will give you a "flavor" for the contest and let you know about any plaques or other special prizes like a bottle of wine or a frozen salmon. Alternatively, you can Google the name of the contest or event and go directly to their home page.

If you are a new or casual tester, there is never a better time to start or return to contesting than now. Pick one of the easier contests, such as a State QSO Party or one of the minor DX contests, and jump in. (No, first read the rules as suggested above.) You do not have to score a lot of points but do spend some time in the chair having fun. As you are enjoying the leisurely pace of one of these slower contests, picture it on steroids as a major contest with wall-to-wall stations all calling CQ. After it is completed, submit your log to the contest sponsor and report your activity on 3830Scores. Then look at the contest results on 3830 to see how you compared with all others. With this contest completely under your belt, check the Schedule of Contests to see what next weekend has in store for you.

## Add to Your Contesting Fun - Join the Online Scoreboard

Contesting has traditionally been a very lonely sport. You sit in your shack, make QSOs, and then find out how you did at the end. That requires a lot of self-motivation to keep going, particularly when conditions are poor. But now you can watch an online scoreboard while operating to see how you are doing compared to others.

The Florida Contest Group encourages you to link your log with an online scoreboard to include your score with other members of the Florida Contest Group. Using the club view, you can watch how you are doing compared with other members and see how FCG compares in competition with other clubs. As more and more operators join the Online Scoreboards, contests become more enjoyable for everyone, regardless of whether you are competing for a top spot or just trying to beat a friend.

You may register by going to <https://contestonlinescore.com/blog/documents/> and following the instructions. After registering your callsign and club on-line, follow your logger's instructions for linking to the scoreboard. The scoreboard works easily with several contest loggers. The Scoreboard doesn't update in real time. You will need to set an interval for your updates. Join the fun now!

## November 2021 Contest Schedule

Contest	Type	Weight	Date	Time	CW	SSB	RTTY	Other Digital
<a href="#">Ukrainian DX Contest</a>	DX	5	6-Nov	1200Z	C	S		
<a href="#">ARRL Sweepstakes Contest, CW</a>	Major	10	6-Nov	2100Z	C			
<a href="#">WAE DX Contest, RTTY</a>	Major	8	13-Nov	0000Z			R	
<a href="#">JIDX Phone Contest</a>	DX	5	13-Nov	0700Z		S		
<a href="#">OK/OM DX Contest, CW</a>	DX	5	13-Nov	1200Z	C			
<a href="#">LZ DX Contest</a>	DX	5	20-Nov	1200Z	C	S		
<a href="#">All Austrian 160-Meter Contest</a>	DX	5	20-Nov	1600Z	C			
<a href="#">ARRL Sweepstakes Contest, SSB</a>	Major	10	20-Nov	2100Z		S		
<a href="#">CQ Worldwide DX Contest, CW</a>	Major	10	27-Nov	0000Z	C			

### Editor's Note:

Stan Zawrotny, K4SBZ, has been instrumental in developing, implementing, and maintaining the Frequent Contester Program (FCP) for the Florida Contest group (FCG.) The FCP was started to increase FCG members' participation in contests. For more information, [FCG FCP](#). If you are interested in developing a program for your group, check out Stan's excellent slide show presentation, [Developing a Contest Incentive Program](#).

## QRP SWR/Wattmeter/Dummy Load Kits

By Bert Garcia N8NN

One piece of equipment every ham should have is a dummy load. I have six of them, all serving a different purpose. This article is about two more dummy loads I built specifically aimed at the QRP crowd. When you go to the field with your little QRP radio, you need a small, lightweight dummy load as well as a QRP SWR meter and wattmeter to take along. Here are two low-cost options.

50 Ohm 20-Watt QRP Dummy Load: QRP Labs [1] offers a dummy load kit for \$8.50 that you can build in under an hour. Using twenty 1K ohm 1% resistors in parallel, this dummy load weighs less than 1 ounce, measures 1.7 x 1.4 x 0.6 inches, and works at HF. The resistors are sandwiched between two circuit boards. A diode and capacitor provide a DC voltage that can indicate RF power on a digital multimeter if desired, and a BNC connector provides an easy connection to your QRP radio.

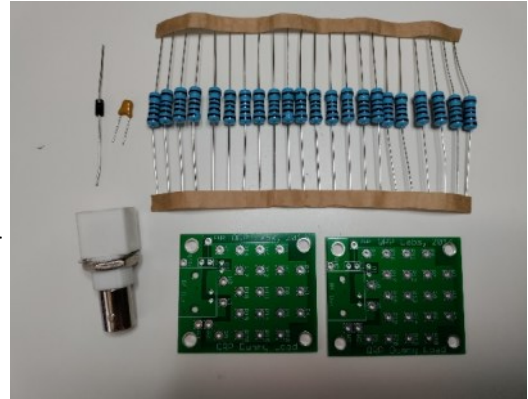


Figure 1: The kit components.

