

# OST NFL



Providing timely and interesting information to Radio Amateurs in North Florida

Volume 6, Issue 7 www.arrl-nfl.org July 2019

THE ORIGINAL 13 COLONIES SPECIAL EVENT GROUP PRESENTS THE 11TH ANNUAL:



# `4th Of July Week - 13 Colonies Special Event

JULY 1 ST - JULY 7TH, 2019

2019 Event Dates / July 1 (9AM Eastern) to July 7 (Midnight Eastern) (July 1, 2019-1300 UTC to July 8, 2019-0400 UTC) YOU DO NOT NEED ALL 13 COLONIES TO GET THE CERTIFICATE YOU DO NOT NEED TO GET THE 2 BONUS STATIONS FOR A CLEAN SWEEP

# The Annual 13 Colonies Special Event

GB13COL

K2Z Bonus Station

WM3PEN

NY - K2A

 VA - K2B
 DE - K2E
 MA - K2H
 NH - K2K

 RI - K2C
 MD - K2F
 NJ - K2I
 SC - K2L

 CT - K2D
 GA - K2G
 NC - K2J
 PA - K2M



The 13 Colonies Special Event is a not for profit event. All donations are used to fund the next years event, and to defray any expenses occurred. All donations are used

for operating costs, supplies, equipment, and 13 Colony Group initiatives. Donation is voluntary.

If you have difficulty with a donation, tell us on your log sheet, and we will send you the certificate earned-No Questions Asked!.



For more information!

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

#### **Proclamation Sets Ham Week**

Jon Lash KM4FOM

Lake City Mayor Stephen Witt proclaims June 17 to 23 as Amateur Radio Week. The proclamation comes at the beginning Field Day 2019: a 24 hour event over two days where local ham radio operators put on demonstrations of equipment and techniques used during emergencies and hobby activities. The presentation was made by Mayor Witt to Bruce Strnad, W2BTC, the Columbia Amateur Radio Society President at the Mayor's office on Friday.

The demonstrations will be held at the grass strip between Lake City Mall and Lowes both Saturday and Sunday. All radio equipment will be powered by solar charged batteries or portable generators. In addition to the personal interest, amateur radio operators assist community groups and emergency services with 2-way communications of voice and data. The public is invited to attend Field Day 2019. The club was formed in 1958 to help promote amateur radio, train members on emergency communications procedures and enjoy the hobby with other hams.



# Spring Hill Amateur Radio Club (SHARC) – KF4IXU

Michael Darnell, kd7toz@aol.com

#### Field Day 2019

SHARC operated three separate operating locations at the Sand Hill Scout Reservation, callsign N4W for Field Day 2019. Operating locations were made available utilizing Lenny's, WS8O trailer, Doug's, NZ2W RV and the KF4IXU trailer.

344 QSO's were made on the following modes/ frequencies:

- 35 on 20-Meter CW
- 54 on 20-Meter Digital
- 50 on 20-Meter Phone
- 116 on 40-Meter Phone

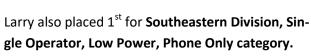
#### Welcome

New SHARC member Ralph Gordon, KN4UZB

# Congratulations, SHARC's own Larry Weil, KC1IH

2018 ARRL 10-Meter Contest Results

- Larry placed 7<sup>th</sup> in the **United States Single Opera**tor, Low Power, Phone Only category with a score of 2968.
- gle Operator, Low Power, Phone Only category.



# Field Day with EWEphoria

Bert Garcia, N8NN

The EWEphoria Radio Club in Summerfield, FL was on the air as K1EWE for Field Day 2019. Despite the HOT weather, many contacts were made, especially on FT8, a new mode this year. Attending were Bob KC8MLB, Carol W8EWE, Pete N4CQN, Jerry KN4JER, and Randy N1JOO. This year we tried out new antennas, new rigs, and a new mode. It was a good opportunity to show off Amateur Radio to the visitors who stopped by.



L to R: Randy N1JOO and Pete N4CQN bring in the FT8 station.





L to R: Jerry KN4JER, Pete N4CQN, Randy N1JOO setting up the FT8 station.



L to R: Bob KC8MLB, Jerry KN4JER, Pete N4CQN, and Ginny xyl-N4CQN setting up Pete's new homebrew all-band vertical.

# Silver Springs Radio Club—Field Day

Elbert Wilkinson, KQ3K, President

The 2019 Silver Springs Radio Club ARRL Field Day event is now "in the log"! It is over and done with and normal life can resume - until next year. In many ways, this year's field day was a replay of last year: high heat, humidity and another learning experience for all. It started with Carl towing his "chuck-a-pult" to the St. George site late Friday and set it up. The screen tents were also set up then. Assisting in the Friday set-up were Ed, WB2UKX, Ivory, W6IVY and my son, Charlie, who provided some muscle. By Saturday midmorning, the operators had arrived to set-up antennas, run coax, fuel the generators and set-up the operating stations. We finally took a break for lunch prepared by Jim, KN4MIV and Marty, N4GL of pulled pork which was provided by Sgt. Preston Miller, Emergency Management Director for the Marion County Sheriff's Office. Many thanks to Preston for feeding us! By 2:00pm we were full, sleepy (nap time) but ready to begin.

