

Volume 9 Issue 8

www.arrl-nfl.org

August 2022

From the Shack of the Section Manager

Scott Roberts, KK4ECR (<u>kk4ecr@gmail.com</u>)

Well, we are one month in and things have been very active. I am excited with everything that is going on in our section. Section EC, Arc Thames, W4CPD, and I are working at filling open positions as well as setting some goals and directions for the section over the next two years. We hope to have some very exciting announcements over the next few months.

Each month, I plan to let you know what events I will be attending, as well as a summary of events that I have attended over the past month.

In August:

- 8/10 I will be attending the North Florida Amateur Radio Club and making a special presentation.
- 8/20-21 Huntsville Hamfest

In July:

I met with the President and Vice President of the Orlando Amateur Radio Club to discuss their club and how we can better be a help to them.

I participated in the NFL Section EC/AEC Zoom meeting. We had some great questions and comments from those who were on the chat.

I want to be able to attend as many meetings and/or events that are held in our section as I can. When I can not be here in person, I would like to be able to attend virtually. Please contact me so we can discuss schedules.

We are still looking to fill open positions.

- Assistant Section Managers
- Assistant Section Emergency Coordinators
- Public Information Coordinators
- Public Information Officers in counties as needed
- Emergency Coordinators in counties as needed

We have received a few applications. Arc and I will be working through the applications this month and hope to have positions filled later this month. Please understand that not all applicants will be accepted. Scott Roberts, KK4ECR Kk4ecr@gmail.com 904-759-7812 — Cell 904-602-9576 — Direct to Shack 5481 — Hamshack Hotline





I look forward to working with you and am honored to be your Section Manager.

What's Inside

Page 2	From the SEC				
Page 3	<u>Silent Keys</u>				
Page 4	Santa Rosa County				
Page 5	Escambia County				
Page 7	D-Layer Absorption and 75-Meter Morn-				
ing Traffic/Emergency Nets					
Page 9	Kids Camp				
Page 11	Radio Scouting Club News				
Page 12	Witness to History—Radio Transmis-				
sions from Space					
Page 13	Telescoping Fiberglass Mast for HOA,				
Deployment, or Field Day Antennas					
Page 14	#HamVenture				

You can email your **QST NFL** input to <u>n4gl.marty@gmail.com</u>, Marty Brown, N4GL, Editor.

All submissions are subject to editing prior to publication.

From the NFL Section Emergency Coordinator

ARC Thames, W4CPD

ARES Simulated Emergency Test October 1

Where has this year gone? Hard to believe we've already entered August and that means we are quickly approaching time for the ARES annual Simulated Emergency Test (SET) on October 1, 2022. The SET is ARRL's primary national emergency exercise and is designed to assess the skills and preparedness of Amateur Radio Emergency Service[®] (ARES[®]) volunteers, as well as those affiliated with other organizations involved in emergency and disaster response¹. Simulated emergency tests and other exercises give us the opportunity to test our skills and equipment in a "real world" type scenario.





This year's SET in Florida is titled "Service DENIED" and will be based around the concept of a statewide cyber-attack that impacts our communications infrastructure. While ARES teams based in Florida are accustomed to activations from a hurricane, a cyber-attack has just as much chance of occurring in today's times with even less notice (if any) than a hurricane. The slogan we all see, "When all else fails, ham radio works", would truly pick up its real meaning with a full communications infrastructure outage.

We have begun working with our served agencies and other partner organizations to get engagement for participation. Communicators from the Florida Department of Emergency Management will be participating in this exercise from the State EOC so this provides an excellent opportunity for your county, volunteer organization, or agency to test their communications ability with the State and other agencies throughout Florida. Additionally, we have reached out to our neighbors in the Southern and West Central Florida ARRL sections in hopes of making this a true statewide exercise.

If your Florida based ARES, volunteer organization, or agency team would like to participate, please signup no later than August 12 using <u>this Google Form</u> (Please only one form per organization.) You can find your local county's ARES Emergency Coordinator <u>on our section website</u> if you aren't already affiliated with one. The SET is scheduled to begin October 1, 2022 at 0900 EDT/0800 CDT and will last around 4 hours. More information can be found on our section website - <u>https://arrl-nfl.org/set/</u>.

The website includes the information currently available regarding the SET including an overview, participants, and pre-requisite activities to prepare you and your team for the SET. This is one exercise your team does not want to miss out on participating in.

Section ARES Report

In June our section reported 1,376 hours of volunteer time to various ARES duties within our section. Thanks to the following counties and EC/AEC's for reporting their time. The information provided by our team is consolidated and then forwarded to the ARRL. Many of our section ARES teams participated in the ARRL Field Day event and were able to connect with and showcase their capabilities to their served agencies.

Alachua-W4UFL Bay-KN4PFZ Citrus-K4SOP Clay-KK4ECR Duval-K4BJS Escambia-KB4HAH Hernando-N9EE Leon-KC4NVU Nassau-KA3OGG Okaloosa-W4KKJ Santa Rosa-W4CPD Seminole-Al4NF St. Johns-WE4MJ Suwannee-KM4BTW Wakulla-W4KEF Walton-W4CJB Washington-WA4MN

	Number	Person-Hrs
Exercises this month:	10	1,288.00
Training events this month:	23	424.00
Public service events this month:	8	175.00
Community service events this month:	4	67.00
Emergency events this month:	23	135.00
SKYWARN events this month:	0	0.00
Meetings this month:	12	221.00
Unclassified events this month:	26	395.00

Our local county ARES teams need you! If you're interested in learning more about ARES in your county, visit the <u>County Emer-</u> <u>gency Coordinator</u> list on the section website to find the contact information for your county's Emergency Coordinator. Many of our counties offer monthly or quarterly training so it's a great opportunity to learn. The following counties do not have an appointed ARES Emergency Coordinator. If you would like to help us grow our section and ARES teams in these counties, please fill out the <u>online application</u> form and we will contact you. I and our new Section Manager, Scott-KK4ECR, are here to support you in any way we can and would love to have you onboard.