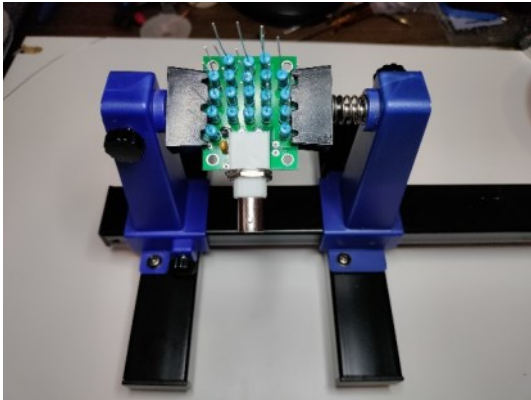


Figure 2: Use a "third hand" to assemble.



Figure 3: The finished 20-watt dummy load.

Soldering the resistors is much easier if you have something to hold the circuit board, leaving you with two free hands for soldering. The assembly directions are available online and include helpful hints to make building the kit easier. My finished dummy load measured 50.8 ohms, close enough for field work!

Digital SWR Meter/Wattmeter/Dummy Load: The QRP Guys [3] have taken the dummy load to a whole other level by adding a digital SWR meter and a digital wattmeter. All this is available for \$25 as a kit. The dummy load consists of four 100 ohm 1% 3-watt resistors that will handle 12 watts, good enough for QRP. The digital wattmeter shows power from 200mW to 10 watts with accuracy better than 95% for HF, and the SWR meter measures from 1:1 to 15:1. The through losses are very small, so it can stay in your antenna feedline while operating. The software is pre-programmed into the micro-controller. Power to operate the display comes from a 3-volt coin cell battery that provides more than 10 hours of continuous use. The digital display enters a "sleep mode" to conserve battery life and comes alive at the press of a button. Assembly time is about 2 hours, and the instructions are available online.

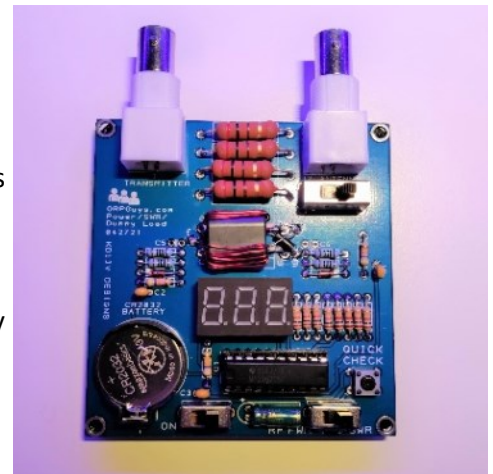


Figure 4: SWR/Wattmeter/Dummy Load

Continued on next page...

There is an on/off switch, an SWR/wattmeter selector switch, and a switch to select the dummy load or to connect the transceiver directly to the antenna for measuring SWR. The input/output connections are BNC.



Figure 5: QCX-mini showing 6.22 watts.

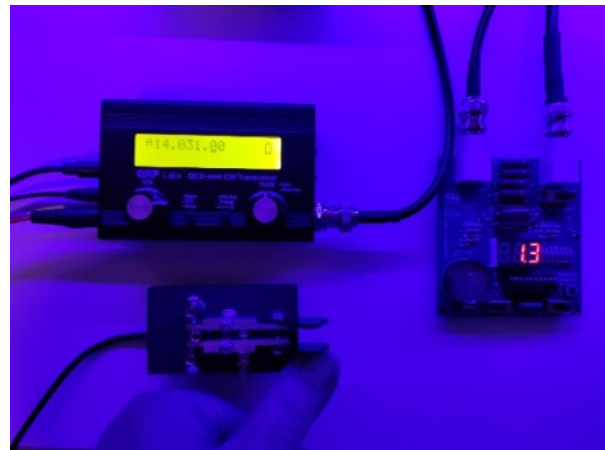


Figure 6: Antenna SWR shows 1.3 to 1.

Figures 5 and 6 were taken in low light so the digital display can be viewed. Here my QCX-mini [4, 5] is putting out 6.22 watts on 20 meters, and my end-fed wire antenna shows the SWR as 1.3 to 1.

The QRP Guys have an inexpensive and accurate portable SWR/Wattmeter/Dummy Load for QRP operators..... and it's fun to build!

