

THE eQRM

APRIL 2021



The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310

PL 131.8

On the Cover: “April showers bring May flowers”.
 Enjoy the rain. Don’t be sad or fret, the flowers and trees need the water. If it’s raining, stay inside and play radio. I hope you enjoy this Spring weather as much as I do. Winter here in Western Pennsylvania isn’t too distant a memory...

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Check into our nets

Wednesday 2 Meter

8:30PM on 145.310 MHz PL 131.8

Wednesday 10 Meter

9:00PM on 28.470 MHz

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Who We Are

2021 BVARA OFFICERS

President: Jack Spencer, KZ3Z

Vice President: Dan Grazulis, KB3VSP

2nd Vice Pres.: Doug Hanna, N4YKQ

Treasurer: Pam Spencer, W3PMS

Secretary: Norm Trunick, K3NJT

Director: Tony Pavilonis, K3AHP

Director: Bob Winkle, N3AZZ

Trustee: Doug Hanna, N4YKQ

MONTHLY MEETINGS

E-Board meetings are now held the Saturday before the monthly club meeting.

VE testing begins at 5:00 PM.

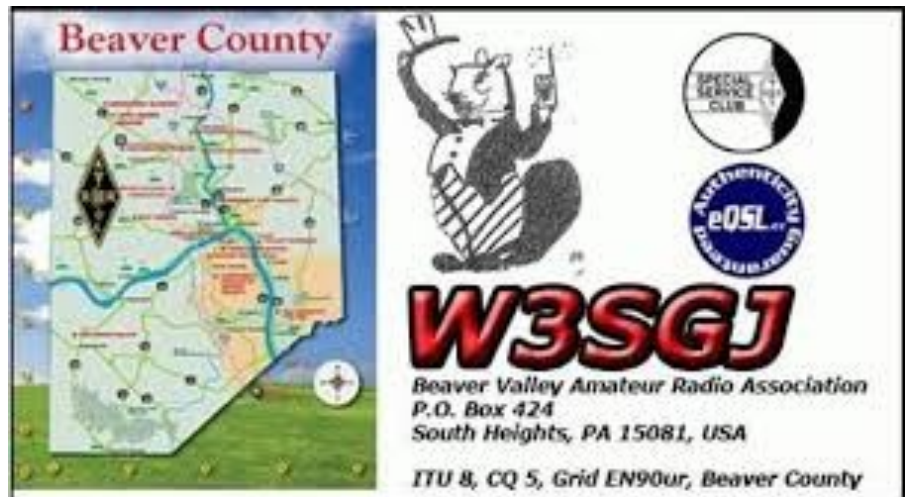
Regular meetings are at 6:30 PM

All meetings are held at the
Beaver County
Emergency Services Center
351 14th Street
Ambridge, PA 15003
on the second Thursday of every month
(unless otherwise stated).

*All meetings subject to Covid
restrictions and cancellations.*

Club Meetings 2021

Apr 08
May 13
Jun 10
Jul 08
Aug 12
Sep 09
Oct 14
Nov 11
Dec 09



This Month

Speaker:

Rich Soltesz
K3SOM

Topic:

Field Day – Prep and Plan

Including:

Continuing with our BVARA Presentation Series, our topic is Field Day. 2021 will reflect the 88 years of change since Field Day first began in 1933. So much has changed with our hobby, with the equipment that we use, and with new purposes for Field Day. After a brief journey through its history, we'll change gears with what has worked well for us after many tweaks. Our more-recent Kite Antenna, a full-size 40-meter vertical with 16 ground radials, our 90-foot vertical, our home-built triplexer for the Yagi, Lazy-H antennas, EFHW antennas, newer bandpass filters, and much more all began as a project to try out on Field Day. Will your new transceiver be up to Field Day?

Field Day without changes is boring. Changes come disguised as miscalculations, overlooking the obvious, component failures, ignoring the fact that the weather, many times is not on the same page as hams. Not to mention bugs – I said, not to mention bugs! Sometimes an idea works the first time that it is tried. Whether we succeed or whether we fail, it's exciting and our knowledge horizon expands.

New = Excitement = Learning = Fun

But wait, there's more! We'll review each aspect of preparation including propagation forecasting to selected target areas, time, band and mode assignments, station locations, PCs and networks, software updates and dry runs, visitor desks, grounding, elected official visits, High Fives when Eastern Washington is worked, and so much more; not to mention satellite contacts, police dog demos by the County Sheriff's men, and the variety of food on hand. Norm's breakfast is not to be missed.