Our ARRL operating class this year was 6A. We had four phone stations: Andy, K2ADA, on 6M, 10M and 15M; Carl, KC5CMX, on 20M; Jim, KN4MIV, on 40M; Bill, KW5BG, on 80M. Ed, WB2UKX, filled in on 20M with Jim, WB2LJT as

#### QSOs Claimed:

Band	CW*	Phon	Digi-	2019	2018
		е	tal*	Total	Total
80M		16		16	
40M	74	33		107	5
20M	67	81	52	200	75
15M	40	33		73	29
10M	2			2	2
Total	183	163	52	398	111
Multiplier x2*	366	163	104	633	173
Emergency				1266	346
Power x2					

#### Bonus Points Claimed:

100% Emergency Power (100 per trans- mitter)	600	400
5 Natural Power QSOs Completed	100	-
Media Publicity	100	100
Set-up In Public Place	100	100
WA1W Field Day Message	-	100
Information Booth	100	100
Report Submitted Via b4h.net	50	50
Site Visit By Invited Served Agency Official	-	100
Safety Officer	100	100
Social Media	100	100
Total	1,250	1150
Grand Total	2,516	1496

relief. Bert, N8NN, worked our CW station with Wayne, N4FP, as relief operator. El-

bert, KQ3K (that would be me) worked 20M digital.

Last year we operated as a 4A and from one central location and our results were not very good. This year, we spread out the operating stations and antennas and our results improved. Having two extra stations helped plus not being plagued by RFI and somewhat better band conditions was a bonus. There were some challenges, however. Jim struggled getting a signal out on 40M and finally got that sorted out and got on the board. Bill tried working 80M phone during the day which was dead until the evening when he started making contacts. Digital, primarily, FT8, was very active until early evening when a software glitch surfaced. Unfortunately, changing radios or antennas did not solve the problem. Curiously, there we some PSK31 stations that were then worked, which leads back to an FT8 software issue. As noted below, the phone and CW operators accounted for the majority of our contacts and deserve the praise and accolades! Great job, folks!

#### **SSRC Summary**

#### **Non-Club Visitors:**

We had eleven non-club visitors during the event. The exciting thing was the number of licensed visitors who expressed an interest in joining the club and several visitors who expressed an interest in getting licensed. This is what Field Day is about and worth the hard work and effort!

#### **Media Coverage:**

Local media was engaged to help advertise the event: Ocala Star Banner, Voice of South Marion, a radio interview on WOCA radio and social media through Facebook.

#### **Being Prepared:**

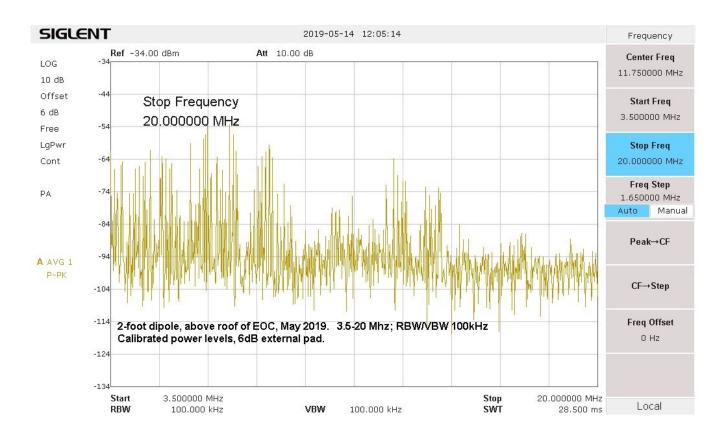
Field Day is always a learning experience as we operate outside the comfort of our homes and shacks. We get a chance to see what works and what doesn't so that we can improve. We will be gathering input from all participants on how to improve our operations in the future for both emergency and under adverse conditions.

# Alachua County: What To Do When Your EOC HF Antenna is Full of Noise? (Part Two) By Gordon Gibby KX4Z

Last month I reported on work done at the Alachua County EOC, to significantly improve our HF antenna capabilities. A new horizontal off-center-fed dipole was installed to replace the prior short "all-band vertical." We saw improvements – but still had a very surprising amount of wide-band NOISE from the antenna, which was basically rendered workable only on 20 meters. The noise was quantified first with S-meter measurements on a specific receiver that was carried to control residential antennas for comparison, and then by a spectrum analyzer which yielded calibrated measurement of the noise problem. Background lightning and galactic noise levels on a typical residential antenna were in the -85 dBm range, but our EOC antenna showed noise as much as 20 dB higher. Spectral plots showed that basically *no stations were visible on multiple bands*. That confirmed what our ears had been telling us.

Since it is impractical to carry around a full-size 80meter test antenna, I developed a testing protocol using a small 2 -foot portable dipole and measuring signal levels between 3-8 MHz. On this greatly-reduced size antenna, feeding into 50-ohm attenuators, the 100kHz-bandwidth noise floor measured from 3.5-20 MHz was roughly -105 dBm at a reference residential location.