By the way, the miniature CW paddle was made for me by Andres Rojo EA3PP [6]. This tiny paddle has a heavy base and is just the thing for portable operation.

#### References:

1. QRP Labs, <https://qrp-labs.com/>.
2. QRPGuys, <https://qrpguys.com/>.
3. QRP Guys, <https://qrpguys.com/qrpguys-power-swr-dummy-load>.
4. *Big Performance, Small Package – QCX-mini*, Bert Garcia N8NN, QST NFL News letter, October 2020, <https://arrl-nlf.org>.
5. *Big Performance, Small Package – QCX-mini*, Bert Garcia N8NN, The Oracle, October 2020, <https://k4gso.us>.
6. Andres Rojo EA3PP, <https://www.qrz.com>.

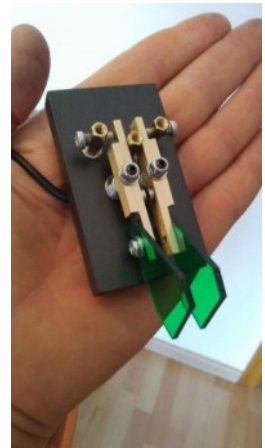


Figure 7: Miniature CW paddle by EA3PP.



The [ARRL November Sweepstakes](#) (SS) weekends loom large on the amateur radio contest horizon. The CW weekend is November 6 - 8, while the phone weekend is November 20 - 22. Both events begin on Saturday at 2100 UTC and conclude on Monday at 0259 UTC.

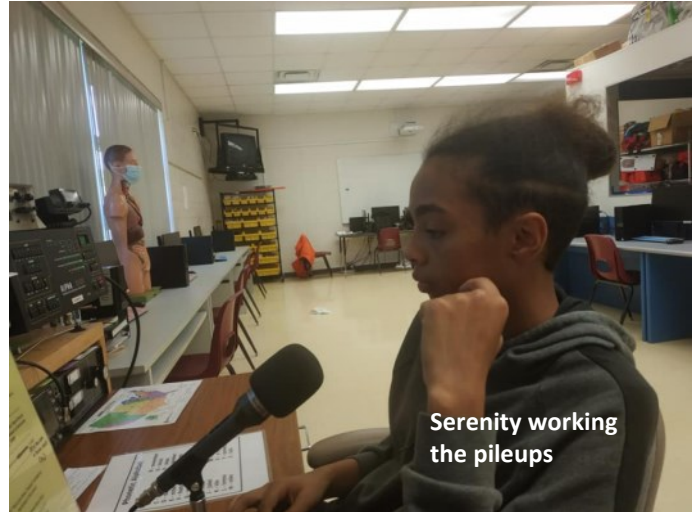
## The W.T. Loften High School Amateur Radio Club

Bob Lightner, W4GJ

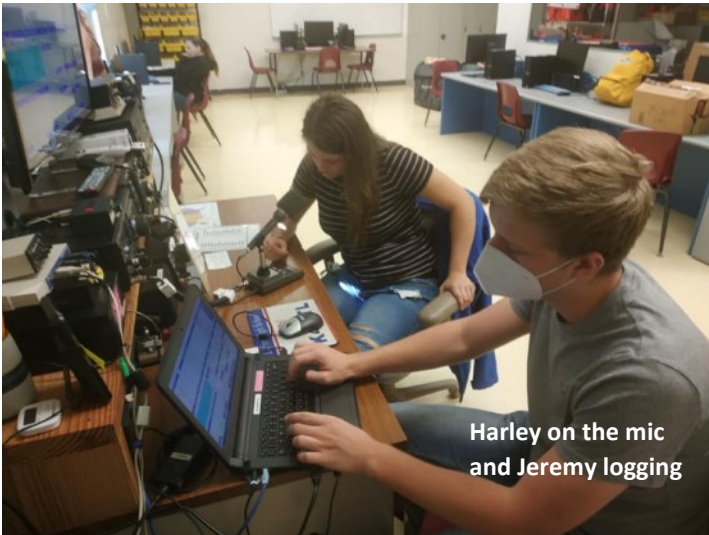
The W.T. Loften High School Amateur Radio Club (K4WTL) logged 702 QSOs in this week's ARRL School Club Roundup. 22 of our 40 club members participated in this bi-annual event. The kids had a splendid time and I enjoyed hearing hundreds of nice comments about their operating skills! We even received a complimentary "radiogram!"



Summer, burning  
up 20 SSB



Serenity working  
the pileups



Harley on the mic  
and Jeremy logging



Bi-lingual Ericka  
speaking Spanish  
to the many South  
American QSOs

Continued on next page...

Loften High School ARC continued.....