Baker Bradford Calhoun Franklin Gadsden Gilchrist Gulf Holmes Lafayette Levy Union

Changes to the NFL ARES Net

In August, we're adding an on the net Radiogram transfer to allow participants in the net to hear how traffic is passed over the air. Be sure to have a <u>Radiogram form</u> handy on Saturday morning's to copy down the text. If you aren't already checking in to the net, we'd love to see you there, daily on 3950 KHz at 7:30A CDT/8:30A EDT.

Your section needs you!

We <u>need additional net control stations for the Northern Florida HF ARES Net</u> that takes place Monday through Saturday at 9A Eastern/8A Central on 3950 KHz. If you transmit and receive well across the section, <u>please</u> email me at <u>arc.thames@srcares.org</u>. We have a critical need for stations near the central part of the panhandle near Tallahassee and other centrally located counties. This is a great opportunity to practice for emergency activations and counts towards completion of your ARES Task Book.

Monthly Radiogram Challenge

August's challenge is to send me, W4CPD, a Radiogram to share with me what your number one fear or concern of something that could go wrong during an emergency activation and what you would do to remediate that concern. Whether it be something like not having enough batteries or an antenna breaking, what concerns you and what would you do to help prevent it. You may send your Radiogram via a voice net or utilize Winlink. Winlink is a software package that allows you to send messages and forms over the internet or using a compatible radio. You can find the step-by-step instructions to send a Radiogram using Winlink via <u>this link</u>. The section website, <u>arrl-nfl.org</u>, has a net listing for voice nets if you wish to use voice. Many of these nets have a traffic representative/liaison that can pass your traffic up to a section net to allow the traffic to reach me.

For those that missed our online training session in April on using voice to transmit a Radiogram, the video is available <u>on</u> <u>YouTube</u>.

Thanks to the following 34 amateur radio operators for their participation in July's challenge. The information gathered from this challenge will be utilized to build our SET (Simulated Emergency Test) in October. This also serves as an opportunity to exercise our National Traffic System. The more participation we have, the more we can simulate load on the NTS and give our liaison stations an opportunity to practice. We increased by 3 stations in July. I'd love to see us reach 50 stations participating in August. If you have a local club newsletter, website, or social media presence, please share the monthly challenge out to help us spread the word. Full details can be found on our section website, <u>arrl-nfl.org</u>.

AC4QS AJ4KY HF7MYF K4BJS K4WMX K4ZSW KD0QIX KD4IMA KF4ZZ KG2MM KG4QCD KG4VWI KI4TRR KK4INZ KM4WKY KO4LBS KO4YZI KO4ZSD KX4Z N4UK N4VSP N5CBP NH2KW NN4DF W4BZM W4CJB W4JDT W4JIR W9ALI WA4AMY WB4ULT WW4RFN WX4BTZ WY80

¹ARRL Website



700 Monroe St SW, Huntsville, AL 35801

Saturday 9 AM — 4:30 PM, Sunday 9 AM — 3 PM

ARRL Southeastern Division Convention

2022 Event Tickets

Silent Keys

W2MEL, Melvin Levinson WA9VIQ, John Ward KK4NPO, Jeff Walden

Thanks, Carl DePoy, K8BBT

What's Happening? Santa Rosa County

ARC Thames, W4CPD

For July we gave our team a bit of a break from meetings due to summer travel activities and recovering from the ARRL Field Day event. On Saturday July 30, however, we had an impromptu situation report exercise. Utilizing the county's EverBridge Emergency Notification system and our social media presence, we activated our Santa Rosa County ARES Emergency Net and began taking situation reports from participants for a 30-minute period. Anyone checking into the net was asked to report the status of their power, internet, and cellular utilizes. Participants could also <u>utilize Winlink</u> to send in a SITREP form.

The goal of this unannounced exercise was to showcase the fact that an activation could happen at anytime. An ARES activation doesn't always come with pre-planning like with a hurricane. A severe thunderstorm or other utilities issue could warrant the activation of ARES communicators to respond and provide information from the field. I encourage other counties to do the same outside of their regularly scheduled nets just to practice your activation skills during an emergency.

Our meetings have been scheduled for the remainder of the year. We will have license testing following each meeting except the SET on October 1. The fee to take a test element is \$10. If you pass you can take next level free. You must repay to retake an element. Candidates must come having a personal e-mail address and an FCC FRN (Federal Registration Number) along with a photo ID. As always, a free breakfast is provided before all of our meetings.

- August 13 9:00A Coax Cabling
- September 10 9:00A Common ICS Forms
- October 1 8:00A (Statewide Simulated Emergency, no license testing)
- November 12 9:00A TBD
- December 10 9:00A TBD

For information on joining or participating in the Santa Rosa County ARES team, please reach out via email <u>info@srcares.org</u>, visit our website <u>srcares.org</u>, or <u>find us on Facebook</u>.