EOC rooftop signals were incredibly stronger using the test probe – as strong as -54 dBm – fifty dB stronger noise environment.



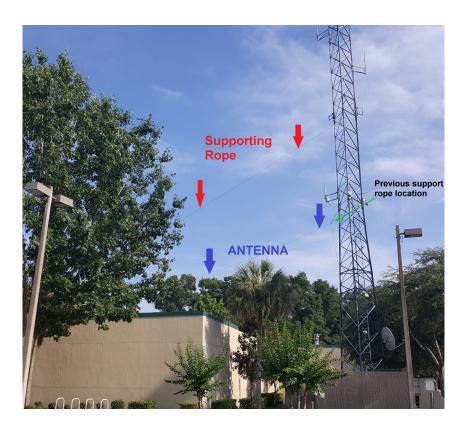
Extremely high RFI noise environment just above EOC roof level measured with small exploring untuned 2-foot dipole.

Antenna Noise (Continued)

**Near Field/Far Field?:** In the far field, many wavelengths away from a radiator, the noise intensity declines by the square of the distance as energy must spread out over an increasingly larger spherical dimension. But in the near field, the drop off can be much, much faster, by the fourth power of distance. Would the interfering noise be mitigated by modest separation of our antenna from the building?

Measurements carried out only scores of yards away from the EOC building showed rapid decline of noise signatures – signal measurements in the front parking lot of the building and at the street adjacent to their property were 20-30 dB softer – proving even small distance separation was incredibly important. Thoughts of a 2<sup>nd</sup> "receiving antenna" among the nearby trees grew.

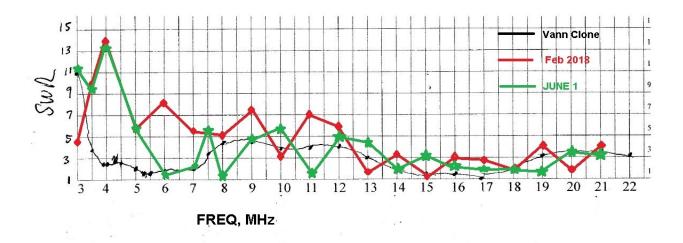
But already a lot of resources had gone into installing an antenna stretched between the EOC tower, and a specially-installed telephone pole. The antenna just wasn't hung quite high enough to assume a real inverted vee shape, but was instead drooping closely to the high-noise roof-top area. Local authorities led by Chief Deputy David Huckstep created a project to move the supporting rope considerably higher on the tower to allow lower tension in that rope, and to allow the antenna to both be higher off the roof and more of an inverted vee topology. That project was a success, as shown in an accompanying photo of the tower support and antenna.



EOC antenna supporting rope moved up 6 bays on the tower, allowing it to move farther off the roof and assume an inverted V shape.

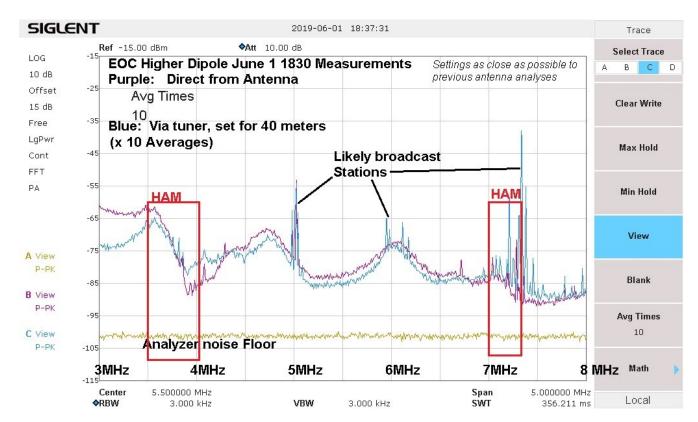
**RESULT:** The SWR measurements at 5MHz and above (**GREEN** in the figure) were considerably improved by getting the antenna higher away from the roof-top metal/lightning rod environment. With the antenna still less than ¼ wavelength at 80 meters above the roof, the 80 meter SWRs still were not good. (Typical residential SWR measurements at a residential location of this same brand antenna showed excellent SWRs throughout 80/40/20 and higher bands, and workable SWRs at frequencies needed for SHARES operations: <a href="https://qsl.net/nf4ac/TypicalBuckmasterSWRCurvesNWGnv.ipg">https://qsl.net/nf4ac/TypicalBuckmasterSWRCurvesNWGnv.ipg</a>)

Antenna Noise (Continued)



Expected off-center fed SWR in BLACK, previous measurements of the EOC antenna in RED and the improved antenna in GREEN, which now shows usable resonant SWRs on 40 meters and 20 meters and bands above.

