



Azalea Coast Amateur Radio Club

June-July 2021
Edition



From the Editor

It's June, so it must be ARRL Field Day month! The club has Field Day 2021 planned and look further inside this newsletter for details. June is also traditionally Museum Ships Weekend where over 100 museum ships and entities like the USS North Carolina (BB-55) fire up radios onboard to make contact with the world. More info on that is also inside. Summer trip planned? Taking a radio with you? Let the club members know via the reflector so we can look for you on the airwaves. POTA, SOTA and IOTA are all possibilities in the nice warm weather...be adventurous and try something new!

Have a question you want answered? Curious about something ham related but need some ideas or guidance? Stumped about something and need help? We have mentors that can give you the advice you need. Please see the "Need help? Contact us" link on the home page of ac4rc.org .

73! - Jeff (W4BIX) – w4bix@arrl.net

ACARC

President

Jeff McCulloch
(K4JEL)

Vice President

Mike Hartmann
(N12S)

Secretary

Norman Clemmons
(KI4YSY)

Treasurer

Anita Jacobs
(KG4IIL)

**Azalea Coast
Amateur Radio Club**
PO Box 4044
Wilmington, NC 28406

www.ac4rc.org



Upcoming Important Club Events

- June 5th-6th** Museum Ships Weekend
USS North Carolina (BB-55)
- June 12th** VEC Testing 10:00 AM
CFCC North campus
- June 15th** Monthly club meeting, 7:00 PM
- July 20th** Location TBA
- June 26th** ARRL Field Day, Ogden Park
- Every Monday** 2 Meter Rag Chew, 9:00PM
147.18MHz, +0.600 offset, 88.5 tone
Norman (KI4YSY) is net control

POTA, SOTA, IOTA...Oh My!

by Jeff (W4BIX)

With apologies to the “The Wizard of Oz” I couldn’t resist this title. Summer is here and some are looking for ideas to operate outside in the nice weather. We’ve touched on the “...ota” themes in past issues, but for the sake of new members (and to refresh the brains of older) I’ll touch on it again briefly.

The biggest three “On The Air” OTA programs for operating outside are POTA (Parks on the Air), SOTA (Summits on the Air) and IOTA (Islands on the Air). Here are links to each program:

POTA: <https://parksontheair.com/>

SOTA: <https://www.sota.org.uk/>

IOTA: <https://www.iota-world.org/>

POTA is Parks on the Air. Basic premise is that you set up your radio and antenna in a designated park from the POTA database and make contacts. You can list your “activation” on the POTA website to garner more contacts. As park of your “CQ” just be sure to mention that you are a “Parks on the Air station.” It can be as simple as operating at a picnic table next to your vehicle or hiking into a remote area of a park.



SOTA is more challenging as this is Summits on the Air. It may be a short stroll from a summit parking lot or it can be a several miles hike to the summit. There are no SOTA summits close to Wilmington, but if you want to make a weekend trip of it or are planning a longer vacation keep SOTA in mind.



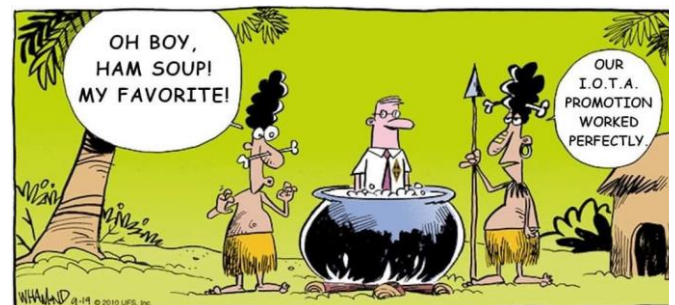
IOTA is Islands on the Air but don’t let the name fool you. You may not need a boat! The island set in the WILM area is grouped with the designation of NA-112 and includes the following:

