



QST NFL



Sharing information of interest to Radio Amateurs in North Florida

Volume 8 Issue 1

www.arrl-nfl.org

January 2021

What's in Your Tool Belt?

Scott Roberts, KK4ECR, NFL Section PIC, kk4ecr@gmail.com



Let me start off by saying, "Happy New Year!" Boy, it is good to have 2020 behind us!

This month I want to tell you about a pretty cool tool that I learned about a few months ago – **Hamshack Hotline**.

*"Hamshack Hotline (HH) is a **FREE dedicated voip tele-com service** for the Ham Radio community. Typically, phones are established in hamshacks, EOCs, Clubs & club members, ARES, and other Ham related areas and functions. It is not the intention of HH to replace traffic carried over radio in an emergency or other tactical operation, but rather to augment it, by offloading managerial tactical operations and providing a full duplex path for such communications when spectrum is occupied, conditions diminished, or otherwise unavailable. HH also supports FAXing of information (with appropriate equipment) which allows tactical offices to share documents & data between tactical locations. In a non-tactical use, HH is an effective resource for off-air troubleshooting when you need to coordinate a troubleshoot of a radio circuit off-air and between multiple SMEs. In addition to all this, conference bridges on the HH network allow large groups of Hams to coordinate & meet in real time anywhere in the world."*

Supported phones are the Cisco SPA-525, SPA-303. Other models accepted are the Cisco SPA-504g, Cisco SPA-514g, and the Linksys/Cisco SPA941/942. Other phones can be used on the Network. Phones can be purchased for as little as \$25.00 on eBay. Depending on the phone you purchase, you can also connect your cell phone to your desk phone via Bluetooth.



Not only does this service offer the ability to call other ham operators directly, but there are conference bridges where many hams can talk together in a group. There is also the ability (using the right equipment) to attach a HH extension to a repeater or other radio (AllStar, Brandmeister DMR, D-Star, and C4FM) and have the ability to talk from your phone over the radio.

In addition to your Hamshack Hotline extension, you can use a service such as VoIP.ms to get a regular phone number attached to your phone. VoIP.ms is a very inexpensive way to get a phone number (<http://www.voip.ms>)

For more information about Hamshack Hotline, visit the website at <http://hamshackhotline.com/>.

A color brochure is also available at <https://drive.google.com/file/d/1EM0D1pKHwc0mT-R8L1m0Oe0jvPNEbIpP/view>.

Continued on next page...

What's Inside....

- Page 2 Duval ARES Winter Field Day
- Page 3 Jacksonville Amateur Radio News
- Page 3 NOARC Remote General Classes
- Page 4 An Unusual QSO
- Page 5 Bob Heil (K9EID) Makes Presentation to GARS
- Page 6 Operating K2DM Contest Station for CQWWCW
- Page 7 Silver Springs Hamfest Summary
- Page 8 Hams Assist with Radio System Development
- Page 10 Lake Monroe ARS Holds Outdoor Meetings

Email your QST NFL input to n4gl.marty@gmail.com
Marty Brown, N4GL, Editor

Several Amateur Radio operators in the NFL Section are already using Hamshack Holine. There is a directory of users available on the HH web page.

If you have any questions, you can contact the HH Helpdesk, or send me an email.

Once you get your Hamshack Hotline extension setup, feel free to give me a call at ext. 5481 or 5732.

Duval County ARES Winter Field Day

Brian Schultheis, K4BJS, Assistant DEC, Crown District Assistant EC, Duval County



Winter Field Day

January 30, 31 2021

Hogan Baptist Church
8045 Hogan Road
Jacksonville FL

Sponsored by: Duval County ARES

ARES will be hosting a field day event on Saturday and Sunday, 8:00am to 9:00pm. Remember church services will be held on Sunday.

We will not be contesting for this event, simply a day to practice our emergency communication skills and spend time operating in field conditions. Radio operators, *please use headphones or headset.*

The theme of this year's event is self-sufficiency. You should not assume electrical power is available. Each radio operator should bring everything needed to get their station on the air and successfully operate in field conditions for the day. Everyone needs to bring the amenities and food you prefer.

