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SECTION MANAGERS MUSINGS

BY DARRELL DAVIS, KT4WX

ARRL WEST CENTRAL FLORIDA SECTION MANAGER

Welcome to the June issue of the WCF PRESSER. It is hard to believe that June, and sadly hurricane season, has arrived. It just seemed like yesterday that we were celebrating the start of another decade, at least unofficially if you count decades the last decade as being from 2011 through 2020, and the 20th Anniversary of the ARRL West Central Florida Section. Then in early to mid-March COVID-19, or as it officially known as SARS-CoV2, and the response to COVID-19 changed our lives for hopefully the short term only. Many of our fellow amateur radio operators are working reduced hours or have been laid off entirely. For me personally, my school bus driving year came to an end on March 13, and the rest of the school year, at least here in Florida, was conducted virtually. Is this



the new normal? I certainly hope not. And thankfully we are seeing the restart of normal activities here in the State of Florida, and importantly the economy which we all need to provide for our physical needs.

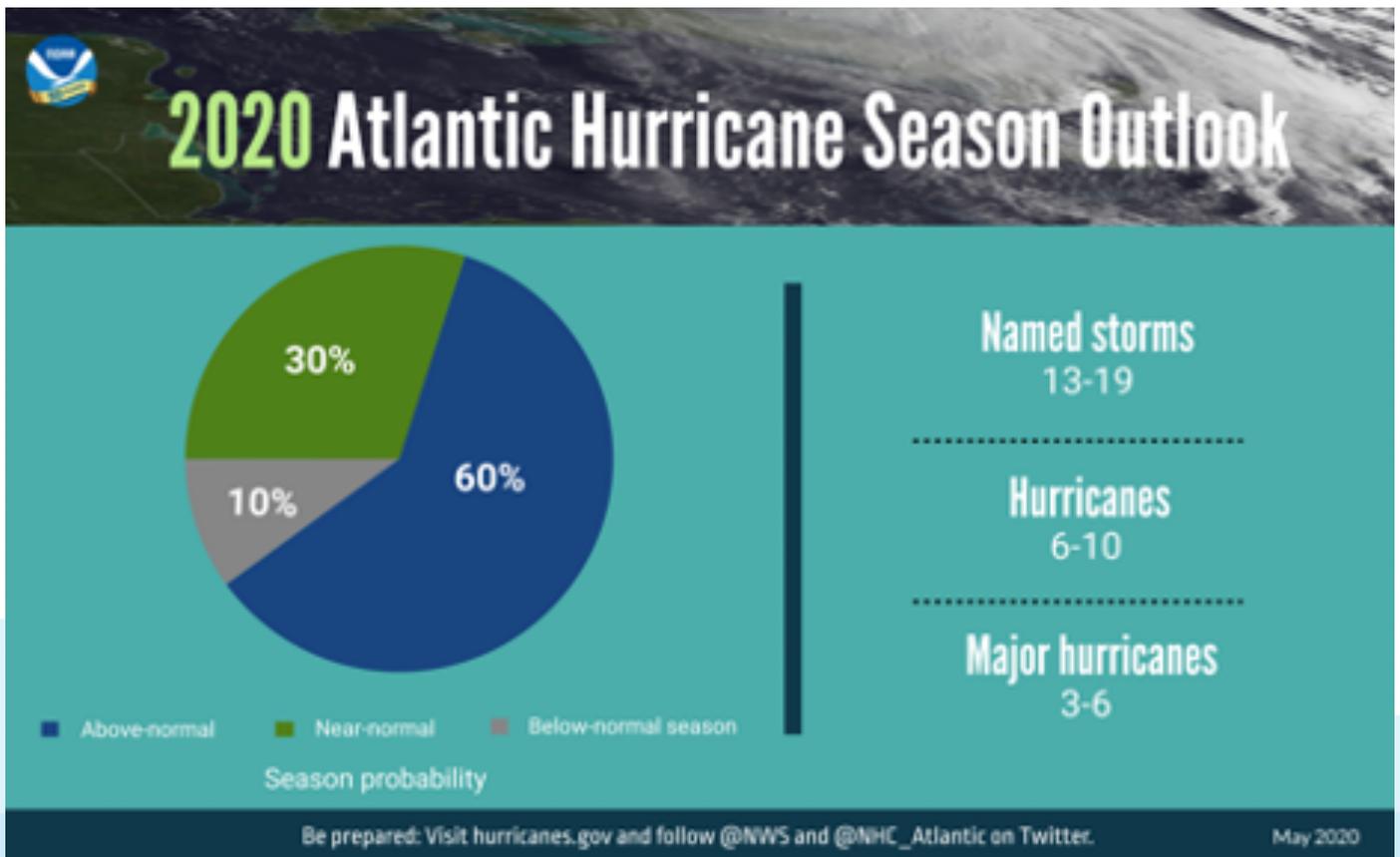
What message can we take away from all this? Extreme isolation can be harmful to your mental health. While you are still staying at home a lot for one reason or another, start or continue that project on your workbench. Get on the air and talk to your amateur radio friends and acquaintances. I have seen amateur radio activity increase on