NORTH CAROLINA STATE WEST (BRUNSWICK TO CARTERET COUNTY) group (=Bald Head [Cape Fear], Battery, Bean, Bogue Banks/Emerald, Cat, Dog, Long, Long Marsh, Lovett, Masonboro, Piney, Smith, Sunset Beach Island, Wood) (Note: not Figure Eight, Harbor, Oak, Ocean Isle Beach, Topsail, Wrightsville Beach)

Why not every island in our area like Wrightsville Beach? From the IOTA list:

Note that most islands bordering the East Coast Intracoastal Waterway fail the 200 meter minimum sea separation rule and that for additional islands to be listed, clear qualification needs to be demonstrated.

Get out there and “...ota”!



2021 Field Day – Save the Date!

by Mike (N1ZS)

Field Day is a go for 2021. AC4RC will operate field day from Ogden Park Shelter #1. Our reservation is confirmed. The event operating start time is 2pm local time Saturday June 26 and runs until 2pm local time Sunday June 27. We'll set up earlier than 2pm of course, and let you know what the set up start time is closer to the event.

Current state of COVID-19 restrictions in NC will not pose a problem for us in our operation, but the ARRL is allowing aggregate scoring for FD again this year, if you prefer to operate from your home, and want your score to be added to the clubs effort.

Shelter #1 affords plenty of room for wire and beam antennas. Whether we raise a beam antenna depends on how many members are available for set up and take down. We need five people to safely assemble, raise and lower the mast & beam.

We are not sure yet how many stations we will operate - meaning one station or more. Last year we operated 2 stations. This depends on the number of members participating.

We are tentatively planning to operate overnight, which we did last year. Whether or not we operate the full 24 hours will again depend on whether we have members who are available to operate. Weather is also a factor here - it's my understanding that last year's field day was the first in many years where the weather was good for the entire event.

We would like to try for as many bonus points as possible. Based on last year - the gaps we had were copying/transcribing the Field Day message from the ARRL, Satellite operation bonus, and sending a radiogram to our section manager through a net. So, if any of our members are experienced at satellite ops, or sending radiograms via traffic nets, or have time available

to record and transcribe the ARRL Field Day message - by all means please let me know.

Please take note of the date, and if your schedule (and significant other) allows for participation in our Field Day op - please let me know your plans for attending so we can decide about the antenna, and we can be sure we have enough food/drinks on hand.

I will send out updates and reminders as Field Day draws near.

Hope you can make it!

Asheville Radio Museum obtains a reproduction of a 1939 ham radio station

from the AVL Radio Museum

The Asheville Radio Museum recently was the recipient of a 1930s-era ham radio station reproduction built by Rick Rogers, K5RCR. Rick, a former LSU professor of Electrophysiology, constructed the receiver based on a schematic published in the February 1947 issue of QST.

"I've been a ham since I was 14," said Rick. "As I grew into the hobby during the 1960s, I was curious to understand what it was like for a ham of modest means during the height of the depression to build and operate a simple station. It was a very eye-opening experience as its construction required a lot of hard work and long hours!"

The station consists of a crystal-controlled transmitter, regenerative receiver and power supply—all home built with available parts. From his QRZ page, Rick explains, "The transmitter is a "new" version of a common (for 1939) homebrew two-tube, 10-watt transmitter using a 6AG7 and 807 tubes. The 4-tube regenerative receiver has a 75, two 6SQ7s, and a 6F6 tube. A home brew power supply provides the necessary power."

Rick further explains, “The first 6SQ7 is hooked up as a cathode follower between the detector and the first audio amp. This enormously improves stability. You have only a vague idea of the frequency you receive, although you can get a pretty good idea about the center of the crystal frequency for the transmitter with some practice. This is like the old novice days with crystal-controlled transmitters and inexpensive "novice-grade" receivers. I had my first QSO on this rig within a few minutes of its initial firing up. It was with K8JD - about 1000 miles north of my QTH. That feeling can't be beaten - working someone that far away on a rig that was a pile of old parts the week before!”