Contest Ebulliently

Stan Zawrotny, K4SBZ

Editor's Note:

Stan, K4SBZ, manages the Frequent Contester Program (FCP) for the Florida Contest Group (FCG). The FCP allows FCG members to compete for points in approved contests.

Here us a list of contests for August.

If you are interested in learning more about the FCG FCP follow the links below:

Florida Contest Group

FCG Frequent Contester Program

			Contest Schedule			
1200 March 100 M			<u>Start</u>		<u>Finish</u>	
Contest	Type	Pts	Date	Time	Date	Time
Batavia FT8 Contest	DX	5	6-Aug	0000Z	7-Aug	23592
NRRL MGM Weekend Contest	DX	5	6-Aug	1400Z	7-Aug	14002
ARRL 222 MHz and Up Distance Contest	Maj	10	6-Aug	1800Z	7-Aug	18002
North American QSO Party, CW Aug	Maj	10	6-Aug	1800Z	7-Aug	0600Z
WAE DX Contest, CW	Maj	8	13-Aug	0000Z	14-Aug	23592
Maryland-DC QSO Party	QSO	7	13-Aug	1400Z	14-Aug	0400Z
SARTG WW RTTY Contest	DX	5	20-Aug	0000Z	21-Aug	16002
ARRL 10 GHz and Up Contest, Aug & Sep	Maj	10	20-Aug	0600L	21-Aug	24002
North American QSO Party, SSB Aug	Maj	10	20-Aug	1800Z	21-Aug	06002
CVA DX Contest, CW	DX	5	20-Aug	2100Z	21-Aug	2100Z
Hawaii QSO Party	QSO	7	27-Aug	0400Z	29-Aug	04002
W/VE Islands QSO Party	DX	5	27-Aug	1200Z	28-Aug	0300Z
World Wide Digi DX Contest	Maj	10	27-Aug	1200Z	28-Aug	12002
YO DX HF Contest	DX	5	27-Aug	1200Z	28-Aug	12002
Kansas QSO Party	QSO	7	27-Aug	1400Z	28-Aug	20002
Ohio QSO Party	QSO	7	27-Aug	1600Z	28-Aug	04002
CVA DX Contest, SSB	DX	5	27-Aug	2100Z	28-Aug	21002

Escambia County Events

Gene Bannon, KB4HAH

The First one, was our Ham Radio Demonstration at the Escambia County Public Library. Ms. Stevie Thomas, the Event Coordinator for the Escambia County Library System, had invited the Amateur Radio Community to come out and do an Amateur Radio Demonstration on July 22nd, 2022 for the Southwest Branch (Perdido Area) & the town of Century Branch Library. With that request, we (Five Flags Amateur Radio Station) decided to set up two Demonstration stations at both Libraries. The Southwest Branch to be headed by Gene-KB4HAH and the other to be headed by Mike-N4DIA. So



8:30 AM, Jul 22nd we proceeded to set both stations and start operating. The Century Branch Operation had set up a complete Digital with Bill-WY8O as lead operator for the Digital, and Voice (HF SSB & 2 Mtr FM) operation with Mike-N4DIA and Larry-N4TAC. In the Southwest Branch, We were set up with Primarily Voice (HF SSB & 2 Mtr FM) with Dave-N4KD, Anna-KN4ZEA, Ron-KW4ZC, Ann-KW4ANN, and me. We established 2 Mtr Contact between both stations



Gene KB4HAH explaining what Amateur Radio does during a Disaster to the interested public

and several local area hams. We both made Contact with a lot of hams in the North America and a few DX stations were heard. Unfortunately, there was very little public turn out at the Century Branch. There were a lot of walks through traffic, but just an occasional stop by of interested folks as to what was going on. We did do an Amateur Radio Demo inside the branch to a young family that seemed to be interested and asked several questions. At about 1:30 PM, we terminated our operations at both locations. It was a fun event, even though there wasn't what we were hoping for, but still we did a great job in demonstrating Amateur Radio to the public. We are looking forward to doing it again and hopefully do it at the Main Branch in Pensacola with a lot more public outreach prior to the demonstration.

Our Second Event, Dominique, the Event Coordinator from the Local CERT team (BRACE), had asked several organizations including the Amateur Radio Community to come out to their CERT Disaster Preparedness Demonstration they had scheduled for Saturday Jul 23rd, (yes the day after our Public Library Demo), at the Pensacola Fair Grounds. The Five Flags Amateur Radio Association decided to have the W4UC station set up there for that purpose. We started our operation at 8:30 AM, setting up an HF SSB and 2 Mtr FM operation with Jim-N4SAR, Alfred (Skip)-N4XXO, Charlie-KN4VGY,







ins, and we had several youth interested who participated in our operations. It was a great operation UNTIL approximately 11AM, at which time the SKY opened up and dumped a LARGE amount of rain water on top of us. It pretty much flooded us out of our operations. We quickly powered down and Demobilized our operations, while taking a bath/laundry wash (without soap and our clothes still on) at the same time. We had a great time (minus the rain water) and looking forward to doing it again the next opportunity to demonstrate Amateur Radio to the public.

N4SAR, N4XXO, KB4HAH as ham operators for the CERT Demo

Continued on next page...