Continued on page 2

local repeaters and on the air during this time, which is a good thing for a difficult time. Some radio clubs are either having “health and welfare” nets, having their monthly meetings on their club repeater(s), or are using video teleconferencing to conduct club meetings. For the moment the Zoom teleconferencing platform seems to be the popular one and can be accessed from a computer, tablet, or smartphone. There will be an article in the upcoming July QST, on page 61-62 called, “Online Club Meetings Ease Shelter-In-Place Isolation” which will be in your mailbox and online soon (if you are an ARRL member) on conducting club meetings virtually. Many VE teams are considering or are actually gearing up to do virtual VE exam sessions, especially with the clarification that the FCC gave on April 30th that remotely

administered exams are in fact legal. For more information on this you may read the ARRL News article at <http://www.arrl.org/news/fcc-providing-flexibility-to-volunteer-examiners-in-developing-remote-testing-methods>. When circumstances are appropriate, remote VE testing, radio clubs nets, and remote club meetings are not bad practices to continue, after COVID-19 is hopefully a distant memory.

I know many of you are disappointed with the cancellation of the “in person” ARRL West Central Florida Section Field Day Caravan, that we announced on May 26th. It was a very difficult decision, but after consulting with the members of our caravan, I felt that it was best to cancel the “in person” caravan to keep down any potential spread of COVID-19, for the safe health of our team members, and due to the



fact that many club Field Day operations will either be an operation from a home or from multiple locations, which would make a visit to a club Field Day logistically very difficult. We are in the planning stages of doing a West Central Florida Section Virtual Field Day Caravan. The West Central Florida Section Virtual Field Day Caravan will be done through one of the teleconferencing services online and will be conducted on the Saturday afternoon of Field Day. Doing a virtual caravan, will allow us to visit each site virtually that a club will operate and everyone else that is on the teleconference will be able to see each other's operation running. Details of how the virtual caravan will be conducted will be issued in an upcoming WCF SECTION PRESS RELEASE once they are finalized. We encourage all of our Field Day operations to take pictures and send them in to my email address at kt4wx@arrl.net and please make the subject of the message "Field Day Pictures - Club Name" so I will know what club the pictures are showing, and so we can publish those pictures in an upcoming issue of the WCF PRESSER. In case you have not heard, the ARRL Programs and Services Committee announced on May 28th, modification of the ARRL Field Day rules for 2020 to: (1) To allow Class D stations to contact all other stations including other Class D stations for credit and (2) To allow multiple stations operating from different locations on behalf of their local radio club to list their combined score as a club score entry. Otherwise many operating ARRL Field Day from multiple home stations on behalf of their club would not have been able to under the normal rules to operate as a club. In my opinion

the rules modification by the ARRL Programs and Service Committee was a great idea. For the full ARRL News article on the rules modification for ARRL Field Day go to <http://www.arrl.org/news/temporary-rule-waivers-announced-for-2020-arrl-field-day>.