Rick’s station can be viewed at the Asheville Radio Museum, but due to COVID restrictions, the museum may be closed during regular hours. Please check our website for current information or to request a private tour for up to four visitors.

Did I Get an Amplifier?

by Pete (WB3FYR)

Take a close look at the FT4 contact below. What was my signal report from the distant end? It’s “R+32”. Wow!

UTC	dB	DI	Freq	Message
225607	Tx		2098	+ CQ WB3FYR FM14
225622	Tx		2098	+ CQ WB3FYR FM14
225637	Tx		2098	+ CQ WB3FYR FM14
225645	-12	0.8	2098	+ WB3FYR WA5FMY EL29
225652	Tx		2098	+ WA5FMY WB3FYR -12
225707	Tx		2098	+ WA5FMY WB3FYR -12
225715	-1	0.8	1275	+ WB3FYR WA5FMY R+32
225722	Tx		2098	+ WA5FMY WB3FYR RR73
225730	-8	0.8	1274	+ WB3FYR WA5FMY 73
225737	5	0.2	1274	+ CQ L21RCA FF99

First, for members new to digital modes, this is a quick lesson in using WSJT-X, a free digital software package. It has several “modes”, that is, ways of communicating and receiving information. This particular mode is FT4, a fast mode. How do I know it is FT4 since the software

has many modes including the more popular FT8? Experienced WSJT-X users will notice the plus sign “+” in about the middle of each line. If it had a tilde “~”, this would indicate FT8 mode.

Furthermore

- Each yellow line is me transmitting to someone
- Each red line is someone transmitting back to me
- The green line is the CQ (calling anyone) process

The overall process above is:

1. I (WB3FYR) transmitted CQ + Grid Square (FM14)
2. WA5FMY responded with his or her Grid Square (EL29), which is their general location. From that, WSJT-X calculates the general azimuth (257 degrees) and distance (1110 miles) from me to the responder.
3. Then I sent the responder his signal report (-12)
4. Then the responder sent me my signal report (+32)
5. Then we both said goodbye (RR73, then 73)
6. This process can be automatic or manual.

(Note: user manual is free & online also)

Now back to my great signal report, a “+32”. The signal report depends on my equipment including antenna, power setting and location, the distant end’s equipment, antenna and location plus the propagation conditions between the two locations at that particular moment. A plus 32 is a wow to me because I only put out 15 watts (NO amplifier) to an end-fed antenna, which is basically a long wire.

Here’s where I throw down the gauntlet, can anyone beat me? Somebody probably can... maybe.

PS: Contact details - WA5FMY contact 2021-03-14, 22:56 UTC, 20meter – 14.0821, Baytown, TX, Confirmed via QRZ

April VE Testing Results

by Steve (AJ4JJ)

We had a good test session on Saturday, April 10th. We had five to test and as a result we have two new Technicians, one new General and one new Extra class operators. We also had seven VE come out for the testing and thanks to all the VE that assisted.

Next VE testing session: June 12th @ 10:00 AM

FCC Auto-Registration Feature for Exam Applicants to be Discontinued on May 20

from the ARRL VE-list Digest, Vol 21, Issue 1

Auto-registration in the FCC Commission Registration System (CORES) for amateur radio exam candidates using a Social Security number will be discontinued on May 20, 2021.

VECs/VE teams should stop accepting social security numbers at sessions immediately.

Applicants must use an FCC Registration Number which you can get on FRN website:

(<https://www.fcc.gov/wireless/support/universal-licensing-system-uls-resources/getting-fcc-registration-number-frn/>) for all license transactions with the FCC. Examinees must register in CORES

(<https://apps.fcc.gov/cores/userLogin.do>) and receive an FRN before exam day. Starting on May 20, electronic batch filed applications that do not include a candidate's FRN will be rejected. The Social Security/Licensee ID Field will be disabled.