Overnight camping at the ball fields is available. No RV or trailers on the ball fields, limited RV parking at the pavilion and rear lot.

The rules and exchange are different from the ARRL field day format, please visit www.winterfieldday.com for additional information concerning Winter Field Day.

Situational Awareness

- Executive Proclamation 2020-009, face mask requirement
- CDC, Personal and Social Activities; [Personal and Social Activities](#) | [COVID-19](#) | [CDC](#)
- Florida's COVID-19 Dashboard; [Florida's COVID-19 Data and Surveillance Dashboard](#) (arcgis.com)
- Florida State Emergency Response Team; [COVID-19](#) | [Florida Disaster](#)

Jacksonville Amateur Radio News

Billy Williams, N4UF

Around fifty attended the combined Jax area Amateur Radio Christmas dinner on December 12th in the gymnasium at Terry Parker Baptist Church. The large room allowed extended spacing between tables with catered barbecue from Sonny's. CBS47/Fox30 Chief Meteorologist Mike Buresh and representatives from Jacksonville Salvation Army attended and picked up a load of toys for the Christmas Wish program which provides gifts for needy children.

NOFARS President Roger Knight, KI4PIL presented the 2020 North Florida Amateur Radio Society Amateur Radio Operator Of The Year award to Rajesh Verma, K4SK and Brandi Kiehl, K4PL. Both were instrumental in organizing the Jax Laurel FCC testing program which provides free examinations for new operators and those upgrading. Since 2017, over 400 tests have been administered and NOFARS Board decided to present a joint award. In addition, both K4PL and K4SK have contributed time and talents to many NOFARS and Duval ARES projects and activities.

Duval County ARES will participate in Winter Field Day on January 30th and 31st. This is an excellent opportunity to learn more about installing antennas and operating Amateur Radio equipment. Portable stations will be on the air both Saturday & Sunday, January 30-31 at Hogan Baptist Church, 8045 Hogan Road.

Organizer Brian Schultheis, K4BJS writes "the theme of this year's event is self-sufficiency. You should not assume electrical power is available. Each radio operator should bring everything needed to get their station on the air and successfully operate in field conditions for the day. Everyone needs to bring the amenities and food you prefer."

Annual North Florida Amateur Radio Society dues remain at \$5 with discounts for those under 18 and for additional members living at the same address. Life memberships start at \$50 for those who have been members for at least five years. And a limited-time discounted rate of \$60 for newer members.

2020 NOFARS Secretary Ray Hall, KM4RAY has retired after five years of outstanding service. Dues go to 2021 Secretary, Chris Russell, KF4AAF. See the nofars.net membership page for details.

The Jacksonville Radio FREE Flea is Saturday, March 27th in the parking lot at Terry Parker Baptist Church, 7024 Merrill Rd. Admission and tailgate spots are free for those selling electronic and computer items. See nofars.net/home/hamfest

NOARC Remote Classes for the General License

Michael Behr, W4BZM

The North Okaloosa Amateur Radio Club (NOARC) will hold classes for the General license beginning in January 2021. Classes will be held remotely, via the Zoom application. Our current intention is to hold classes from 6:30 PM to 9:30 PM (with breaks) Central Time on the following dates in 2021:

January 25

February 1, 8, 22

March 1, 8

March 15 – tentative test under WCARS VEC

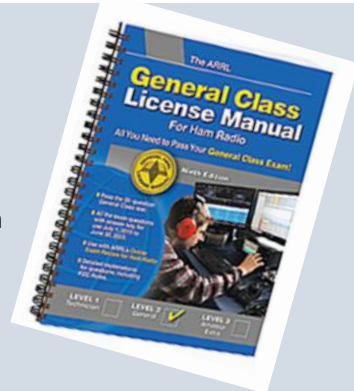
We will be using the ARRL General Class License Manual, 9th Edition. A Zoom account will be required, available free from zoom.us.

NOARC's home location is in the Florida panhandle, but during a previous Technician class, we had students from out of state (Alabama) and in other time zones (Tampa area). So don't let geographic separation be a limiting factor.