THE AMERICAN RADIO RELAY LEAGUE RADIOGRAM VIA AMATEUR RADIO							
NUMBER 767	PRECEDENCE R	HX C	STATION OF ORIGIN KC1KVY	CHECK 10	PLACE OF ORIGIN BILLERICA MA	TIME FILED	DATE OCT 21
TO ROBERT LIGHTNER K4WTL W TRAVIS LOFTON HS ARC 3000 EAST UNIVERSITY AVENUE GAINESVILLE FL 32641 TELEPHONE NUMBER BOBW4GJ@GMAIL.COM					THIS RADIO MESSAGE WAS RECEIVED AT AMATEUR STATION W2PAX PHONE 239 250 0282 NAME DAVE SHEPPARD STREET ADDRESS 591 18TH ST NE CITY, STATE, ZIP NAPLES FL 34120		
THANKS 1824	FOR UTC	QSO ON	OCTOBER 20M	21 73			
SIGNATURE: BOB KC1KVY							
FROM REC'D W4DNA		DATE OCT 22	TIME 1739ET	TO SENT K4WTL/EMAIL		DATE OCT 22	TIME
<small>THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM ARRL HEADQUARTERS, 225 MAIN STREET, NEWINGTON, CT 06111</small>							

ARRL The national association for AMATEUR RADIO®							
ARRL Home	Contests Home	Calendar	Log Submission	Logs Received	Scores	Certificates	Clubs
<b>Contests - 2021 October School Club Roundup - Log Submission</b>							
Rules	<b>Congratulations!</b> You've successfully submitted your entry for the School Club Roundup. Your confirmation number is 233vipst.arrl-scr.						
Calendar	If you'd like to add soapbox comments associated with your entry, please use the following link: <a href="http://contests.arrl.org/contestsoapbox.php?call=K4WTL&amp;id=233vipst.arrl-scr">http://contests.arrl.org/contestsoapbox.php?call=K4WTL&amp;id=233vipst.arrl-scr</a>						
Score Submission	Thank you for entering the contest and submitting your log via the ARRL's web form. Please review the information listed below and, if necessary, resubmit your summary and log to make any corrections. If you have any questions about your entry, please contact LIMARC at <a href="mailto:scr@limarc.org">scr@limarc.org</a> .						
Logs Received	Call Used	Category	QTH	Club/School Name	Participants		
Soapbox	K4WTL	Senior High	FL	W.T. Lofton High School ARC	22		
Scores	<b>Primary Operator/Sponsor:</b>						
Other Contests	Full Name	Call	E-mail Address				
	Bob Lightner	W4GJ	bobw4gj@gmail.com				
<b>Score Calculation:</b>							
QSOs		Multipliers					
CW/RTTY/Dig	Phone	States	VE Prov/Ter	DX	Clubs	Schools	
64	637	44	7	29	4	25	
QSO Points		Total Multipliers					Total Score
( 2x64 + 1x637 )		x ( 1x44 + 1x7 + 1x29 + 2x4 + 5x25 )					= 162,945
Number of QSOs in Log: 702							
Operating Time: 15:02 (hrs:min) Max Op Time in 24 hrs: 4:54 (hrs:min)							
Log received at: 2021-10-22 19:15:50 UTC							

## Alachua County S.E.T. Success!

Gordon Gibby KX4Z

Although the Section wasn't having a section-wide S.E.T. due to an unexpected illness, we went ahead with an Alachua County S.E.T. to give our members more practice in this calendar year, hoping for a Section-wide exercise next year. The HSEEP-based plan was designed to emulate expected communications during a significant disaster: peripheral incoming structured succinct status messages from neighborhoods/shelters to the local governing authority, aggregated and forwarded to the State for situational awareness. And also outbound health-and-welfare "survivor messages" to concerned family.

The wrinkles of this S.E.T. were that (1) **all repeaters (and infrastructure-digipeaters) were out of service**, and (2) **participants were requested to obtain electricity from some sort of vehicle battery using NEW wiring, or from a portable solar power system.**