Noise measurements showed significant improvement above 5 MHz, with low-enough noise measurements and improved signal pickup so that stations were now visible on a spectrum analyzer plot on 40 meters and above. At least the lower end of 80 meters still have high noise, but overall this was very significant improvement — and for the first time, the 40meter band seemed to have real signals in the receiver! Digital and other contacts on 40 meters were made for the first time. A SHARES connection to a state facility was made for the first time in the region of 4 MHz, where the noise dips a bit.



EOC Antenna Signals measured after raising antenna now show observable broadcast and amateur signals, particularly at 5 MHz and above. Noise in the 75 meter band may be usable, lower end of 80 meters still high noise.

Antenna Noise (Continued)

This was a huge improvement for our group and for amateur radio and SHARES backup communications in Alachua County. We may still investigate measurements at receiving antennas placed away from the building, but we are delighted to finally have a real working HF antenna at the Alachua County EOC for station NF4AC.

#### REFERENCE

Antenna Environment Noise Measurement Protocol: <a href="https://qsl.net/nf4rc/2019/">https://qsl.net/nf4rc/2019/</a> AmbientNoiseMeasurementProtocol.pdf

# **Marion County Happenings**

de Carl Berry, KC5CMX

Usually after Field Day, we're all worn out and are done until Hamfest. Well, just to make things interesting for everyone and give you something to do, we're holding a Winlink Workshop just in time for hurricane season!

Silver Springs Radio Club in conjunction with the Marion County Hospital Emergency Communications Team presents:

A WINLINK workshop July 20, 10:00 to be held at:

Green Clover Hall 319 SE 26th Terrace Ocala FL 34471

Talk in 146.610 PL 123 - or call (352)489-1378.

For anyone interested in learning about Winlink, how to download and use the WINLINK Software

#### Objective:

For new users to learn enough about the WINLINK system to successfully check into the weekly Ohio Winlink Wednesday check-in using the WINLINK Express software and a connection to the internet. For more experienced users, more information and questions answered on using the WINLINK

Express program and radio connections, many modes and use of forms and the many other tools possible.

Bring your laptops, power supplies, and extension cords. For those that have WINLINK VHF radio capability, bring your equipment, and portable antenna to be able to make radio connections to a gateway. We will also have an IC-7300 setup for HF, but band conditions being as bad as they are, contact via HF may not happen.

YOU MUST RSVP for this session as space is limited to 40 people. You will get a confirmation, however, you may want to add wordpress@k4gso.us to your whitelist or check your spam folder (It's a WordPress issue, nothing we can do about it).

#### PLEASE PLAN TO ARRIVE 30 MINUTES EARLY FOR SETUP.

There are plenty of restaurants in the area from McD's and Wendy's to rib joints, tacos and subs. We also have Wolfy's and Darrell's Diner which are good establishments in their own rights.

More information and signup can be found on the club's webpage <a href="https://k4gso.us/wl2kgch/">https://k4gso.us/wl2kgch/</a> or you can contact Dave Welker, W2SRP, (352)489-1378.

# North Florida Amateur Radio Club to Hold EXTRA CLASS Amateur Radio Weekend

By Gordon Gibby KX4Z

The Alachua County ARES folks are at it again, and the NFARC (North Florida Amateur Radio Club) will hold another EXTRA CLASS amateur radio weekend-marathon course on Saturday / Sunday August 17/18, in Gaines-



ville Florida. We expect to hold the first day in the wonderful conference room of the Alachua County EOC (what you see on the TV) and the 2nd day at a private residence where we can experiment with antennas and other things a lot more easily.

I'd really encourage you to drum up the folks in your group who need to advance and get them to come to this intensive, hands-on course. We'll do our best to cover as much as possible, while providing as much hands-on as possible. We have volunteer instructors, drawn from our group, many of whom passed their own Extra after taking our last Extra course. There is usually a small fee to cover the antenna or other materials that participants construct and we haven't nailed that down this year yet, but it isn't a showstopper. We have a few meals involved, and pocket cash is needed to defray the costs of publix sandwiches or lunch or pizza, etc. The course is 8-6 on Saturday and 1-6 on Sunday.

There is a lot more understanding of RADIO required at the Extra Class level -- and now we've gained access to a commercial spectrum analyzer as well as standard antenna analyzers. This may allow us to show participants exactly what is happening inside a simple transceiver, seeing the exact signals as they mix and create the necessary frequencies, modulate and demodulate. And we always try to give participants a lot of exposure to all kinds of ham radio -- voice, digital, VHF / UHF / Hf -- everything.

If someone is interested in taking this Extra Class Course, please

- a) reply to docvacuumtubes@gmail.com
- b) purchase the ARRL Extra Class license manual and start looking through it

Most participants need to brush up afterwards using <a href="https://hamstudy.org">hamstudy.org</a> or similar online practice tests to insure they will pass on the first try!

# The Gilchrist County ARES Group Adds Nets

John Greiner, KL4YPZ ARRL EC, Gilchrist County FL ARES

The Gilchrist County ARES net is adding a second weekly session on the Chiefland repeater (147.390, 123Hz CTCS) at 7:15 PM every Thursday. The purpose of the net is to enhance ARES coverage and participation in the southern part of the county. The current ARES net will continue to be called on the Bel repeater (147.285, 123Hz CTCS) at 7:30 PM as always.