Interested in participating in the classes? Please contact one of the following instructors prior to the **signup deadline of Thursday, 07 January 2021.**

Mike, W4BZM w4bzm@arrl.net

Bruce, KA5DLV badams138@yahoo.com



An Unusual QSO – W4GAL

Gary Liljegren, W4GAL, Melbourne, FL

I have been a ham for a long time with various stations, large and small. I have operated from my home stations as well as being on location at a number of DX spots, and in the woods, and at the beach. Probably my most unusual QSO is a recent contact where I worked myself around the world.

First, you need to know that I am stuck in a community of seniors, where my only antenna is a 14' flagpole. I have worked all continents with the flagpole on JT-9 and FT-8, but almost all of my operating today is on first class remote sites with remotehamradio.com and remotehams.com. It is like the old days, but now rather than having ham equipment in front of me, I'm sitting in front of my computer and operating from remote stations at other locations.



And that brings me to the recent world circling QSO. On my radio desk, I have two computers, two keyboards, and two monitors. At 2 PM on a bright sunny afternoon, with computer #1, I loaded the remotehamradio.com software and, going east, I connected with the Flex 6500 at Brckovljani, Croatia, 5264 miles away via the internet. It is 8 PM in Croatia and its night. From that station, I am 9A/W4GAL. On 40 meters in Croatia, I am running 1.5 kw with a full-sized 4 element monoband beam at 101 feet on a rotating tower. Then, going the other direction with computer #2, I loaded the remotehams.com software and connected with a Yaesu FT-991 at Perth, Western Australia, 11,396 miles away via the internet. It is 3 AM in Perth and it's dark. On that station I operate as VK6/W4GAL. On 40 meters in Perth, I am running 100 watts with an end-fed half wave antenna. At 2 PM in the afternoon in Melbourne, Florida, it's night-time the whole way from Croatia to Australia, on that side of the earth. It's ideal for 40 meters.

In my left earphone, I can monitor the Flex 6500 in Croatia. In my right earphone, I can monitor the FT-991 in Western Australia. On 40 meters from Croatia, I called VK6/W4GAL on CW with 1.5 kw and the four element yagi pointed at Australia, 8220 miles away. I heard the sidetone in my left ear keying the rig in Croatia, and in my right ear, I heard the signal from Croatia arriving in Perth. What is exciting for me is to visualize where the VK6/W4GAL station is on the west coast of Australia, because emotionally it feels like I am sitting in front of the FT-991 in Perth. I can clearly hear the CW on 40 meters coming from Croatia 8000+ miles away with the signal bouncing from ionosphere to water, as well as over many middle eastern countries, Pakistan and India, Sri Lanka, and then bouncing off the reflective surface of the Indian Ocean.

It was a fun experience, sending a signal around the earth by internet and ionosphere. Was it legal? Sure. And I enjoyed talking to myself, completely circling the world.

HAPPY NEW YEAR

Bob Heil (K9EID) Gives Presentation at GARS December Meeting

By Vann Chesney (AC4QS)

The Dec. meeting of the Gainesville Amateur Radio Society (GARS) is usually a festive occasion. It has been a time to get together, share a meal, present yearly achievement awards and to enjoy fellowship with friends during the holiday season.

However, this year was different. Since the covid 19 lock-down our club has canceled all in person meetings and have been meeting via Zoom. At the Dec. board meeting we debated whether to have a Dec. meeting at all but thanks to our president, John Troupe (KM4JTE), this meeting turned out to be the most interesting of the year. John contacted Bob Heil (K9EID) of Heil Sound and Ham Nation to give a talk at our Dec. meeting via Zoom.

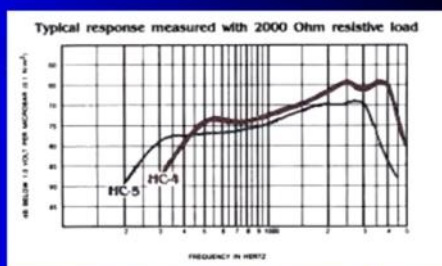
Bob started by describing some of his experiences while providing sound systems for rock bands during the '60s and '70s. In 1980 Bob got back into ham radio and with his vast experience with sound systems one of the first things he noticed was the poor state of audio on ham radio. He noticed that ham radio equipment designers at that time paid a great deal of attention to high powered transmitters, large antennas and various accessories to make signals loud but gave very little attention to the quality of that sound or in other words articulation – the ability to clearly understand what is spoken.