Escambia County Library Southwest Branch Demo



Hadely Krantz our youth helper at the Library Demo



PCARS 57th Annual Melbourne Hamfest hosting the 2022 ARRL Florida State Convention

October 7-8, 2022

Melbourne Auditorium 625 E Hibiscus Blvd Melbourne, FL 32901

INFO



D-Layer Absorption and 75-Meter Morning Traffic/Emergency Nets

by Gordon Gibby KX4Z



Traffic nets as well as emergency nets, must deal with *constantly changing ionospheric conditions*. The two main variables are the ionization levels of the D- and F-layers. Together, these two generally set the minimum and maximum workable frequencies for any given path required for connection to a participant in their net.

The F layer is less ionized in the nighttime, and so the critical frequency (the highest frequency which can be refracted 180° right back to the same town or county) drops considerably. In times of sunspot minima, in the winter in northern latitudes (think Pacific Northwest) it can drop even below 3.5 MHz -- below the 80 meter band! Dark-evening Pacific Northwest nets may have to resort to using an out-of-state net control station who can hear the participants....none of whom can hear each other on 75 meters due to the low critical frequency.

The F layer is more highly ionized during the daytime, particularly at local solar noon, and thus the critical frequency rises. The maximum usable frequency (MUF) for any given non-zero distance is always higher than the critical frequency (because slanted long-distance signals are much easier to refract than straight up-and-down nearby signals) and rises to a maximum about that time also. The critical frequency is measured every 15 minutes by radio-ionosondes (such as at Eglin AFB) and easily found on the web. Along with it is an *estimated* maximum usable frequency chart for various distances. Net control stations can utilize this data to figure out whether stations in their area of interest will likely benefit from workable skip communications.

The other side of the coin is the D-Layer. In Alachua County training, we call it the DESTROYER-layer, because when sunlight hits the atmosphere and ionizes the D layer, it DESTROYS lower-frequency communications, much more so than higher frequency communications. As its impact lessens with increasing frequency, by 14 MHz, it is not a big factor and hence daylight DX is common on 20 meters -- but NOT ON 80!!

A lot of research, especially during solar eclipses, has shown that the sparse atoms of the D-layer quickly ionize and quickly de-ionize as the intensity of incident sunlight increases and decreases due to occasional interactions with other atoms. Thus, as the sun rises each morning, and its angle of incidence onto the atmosphere of your region climbs to perpendicular at local noon, the ionization of the DESTROYER layer rises from minimal during dark times, to near-maximal by 3 or 4 hours after sunrise. (So does solar panel output, of course!)

It isn't difficult to measure the actual impact of sunlight D-Layer on a fixed path communications. From my North Carolina family vacation home, I repetitively directed Leland Gallup's AA3YB JS8 relay station to give me signal reports in Gainesville Florida, from my transmitter, running about 80 watts output into a full-size end-fed dipole at 25-30 feet, every few minutes. The results are shown in the chart at the top. Well before sunrise, Leland's receiver (on a full size 80 meter end-fed dipole) reported my 80 watt signal resulted in a 10dB Signal-to-noise ratio (on a 2500 Hz bandwidth) -- this is adequate if voice SSB contact were required.

But as the sun climbed, things changed!! 30 minutes after local sunrise, the signal had lost about 75% of its "punch" and now registered only 5dB S/N -- marginal or worse for voice traffic handling. One might add in 7-10 more dB with a powerful linear and still make things work passably on voice.

Between 1hour-15 minutes and 1hour-30 minutes after sunrise, things got MUCH WORSE and now the roughly 80 watt signal only creates -4dB S/N (relative to a 2500 Hz bandpass). JS8 can still easily decode the much-weakened incoming signal, and carry on a conversation because of JS8's tiny bandwidth, but VOICE would be impossible at this time, and even with a BIG amplifier, it would be difficult to impossible. It only gets worse from there. (A later day's testing showed it could get down to -10 dB S/N a couple hours after sunrise.)

The moral here is that the difference between nighttime and mid-morning communications on 80/75 meters can be **more than 15 dB difference** -- *vastly exceeding the gain of most linear amplifiers* and <u>making voice communications</u> <u>over longer distances</u> (that require more "slant range time" in the D-layer) <u>impossible</u>.

Net control operators can use this information to time when they hold nets, when they QSY to 40 meters, or handle traffic from more distant stations, or have them QSY to 40 meters to move traffic. As Craig Fugate KK4INZ aptly reminded us -- most priority EOC communications occur at MID DAY -- one of the times that is most difficult for voice communications on some ham bands, precisely because of 15-20 dB of D-Layer destruction of signals. If the critical frequency doesn't rise far enough, nets can be left squeezed into a narrow set of workable frequencies, below which D-layer damage is too great, and above which the skip zone expands so much that stations can't be heard at all. In those times, net control operators may wish to utilize (a) farther distant relay stations on higher frequencies, or (b) higher power stations that can overcome D-layer on 40 meters, or (c) advanced data communications such as JS8 or WINLINK that have **10-25 dB S/N threshold advantages over voice**. *Making comms work twenty-four hours a day over important signal paths for disaster response is quite a feat for volunteers!*



Kids Camp – Special Event Station K4K

by Bert Garcia N8NN

The EWEphoria Radio Club in Stonecrest, Summerfield, Florida participated in Kids Camp on July 18-22, 2022, by providing amateur radio activities for the kids – a fox hunt, an HF SSB station, a Morse code session, a VHF video station, and UHF handhelds and repeater. All the radio activities were conducted outdoors with equipment installed Field Day-style at a picnic shelter. More than 50 kids aged 6 to 16 participated in Kids Camp. For most of the kids this was their first experience with ham radio.