The High Springs Radio Rangers have established a two-meter simplex net that meets every Tuesday on 146.520 at 8:15 PM. Several members now have beams in service, and more are on the way. Coverage is expanding rapidly, and members are becoming proficient in weak-signal and relay work. Dust off your old two-meter beam and point it at WA4HHC, or pull a Jpole or Slim Jim up to the highest branch you can, and as far from the tree trunk as you can, and join the fun.

The High Springs Radio Rangers have established a six-meter SSB net that meets on 50.135 at approximately 8:30 PM every Tuesday immediately following the two-meter simplex net. Coverage is much better than two-meter simplex, so even if you can't make the two-meter simplex net you can probably make this one.

Info contributed by member Hal Helms, WA4QLA

The Gilchrist County FL ARES Group and the ARRL affiliated Dixie Amateur Radio Klub (www.DARKLUB.org) are practicing message handling skills, and learning new skills, as we work on learning digital radio programs and even slow scan television techniques. Our first fox hunt was in early June. There were some weather and personal health issues that limited the participation to a few, but the fox transmitter was found just the same.



### **Noise Measurements of Longer-Term Emergency Power Sources**

by Gordon Gibby KX4Z, June 24 2019

**Why?** While doing some planning for a possible Field Day effort, I made some surprising measurements of the high frequency noise from several different longer-term power sources. Sure, you can operate for several hours just from stored energy in a lead-acid or other battery, but eventually you need some other power source to recharge or provide power. So which power sources are noise-free for HF radio usage?

**Testing Protocol:** Radio-equipped travel trailer with full size 130-foot off-center fed inverted vee hoisted on mast of travel trailer. Antenna was tuned for 40 meters, using ICOM 725 HF transceiver powered by the power source under test. The power source was positioned as close as possible to the front of the travel trailer, almost underneath the antenna (worst case) and S-meter readings were compared to background ionospheric/galactic noise measurements made while running on batteries. (Background measured on 40 meters was between S0 and S1.) Additional real-world observations were made during the 2019 Field Day.

#### **RESULTS**

System	Power Capability / Quality	HF NOISE MEASUREMENTS
Champion 3400 Watt Inverter Generator	Perfect 60 cycle, 3400 watts, able to start travel trailer A/C	20dB over S9 80 meters 10 dB +/- over S9 40 meters
		Efforts to quell with filtering were mediocre and would require huge wiring filters to survive the A/C systems
Xantrex 2kw Sine Wave Inverter	Perfect 60 cycle, rated for 2kw but with only 1 storage battery could muster only 500 watts before low voltage trips. With concurrent solar charging, several hundred more watts. Plan would require 4 batteries. Can't quite start the travel trailer AC.	S5-S7 wavering 10 kHz wide oscillations were detected on at multiple spots in 80/40 meter bands. Judge a problem to avoid for Field Day if close to antenna. Have not tested moving considerably farther away.
30V 250Watt Solar Panels feeding Greeley MPPT charge controller feeding 12V lead-acid storage batteries	Each Greeley MPPT controller is rated for up to 15A @ 12V charging. Unclear if this can be maintained without overheating. Sun protection a must.	Intermittent, variable frequency, scratchy S7 interference noted, primarily on 40 meters. Ferrites on solar panel wires did not alleviate  Did not seem to interfere with FT8 communications. But could obliterate portions of a SSB QSO

Noise Measurement (Continued)

Conventional 4kw Sportsman Generator. Electronic internal voltage regulator.	Able to run the travel trailer A/C, important consideration in the summer. : Tested in a field day with generator about 40 feet from antenna.	No discernible noise when operated 40 variable feet from antenna for entire field day. interference secon spectrum ar lyzer	en
10KW conventional Generac Generator (mechanical governor voltage control)	Very poor voltage control as mechanical speed governor only.	Unable to get the generator into normal testing spot but no discerni- ble noise discovered when 35 yards away. Suggest shielding spark plug wires if ignition noise noticed.	

#### Conclusions -

Develop some baselines: <u>Note what your typical S-meter readings of background noise are on each band, before an outing or deployment so you can recognize when you have an unexpected noise problem.</u>

**Avoid the new efficient inverter generators if possible.** Although I've seen varying claims and run some tests on a WEN unit that seemed better than mine – I haven't got any firm proof of usable ones so far. Utilize older style conventional generators to provide air conditioning. By the same token – probably avoid "inverter air conditioners" for a mobile trailer planned for ham radio communications unless you have thoroughly tested that AC unit.