From his long experience with audio Bob was aware of the research at Bell Labs resulting in the Fletcher Munson curve which shows that emphasizing the frequencies in the range of 2000 to 3500 Hz increases the articulation of the spoken word via communication channels. Using these principles microphones and headphones specifically designed for ham radio were made available from the company Heil Sound.

The most interesting part of this talk was the live demonstration of audio from various microphones which when controlled by an equalizer could result in loud booming poorly understood to crystal clear audio.



Audio Response: Articulation!



**All Heil microphones apply
the studies of Dr. Fletcher and Dr. Munson**

K2DM Multi-Single in CQWWCW Contest

Wayne Brown, N4FP, The Villages Amateur Radio Club, Silver Springs Radio Club

I was fortunate to be invited by George, K2DM to participate as a run operator in the CQWWCW contest on Nov 28-29 for The Villages Amateur Radio Club. Other club operators included Doug K1CTR, Bob K3ZGA, Dennis N0SMX, and Gary W2TR. We ran as a Multi-Single entry, which means 1 station can operate full time and work as many contacts as possible with anyone while the other station can only work stations that provide a new zone or country multiplier. We worked all bands from 160 to 10, with these results:

| BAND | CONTACTS | ZONES | COUNTRIES |
|------|----------|-------|-----------|
| 160 | 17 | 7 | 12 |
| 80 | 111 | 14 | 52 |
| 40 | 598 | 29 | 85 |
| 20 | 436 | 28 | 91 |
| 15 | 598 | 23 | 81 |
| 10 | 98 | 16 | 28 |
| | 1858 | 117 | 430 |

Score: 2,416,210

The points for each contact were based on the continent and country, from 0 for your own country to 3.

It was great to have activity on 15 and 10 meters after a long dry spell.

George has assembled a great contest station setup on a 2.5 acre lot in Wildwood. Each station has an Elecraft K-3 rig and an Extra 1.3K-FA amplifier. There are 3 towers, one each at 40, 60, and 90 ft. Antennas include monobanders for 10, 15, and 20 at 90 ft; a Cushcraft A3 + 40 Meter beam at 40 ft; a Bencher Skyhawk at 60 ft; 80 and 160 meter inverted Vees. N1MM+ was used as the contest log and controlled the station keying. George scheduled us for 2 or 4 hour operating periods with appropriate resting periods between. By Sunday things were pretty slow for the multiplier station as there were few new countries or zones to be found. George thinks he will opt for the Multi 2 category next year so both stations can work full time without restrictions.