Last of all, the 2020 Atlantic Hurricane Season began on June 1st. The 2020 Atlantic Hurricane Season is predicted to be an above average season for overall activity. You may read the NOAA Press Release at <https://www.noaa.gov/media-release/busy-atlantic-hurricane-season-predicted-for-2020>. This is a very unsettling prediction and as I am writing this, we have already have two tropical storms in the month of May, and one tropical depression is currently down in the Bay of Campeche and is forecast to emerge into the Gulf of Mexico over the next weekend. This may be our warning shot across the bow. Continue any mitigation efforts on your own property so your home will be prepared as best it can for when a storm may come. Check your hurricane supplies and check your equipment to be sure you are ready to serve. Stay tuned to the latest advisories by the National Hurricane Center. Continue your participation with your local ARES, ACS, or CERT groups in case your services may be required.

Take care, stay safe and well and talk to you all again next month.

WEST CENTRAL FLORIDA SECTION FIELD DAY CARAVAN GOING VIRTUAL FOR 2020 ARRL MAKES TWO RULES MODIFICATIONS FOR ARRL FIELD DAY 2020

After much consideration, and in consultation with the members of the Field Day Caravan team, Darrell Davis KT4WX, Section Manager for the ARRL West Central Florida Section, has decided to cancel the in person ARRL West Central Florida Section Field Day Caravan for 2020, out of a sense of precaution to help slow the spread of the COVID-19 virus and due to the fact that many local clubs will not be doing Field Day operations as a large group but possibly in multiple locations either as a club effort or as individual stations. The ARRL West Central Florida Section Field Day Caravan will be held virtually, most likely using teleconferencing, instead of conducting the caravan in its traditional format. Details of the virtual ARRL West Central Florida Section Field Day Caravan will be published on the Field Day Caravan webpage on the Section website which is at <http://arrlwcf.org/wcf-special-events/west-central-florida-section-field-day-caravan/> as soon as they are finalized. There will be a WCF SECTION PRESS RELEASE issued to announce the publications of these details. The virtual caravan is scheduled to be conducted on Saturday afternoon of Field Day.

The ARRL West Central Florida Section Field Day Caravan has been conducted by the Section Manager and other section cabinet members since the creation of



the ARRL West Central Florida Section in 2000. For many years the caravan was conducted by the Section Manager and the Section Emergency Coordinator. Starting in 2017, the caravan began to operate in multiple teams of two section cabinet members each to allow the caravan to visit all the Field Day sites on Saturday during daylight and evening hours.

On May 28th, the ARRL Programs and Services Committee made two modifications to the rules for Field Day for 2020 to facilitate operations from home stations and accommodation for clubs operating from multiple locations, such as home stations. For the full details of these changes see the ARRL News Release at <http://www.arrl.org/news/temporary-rule-waivers-announced-for-2020-arrrl-field-day>.

JOINING IN THE FUN OF CONTESTING - THREE PERSPECTIVESΩ

by *Chris Blake NX4N, Dawn Drury K2WLS, and Lu Romero W4LT*

Hello Fellow Hams, So, what's this contesting stuff all about?

This article is intended to inspire and help you take your first steps into the wonderful world of amateur radio contesting, also known as Radiosport. 'Contesting' is a blast! I started to learn the basics of contesting at our great US/Canadian annual operating event, the ARRL Field Day, in 1974 at the ripe old age of 13. I watched the pace of the CQ's, the quick exchange of information and then onto the next contact (QSO) in just seconds – I was hooked!

Like so many endeavors of life, contesting takes some practice and patience. But the journey as you start and then improve is very rewarding and you will become a better operator in all your other ham activities too. You will have more confidence in your ability to do what hams strive to do – set up and operate a radio more competently.

As a ham for 49 years, I have done many different and enjoyable ham activities, but I always gravitate back to contesting as the most fun for me. Curious? Ok, let's get started down the path of contesting: Warning – it is addictive!