**Power for radios** can come from solar panel chargers, older generators, or possibly some makes of sine wave inverters, not tested in this study. Although I experienced some variable interference from my Greely MPPT controllers, GENASUN MPPT solar panel charge controllers are reported to be "FCC-approved" and highly regarded for negligible RF emissions; they are available in output currents from 4 amps to about 10 amps. Their limitation is on input voltage, where they will not accept higher voltage panels – so carefully choose compatible panels. If your MPPT solar panel charger is "noisy" consider moving the solar panel system far away from your antennas and radios and using it to charge one of two switchable banks of batteries. There are commercially available products designed to reduce RFI problems for amateur radio. (https://palomar-engineers.com/rfiemi-solutions/Radio-Communication-RFI-Solutions-c21444152)

Computers are increasingly required for advanced communications such as FT8, PSK, WINLINK – and most laptops require a 19-20VDC charger. Using a step-up dc-dc converter to produce 20V from 12V solar-charged batteries might introduce yet another noise source. An alternative is to use an older modified sine wave dc inverter to produce 120VAC modified sine wave to power the stock computer charger. For my Lenovo computers, with a 20V power supply model ADLX45NCC3A, I found that the BESTEK 300 watt inverter ( https://www.amazon.com/gp/product/B004MDXS0U ) worked acceptably, and did not generate any discernible interference in my tests on 80, 40 or 20 meters. Some computer chargers do not like modified sine wave! Test any dc-to-120VAC inverter well before usage.

# Heat Sizzles, Bands Not So Much, at Jacksonville Field Day

By Billy Williams, N4UF

Jacksonville's Field Day was an enjoyable and predictably hot weekend event. The North Florida Amateur Radio Society (NOFARS) and Duval County ARES sponsored the Jacksonville outing again this year.

Using callsign K4D, the group operated from the recreation area at Hogan Baptist Church near Pottsburg Creek in south Jacksonville. Around 60 participants and visitors attended. Church Pastor Rev. Peter Copeland, KK4WAY arranged for the use of this ideal location.

While radio propagation did not measure up to the excellent conditions in 2018, a half dozen stations pulled in contacts using a variety of modes....solar power, satellite communications, FT8, CW and voice. The Salvation Army portable canteen staff provided a tasty spaghetti dinner Saturday night. A periodic sea breeze helped offset temperatures that hit the high 90s and no lightning streaked or rain fell during the 24-hour operating period.

Laurel VEC provided free FCC testing Saturday. Chief VE Rajesh Verma, K4SK reports two new operators licensed plus two upgrades.

WJXT-TV Channel 4 produced a video report for their Saturday news. Organizers Todd Lovelace, K1KVA and John Reynolds, W4IJJ speak very eloquently about Amateur Radio's role in providing backup communications along with other facets that make ham radio attractive.

It is posted on their website: <u>Amateur radio operators</u> gather for American Radio Relay League Field Day

The video of Jacksonville FD site provided by: John Reynolds, W4IJJ, DEC, CROWN District EC, Duval County



Main Station





The SSB Station



Jim Lovelace, K1KVA



Satellite

# Field Day 2019 & Amateur Radio in the Pensacola Bay Region, My Perspective

Bill Hayden/WY8O

I've been a HAM for 40 years and the last 27 years in the Pensacola Bay area. You could say a lot of water has passed under my bridge and I've witnessed very many changes in the local amateur radio community. Today I finished up participating in the Five Flags ARA Field Day event at Ashton Brosnaham Park. It was my first time in several years to participate in a club field day function. I got to work the mode I most enjoy (CW.) It was twenty-four hours of Morse enjoyment for me but more importantly, I was able to observe the local Hams of today up close and assess the very many different skill sets that they possess and how very well they all worked together.

Starting with set-up. So many arrived at 6 AM with all of the equipment (and more) they felt may or may not have been needed for the event. Everybody pitched in assisting each other with power, station and antenna set-up. And most importantly, let's not forget the cook! Also support from Escambia Co. SAR. Everybody played a part and lent their skills or just plain labor to have everything up and running by 1 PM. Others that may not have operated, lent their equipment needed to finish the station set up. We had people with vast tech skills and the necessary equipment to solve antenna or other equipment issues. Then others set up a logging network at all operating positions that permitted us to assess our progress both numerically and visually on demand.

Once the event commenced it became a beehive of operators totally focused upon the task at hand...get as many contacts as you can BUT have FUN doing it. Yes, there were the typical RF interference issues that occurred but I think everybody understood and demonstrated patience and tried to overcome the issues.

During the operation, so many visitors came by. Local hams as well as unlicensed curiosity seekers. Some local hams even stopped by to seek advice on their own field day problems. Each time they would approach the operating positions, I would see operators stop what they were doing and take the time to explain what was happening and to foster an interest in the technical realm. We had visitors during the day and well into the evening from as far away as Tuscaloosa, AL. Family members came by and a few young ones even had the opportunity to make a field day contact!

Of course, as the event went into the late hours, the tempo slowed down with operator fatigue. Some of us

older guys no longer have the stamina to do the full twenty-four hours and went home for a shower and a few hours sleep only to return by day break to complete the remaining hours of the event.



Then as the end of the event approached, the crew gathered again to tear down and pack up antennas and equipment. Once again, I witness a sense of cooperation and helpfulness that one can only admire among hams.

And then...it was all over.