An instructional video (<https://www.fcc.gov/rofrn>) provides step-by-step instructions on how to establish a CORES account, which is necessary for licensees to make administrative updates and download electronic license authorizations.

After June 29, all filers must provide an email address (<http://www.arrl.org/news/fcc-to-require-email-address-on-applications-starting-on-june-29-2021>) on all applications. When an email is provided, applicants will receive an official electronic copy of their licenses once granted (allow incoming email from authorizations@fcc.gov). If no email is provided when filing on or after June 29, applications will be rejected. ARRL VEC suggests that those without access to email to use the email address of a family member or friend.

Licensees need to log in to the Universal Licensing System (ULS) to download their authorizations (<https://www.fcc.gov/support/universal-licensing-system-uls-resources/how-obtain-official-authorizations-uls>). The FCC no longer issues paper copies.

Emergency Communications Update

by Bill Morine, N2COP

ARRL Vice Director – Roanoke Division

June marks the beginning of the Atlantic hurricane season, and this year forecasters are predicting an above average year for storms. Those who attended the May 18 in-person ACARC club meeting at Ogden Park or viewed it via Zoom saw an explanation as to what is happening with Amateur Radio emergency communications through New Hanover Emergency Management.

For the past few decades, New Hanover's ARES® organization (Amateur Radio Emergency Services®) has worked in conjunction with New Hanover Emergency Management in supplying

backup communications in disasters. Longtime members will remember when the county's Emergency Operations Center (EOC) was in a cramped room on 4th Street downtown, or when Governor Jim Hunt spoke to Ricky Tharrington, KD4JRX, during Hurricane Fran in 1996 to ask what Wilmington needed.



Today, emergency communications, now nicknamed "EmCOMM", is more resilient thanks to hardened, more reliable commercial systems. Amateur Radio is still needed in EmCOMM, but emergency response as a whole has become more professional. Since the 2001 terrorist attacks and Hurricane Katrina, federal and state agencies, along with Non-Governmental organizations (NGOs) like the Red Cross and the Salvation Army, have standardized response operations by adopting procedures known as the Incident Command System, or ICS. ICS is a training system offered through FEMA. It has four introductory courses offered online numbered ICS 100, 200, 700 and 800. These basic four classes take about four to six hours to complete, and having them permits you to join federal and state EmCOMM deployments, as well as those sponsored by local government agencies and NGOs which require ICS training. There are advanced ICS courses for those who want to pursue higher level engagement, such as AUXCOMM (which is short for AUXiliary COMMunications) and COM-L, or COMunications Leader. Presently, about 800 Amateur Radio operators across North Carolina have completed the four basic ICS courses (100, 200, 700 and 800) and there are now about 75 COM-L trained operators across the state.

EmCOMM and public service, such as helping with communications during races and parades, may not be of interest to you, but it is the aspect of Amateur Radio most recognized and appreciated by public officials and regulators.

With today's robust phone and internet networks, the public does not get as excited with distant communications as it once did. However, government officials appreciate knowing there is a corps of civilian trained communicators who can respond when needed. In its introduction, Part 97 of the federal Code of Regulations (CFR) which oversees Amateur Radio states emergency communications is a fundamental purpose of the Amateur Radio service.

The landscape of overall emergency response is changing. ICS training has helped volunteers with all kinds of skill sets to work in better harmony with one another during emergency drills and disaster relief. ARES and AUXCOMM are continually seeking qualified volunteer operators, and ARRL hopes you will strongly consider joining one or both. If formal participation through a sponsoring agency is not something to which you wish to commit, ICS training is still highly beneficial in the knowledge you will get from taking the four introductory classes. According to studies from the hurricane research center at Florida International University, New Hanover and Brunswick counties are among counties most vulnerable to a hurricane strike. Being trained and prepared will ultimately help you, your family and your community.