There are contests for many different kinds of ham radio interests, but they all involve maximizing your ability to make accurate and efficient QSO's with other contesters. You can find contests for all modes – SSB, CW, RTTY, FT8 (and more), AM, FM, QRP, Mobile/Portable, EME and more. Contesters can be heard across our entire spectrum from 160m to 10GHz and up. There are contests that include folks who build their own gear, who own vintage gear, who like to try different antennas and even

those who operate from nearby islands (ex – Honeymoon or Sanibel), mountainous summits, National Parks and so much more.

And you can do this casually, testing your skills to build and operate an efficient radio/antenna setup, or you can compete seriously on the world stage of amateur radio. In fact, every 4 years there is a 24-hour long amateur radio International Radiosport contest, Olympics style, that pits the world's best qualified operators in the same location using identical antennas and rules. There are even judges that monitor all their contacts. Like many competitive activities you can play in the casual league, minor leagues or the major leagues. It's all tremendous fun and your main competitor is usually... yourself!

So how do you get started in contesting? If you are like many hams, whether new or experienced, you have already started to like certain activities. This is a good place to start – turning what you enjoy casually into a contesting challenge.

Like VHF/UHF? Set up a VHF/UHF station to operate during Field Day, the June VHF contest, or July CQ VHF contest. Read the rules, start making plans and have fun!

Like to operate HF SSB? Try it out at Field Day, or a State QSO Party (there's a different state QP just about every weekend and each would love to have you join the fun!).

If CW or Digital are your modes, there is plenty of contest fun for you too! Give a few of these a try – Straight Key Night, ARRL Rookie Roundup, CQ World Wide DX, CQ WPX or World Wide Digi DX Contest. And be sure to check out cwops.

org – beginning to advanced CW ops can develop their skills with online classes and weekly operating events that welcomes both members and non-members alike.

10 HELPFUL CONTESTING TIPS:

#1. Find a mentor (“Elmer”) who can guide and encourage you. Many of us are around and very willing to help!

#2. Make sure your station, big or small, works as it should for the bands/modes you want to try contesting.

#3. Read the contest rules – twice! Ask your Elmer about anything you don’t understand.

#4. Prepare for the contest – this can be as much fun as the contest itself. Perhaps setting up a mobile station, adding a new antenna or discussing the best operating strategy with your Elmer.

#5. Find a logging program that works for you and become familiar with it. N1MM+ is very powerful and is free. SD Logger is another freebie. N3FJP logging software is not free but is easy to learn and well supported. Again, an Elmer may be able to help guide you to one that meets your needs.

#6. Jump in and operate! Start by listening to other contest stations and see how they exchange calls and their contest information ‘exchange’. This could be a signal report and state, their name, a serial number or their CQ or ITU zone. Notice that good operators don’t hesitate to ask stations to slow down and repeat their info so they make sure to receive and log the Exchange correctly. Then just follow their lead – tune for a station calling CQ Contest (or CQ test, CQ FQP, CQ FD, etc.) and answer with your call. Listen and log his Exchange and then give yours in return. Voila- Your first Contest QSO! Are you nervous? GOOD! That is the

beginning of your adrenaline kicking in for the contest. It happens to all of us at the beginning of every contest. Then ‘Rinse and Repeat’ – find another Contest CQer to answer or find an open frequency and call CQ Contest yourself (always ask first if the frequency is in use). Go slow, work on accurate copy.

#7. Mistakes are OK – repeat – OK. Even world class operators make mistakes, we all do. If you don’t copy an operator’s call or exchange, just ask them to repeat it. Just slow down, go at your own pace and ask the other operator to repeat their Exchange info or to slow down. Most contesters need your contact and are very willing to slow down and repeat info you need.

#8. Be sure to log your contacts, either on paper or (hopefully) with electronic logging software. You’ll need that record to submit your contest entry. It really helps contest sponsors to have your log to verify contacts on both ends, even if you’re in a contest casually and not going for score. And, who knows – you might earn a very nice certificate. One contest, the Washington State QSO Party ‘Salmon Run’ offers real Pacific smoked salmon to top entries!

#9. Learning takes practice. Just keep plugging away, have fun and work on sending and receiving the calls and exchanges accurately. Speed will come later as you practice more. Slow and accurate is much better than fast and sloppy operating. Sometimes it helps to imagine if this exchange of information is as if it were Health and Welfare traffic – accuracy wins the day, and your operating skills will improve.