Field Day 2019 is in the books. All that is left now is the paperwork. But my assessment of the local ham community does not end there. As I stated earlier, I've seen a lot of changes in the local ham community since I arrived here in 1992. Some good...some not so good. But what I am seeing today, I like, and have high hopes for. I see an influx of new technologies and new young hams with a willingness to embrace these new modes. I also see many seasoned hams very willing to lend their experience and advice to those who need help and are willing to learn. You might say we have so many new avenues for hams to explore that it is difficult for some new modes to get a foothold as things constantly evolve. I think this is why I have always enjoyed this hobby. There is always something new coming around the next corner up ahead and this hobby never disappoints.

I would be remiss if I didn't say anything about the many local nets that occur and the local encouragement to participate in each of them. The Escambia and Santa Rosa ARES nets. The Wed. 10 meter net as well as the Mullet net on Thursday. Then there is the Wire Rascals Net on Friday evenings. This one just blows me away. Without any formal organization NCS operators with a freehand to "do it their way" make this happen each week. Here is a net that routinely lasts for ninety minutes. It fosters good will and enjoyment in the ham community. They must be doing something right because week-after-week the hams just keep coming back.

#### Pensacola (Continued)

I guess in summary, I think we have something good happening here in the Pensacola Bay ham community. It may not be apparent to everybody but I do think good things are happening. I think fostering good will and a willingness to help will carry this hobby well into the future. Finally, I would like to pass on my twoword philosophy on amateur radio. It's so very simple. Just "BE NICE."



# Friendship Amateur Radio Club Field Day, Ocala

Ken Simpson, W8EK

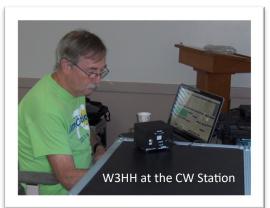
As many clubs did, the Friendship Amateur Radio Club, based in Ocala, held Field Day June 22 and 23. It was held at the Holy Faith

Episcopal Church Fellowship Hall, which is located just west of the river in Dunnellon. Band conditions were not great, and S 9 noise did not help.

The next meeting of the Friendship ARC will be held on Monday, July 8, at the Sheriff's substation on Route 200 near On Top of the World and Oak Run, at 1:30 PM. All are welcome to attend.

The Friendship ARC also holds a net on the 146.61 repeater on Monday's at 4 PM, except for the second Monday when the club has its meeting.







KA1CX and W8PMZ at the SSB station



W1DOH at the FT-8 station

# Northern Florida Section SEC Report for May 2019

Karl Martin KG4HBN, ARES Amateur Radio Emergency Service, Section Emergency Coordinator, North Florida Section

Northern Florida Section SEC Report		May 2019
Report	Counties Reporting	County in NFL
Number of Counties Reporting	11	43
Total Number of ARES Members		356
	Number of Events	Hours
Exercises & Training Sessions	84	814.5
Public Events	4	48.5
Emergency Operations	0	0
Skywarn Operations	4	16
Total	92	879
Comments		

Hurricane season is here. The peak of the season is September 10th. It only takes one hurricane to affect you. Be safe, Be prepared! Karl KG4HBN kg4hbn@arrl.net

#### New ARRL EC-001 Course Covers All The Bases

by Gordon Gibby KX4Z

The ARRL revamped EC-001, and now has free PDF reading materials available. In Alachua County we were able to hold a three-Saturday, **full-radios**, **hands on course** with the proctored Exam immediately afterward.

There are 32 topics to cover, ranging from an overview of all the emergency communications groups and systems with whom you may interact, briefly through the Incident Command System, and a big emphasis on down-to-earth informal and formal communications tools, including nets, radiograms, ICS documents, and digital systems, such as WINLINK.

The ARRL has basic net and net control topics taught very early. Taking advantage of training materials in the ARRL NTS Methods, Procedures and Guidelines, we added a full tabletop net with multiple participants arriving as various liaison reps, multiple different pieces of traffic to pass and others with traffic for different counties and shelters. The ARRL net management document allowed multiple participants, one after another, to run the "hot seat" of net control in 20-minute action-packed net sessions. We did this both with and without radios, but we "faked" actually transferring radiograms for the first Saturday. When we used radios, we used three frequencies, including a deployed emergency repeater for the main net session. This was definitely the highlight of the first Saturday as most had never run such a busy formal traffic net and really appreciated the (harrowing) experience.

Between 1<sup>st</sup> and 2<sup>nd</sup> Saturdays, participants studied and created Radiograms and got their WINLINK accounts running, handling training messages over TELNET or real radio.

The 2<sup>nd</sup> Saturday was very intense, with **participants** arriving with full go-box radio gear of their choosing,

either HF or VHF/UHF. At the session, we provided a voice UHF repeater (running low power in a truck outside), a full HF WINLINK rms server; as well as a VHF (packet) WINLINK rms server.

After some preliminary for-real practice in passing and receiving Radiograms, we ran two more full traffic "Mythical Florida Emergency Net" sessions, using the repeater & two side-frequencies, this time passing all traffic for real. *Huge learning experience*.