Run Station, KX-3 and Extra 1.3K-FA

| PERIODIC TABLE OF MAJOR AMATEUR RADIO CONTESTS | | | | | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------|----------------------------------------|--------------------------------------------------------------|-------------------------------------|-----------------------------------------|----------------------------|-------------------------------------------|------------------------------------------|----------------------------------|------------------------------|
| 2021 | | | | | | | | | | | |
| <div> <div>Start Day (UTC) → 1 → End Day (UTC)</div> <div>Start Time (UTC) → 2100Z → End Time (UTC)</div> <div>Contest Name → Major Contest of weekend</div> </div> | | | | | | | | | | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 2 1800Z ARRL RTTY Roundup | 3 2400Z NA Sprint CW | 7 0400Z ARRL DX SSB | 7 2400Z SP Polish DX | 4 1500Z 7QP/IN/DE New England QSO Parties | 1 varies SEANET Contest | 2 1200Z Marconi Memorial HF | 3 1400Z NAQP CW | 4 0600Z CWops CW Open | 2 2100Z California QSO Party | 3 2100Z ARRL SS CW | 6 2200Z ARRL 160 |
| 9 1800Z NAQP CW | 10 0900Z WPX RTTY | 14 2400Z NA Sprint RTTY | 14 0400Z JIDX CW | 10 0700Z CQ-M DX | 11 1300Z ARRL June VHF | 8 1900Z IARU HF | 9 1100Z WAE CW | 12 0300Z WAE SSB | 10 0800Z Oceania CW | 13 0000Z WAE RTTY | 14 2300Z ARRL 10 |
| 16 1800Z NAQP SSB | 17 0600Z ARRL DX CW | 20 2400Z Russian DX | 21 1200Z CQMM DX | 17 0900Z King of Spain | 18 2300Z All Asian CW | 15 1200Z CQ VHF | 16 2000Z NAQP SSB | 17 1800Z WA/NJ/NH QSO Parties | 18 varies Worked All Germany | 19 1800Z ARRL SS SSB | 20 2100Z RAC Winter |
| 16 1900Z ARRL January VHF | 18 0300Z CQ 160 SSB | 26 2200Z WPX SSB | 27 2400Z Florida QSO Party | 28 2400Z Contest University Dayton Hamvention | 24 2100Z ARRL Field Day | 25 1100Z RSGB IOTA | 26 1800Z WW Digi | 27 1200Z CQWW RTTY | 28 0000Z CQWW CW | 29 2400Z HAPPY HOLIDAYS | 30 0000Z CQWW SSB |
| 29 2200Z CQ 160 CW | 31 2100Z | | | 29 0000Z WPX CW | 30 2400Z | | | | 30 0000Z CQWW SSB | 31 2400Z | |

Silver Springs Radio Club Celebrates Successful Hamfest

Elbert Wilkinson, KQ3K, Outgoing President & 2020 Hamfest Chairman

December 5th 2020, 7:30 AM – 3:00 PM, First Christian Church, East Fort King Street, Ocala

By all accounts, our hamfest was a success. The weather was ideal...cool and low humidity. It was simply perfect. Many of our commercial vendors had not been able to attend any hamfests since the Spring due to most events being cancelled because of the pandemic. Our vendors were happy to be here, and they like the First Christian Church layout, ease of access, on-site parking and the crowd we seem to attract. However, we had several challenges to overcome. Our unwelcome "guest," COVID-19, tried to spoil the party by dampening attendance. We projected attendance of 200 with about 150 showing up. We also had to adjust floor plans to allow for social distancing and limit the number of commercial and individual vendors.

The setup crew began early Friday morning arranging tables for the first vendors who began arriving at 8:00am and followed shortly by the others. Setup continued throughout the day and was completed late afternoon. Eight commercial vendors setup in the larger Memorial Hall: Tower Electronics, Hamworld, Signman of Baton Rouge, Satellite Sam, Nitefire Electronics, Paradan Radio, JT Communications and CCTV Electronics. Individual vendors were setup in the smaller Fellowship Hall.

An unexpected "surprise" was thrown at us late Thursday evening. The scout troop, sponsored by First Christian Church, had committed to provide basic ham food for our event as a fund raiser. Unfortunately, Friday they had to pull out. The scouts had already purchased the food and willingly made it available to us, but we would have to find a way to prepare and serve it, or the food would go to waste.

So, what were we to do? We did what any smart, well-adjusted males would do – we persevered, overcame and adapted, well sort of – we asked our club members and wives to save us! SSRC club member, Marty, N4GL, stepped up and said she would be willing to tackle the project but would need some help. Ramona, KN4NRZ and her OM, Jim, KN4MIV, along with their son Allan, KN4NSA, are SSRC members and members of the First Christian Church. Although their original hamfest assignments did not involve the kitchen, their multi-tasking skills were invaluable. The real heroes of the event were Vicki (XYL of incoming president, Bill, KW5GB), and Susi (my XYL). They agreed to come in early Saturday morning and spend the day cooking and selling the food. All food sale proceeds went back to the scouts to help them recover from the financial loss of not being able to do this event. We can't thank the kitchen team enough for bailing us out of what could have been a disaster and black eye for the club. Well done!

The tailgaters arrived early Saturday morning with one from South Carolina arriving late Friday. The tailgate area was a very popular and well attended place. The tailgate crew did an excellent job of marshalling the tailgaters and maintaining control.