#10. Join the Florida Contest Group (FCG)! We have more than 300 members all across the state and a very active online Group that is a terrific forum to ask questions regarding your station, antennas, operating

practices and so much more. You will find an outstanding group of friendly Elmer's very happy to answer your questions, no matter how basic. The only dumb question is the one that is not asked! We have annual meetings at both the Orlando HamCation and the Melbourne Hamfest. Annual dues are a whopping \$5/year. You can get started by emailing George K5KG at K5KG@K5KG.com. Also, check out our website at <https://floridaqsoparty.org/>

Good Luck (GL) with your new adventures into Radiosport!

Vy 73 (Very Best Regards),
Chris, NX4N

(Article 1 of 3 – Continued in the July and August issues of the WCF Presser)

COMING HAMFESTS IN THE SECTION

JUNE 13

MID-JUNE PRE-ARRL FIELD DAY TAILGATE 2020

Dade City Masonic Lodge
13642 21st Street South
Dade City, FL 33523

AUGUST 22

TARCFEST SUMMER 2020

TARC Clubhouse,
7801 N. 22nd Street
Tampa, FL



NOVEMBER 14

SPARCFEST 2020

Freedom Lake Park,
9990 46th Street North
Pinellas Park, FL , FL 33782



WCF EXPERIMENTER SPRING 2020 IS PUBLISHED AND AVAILABLE FOR DOWNLOAD



The WCF EXPERIMENTER Spring 2020 issue is now available for download. To download the Spring 2020 issue and any other previous issues please go to the WCF EXPERIMENTER webpage at <http://arrlwcf.org/home/the-wcf-experimenter-technical-newsletter/>. The WCF EXPERIMENTER is published quarterly, and on occasion a supplemental issue as needed.

We try our best to get articles from authors in our Section and in the State of Florida. If not, we look for articles from authors who have written elsewhere but have not been published in a widely read amateur radio publication already. If you

have an idea that is not necessary a feature length article but something you think that is worth sharing, send it in. We would like to publish more small articles that are only one or two paragraphs, similar to what QST does with the “Hints and Hacks” column. We are targeting release of the Summer 2020 of the WCF EXPERIMENTER in the month of July. We are looking for articles for this next edition and future editions of THE WCF EXPERIMENTER. If you would like to submit an article, please send those submissions to Jim Weslager K3WR via email at weslager@gmail.com.

SECTION NET INFORMATION

Here is a list of the current Section Nets that are in operation: Please feel free to check in and participate on these nets as you are able to do so.

DAY / NET	NET	NET TIME	SYSTEM/FREQ	NET MANAGER
Daily	Eagle Net (West Central Florida Section NTS Net)	2030 hours	NI4CE Repeater System	Dave Rockwell W4PXE
Monday	West Central Florida Section ARES and Information Net	1930 hours	NI4CE Repeater System	J.C. Rivero K4RTC
Thursday	West Central Florida Section Technical Net	2100 hours	NI4CE Repeater System	Burt Wizeman K4SRQ
Saturday	West Central Florida Section ARES and Information Net	0730 hours	3940 KHz	Randy Payne K4EZM

The Section ARES Information Net on 3940 KHz will start at either 0730 or immediately following the Florida Phone Traffic Net whichever is later.

For more information on the NI4CE Repeater System, including frequencies and a coverage map go to <http://www.ni4ce.org> or visit their Facebook page at <https://www.facebook.com/ni4ce>.

The ARRL West Central Florida Section wishes to thank the West Central Florida Group Inc. for the use of the NI4CE Repeater System for the Section Nets that are on VHF and UHF.

20TH ANNIVERSARY OPERATING EVENT STILL GOING ON NOW TO CELEBRATE THE 20TH ANNIVERSARY CELEBRATION OF THE ARRL WEST CENTRAL FLORIDA SECTION.