May Club Meeting In-person!

by Jeff (W4BIX) and Bill Morine, N2COP
ARRL Vice Director – Roanoke Division



FINALLY – the May monthly club meeting was an in-person event at Ogden Park with a few of us watching on Zoom. Jeff (K4JEL) invited two members of the New Hanover County Emergency Operations Center to give a presentation about the county emergency operations and EmCOMM (Emergency Communications).



In the picture, guy standing up on right is Zak Whicker (KK4TBI), Deputy Director of New

Hanover Emergency Management. Sitting is Andy Wittman (KK4ZKP), Assistant Emergency Coordinator (AEC) for New Hanover county ARES®, Amateur Radio Emergency Services®, an ARRL service.

Zak is expanding ARES and AUXCOMM, the federal Dept. of Homeland Security's (DHS) emergency communications response system, in New Hanover county. ARES and AUXCOMM are partners in disaster communications. The main difference is that official North Carolina Emergency Management (NCEM) deployments use AUXCOMM credentialed operators who have completed FEMA's NIMS/ICS introductory courses. NIMS/ICS stands for National Incident Management System/Incident Command Structure. ARES does not require NIMS/ICS training, but AUXCOMM operators in emergency operations centers and shelters rely on ARES operators in the field to supply vital information in a disaster. Races like marathons and triathlons are excellent events to practice ARES and AUXCOMM training.

In their May 18 presentation, Zak and Andy explained how races apply ARES and AUXCOMM practices, and invited ACARC members to join ARES and AUXCOMM. Also ACARC members got to tour the New Hanover Emergency Management mobile command center bus which Zak brought to the meeting.



June/July 2021

Contest Calendar

From WA7BNM

<https://www.contestcalendar.com/>

June 2021	
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jun 1
+ QCX Challenge	0300Z-0400Z, Jun 1
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 1
+ Phone Weekly Test - Fray	0230Z-0300Z, Jun 2
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 2
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jun 2
+ CWops Mini-CWT Test	1900Z-2000Z, Jun 2
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Jun 3 and 0200Z-0300Z, Jun 4
+ CWops Mini-CWT Test	0300Z-0400Z, Jun 3
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 3
+ NRAU 10m Activity Contest	1700Z-1800Z, Jun 3 (CW) and 1800Z-1900Z, Jun 3 (SSB) and 1900Z-2000Z, Jun 3 (FM) and 2000Z-2100Z, Jun 3 (Dig)
+ EACW Meeting	1900Z-2000Z, Jun 3
+ SKCC Sprint Europe	1900Z-2100Z, Jun 3
+ PODXS 070 Club Three Day Weekend Contest	0000Z, Jun 4 to 2359Z, Jun 6
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 4
+ NCCC Sprint	0230Z-0300Z, Jun 4
+ HA3NS Sprint Memorial Contest	1900Z-1929Z, Jun 4 (40m) and 1930Z-1959Z, Jun 4 (80m)
+ K1USN Slow Speed Test	2000Z-2100Z, Jun 4
+ 10-10 Int. Open Season PSK Contest	0000Z, Jun 5 to 2400Z, Jun 6
+ PVRC Reunion	0000Z-0200Z, Jun 5 and 0000Z-0200Z, Jun 6
+ DigiFest	0400Z-1200Z, Jun 5 and 2000Z, Jun 5 to 0400Z, Jun 6 and 1200Z-2000Z, Jun 6
+ KANHAM Contest	0600Z, Jun 5 to 0600Z, Jun 6
+ Wake-Up! QRP Sprint	0600Z-0629Z, Jun 5 and 0630Z-0659Z, Jun 5 and 0700Z-0729Z, Jun 5 and 0730Z-0800Z, Jun 5
+ Tisza Cup CW Contest	1200Z, Jun 5 to 1159Z, Jun 6
+ UKSMG Summer Contest	1300Z, Jun 5 to 1300Z, Jun 6
+ Kentucky QSO Party	1400Z, June 5 to 0200Z, Jun 6
+ RSGB National Field Day	1500Z, Jun 5 to 1500Z, Jun 6
+ FULL-LRB HF Contest	1800Z, Jun 5 to 1200Z, Jun 6
+ Cookie Crumble QRP Contest	1700Z-2200Z, Jun 6