The SSRC board is grateful for the enthusiastic club participation. Looking forward to next year's event.

Amateur Radio Operators Assist Service Groups With Radio System Development

Gordon Gibby KX4Z, docvacuumtubes@gmail.com

The Amateur Radio Service has been called the “sandbox” in which citizens can develop impressive skills and provide non-compensated service to their communities. The level of freedom of development, experimentation and communication made possible in the Amateur Radio Service is very impressive when compared to the restrictions in many other of the radio services. As a result, amateurs can offer significant expertise to agencies and groups needing radio communications for their service efforts, and frequently may be consulted by leadership of such groups. This article summarizes some of the options to be considered, which were evaluated for creating radio systems for the Florida Baptist Disaster Relief organization, a charitable ministry to persons affected by disasters.

Needs: I suggest to first study the needs of the organization, which may be multiple, poorly recognized, and more complicated than first thought. We are **so accustomed** to an array of efficiency-enhancing communications options, including cell phone at almost any location, high speed Internet file, data and video services, a plethora of broadcast voice and video broadcast services. When these systems are degraded or non-existent, an organization may need:

- Instant one-to-one or one-to-many communications between leadership of different sections (e.g. Incident Commander, Admin, Logistics, Finance, Operations) for efficient sequencing, location and setup of structures and equipment
- Instant communications between security personnel and backup response, with the additional ability to reach local police/sheriff officers
- Longer-range communications between deployed teams and “base” for direction, safety, and information flow
- Data communications for efficient recordkeeping and service delivery.

Service Options: The radio options that might be considered for non-governmental agencies include: citizen’s band, MURS, FRS, GMRS; business band and amateur radio. Most readers will be familiar with the typical radios commercially available for the services in the following table, with the exception of MURS. MURS radios operate on five fixed channels in the VHF range, with up to 2 watts output and are allowed to use external antennas. Certain repeaters are also allowed.

| Radio Service Applicable Regulation | Allowed Users / Usage Licensing? | Allowed radio assets | Example of inexpensive transceiver |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Available for non-business usage only | | | |
| Amateur Radio Service Part 97 | Personal ONLY ; license required by examination; non-pecuniary transmissions. | Up to 1.5 kW power, home-made system or commercially constructed; external antennas, repeaters, digital, vast array of options. | (Well known to amateur radio readers.) |
| General Mobile Radio Service (GMRS) 47 CFR Part 95, Subpart E https://www.law.cornell.edu/cfr/text/47/part-95/subpart-E | Currently license required and restricted to individuals/families (previously allowed businesses); basically, for personal radio comms | Certificated radios. Repeater are allowed. | BTECH GMRS-V1, \$60 |

Continued on next page...

| Radio Service Applicable Regulation | Allowed Users / Usage Licensing? | Allowed radio assets | Example of inexpensive transceiver |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Available for Personal and/or Business Utilization | | | |
| Citizen's Band Radio Service 47 CFR Part 95; Subpart D https://www.law.cornell.edu/cfr/text/47/part-95/subpart-D | Personal or business; generally no individual license required. Designed for both personal or business comms. | Certificated equipment; power and antenna limitations. | |
| Family Radio Service (FRS) 47 CFR Part 95, Subpart B https://www.law.cornell.edu/cfr/text/47/part-95/subpart-B | No individual license is required; both personal and business users and usage. | 0.5 or 2-watt voice certificated transceivers; no change in antenna allowed; no repeaters. Short range--<<1 mile. | Commonly available FRS transceivers |
| Multi-Use Radio Service 47 CFR Part 95, Subpart J. https://www.law.cornell.edu/cfr/text/47/part-95/subpart-J | Personal or Business. No license required | 2-watt certificated transmitters, not allowed to operate on any other services , external antenna allowed, but no repeaters. | BTECH MURS-V1 retails for \$60 |
| Private Land Mobile Radio Services: Industrial/Business Radio Pool 47 CFR Part 90, frequencies available given in Subpart C https://www.law.cornell.edu/cfr/text/47/part-90/subpart-C but see other parts for detailed | Licensed, personal or business. Specific geographical location/radius versus "itinerant"; personal and/or business users/usage. | Modest power (various limits apply to different frequencies, but often in the 20-35-watt range) certificated transmitters, external antennas and repeaters allowed. Note requirement for 12.5 kHz channel spacing equipment | Baofeng UV-82C, \$55, likely the least expensive Part 90 certificated radio. Large variety of >\$200 mobile vehicular radios. |