Come join us, because this is one exciting presentation you won't want to miss and don't forget to bring some spare coax connectors!

Rich's Background:

Extra Class Ham, Licensed since 1962, VE,
B.S. Electrical Engineering

More this Month

Weekly

The Freedom Square Diner in Monaca has a great wait staff. Come let them take your order.

Thursday Morning Breakfast (or you can have lunch)

As the Governor permits restaurants to function we will be there if the Diner is open.



The BVARA meets every Thursday at the Freedom Square Diner in Center Township, just to the right of the Cinemark Center Township Marketplace at 09:30 AM. All radio amateurs and those interested in amateur radio are encouraged to come join us at our Thursday morning breakfast.

See you Thursday at

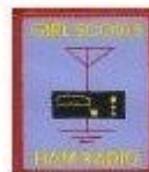


The eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs.

Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the WW3AAA 146.850 MHz repeater (131.8 PL)

RACES / ARES

The eQRM Urges All County Hams to Participate.



Get your License or Upgrade

If you are interested in getting your first FCC license or upgrading your current amateur radio license, the Beaver Valley Amateur Radio Association holds VE Test sessions (Volunteer Examinations) the second Thursday of each month at the Beaver County Emergency Services Center in Ambridge Pennsylvania prior to our BVARA Club meeting. If there is no meeting there is no test session. Please come take your test with us!

For more information, contact :
Rich Soltesz, K3SOM
(724) 847-0610
k3som@arrl.net



VE TEST SESSIONS

Beaver County Emergency Services Center 351 14th Street Ambridge, PA 15003.
Tests begin promptly at 5 pm on the same day as BVARA Club Meetings
(the second Thursday of the month).
All classes of amateur radio license tests are administered.



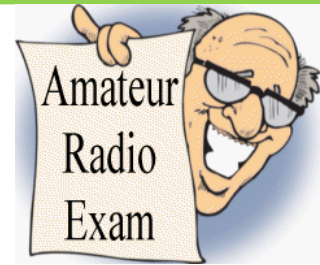
ALL candidates MUST bring ALL of the following:

1. 2 forms of I.D. - one MUST be a photo I.D.
2. A pencil AND a pen with blue or black ink.
3. The original AND a photocopy of any valid ham license.
4. The original AND a photocopy of any C.S.C.E.
5. The test fee of \$15 - cash, check, or money order.
6. Your FRN Number (free from the FCC, call for details)

New License and Upgrades

BVARA VE Testing

Testing this month :



March 2021 VE Test Session Results :

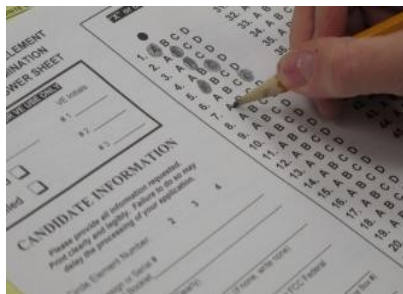
We had four candidates for testing and all four passed. Two Technician licenses issued and two General licenses issued. Our testing was conducted at our normal location at the Beaver County Emergency Services Center in Ambridge, PA. We are anticipating the continued use of the facility for our VE testing. Next month our newest VE Team member will be joining us, please welcome Mick Pyzoha – N3OJP.

Congratulations to:

- Ron Havranek – KC3ROP, Baden, PA, Technician
- Ron Modrovich – KC3ROQ, Aliquippa, PA, Technician
- Keith Black – KC3ROR, Aliquippa, PA, General
- Larry Homich – KC3ROS, Baden, PA, General

All of this testing would not be possible without the help of the following Extra-Class VE Team members:

Reg Genola – W3REG,
Tony Pavilonis - K3AHP,
Bart Stack - KB3NFM, and
Bob Winkle - N3AZZ



Thank you and 73 from:
Rich Soltesz - K3SOM, VE Liaison



Membership Information

By becoming a BVARA member you help secure the future of Amateur Radio in Beaver County. Additionally, the BVARA receives a portion of each ARRL membership you purchase!

Join the BVARA and ARRL

Sign up for:	Price	
<input type="radio"/> BVARA full membership	25.00	_____
<input type="radio"/> BVARA student membership	15.00	_____
<input type="radio"/> BVARA associate membership	10.00	_____
<input type="radio"/> BVARA Child under 21 at home membership	5.00	_____
One year ARRL membership	49.00	_____
A Club Donation		_____
ARRL Member? Yes No	Total Enclosed	_____

Your License Class (If you have one.)