Two groups of fox hunters competed to be first to find the fox. Bert N8NN,

Randy N1JOO, and Jerry KN4JER provided the fox and two homebrew directional antennas and led the two teams. Bob KC8MLB and Carol W8EWE helped organize activities. The kids were rewarded for finding the fox by sharing candy hidden with the fox. The fox hunt demonstrated antenna principles and simulated wildlife tracking methods used by researchers.

The HF SSB radio operated as K4K special event station with a Yaesu FT-991A transceiver and a 53-ft end-fed wire. Bert N8NN was as surprised as the kids to talk with Australia on 20meters SSB as their first contact! The kids did their best to speak on the air, but mic fright was evident with the littlest ones. Several of the kids spoke Spanish and translated for others as stations from Central America were worked.







Kathy N4TKY conducted Morse code sessions with the kids sending and attempting to receive messages while using a handout sheet of the code. The older kids were most interested in the code and used both a straight key and a keyer and paddle to send code.

Randy N1JOO provided a Yaesu FTM-400XDR radio with a camera microphone which allowed the kids to see themselves on the radio display and to transmit video data messages to a Yaesu FT-2DR handheld. Most of the kids were familiar with cellphone pictures and video, but seeing their photo transmitted over radio was a new and interesting experience for them.

The best activity for the youngest kids was to use UHF handheld radios to talk with each other via the EWEphoria Radio Club's repeater, K1EWE. As soon as the kids learned how to use the push-to-talk button, they raced off in all directions to talk with each other. Radio discipline was quickly lost, but all handhelds were recovered at the end of the day.

The Kids Camp week was filled with many activities and crafts. The members of the EWEphoria Radio Club were proud to participate and demonstrate amateur radio. The best reward for our efforts was when several of the older kids ask us, "How do we get a radio license?"





Randy N1JOO and Jerry KN4JER



Kids Camp Radio Pavilion



Kids Camp EWEphoria Radio Club Summerfield, FL







Radio Scouting Club News

Ken Lyons, KN4MDJ ARRL Southeastern Assistant Division Director - Radio Scouting, <u>www.kn4mdj.com</u>



"Bringing Amateur Radio Scouting programs to a half million scouts in AL, GA, FL, PR, USVI"

We've been approved for an \$8k grant to add solar, off-grid & lithium power to the scout ham trailer. So we can now offer demos without an extension cord or generator, and add Electricity MB demos.

BOY SCOUTS OF AMERICA®

CENTRAL FLORIDA COUNCIL

Radio Scouting, Inc., is the amateur radio station and club of the Boy Scouts of America, Central Florida Council. Our youth learn about ARDF (direction finding using hidden wifi ammo cans on trails or in the woods), see samples of existing wireless technology in their everyday life, learn about the history of radio, and go on the air with a licensed ham using various mobile and HF rigs. The program already displays ham and radio technology for over 10,000 youth each year and leads the nation in participants for the international JOTA/ Jamboree-on-the-air event. To date over 20,000 scouts have learned the basics of Morse Code.

This grant will expand the organization's educational potential by adding solar power education, and allow the scouts to obtain the Electricity Merit Badge as well as Radio Merit Badge. Approximately 6 KW of solar panels will be installed, along with cables, controllers, inverter and a 200Ah LFP Battery. This system will power the ham trailer without running a generator or using an outlet as it does now. The youth will learn how off-grid power systems work using the panels, charge controller, battery pack, and inverters. <u>www.RadioScouting.US/cfc</u>

REF: <u>https://mailman.ampr.org/hotcrp/paper/167?cap=0167aM3_or-g19Ng</u> REF: <u>https://www.ampr.org/grants/2022-grants/grant-amateur-radio-in-boy-scouts/</u>

October Events:

Our busiest events are around the corner, JOTA is where scouts communicate with each other world-wide on the 3rd weekend of October, sort of a field day for scouts. Our council does JOTA like events so that several thousand scouts can get the same experience. WE NEED MORE HAMS for CFL: mobile rigs, CERT groups, ARES, anyone that would like dust off their go-boxes and repeat Field day. Our dates are Sept 24, Oct 1st, 8, 15, 22, and finally Oct 29th. Ham in other areas reach out to your local clubs and scout councils to see if they need more help. We will try to process about 2,000 scouts at each saturday event, the more hams and equipment, the more youth we can get on the air. If you'd prefer to stay home, please monitor Simplex, local repeaters, 40M & 20M and listen for youth for their first QSO.

73 & YIS (yours in scouting),

Ken Lyons, KN4MDJ / Trustee for wB4SA, Cell 407-496-6694 BSA - Central Florida Council - <u>www.RadioScouting.US/cfc</u>

Link to Pictures



Witness to History—Radio Transmissions from Space

Patrick Lightcap, Now K4NRD, Madison County, Florida

After moving to Orlando, Florida in 1960 I developed a deeper interest in the United States space program. Edgewater High School where I began 10th Grade provided a good view of rockets lifting off at Cape Canaveral, Florida to the East. Students would be allowed out of class for special space events such as the first suborbital flight by Alan Shepard on May 5, 1961 and then John Glenn's first orbital flight on February 20, 1962. The view from the catwalk was inspiring.