+ K1USN Slow Speed Test	0000Z-0100Z, Jun 7
+ RSGB 80m Club Championship, Data	1900Z-2030Z, Jun 7
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jun 8
+ ARS Spartan Sprint	0100Z-0300Z, Jun 8
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 8
+ NAQCC CW Sprint	0030Z-0230Z, Jun 9
+ Phone Weekly Test - Fray	0230Z-0300Z, Jun 9
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 9
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jun 9
+ CWops Mini-CWT Test	1900Z-2000Z, Jun 9
+ CWops Mini-CWT Test	0300Z-0400Z, Jun 10
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 10
+ EACW Meeting	1900Z-2000Z, Jun 10
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 11
+ NCCC Sprint	0230Z-0300Z, Jun 11
+ K1USN Slow Speed Test	2000Z-2100Z, Jun 11
+ VK Shires Contest	0000Z-2359Z, Jun 12
+ DRCG WW RTTY Contest	0000Z-0759Z, Jun 12 and 1600Z-2359Z, Jun 12 and 0800Z-1559Z, Jun 13
+ SMIRK Contest	0000Z, Jun 12 to 2400Z, Jun 13
+ Asia-Pacific Sprint, SSB	1100Z-1300Z, Jun 12
+ Portugal Day Contest	1200Z, Jun 12 to 1200Z, Jun 13
+ SKCC Weekend Sprintathon	1200Z, Jun 12 to 2400Z, Jun 13
+ AGCW VHF/UHF Contest	1400Z-1700Z, Jun 12 (144) and 1700Z-1800Z, Jun 12 (432)
+ GACW WWSA CW DX Contest	1500Z, Jun 12 to 1500Z, Jun 13
+ REF DDFM 6m Contest	1600Z, Jun 12 to 1600Z, Jun 13
+ ARRL June VHF Contest	1800Z, Jun 12 to 0259Z, Jun 14
+ K1USN Slow Speed Test	0000Z-0100Z, Jun 14
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jun 14
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jun 15
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 15
+ NAQCC CW Sprint	0030Z-0230Z, Jun 16
+ Phone Weekly Test - Fray	0230Z-0300Z, Jun 16
+ SARL Youth Sprint	1200Z-1400Z, Jun 16
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 16
+ CWops Mini-CWT Test	1900Z-2000Z, Jun 16
+ RSGB 80m Club Championship, CW	1900Z-2030Z, Jun 16
+ CWops Mini-CWT Test	0300Z-0400Z, Jun 17
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 17
+ EACW Meeting	1900Z-2000Z, Jun 17
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 18
+ NCCC Sprint	0230Z-0300Z, Jun 18
+ K1USN Slow Speed Test	2000Z-2100Z, Jun 18
+ All Asian DX Contest, CW	0000Z, Jun 19 to 2400Z, Jun 20
+ Battle of Carabobo International Contest	0000Z-2400Z, Jun 19