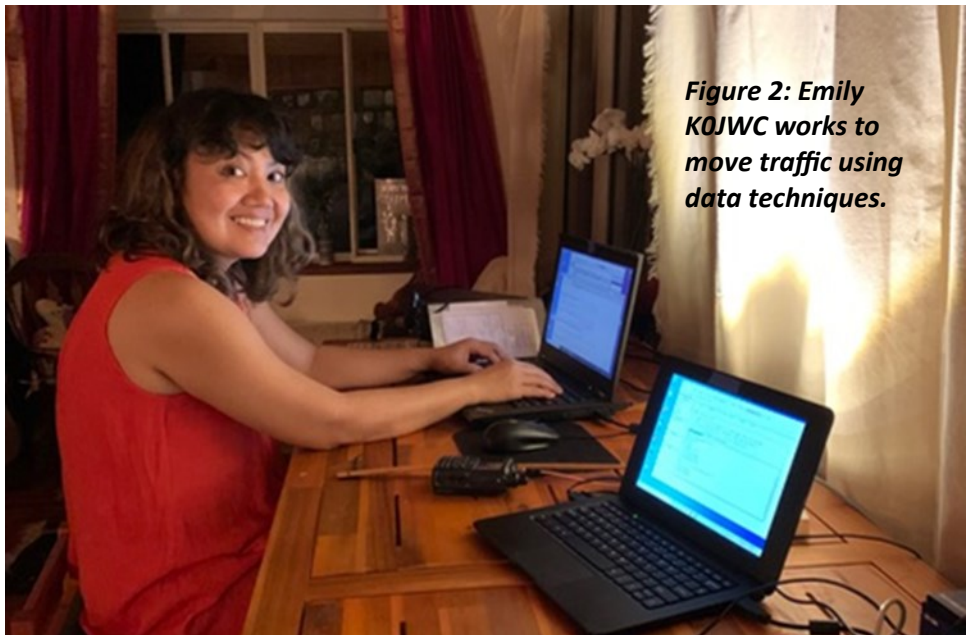
Furthermore, the local ARES leadership was requested to come up with the PLAN for accomplishing all these communications, including plans for nets and frequencies on various modes that would likely succeed over the geography of the entire county, and the morning time frame of the Exercise. That part -- the planning of emergency communications techniques -- turned out to be one of the more acute learning phases of the exercise! A lot of people didn't understand how LIMITED were the capabilities of a couple of overworked personnel in the EOC compared to the much larger capabilities of a dozen or more volunteers scattered around the County.. Over a couple of planning sessions, more workable plans were hammered out to handle the different kinds of traffic.

The morning of the Exercise saw a LOT of growth and work completed by 15 or so participants, many of whom came up with innovative ways to power their gear, including three who used, or tried, solar power. Some of the participants ran into problems, with varying degrees of success...one red-faced leader found their planned vehicle battery was completely DEAD. Others had radio frequency "hash" from planned inverters and had to come up with solutions or work-arounds. Solar in some cases was too puny or obstructed by clouds. Lots of new solutions were forged!

Our Draft AAR/IP provides lots of details and also photos of some of the efforts and solutions (<https://qsl.net/nf4rc/ICS205-Alachua2021.pdf>) A total of at least 32 formal traffic messages were handled during the short exercise -- a pretty good success for the 15 participants (approximately 40% of the registered ARES(R) personnel). With the size of the county and the "downing" of all infrastructure, a surprising amount of traffic moved by HF Data techniques (primarily WINLINK) -- 18. Only one message moved by VHF data, possibly due to lack of possible relays. Voice relays or deliveries of traffic were utilized on both HF (6 messages) and VHF (7 messages) simplex nets. We had expected more voice relays on VHF.



*Figure 1: Amy Woods KO4IDO solar panel system*



*Figure 2: Emily KOJWC works to move traffic using data techniques.*

Continued on next page...

Some of the conclusions were that there is a need to emphasize that net controls should work to include peripheral participants in handling traffic more often, rather than just handling all of it themselves, and that more outbound traffic needed to be actively directed to peripheral volunteers for HF outflow rather than depend on the EOC for this purpose. We also realized for the first time that the soundmodem.exe (<http://uz7.ho.ua/packetradio.htm>) that many of us use for VHF AX.25 modem **can provide an individualized digipeater at each and every neighborhood stations, allowing a sort of "ad-hoc" network of forwarding to be discovered and utilized** -- our group will work to improve on that capability as a result of this Exercise. One participant is championing manual relay of broadcast-type data techniques, and has been encouraged to carry out an experiment across the county to verify the technique and gain experience.

The experience has led us to improve our county ICS-205 frequency list (<https://qsl.net/nf4rc/ICS205-Alachua2021.pdf>) to include a better ordering and ranking of possibilities. We may also be able to write a more pertinent communications plan as a result.

In the post-exercise discussions, participants have been encouraged to record their participation in their Florida Tri-Section ARES(R) Taskbooks (<https://arrrl-nfl.org/wp-content/uploads/2020/01/Florida-ARES-Training-Task-Book-2020-R1.pdf>), and to submit them to the SERT TRAC training records system as well. (<https://trac.floridadisaster.org/trac/loginform.aspx>). Our draft report has 15 items for possible improvement.