The ARRL West Central Florida Section 20th Anniversary Operating Event was established to commemorate the 20th Anniversary of the ARRL West Central Florida Section. The ARRL West Central Florida Section 20th Anniversary Operating Event is an activation of K4WCF, the callsign of the ARRL West Central Florida Section, in each of the ten counties of the ARRL West Central Florida Section at least once, hopefully many times, throughout the year 2020. Therefore all weekends, except for ARRL Field Day, will be available on a “first come, first served” basis to any club, organization, or individual, that applies to activate K4WCF in any given county. The only restriction on activation is that the activation for a particular county must be within the county activated. The activation may be from a club station, EOC station, base station, portable or mobile fixed. Activation on VHF and UHF, including the [NI4CE Repeater System](#), is being encouraged so Technician Class licensees can join in on the fun. This will not be a contest, but simply an operating event to celebrate the anniversary of the ARRL West Central Florida Section. All log entries will be entered into the ARRL Logbook of the World. Any QSL card and or contact verification will be via ARRL LoTW.

Even with the COVID-19 situation that way it is, it does not mean that a club cannot activate K4WCF from a base station of a club member, if the social distancing guidelines are followed. Club members could take turns activating K4WCF from



their respective base stations using their club callsign, similar to what many are planning for ARRL Field Day. The only criteria again is that the activation of a county must be in within that county.

The West Central Florida Section is still taking applications for ARES and or ACS groups, CERT groups, or radio clubs to apply to be authorized to activate K4WCF for a weekend at a time for each respective weekend. To apply to operate a K4WCF ARRL West Central Florida Section 20th Anniversary Operating Event station in your county, please use the Contact Form on the Section website. For the full list of activation criteria, operating rules, etc., may be found on the K4WCF 20th Anniversary Operating Event webpage at <http://arrlwcf.org/wcf-special-events/k4wcf-20th-anniversary-operating-event-2020/>.

LET'S GET CREATIVE THIS YEAR ON FIELD DAY

By Dan Romanchik, KB6NU

Since many of us are still hunkering down, and that doesn't look like it's going to change much by the end of June, Field Day is going to be a lot different this year.



Our club has canceled our club event, and I'm really going to miss helping newcomers operate the GOTA station, the food, and all the camaraderie. That doesn't mean that Field Day can't still be fun, though. Let's get creative!

First, note that the ARRL has modified the Field Day rules for this year. The biggest change is that Class D stations, that is home stations using commercial power, can now work other Class D stations for points. Previously, this wasn't allowed.

The second change is that the ARRL will publish aggregate club scores this year. In previous years, this was only done for Class A and Class F entries. Remember, though, Field Day isn't a contest (yeah, right!).

Personally, I plan to operate 1B-Battery. I'm going to set up my KX3 on the front deck and power it with a LiFePo battery charged by a recently-acquired solar panel to get the 100 point bonus for alternate power. For an antenna, I plan to set up my 20m/40m fan inverted-V "GOTA antenna" in the front yard.

I'm going to shoot for other bonus points, too:

- copy the bulletin—no brainer.
- promote my location on social media—I am going to get on NextDoor

and invite neighbors over to watch from an acceptable "social distance."

- put some literature down at the bottom of the hill near the street and claim a public information table.
- send a press release to the local online paper and claim a media publicity credit.
- perhaps get someone under 20 to come and operate while I coach from an acceptable "social distance."

If Class B isn't your cup of tea, check out the presentation, "Field Day and Social Distancing," (https://docs.google.com/presentation/d/e/2PACX-1vSWypTtJ_R0s-UmysOEhQWwJwBlMrOavXqfs5AvigQzad8Z1c-3JFn9TMI5ewxc8VVIIIX-2g6bOTpUFD/pub?start=false&loop=false&delayms=3000&slide=id.g774df1657a_0_39) by Anthony, K8ZT. It has a lot of great ideas, including ideas on how to operate mobile (Class C).

Field Day doesn't have to be a downer this year. Get creative and have some fun.

This article originally appeared in the June 2020 issue of the WormHole newsletter.

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not thinking up new ways to enjoy Field Day, he likes to build stuff and operate CW on the HF bands.