<input type="radio"/> Technician	Name _____
<input type="radio"/> General	Address _____
<input type="radio"/> Advanced	_____
<input type="radio"/> Extra Class	Email _____
	Phone _____
	Your Call sign _____
	Your Signature _____

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424
South Heights, Pa 15081

Hamfests & General Announcements



TWO RIVERS AMATEUR RADIO CLUB

49th ANNUAL AMATEUR RADIO / COMPUTER SHOW

SUNDAY APRIL 18th, 2021

The McKeesport Palisades – 100 Fifth Ave – McKeesport, PA 15132

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

"The McKeesport Palisades" is located off PA Rt 48 in the city of McKeesport, PA

Amateur Radio Directions: 146.73 Repeater – Mobile Check in: 146.52

Main Prizes : ICOM-7300 ICOM 5100AD
 ICOM 2730AP Portable Generator
 HP laptop computer
 NANOVNA Vector Network Analyzer

Admission \$5.00

Tables for Rent \$10 each

Table Reservations: Phone 412-260-5699 email: atsfbill2@gmail.com

Overnight parking is available

****Amateur Radio Exam Testing is Available**

****Exam Registration: 412-751-9657 email: veteam@trarc.net**

****Breakfast and Lunch Available**

This is an ARRL sanctioned hamfest

Bits and Pieces

Hello All,

This month's eQRM was so much fun to write. I always enjoy the April issue. I have been impatiently waiting for Spring! Off and on this winter, I have been improving the indoor portion of my ham shack. Repainting, organizing, sorting out, new windows (I love that I can now look outside while in my radio room, thanks Ben!) and other improvements that make my shack even more comfortable; a retreat. If you have been reading the eQRM you know I want to put up a new HF antenna. I have so much going on in my personal life I haven't taken the time to play. I have been working on the completion of an extensive "honey do" list. I need to take a little time to relax and play radio. I don't currently have an antenna I can transmit on HF. I had a feed line coax accident last fall. I accidentally punched several holes in my outdoor coax! The rain got in and the cable shield and center conductor are now shorted. I can listen to HF but I don't dare transmit! The weather is beginning to cooperate, it has been nice a few days. I am reasonably certain I have the supplies I need for that new HF antenna install. I found so many things I didn't remember I had during the winter shack clean up. This is so much a part of my Ham experience. It's the journey not the arrival necessarily...



What is going on in your radio hobby? I have been in this hobby for a few years now and I have had a lot of fun along the way. I try to use disappointments and fails as positive building blocks. I move forward to better things even when I have failed, I hope you do too. I have met so many great hams, their families & friends. I have learned so much about radio and tech related subjects. I have made some great friends on-the-air and in-person. By meeting some difficult people, I have had opportunities to hone my people skills in a positive way too.

I always look forward to hearing from you. Sometimes I can share what has been entrusted to me, sometimes it is just for my ears/eyes only or personal. I can always use help with interesting articles, experiences, ham related goings on or ideas to incorporate into the pages of the eQRM. If you have something of interest please, don't hesitate, send it to me. Currently I am soliciting some inputs for the newsletter about Solar Cycle 25. Please send me some information (kc3bxc.73@gmail.com). I am also actively researching it myself.

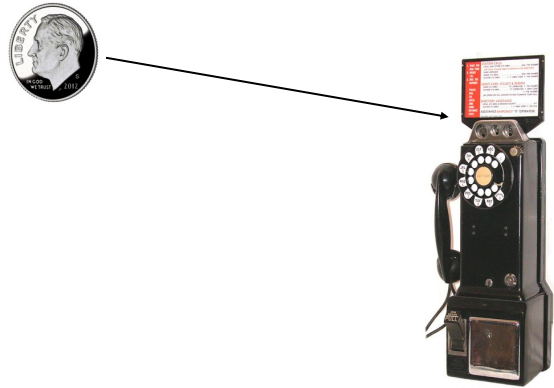
Well as I close this issue, I hope you have some warm-weather radio plans made to improve your hobby enjoyment. There is a Hamfest planned for here in Western Pa, see eQRM page 9 for more details. I am ready to attend, how about you? I will be moving nearer to getting that new HF antenna up and running. I just need a warm day and to take time to do it.