With HF and VHF winlink servers right in the room, participants cranked up their radios and started making WINLINK connections. Once initial stumbling blocks were overcome, they tackled a rigorous task-book which including learning how to beep cell phones with radio email texts, and creating embedded ICS forms.

On the much more relaxed 3<sup>rd</sup> Saturday, we finished up the deployment advice, and practiced winlink configuration of a PACTOR modem as well as FT8 and JS8Call.

All 11 of our participants passed the Exam as expected. Many thanks to Allan West WA4JD and Jane Dominguez WOOLS for administering! Evaluations were a solid 5.0 out of 5.0, with the hands-on practice solidly rated as the best part of the course (and also the hardest by some). The occasional discordances between the ARRL example slide pack and the ARRL PDFs were frequently cited as an issue – and I can work on that by further editing the extensive slide pack.

#### **References**

Net Control Practice Training: <a href="https://qsl.net/nf4rc/2019/">https://qsl.net/nf4rc/2019/</a> NetControlPractice.pdf

EC-001 Experiences Check Off List: <a href="https://qsl.net/">https://qsl.net/</a>
<a href="https://qsl.net/">https://qsl.net/



Full Radio Practice Session in the EOC conference room



Our "high tech" dummy load for HF Rigs

# **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**

- First Saturday, 11:00 AM, starting September 1, 2018
- Cross Connection Church, 1451 West County Road 476, Bushnell, FL 33513
- Info: sumterVE@gmail.com

#### Lake ARA

- Monthly on the 3rd Saturday, prior to monthly meeting. (Except December)
- 8:00 AM
- <u>LARA Clubhouse</u> (11146 Springdale Ave, Leesburg off of CR 473)
- For more information and registration, contact
   David A. Pennell, NP2MR (352) 602-5164
   np2mr@yahoo.com in advance of the meeting.

#### **LMARS FCC Testing**

- Third Saturday every month
- 9:15 AM
- Seminole County Sheriff's Office
   Off SR 17-92, on 100 Eslinger Way in Sanford
- For more information and registration, contact Bob Cumming, W2BZY, 407-333-0690 or w2bzy@cfl.rr.com

#### **North Florida ARS**

- Weeknight testing for all grades of license in Feb., May, Aug. and Nov.
- Hogan Baptist Church at the corner of Hogan Rd. and Parental Home Rd. in Southside.
- Advance registration is required. See <a href="http://nofars.net/home/fcc">http://nofars.net/home/fcc</a> testing

#### **Suwannee ARC**

- 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

#### Silver Springs Radio Club

- Go to <a href="http://k4gso.us/class/">http://k4gso.us/class/</a> to signup for classes
- Go to <a href="http://k4gso.us/test-signup/">http://k4gso.us/test-signup/</a> for testing. Testing is held on the 2nd Tuesday of odd months at 7 PM.
- Note <a href="http://k4gso.us/ncvec605/">http://k4gso.us/ncvec605/</a> 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.

#### QCWA Chapter 45, Orlando FL

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

#### Tallahassee Amateur Radio Society (TARS)

- First Tuesday of each even numbered month
- 7:00 PM
- American Red Cross, 1115 Easterwood Drive, Tallahassee, FL
- Contact TARS : <u>tallyamateuradio@gmail.com</u> with questions
- Info: http://www.k4tlh.net

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



# Links to the NFL Web Site

For net, hamfest and other events go to <a href="www.arrl-nfl.org">www.arrl-nfl.org</a> or select the option below. Web Master Bert Garcia, N8NN, 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, contact Bert at: n8nn@arrl.net.

#### **Section Nets**

**Northern Florida STM Report** 

Florida Hamfest/Convention Calendar

**Operating Events** 

**Emergency Communications Archive** 



# **NFL Officials**

Section Manager – Kevin Bess, KK4BFN

Assistant Section Managers – Joseph D. Bushnel
W2DWR, John C Reynolds W4IJJ, Dave Davis
WA4WES, Jeff Capehart W4UFL, Neil Light KK4VHX,
Ray Crepeau K1HG, Steve Szabo WB4OMM

Section Emergency Coordinator – Karl Martin

**Section Emergency Coordinator** – *Karl Martin KG4HBN* 

**Section Public Information Coordinator**— *Scott Roberts KK4ECR* 

**Assistant SE Coordinator** – Robert A. Mitchell W4HKG

Section Technical Coordinator – Frank Haas KB4T

Affiliated Club Coordinator – Appointment Pending

Section Traffic Manager – Tom Housworth, KIOJO

Official Observer Coordinator – Robert Leasko,

WB8PAF

State Government Liaison – Darrell Brock N4GOA



#### Newsletter of the Northern Florida Section of the ARRL

- 1. Spread the word about our website <a href="www.arrl-nfl.org">www.arrl-nfl.org</a> and <a href="www.arrl-nfl.org">QST NFL</a> 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. <a href="www.ARRL-NFL.org">www.ARRL-NFL.org</a> 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.