## Jacksonville Radio News

Billy Williams, N4UF

The North Florida Amateur Radio Society (NOFARS) meets Thursday, November 11th at Hogan Baptist Church, 8045 Hogan Rd. President Roger Knight, KI4PIL plans a Veterans Day program plus a talk by a representative from the Jacksonville Salvation Army. The meeting begins at 7:00pm.

At the October NOFARS meeting, Jack Driskell, KB4B spoke on artificial intelligence and SDR technology.

JAX DECEMBER DINNER: The Jacksonville Ham Radio Christmas Dinner is Saturday, December 11th at Terry Parker Baptist Church. In addition to catered barbecue, there will be prizes and awards. The fun starts at 4pm. NOFARS, RANGE, BARS, ARES, Skywarn and other groups are all invited along with families and visitors.

Advance tickets are available at the November meeting with remaining tickets, if any, to be sold at the door. Contact Jerry, N2GLF or Neal, N4FAS for tickets. Cost is \$15 per person. Again, we will participate in the Salvation Army Christmas Wish program. Bring an unwrapped children's gift if you wish to help.

HANK FITZ, WB4URU: Hank passed away in October after extended illness. Since moving to Jacksonville in the 1970s, Hank participated in many facets of Amateur Radio, especially satellites and served in various capacities for several area groups. Hank is remembered for his cheerful presence and willingness to help others.

LOCAL NETS: Voice nets on the W4IZ 146.7 MHz repeater include the Duval County ARES Net each Weds. at 7:30pm and the VHF WWD Net at 8pm on Mondays. Ladies Net is the second Tuesday and last Sunday of each month at 8pm.

PINS & DECALS: Roger, KI4PIL has peel-off decals and pins with NOFARS triangular logo for sale. Pins are \$5 and decals are \$3. Proceeds go to the W4IZ repeater fund.

## New School Ham Radio Club Receiver Project

Gordon Gibby KX4Z

In Alachua County, we have only one known grade school ham radio club, sponsored by Bob Lightner W4GJ -- an impressive club at the Lofton Center that routinely turns in great scores in suitable youth radio contests. Carol Chesney KG4FEX has also made some forays during substitute teaching to introduce technology in the school. So when I discovered a "flex period" open for clubs at the little private school where I volunteered to teach Chemistry, I jumped on the chance to provide more STEM club opportunities to younger students!

I was able to offer TWO weekly STEM-type clubs, one on "ham radio" and the other on "computer programming." The ham club is oriented toward broad radio technology, rather than being an overtly "license test club." The programming club is currently oriented toward Arduino microcomputer programming -- a chip that has been used in several ham radios, including the very successful uBitx series<sup>1</sup>.

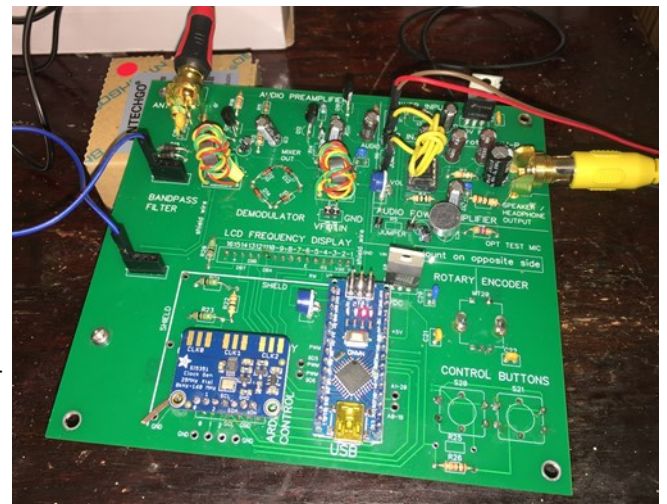
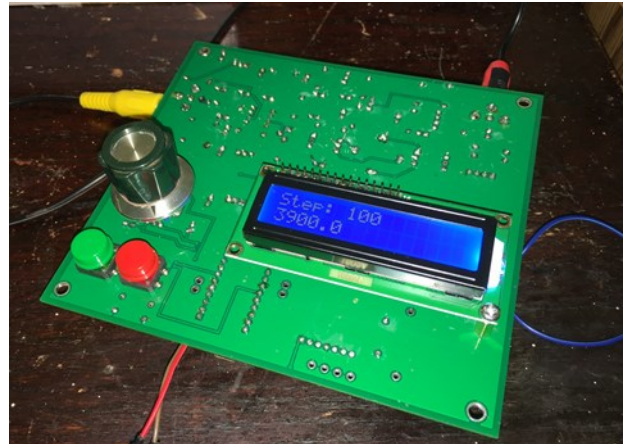
What kind of project would give all these students some real HANDS-ON experience? I decided to try to build a **School Receiver** -- a direct conversion, single printed circuit board radio, one of the simplest types of SSB / CW / AM receivers possible.