+ Ukrainian DX Classic RTTY Contest	1200Z, Jun 19 to 1159Z, Jun 20
+ IARU Region 1 50/70 MHz Contest	1400Z, Jun 19 to 1400Z, Jun 20
+ Stew Perry Topband Challenge	1500Z, Jun 19 to 1500Z, Jun 20
+ West Virginia QSO Party	1600Z, Jun 19 to 0400Z, Jun 20
+ ARRL Kids Day	1800Z-2359Z, Jun 19
+ Feld Hell Sprint	1800Z-1959Z, Jun 19
+ WAB 50 MHz Phone	0800Z-1400Z, Jun 20
+ Run for the Bacon QRP Contest	2300Z, Jun 20 to 0100Z, Jun 21
+ K1USN Slow Speed Test	0000Z-0100Z, Jun 21
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jun 22
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 22
+ SKCC Sprint	0000Z-0200Z, Jun 23
+ Phone Weekly Test - Fray	0230Z-0300Z, Jun 23
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 23
+ CWops Mini-CWT Test	1900Z-2000Z, Jun 23
+ CWops Mini-CWT Test	0300Z-0400Z, Jun 24
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 24
+ EACW Meeting	1900Z-2000Z, Jun 24
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, Jun 24
+ NCCC RTTY Sprint	0145Z-0215Z, Jun 25
+ NCCC Sprint	0230Z-0300Z, Jun 25
+ K1USN Slow Speed Test	2000Z-2100Z, Jun 25
+ UFT QRP Contest	0600Z-0900Z, Jun 26 and 1400Z-1700Z, Jun 26
+ His Maj. King of Spain Contest, SSB	1200Z, Jun 26 to 1200Z, Jun 27
+ Ukrainian DX DIGI Contest	1200Z, Jun 26 to 1200Z, Jun 27
+ ARRL Field Day	1800Z, Jun 26 to 2100Z, Jun 27
+ K1USN Slow Speed Test	0000Z-0100Z, Jun 28
+ QCX Challenge	1300Z-1400Z, Jun 28
+ RSGB FT4 Contest Series	1900Z-2030Z, Jun 28
+ QCX Challenge	1900Z-2000Z, Jun 28
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jun 29
+ QCX Challenge	0300Z-0400Z, Jun 29
+ RTTYOPS Weeksprint	1700Z-1900Z, Jun 29
+ Phone Weekly Test - Fray	0230Z-0300Z, Jun 30
+ CWops Mini-CWT Test	1300Z-1400Z, Jun 30
+ CWops Mini-CWT Test	1900Z-2000Z, Jun 30
July 2021	
+ RAC Canada Day Contest	0000Z-2359Z, Jul 1
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 1
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 1
+ NRAU 10m Activity Contest	1700Z-1800Z, Jul 1 (CW) and 1800Z-1900Z, Jul 1 (SSB) and 1900Z-2000Z, Jul 1 (FM) and 2000Z-2100Z, Jul 1 (Dig)
+ EACW Meeting	1900Z-2000Z, Jul 1
+ SKCC Sprint Europe	1900Z-2100Z, Jul 1

+ NCCC RTTY Sprint	0145Z-0215Z, Jul 2
+ NCCC Sprint	0230Z-0300Z, Jul 2
+ K1USN Slow Speed Test	2000Z-2100Z, Jul 2
+ DL-DX RTTY Contest	1100Z, Jul 3 to 1059Z, Jul 4
+ Marconi Memorial HF Contest	1400Z, Jul 3 to 1400Z, Jul 4
+ TA VHF/UHF Contest	1500Z, Jul 3 to 1500Z, Jul 4
+ Original QRP Contest	1500Z, Jul 3 to 1500Z, Jul 4
+ PODXS 070 Club 40m Firecracker Sprint	2000Z, Jul 3 to 2000Z, Jul 4
+ K1USN Slow Speed Test	0000Z-0100Z, Jul 5
+ RSGB 80m Club Championship, CW	1900Z-2030Z, Jul 5
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 6
+ ARS Spartan Sprint	0100Z-0300Z, Jul 6
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 6
+ Phone Weekly Test - Fray	0230Z-0300Z, Jul 7
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 7
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 7
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 7
+ Walk for the Bacon QRP Contest	0000Z-0100Z, Jul 8 and 0200Z-0300Z, Jul 9
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 8
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 8
+ EACW Meeting	1900Z-2000Z, Jul 8
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 9
+ NCCC Sprint	0230Z-0300Z, Jul 9
+ K1USN Slow Speed Test	2000Z-2100Z, Jul 9
+ IARU HF World Championship	1200Z, Jul 10 to 1200Z, Jul 11
+ SKCC Weekend Sprintathon	1200Z, Jul 10 to 2400Z, Jul 11
+ QRP ARCI Summer Homebrew Sprint	2000Z-2300Z, Jul 11
+ K1USN Slow Speed Test	0000Z-0100Z, Jul 12
+ 4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Jul 12
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 13
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 13
+ Phone Weekly Test - Fray	0230Z-0300Z, Jul 14
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 14
+ VHF-UHF FT8 Activity Contest	1700Z-2000Z, Jul 14
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 14
+ RSGB 80m Club Championship, SSB	1900Z-2030Z, Jul 14
+ NAQCC CW Sprint	0030Z-0230Z, Jul 15
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 15
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 15
+ EACW Meeting	1900Z-2000Z, Jul 15
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 16
+ NCCC Sprint	0230Z-0300Z, Jul 16
+ K1USN Slow Speed Test	2000Z-2100Z, Jul 16
+ Russian Radio Team Championship	0700Z-1459Z, Jul 17
+ Trans-Tasman Low-Bands Challenge	0800Z-1400Z, Jul 17
+ YOTA Contest	1000Z-2159Z, Jul 17