Type of participants: Private family/individual-based social group versus a "business?" Families or individuals in a neighborhood or community can often utilize the GMRS service (even including repeaters) with a non-examination license, or the examination-based Amateur Radio Service. Businesses (including the Florida Baptist Disaster Relief ministry) seeking new authorization can use the unlicensed MURS radio service and the licensed Private Land Mobile Radio Services and licensed Citizens Band Radio Service and FRS service, but **not** the Amateur Radio Service or GMRS.

Distance needs? For communications over very short distances (hundreds of yards) the FRS system works well; the MURS can reach a mile or so with external antennas. CB equipment is relatively inexpensive and vehicular equipment is easily available. For longer distances, the Part 90 Private Land Mobile Radio Service ("business band") offers licensed frequencies, and the use of repeaters. Part 90 handheld and vehicular transceivers are available ranging from the \$60 range (Baofeng UV-82C version) up to hundreds of dollars.

Based on those decision points, we concluded that MURS would well serve single-campus based needs of the Florida Baptist Disaster Relief, but would not work for assessor, tarp- or chainsaw-based teams heading out into a disaster area, and would not well serve multiple-location setup and coordination deployments, leading us to move toward a Part 90 Industrial/Business Pool licensed solution.

Lake Monroe ARS Holds Outdoor Meetings

Rich Fischer, WA3SXX

Outdoors meetings December 14 2020 Within Seminole County our usual meeting venue has remained closed since March due to COVID-19. LMARS adopted Zoom.us virtual conferencing to host our Board of Directors and General Membership meetings.

When the time arrived to conduct our annual business of nominations and election of Board members, we decided to try meetings outdoors at the Pamela Carroll Memorial Pavilion in Winter Springs.

Our Secretary, Stephen Zellers, W4IIR while always the clever innovator within our Club devised an online survey to serve as an online ballot. Those wishing to remain safely at home could vote in our election. Stephen devised a method of streaming the nominations and election process via Zoom.us from the pavilion.

So, with his camera capturing the events we successfully broadcast the meetings to our membership. Stephen's online ballot would permit only one response per visitor and the results were combined with in person meeting ballots to determine the candidates elect.

During our second meeting I presented Mr. Al LaPeter Jr., W2AS with a Meritorious Service Award, then a lifetime membership with LMARS. Al is well known by many Hams within Seminole and orange Counties and the North Florida Section. He is an amazing fellow having been involved with many facets of Amateur Radio. He has been long-time members of local Ham Radio Clubs to include Lake Monroe Amateur Radio Society and Orlando Amateur Radio Club. Al served upon LMARS' Board of Directors fourteen years, has been President of QCWA and involved in teaching and VE sessions and support of Ham Radio Comradery in many ways. LMARS looks forward to a better year in 2021 and plans to resume outdoors operating in a safe manner. For now we will continue hosting our General meetings via Zoom.us.

LMARS is an ARRL Special Services Club and we operate VHF/UHF repeaters and have a mobile operations center outfitted within a small trailer also equipped with a crank up tower. Our website is: www.lmars.org,



Al LaPeter, W2AS, (left) is presented with Meritorious Service Award at LMARS outdoor Meeting.

FCC Testing Information

4 Corners Radio Club, Davenport FL

- First Saturday
- 10:00 AM
- Polk County Firehouse, 50945 US 27
- Walk-ins welcome
- 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: Robert Speser, nb8s@icloud.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

- Second Thursday
- 11:00 AM
- Golden Corral, 5535 S. Kirkman Ave, Orlando
- Walk-ins welcome
- Info: WA2FRW@aol.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 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>

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**

- o REF046A – Florida Statewide

- o REF046B – NFL ARES

- o 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.