Ashhar Farhan publicized a "DC40" design<sup>2</sup> that was easily upgraded to utilize an Arduino-controlled Si5351 digital VFO. A bit of home-brewing and we have a printed circuit design! With a small bit of adjustment to a programming constant, the crystal-derived Si5351 gives rock solid frequency readouts. The digital VFO feeds into a simple 4-diode balanced (de)modulator and the output is plain analog AUDIO -- that then gets amplified by a 3-transistor preamp, and sent to the speaker or headphone by the popular LM386 integrated circuit.

The entire receiver fits on a 5-1/2 x 5" printed circuit board, and is broken into separate sections for modular construction. I spread out components a bit to make it easier work for new builders. First the 3-terminal 9 and 5 volt regulators, then the audio power amplifier. A board-based electret mic allows students to immediately test and enjoy their audio amplifier! Then add the Arduino and demodulator and preamp modules.

My first build turned out to work far, far better than I expected! Good sensitivity, and easy tuning of SSB voice, CW and data signals<sup>3</sup>. Even with audio-coupling to a laptop, I was decoding FT8 with ease. This simple receiver is double-side-band, so you can receiver either USB or LSB. It wouldn't be your choice for a crowded contest, but great for just casual listening. A mechanical rotary encoder gives it a "big-radio" feel with a digital frequency display that is always right on. There are sockets for qrpkits bandpass filters -- but it does pretty well even without them.

The middle- and high-school radio students are having great fun soldering a module at a time on two boards right now, for most of them, their first soldering experience.



<sup>1</sup><https://www.hfsignals.com/>

<sup>2</sup>Farhan: <https://web.archive.org/web/20171109081542/http://www.phonestack.com/farhan/dc40.html>

<sup>3</sup>CW Reception: <https://qsl.net/nf4rc/2021/CWreception.MOV>

Continued on next page...

The programming club is having a slower start, just working on understanding downloading files, and compiling with the free Arduino Integrated Development Environment (IDE)<sup>4</sup>. Their "computer-savvy" was a little less than I expected, so this is a big learning experience for them! The school's robotics mentor is VERY interested in their progress, to allow them to move to the Arduino from PIC controllers

A parts list<sup>5</sup>, Gerber PCB files (ready to have fabricated)<sup>6</sup>, and a bare-bones Arduino IDE sketch<sup>7</sup> are available at no cost. Parts availability is variable this year, but many of the parts can be found in quantity packs on Amazon, making the cost even lower.

Next comes a simple cabinet, a sound-card interface, and possibly a transmitter!

<sup>4</sup>Arduino free IDE download: <https://www.arduino.cc/en/software>

<sup>5</sup>Parts List: <https://qsl.net/nf4rc/2021/BillOfMaterials.ods>

<sup>6</sup>Gerber files (zipped): <https://qsl.net/nf4rc/2021/ZippedGerberRadio.zip>

<sup>7</sup>Arduino Sketch: [https://qsl.net/nf4rc/2021/sketch\\_sep24a.ino](https://qsl.net/nf4rc/2021/sketch_sep24a.ino)



## LARA Participates in Night Out Event

Frank Anders, KK4MBX

On October 5, our ARES and AUXCOM team participated in a National Night Out event in Clermont, FL. Night Out is an opportunity for public service organizations to reach out to the community and display their equipment and capabilities. LARA displayed our Emergency Communications trailer including a WSPR repeater with a portable antenna that received signal supports from Antarctica, Europe and many other locations (see picture below). We also offered information on our club, Ham Radio, ARES, Emergency Communications, and Amateur Radio License training and testing. During the event we talked to many attendees about HAM radio and our role in the community and displayed our Emergency Communications Trailer.



Our team included Jason, K4AUS; Ken, KN4MDJ; Frank, KK4MBX; Lew, AC2KW; Jay, N4KXO, Jamie, W4CGX and his children; and Bret, K4MXW.