When I was older, I had moved to Madison, Florida in the northern part of the state. It was 1976 and I developed an enhanced interest in two-way radio communications. In December of 1977 I passed the code test and written test given by my Elmer Mr. Bill Montgomery, W4TBF, that allowed me to be a licensed Amateur Radio Operator (Ham) with the call sign of WD4ODB. Later, as a Technician Class operator, I focused on VHF communications capabilities and some HF work on 10 meters.

In 1983 my interests in the Space Program and radio communications would come together to provide one of those events that will forever be in my mind. I had heard that astronauts would be allowed the freedom to try contact with Amateur Radio operators while at their duty stations when time was available to them on the Space Shuttle missions. This created a stir and many people prepared to try to make contact with a station in "outer space". I began keeping a small portable tape recorder with me to record any of my attempts to contact the Amateur Radio operators on board space craft on a scheduled orbit near North Florida.

My preparations somewhat paid off on Wednesday, December 7, 1983 at 7:58 AM Eastern Time. I was in my car parked at the Madison County High School having just dropped off a couple of students who had attended the Early Morning Seminary Class that I was teaching at my Church. On my VHF 2 meter mobile radio I heard the voice of Dr. Owen Garriott, W4LFL calling "CQ" from the Space Shuttle Columbia (STS-9). He was on orbit 144 of their mission and transmitting on 145.550 MHz.

I sat motionless in my vehicle and hit "record" on the tape recorder just in time to hear W5LFL confirm contact with a friend of mine 30 miles to my north in Valdosta, Georgia. Jimmy Brooks, WA4BEV, had built an antenna system designed for directional celestial communications and it worked. He had been heard over the many stations attempting contact with the orbiting space craft. In 1983 this was news!

The Amateur communications with space got the attention of the CBS affiliate WCTV in Tallahassee, Florida. Jimmy did not have a recording so he asked me to meet with him in Valdosta at his home because the TV station was sending a reporter to do the story about how this was even possible with the space craft only using a 5 watt hand held radio connected to the antenna taped to a window. The story aired with Jimmy Brooks explaining his antenna construction and radios and using my recording confirming the contact.

Seeing my two interests come together in such a dramatic way was very fulfilling. These kinds of memories bind time and people together forever. Dr. Owen Garriott passed away on April 15, 2019. But his impact on Amateur Radio and the Space Program will remain a part of national history. The two brief recordings can be heard if one searches the "News" section of QST on the ARRL website.

ARRL News 7/20/2011 <u>W5LFLonColumbia1983.wav</u> (3.2 MB) <u>W5LFLspacecraftColumbia1983.wav</u> (1.9 MB)

Update:

https://www.youtube.com/watch?v=Ermmxc9ZfmE

Space Shuttle Flight 9 Post Flight Presentation. Owen Garriott using the amateur radio in Space Lab during STS-9 and he is narrating the video. The very brief part of him holding the H/T is at about 5 minutes in to the video which has a total run time of about 19 minutes.

Telescoping Fiberglass Mast for HOA, Deployment, or Field Day Antennas

by Gordon Gibby

The photo shows my new inverted-vee end-fed 1/2 wave dipole (red arrows) in the backyard of our family vacation home in Black Mountain NC. Unfortunately, the trees visible are either on the property line or belong to our neighbor and thus putting up an HF antenna was somewhat difficult.

The mast (white arrows) is an MFJ-1906H 33-foot "heavy duty" fiberglass telescoping mast (multiple retail vendors, including: https:// www.dxengineering.com/parts/mfj-1906h) with clamp connectors to hold any position. I spray painted the last 1 foot of each section to make maximum extension limits more clear. The outer diameter (O.D.) of the bottom (largest) section is a shade under 2.00 inches. I found it would fit nicely inside a 2 foot section of 2" PVC water piping from Home Depot



We currently use this *same physical mast* on our "Field Day/Deployment Tower Trailer" where it is secured with two stainless U-bolts to a 2x6 mounted vertically on the rear of a Harbor Freight utility trailer. A 1/2" x 6" galvanized bolt through the wood and through a 1/2" hole drilled a couple inches above the bottom end of the bottom section, secures the mast, when mounted on the trailer.

A rear seat of our Toyota Camry folds down to allow longer loads, and I was easily able to transport the mast to our vacation home in Black Mountain NC. Eventually we'll have two masts and each can "stay put."

The bottom section perfectly slides into a 2 foot section of 2" PVC water pipe from Home Depot. A cap PVC-glued to the bottom, and a "clean out" opening and screw cap on the top, allow this to be inserted in a 28" deep hole (think: *post*

-hole digger) in the back yard. This provides good mounting for the pole, and can be "capped" when we leave our vacation home with the mast, underneath the lawn-mower's reach, but available for our next visit.





The Great '#HamVenture'! <-Yes it's a hashtag!

DJ Stewart, KI4ZER, Pres. <u>Playground ARC</u>, Pres. <u>Walton County ARC</u>, Vice Pres. <u>North Okaloosa ARC</u>, Member of <u>Walton Couny ARES</u>, Supporter of <u>NWFL Ham Radio</u>

What a wonderful hobby this is and encouraging the next generation of operators to boot is no less than exceptional! Not only are many of these new licensee's joining clubs and organizations, they are participating, showing up to events and helping run the operations from appointed roles! These wonderful people are even taking responsibility by accepting nominated positions and enabling the continuation of a wonderful legacy!