SECTION TRAFFIC MANAGERS REPORT

by Doug Williams N2DW

Section Traffic Manager, ARRL West Central Florida Section

West Central Florida STM Reports

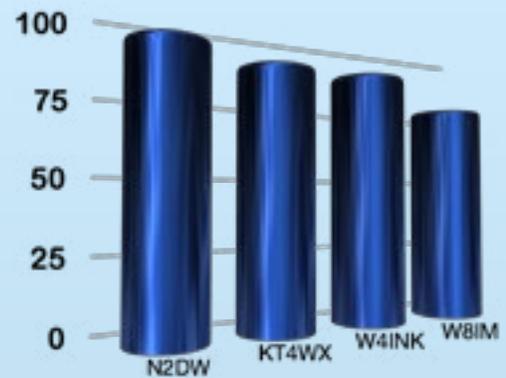
April 2020

Station Activity Reports (SAR)



Call Sign	Originate	Receive	Sent	Delivered	Total
K4EEI	1	8	11	1	21
N2DW	4	9	8	0	21
W8IM	1	3	11	1	16
KM4BRQ	2	4	2	4	12
W4INK	0	8	0	0	8
KT4WX	0	2	2	2	6

Public Service Honor Roll



Call Sign	Total
N2DW	91
KT4WX	86
W4INK	86
W8IM	76

West Central Net Activity Reports

Net Name	Sessions	Stations	Traffic	Minutes	Manager
EAGLE NET	30	1562	32	1025	W4PXE
SPARC	36	717	36	1293	KN4LUZ
SRQUARES	5	105	5	92	KB2ICN
SARASOTA ERC	5	98	5	86	KB2ICN

ARRL FIELD DAY 2020

The most popular on-the-air operating event in amateur radio. Gear up and get in on all the action and fun!

find us on [facebook](#) follow us [twitter](#)

ARRL Field Day June 27-28, 2020
Open to the Public.

The location is at the Millennium Academy
10005 Ridge Rd, New Port Richey, FL 34654
For more information email
fieldday@gulfcoastarc.org

www.arrl.org/FieldDay

Field Day Purpose

- Emergency preparedness
 - Training ourselves
 - Demonstration of emergency preparedness to the public, government, and served agencies
 - Experimentation with antennas, portable equipment, and unusual power sources
- Social gathering
 - Eating and drinking
 - Camaraderie and friendship
 - Camping
 - Weekend "getaway"

Here are the other Field Day Locations that are planning Field Day that are listed on the ARRL Field Day Locator at press time. For more details on contact info including phone numbers for these please go to the ARRL Field Day Locator at <http://www.arrl.org/field-day-locator>.

Charlotte Amateur Radio Society - WX4E
Charlotte Harbor Environmental Center
10941 Burnt Store Rd, Punta Gorda, FL 33955
Contact Dave Weinstein K3FHP - Email: info@carsfl.org - Web: <http://carsfl.org> or <http://cars-fl.groups.io/g/main/message/388>

Northport Amateur Radio Club - W4NPT
North Port Fire and Rescue Station -
4980 City Center Blvd, North Port Florida, FL 34286
Contact Brian Miller KJ4DOW - Email: kj4dow@gmail.com - Web: <http://www.w4npt.org>

Come join us For this years ARRL Amateur Radio Field Day. 24 hours event. Radio, food, and fun!!
Three ham radio clubs joining up for one BIG event!

ARRL FIELD DAY 2020

The most popular on-the-air operating event in amateur radio. Gear up and get in on all the action and fun!

ARRL Field Day June 27-28, 2020
Open to the Public.

6211 Dean Dairy Road Zephyrhills FL 33541
Setup time is 11am. The event runs 2pm
Saturday to 2 pm Sunday.
For more information visit one of our Clubs
websites zaarc.org -OR- eparsonline.org

www.arrl.org/FieldDay

Tampa Amateur Radio Club - N4TP

Tampa ARC Clubhouse - 7801 N. 22nd Street, Tampa, FL
Contact Bill Bode N4WEB - Email: n4web@arrl.net - Web: <http://hamclub.org>

Suncoast Amateur Radio Club - WA4T

12182 Bethwood Ave, New Port Richey, FL
Contact Don Nystrom KA2KDP - Email: ka2kdp@qsl.net Web: <http://sarqfl.com>

Note: Many amateur radio clubs are not holding organized ARRL Field Day operations or are holding ARRL Field Day Operations that are not open to the public due as a precaution against COVID-19 transmission. Some in this listing are not public locations and it is recommended if you are interested in visiting a Field Day location that you contact the respective point of contact for the respective Field Day operation before you plan to visit.