+ Feld Hell Sprint	1200Z-1359Z, Jul 17
+ North American QSO Party, RTTY	1800Z, Jul 17 to 0559Z, Jul 18
+ CQ Worldwide VHF Contest	1800Z, Jul 17 to 2100Z, Jul 18
+ RSGB International Low Power Contest	0900Z-1200Z and 1300Z-1600Z, Jul 18
+ CQC Great Colorado Gold Rush	2000Z-2159Z, Jul 18
+ Run for the Bacon QRP Contest	2300Z, Jul 18 to 0100Z, Jul 19
+ K1USN Slow Speed Test	0000Z-0100Z, Jul 19
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 20
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 20
+ Phone Weekly Test - Fray	0230Z-0300Z, Jul 21
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 21
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 21
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 22
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 22
+ EACW Meeting	1900Z-2000Z, Jul 22
+ RSGB 80m Club Championship, Data	1900Z-2030Z, Jul 22
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 23
+ NCCC Sprint	0230Z-0300Z, Jul 23
+ K1USN Slow Speed Test	2000Z-2100Z, Jul 23
+ RSGB IOTA Contest	1200Z, Jul 24 to 1200Z, Jul 25
+ ARS Flight of the Bumblebees	1700Z-2100Z, Jul 25
+ K1USN Slow Speed Test	0000Z-0100Z, Jul 26
+ QCX Challenge	1300Z-1400Z, Jul 26
+ RSGB FT4 Contest Series	1900Z-2030Z, Jul 26
+ QCX Challenge	1900Z-2000Z, Jul 26
+ Worldwide Sideband Activity Contest	0100Z-0159Z, Jul 27
+ QCX Challenge	0300Z-0400Z, Jul 27
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 27
+ SKCC Sprint	0000Z-0200Z, Jul 28
+ Phone Weekly Test - Fray	0230Z-0300Z, Jul 28
+ CWops Mini-CWT Test	1300Z-1400Z, Jul 28
+ CWops Mini-CWT Test	1900Z-2000Z, Jul 28
+ CWops Mini-CWT Test	0300Z-0400Z, Jul 29
+ RTTYOPS Weeksprint	1700Z-1900Z, Jul 29
+ EACW Meeting	1900Z-2000Z, Jul 29
+ NCCC RTTY Sprint	0145Z-0215Z, Jul 30
+ NCCC Sprint	0230Z-0300Z, Jul 30
+ K1USN Slow Speed Test	2000Z-2100Z, Jul 30
+ Russian WW MultiMode Contest	1200Z, Jul 31 to 1159Z, Aug 1
+ Missouri QSO Party	1400Z, Jul 31 to 0400Z, Aug 1 and 1400Z-2000Z, Aug 1