You should all be proud of the social engagement in Amateur Radio and what it is that brought us all together in the first place. Whether it is across the street, around town or on the airwaves of another ITU Nation, you, and your efforts, have made the experience worthwhile and pleasurable. There a thousand reasons as to why we do what we do and how we do it has a million more opinions and there always will be. Regardless, the positive path forward for those that support Ham Radio directly or indirectly has proven to be a fruitful endeavor for all!

So give yourselves a pat on the back, write down and log your experiences! Capture your positive occurrences and use them to encourage, foster, develop and recruit new membership! Maybe even bring back some that are out of practice in all of your organizations. Above all, empower the members to perform at their best while leading by example and letting them tune the dial!

The week of the 4th of July starts us off with the fine folks at the **Walton County Amateur Radio Club! WF4X** hosted Donna Johns as a Special Guest to the monthly Club meeting. She is running for Walton County Commissioner District 4. Her message is simple, improve the open space in Walton County and its Infrastructure to support its growth to increase resiliency. She is a strong supporter of ensuring the County at large benefits to its maximum potential to not only develop and pave the way forward, but to honor the



past and include all residents in the measures of the County economy and well-being. That aforementioned resiliency, is how the County will communicate during wide area outages of power, cellular and other forms of digital and analog communication. <-Sound familiar?

Following her intro and questions from the members present she stuck around to participate in the meeting and learn more about how we operate and what we can do to benefit the County and surrounding area! Learning that the **Walton County Amateur Radio Club** also has a footprint in the **Walton County ARES** roles at the Emergency Operations Center in Defuniak Springs, she was drawn further into the investment that the **WF4X** club has much to offer for the communities in, around and outside of Walton County!

WF4X's business meeting went on to discuss plans for improvements to the Club Station following applying for **ARRL** Grants as well as fund raisers and donations. They also welcomed another new member who is just getting started in Amateur Radio and is diving right in! Come see this crowd as they are known for their energy, enthusiasm and practices beyond reproach! Thursday the 7th of July took us to the **Playground Amateur Radio Club** in beautiful Downtown Fort Walton Beach! Immediately (the day after) following their Station re-build, Field Day 2022 was upon them! And this meeting of the minds put together a Tech Night to teach all who were willing to enter the contact information correctly and submit the logs! Their Field Day event was a large success and a great experience for all who participated! As this Club continues to add new members and test new hams it is vital to teach the young and even the older more seasoned operators, the ways of getting the log-books on the record! It is a skill that each operator should be able to do and not rely on just one source!

Another great point of interest is that the team at **PARC** was able to collectively review and take down vital information to improve their station and make it even better! Join up with the team at the Playground as they enhance their capabilities and continue to be a pivotal training point for Hams the region wide! Case and point, that Saturday at 0900 the VE Team at the **Playground Amateur Radio Club** administered testing for multiple people who traveled from near and far to get their licenses. They had 4 that passed out of the bunch and while that does not sound like many it adds to the active Hams in the area! Get this, the youngest was just six years old! Your read that right...**six!**

Following the testing session the members got back together on Sunday the 10th at the **Playground Amateur Radio Club**house and performed more testing and tuning of the club station and other various equipment. Once satisfied items were capable of operation they wasted no time in making contacts across multiple bands and frequencies! This Club has a long standing tradi-



The 14th of July came about quickly and the delightful crowd at the **North Okaloosa Amateur Radio Club** hosted a wonderful Business Meeting! With many attending in person and over Zoom! The folks at **NOARC** expounded upon the growth of the club and its supporting equipment! **NOARC** is continuing on in training and testing as well and moving forward with more

plans for further involvement in the local area and with multiple organizations in and around the community to boot! IF you want to get involved in a greatly organized club and participate where the members are put first this is your spot!

The buzz lately is about the upcoming **Annual NOARC**

Hamfest which is coming soon! This will take place in a 40,000sq. Ft. HVAC facility and features major National Vendors to the tune of Tower Electronics and the Sign Man just to name a couple! You do not want to miss this show **on Saturday the 15th of October 2022**! Come and <u>'Be vendor'</u> as each **table and spot** is the same price as admission only \$5.00 ea.! That is astounding! For only \$10.00 total you can be a spectator and a vendor with one table! **NOARC** is here to welcome



you and present you with a valiant opportunity to **sell, swap, trade, barter** and attend '<u>one of the best shows in the South-</u> <u>east'</u> United States! Come and see what these folks put on, we promise, you will be thoroughly impressed! <u>https://</u> <u>w4aaz.org/noarc-hamfest/</u>

During the travels around the Ham Community over the weekend of the 16th & 17th of July, we were able to stop in to **assist a Ham**, KB4OIF, who suffered a lightning strike which took out several components of his Ham Station. Membership from multiple Clubs to include **WF4X, PARC, NOARC** and **ARES Associations** came together to assist with the installation of a new rotor with KB4OIF on his personal tower. This put the operator back on the air and returned the capabilities to not only communicate across the Good ol' U S of A, but also the



ability to reach out and communicate Worldwide! It is great to see a culture that is there to lend a hand when needed. Hats off to all that continue to promote the positive relationships and take the time to be followers just as much as leaders!

That same weekend, the team at **Okaloosa County ARES** met at the Emergency Operations Center in Niceville on the Northwest Florida State College Campus! There were many in attendance and the team discussed and made plans for multiple engagements to come! Some of those plans are for a Tabletop Exercise to be announced for type/nature of incident, date and time in the near future. Since their numbers are growing and they have a great formulated plan they are looking to hold a once monthly net in conjunction with the **Gulf Coast VHF Training Network**, The **GCVTN**. If you have not already heard, they will be asking that this net operates on the back up frequency once a month in case the primary repeater of 147.36 + 100Hz goes down. Announcements will be made on the **NOARC** machine to utilize the Duke Field Repeater of 147.225 + 100 Hz at 8pm once a month. So while this writing may be behind by a few days, expect it to be reciprocated as announced by the Net Controllers on the **GCVTN**.