TECHNICAL TIPS

*By Dave Birnbaum, K2LYV
Technical Coordinator - ARRL
West Central Florida Section*

The QCX Transceiver

I want to spend part of this column talking about a small QRP transceiver that embodies some really clever use of modern technologies. The rig I'm talking about is the QCX transceiver from QRP-labs. The whole transceiver is on a PCB about 4x5". The rig uses a Si5351 clock generator controlled by a Atmel 328P – the same CPU used in the Arduino.

The core of the receiver is a direct conversion using a Tayloe detector. This is a circuit that has been around for about a decade now. It uses an analog switch driven by a signal from the Si5351 to generate IQ signals at audio frequencies. There's no IF: the conversion is direct to baseband audio. One surprising thing about the Tayloe detector is how sensitive the receiver is. All the gain is done at audio frequencies so the circuits are simpler and easier to keep stable. Each of the IQ signals is amplified and filtered and combined to give SSB reception. The effective filter width is only 200Hz so the rig is quite selective. The IQ signals are combined to



generate the final audio which is amplified once more to drive a set of headphones. While none of the individual parts of the receiver design are new, the combination is quite effective. I have found that the rig is capable of detecting very weak signals.

The rig can be built for a band of your choice (80,60,40,30,20,17). The tuning is continuous across the band. Actually the tuning can cover a broad range of frequencies with reduced sensitivity when tuning out of the band you've configured it for.

The transmitter side of the rig is actually pretty simple in concept. A class-E amplifier is driven by another output from the Si5351. Keying is done by control of the B+ (12V) power to the amplifier. For those of you who aren't familiar with class E amplifiers, it is a design that drives the transistors with a high speed switching signal. The amplifier is followed by a low-pass filter to remove harmonics. The big advantage of the class E design is the high efficiency which allows three parallel FETs to generate 5W output.

The Atmel CPU is programmed to provide a broad variety of features. Some





of these include: a built in iambic keyer, pre-stored messages, a CW decoder and more. All of these can be controlled via a set of pushbuttons and a rotary encoder and displayed on a 16x2 LCD panel. The whole rig can be run for many hours from a 12V 12000mAh Li-ion cell pack which makes it a great rig for a QRP “expedition” to a local park.

The construction uses through hole parts, there are a few SMB devices which come already soldered to the PCB. The instruction manual is one of the best I’ve ever seen. Aside from the construction part of the manual, there is an extensive user manual and detailed description of the design of the radio.

Setting USB ports on Linux

One of the nice things about using Linux for your ham radio operating is the ability to set up the USB ports so that when you plug in your devices they are automatically identifies and given a name that doesn’t depend on which USB port the device is plugged into or in which order multiple devices are plugged in.

Without going into detail here you can

set up a set of rules that allow the system to detect a particular device and assign it to a name. So instead of figuring out which USB port is your radio today, it can be directly addressed as /dev/radio (or whatever name you like).

If you want details for doing this, you can Google for “udev rules” to get the details of the syntax used to set the whole thing up. If there’s enough demand I will write it up in gory detail for either the Experimenter or

a column in the Presser. Let me know.

Field Day

Many of us are bummed out about having restrictions on normal FD operations. But there are still ways to participate. ARRL has just modified the rules so that each of us can operate from home using commercial power. If you include a club with you log submission all the individual scores for the club are added together to give a club score.

But there are also opportunities to do something new and different. After all in the spirit of FD we are trying to show how we can adapt to unusual conditions and still maintain communication capability. If some club is using anything using remote connections or other tech solutions, let me know, or better, write a note for this column describing what you’ve done.