## What's happening? Santa Rosa County Edition

Arc Thames, W4CPD

### NOARC Tree Crew

Multiple clubs, organizations and individuals dedicated their time to show their skills to the public while discussing what Amateur Radio has to offer at the Pensacola Interstate Fair. A booth was setup providing a week and a half at the fair, including a special event station (W4F.) Hams from all over the NWFL Panhandle joined in on the fun! We highlighted not only emergency communications, but training and advancement to educate and enjoy the hobby! This event was organized under an initiative we are calling "NWFL Ham Radio". NWFL Ham Radio isn't a club but a website and Facebook Page that contain general amateur radio information, links to all the clubs in the tri county (Escambia, Okaloosa, and Santa Rosa) area, and event listings for all area clubs and organizations. You can check it out online at <http://nwflhamradio.net/> or via Facebook at <https://www.facebook.com/nwflhamradio>. A HUGE shoutout to volunteers from all the area clubs and ARES teams that worked the booth or provided materials for display. Special thanks to Charlie-KN4VGY for setting up his "hambulance" and tower to support the special event station and to Hal-WA5HC for coordinating with the fair staff.



### PARC w-RRPA

Pictured from left to right: Victor-KO4PCO, Anna-KN4ZEA, Arc-W4CPD, Hal-WA5HC



Brochures displayed on the table, the "Hambulance", and the tower mounted on the "Hambulance"



Pictured from left to right: DJ-KI4ZER, Joseph-KN4UDS | We were in the same building with the reptile exhibit so we had a special visitor. Pictured in the background: Shanon-KJ4PWA, Charlie-KN4GY, and Gene-KB4HAH

Continued on next page...

We have several events coming up in Santa Rosa County. On Saturday November 6 at 9:00AM, Arc-W4CPD will present on the FL ARES Taskbook as well as hand out copies for those in attendance. This presentation is open to anyone (not just Santa Rosa County) and a FREE breakfast will be provided.



On Saturday December 4 we will have a Fox Hunt in the tri-county area combined with a Christmas Luncheon. All are welcome. The fox will begin transmitting at 9:00A central and we will announce the location on the 146.700 K4SRC repeater at 11:45A so everyone can make it over for the Christmas luncheon. A donation box will be available for those wishing to contribute to the cost of the food.



If you have time, no matter where you are, please reach out to your local ARES team or club to see if there are any activities or tasks that you can assist with. You never know what kind of impact you could make in your city or county!

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

PPS..Arc-W4CPD, Net Manager for the Northern Florida ARES Net, is looking for additional Net Control Stations for the morning Net (9A E/8A C). If interested in finding out more, please email Arc – [arc.thames@srcares.org](mailto:arc.thames@srcares.org).



## FCC Testing Information

### Hog County Amateur Radio Association, Bushnell FL

- First Saturday, 11:00 AM
- Cross Connection Church, 1451 West County Road 476, Bushnell, FL 33513
- Info: [sumterVE@gmail.com](mailto: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](mailto: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](mailto:w2bzy@cfl.rr.com)

### Milton Amateur Radio Club, Milton FL

- Check date at [miltonarc.org](http://miltonarc.org)
- Walk-in
- Bagdad United Methodist Church
- Info: Chuck, N4QEP, [merlinman3@yahoo.com](mailto:merlinman3@yahoo.com)

### Orlando Amateur Radio Club

- First Wednesday
- 5:30 PM, Walk-ins allowed
- ARRL/VEC
- Central Florida Fairgrounds Craft Building, 4603 W Colonial Drive, East Gate off Fair Villa Road
- Info: [testing@orac.org](mailto:testing@orac.org), Robert Cumming, 407-333-0690

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

- Information and dates can be found at [srcares.org](http://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](mailto:w2bzy@cfl.rr.com)

### Silver Springs Radio Club, Ocala FL (SSRC)

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

### Suwannee ARC, Live Oak, FL

- 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](http://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/fag/license-testing/>

### West Volusia Amateur Radio Society

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

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

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

## NFL Web Site

For net, hamfest and other events go to [www.arrl-nfl.org](http://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. Bushnel W2DWR*

*John C Reynolds W4IJJ*

*Jeff Capehart W4UFL*

*Neil Light KK4VHX*

*Ray Crepeau K1HG*

*Steve Szabo WB4OMM*

*Scott Roberts KK4ECR*

**Section Emergency Coordinator** – Karl Martin K4HBN

**Assistant Section EC** – Arc Thames W4CPD

**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

### Statewide Digital Radio Resources

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

- **DSTAR Reflector 046**
  - o REF046A – Florida Statewide
  - o REF046B – NFL ARES
  - o REF046C – NWS Mobile, AL SKYWARN
- **DMR Florida State ARES TG 31127**

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

Email your QST NFL input to [n4gl.marty@gmail.com](mailto:n4gl.marty@gmail.com), Marty Brown, N4GL, Editor. All submissions are subject to editing prior to publication.



Newsletter of the Northern Florida Section of the ARRL

1. Spread the word about our website [www.arrl-nfl.org](http://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](mailto: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](http://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. All submissions are subject to editing prior to publication.