Where to next but off to the **Playground Amateur Radio Clubs** Weekly Sunday Pile-Up on 17 July! There, operators came together for Station and Ham training as well as DX Work! Contacts were made on multiple bands and around the world. Proper station operation was shown to new members and they were put into the driver seats! Remember folks, there were once things we all didn't know



that we sometimes take for granted now and sometimes, a few of us may need a reminder of how to operate a piece of equipment if it has been a while. Always check your antenna connections before hitting that Press to Talk! '*Nothing hap-pened'*, but even though it seems simple to some, there are others who may not have used a particular radio and just never knew that older versions require more than one feed of coax in lieu of an antenna selector. (That and we somewhat like to make the hair on the back of your neck stand! (HiHi)). Inspection and practice makes for great contacts! So keep up the great work! A short lesson in APRS tracking and contact was also given and showed off the <u>W5KUB-112 balloon</u>! If you do not know about this, go to <u>APRS.Fi</u> and check it out!

Additionally, **PARC** continues to enhance the Clubhouse each week with the completion of projects and tasks which continues to not only introduce operational features, but adds to the aesthetic feel as well! Make sure you come on out and see them in action at 17 First ST SE in B E A U tiful Downtown Fort Walton Beach Florida! For more information please check the team's calendar at <u>W4ZBB.Org</u>.

'Off we go' to more 'Fun' in DeFuniak on Tuesday the 19th of July with the team at the **Walton County ARES** Group! Talk about gusto! This team is all hands on deck and prepared to serve. Being so, they welcome new folks to show up (new to ARES or not) and add to their capabilities! Following field testing of their famed "go Kits', they realized there were some improvements to be made and began the process of instruction and demonstration to its members for the modifications to be made! This was a great and informative evening and it was even more of a pleasure as we were able to interact directly with the Walton County Emergency Management Logistics director!

These folks have a Winlink Wednesday each week and would love to hear from you! To participate please follow these instructions:

'Walton Winlink Wednesday''

Send your message weekly via Winlink to Mark KX4LD. To; KX4LD Subject; Walton Winlink Wednesday Message; Name, Call sign, Location, Mode Website: https://n4ema.wordpress.com/



SWAMPFEST 2022, TAILGATE AND OPEN HOUSE 19 NOV 2022!



FREE

17 First Street SE Fort Walton Beach Florida starting at 8 am on the 19th of November 2022! Be sure to bring your gear for sale, swap or trade! Open your tailgates and trunks and enjoy the day FREE of charge courtesy of the Playground Amateur Radio Club

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

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 <u>n4ng@icloud.com</u> in advance of the meeting.

Lake Monroe ARS FCC Testing, Sanford FL (LMARS)

Third Saturday of every month

•Seminole County Sheriff's Office, 100 Eslinger Way, 1st Floor, Sanford, FL

•Registration Required

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

Milton Amateur Radio Club, Milton FL

•Check date at miltonarc.org

•Walk-in

•Bagdad United Methodist Church •Info: Chuck, N4QEP, merlinman3@yahoo.com

Orlando Amateur Radio Club

•First Wednesday

•5:30 PM, Walk-ins allowed

ARRL/VEC

•Central Florida Fairgrounds Craft Building, 4603 W Colonial Drive, East Gate off Fair Villa Road

Info: testing@orac.org, Robert Cumming, 407-333-0690

Santa Rosa County FL ARES Testing (Walk-in)

•Information and dates can be found at <u>srcares.org</u>

Seminole County

- •Every month on the third Saturday
- •9:15 AM
- •Seminole County Sheriff's Office off SR 17-92, on 100 Eslinger Way in Sanford, FL
- Info: Bob Cumming, W2BZY, w2bzy@cfl.rr.com

Silver Springs Radio Club, Ocala FL (SSRC)

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

•Note <u>http://k4gso.us/ncvec605/</u> 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. <u>https://k4tlh.net/faq/license-testing/</u>

West Volusia Amateur Radio Society

•Second Saturday of each odd numbered month •9:00 AM

•Elks Lodge, 614 S. Alabama Avenue, Deland, FL •Info: <u>https://westvars.org/testing</u>

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

Remember: Bring photo ID, CSESs, 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 <u>www.arrl-nfl.org</u>. 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 – Scott Roberts KK4ECR Assistant Section Managers

> Kevin Bess, KK4BFN Helen Straughn, WC4FSU

Section Emergency Coordinator – Arc Thames W4CPD

Section Public Information Coordinator-

Section Technical Coordinator – Frank Haas KB4T

Affiliated Club Coordinator -

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 SKYWARN · DMR Florida State ARES TG 31127

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

Looking for Something?

Gordon Gibby, KX4Z, has taken the time to index the articles from all the 2021 issues of **QST NFL**! The link below takes you to a pdf of all the articles in alphabetical order. This link is also on the <u>arrlnfl.org</u> website newsletter tab.

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



Newsletter of the Northern Florida Section of the ARRL

Marty Brown, N4GL, Editor 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. <u>www.ARRL-NFL.org</u> 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.