I have been alluding to a large improvement in my radio hobby. This involves a very special base mount for a vertical antenna I am planning, a DIY project. This idea is only sitting on a back burner that isn't even on simmer for now. There will be more details as I get the planning/organizing for this more focused. Till next month be safe, KC3BXC clear...

I'll be listening.

It's Your Dime

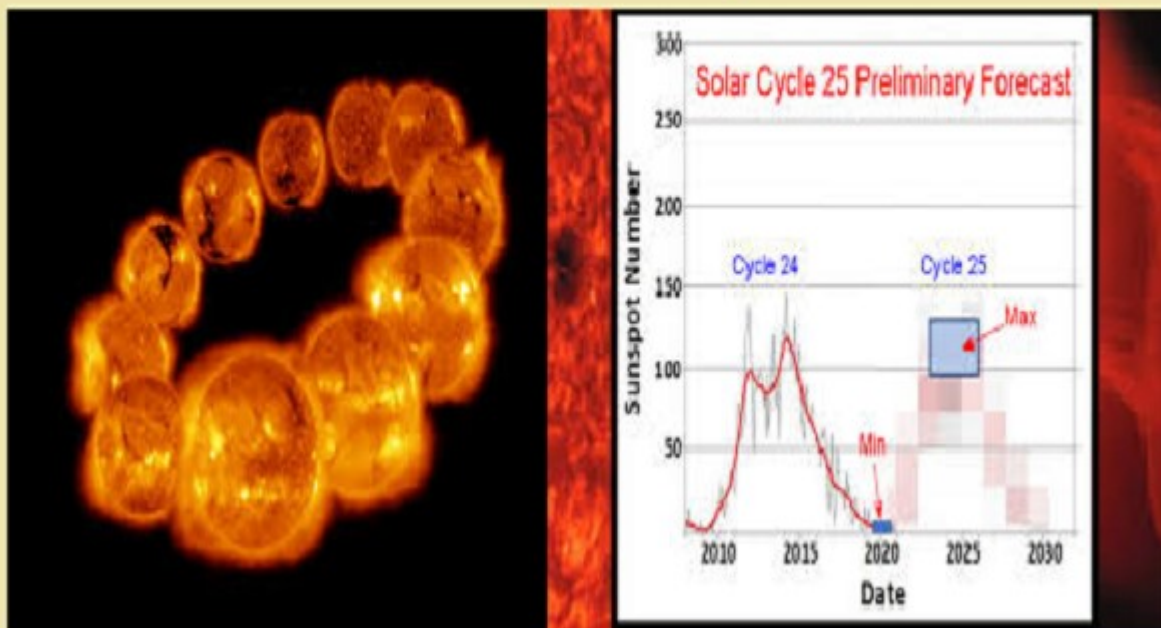
It's Your Dime.



Remember back when you could communicate by “Pay Phone” for ten cents? This page is for anyone who wants to communicate with the BVARA community and beyond. Please send me your article that you would like posted on this page. Please, only topics and language in good taste. As the editor I reserve the option to post it or ignore it. Send your dime to me at: kc3bxc.73@gmail.com



What is Solar Cycle 25?



Make sure you read the May eQRM.

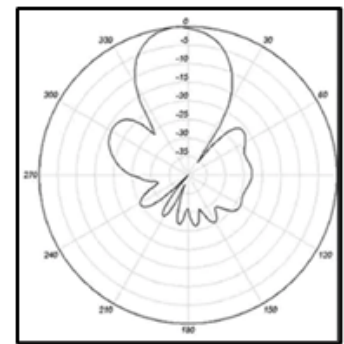
There will be information about Solar Cycle 25.

Codswallop Scientific Industries Picayune, ME 01010

Codswallop Scientific Industries announced a profound radio wave breakthrough in January of this year.

Codswallop Scientific Industries has invented a paint for radio antenna use. The paint uses a proprietary compound that promises to change radio antenna transmission patterns. The paint, called **RF Reflective Amp Paint** will be available to the general public by April 1, 2021.

The paint is best applied to the antenna by air sprayer or brush. When applied by the air spray method, the paint achieves the most enhanced characteristics according to the company. Brush application is a close second in performance. Azimuthal maps model how antennas exhibit lobes and nulls of their rf transmission pattern. The Codswallop Scientific Industries paint causes the transmitted RF to flow into those nulls by reflecting the stronger RF energy into the less energized areas of the pattern. This results in an omni-directional pattern.



The paint also contains breakthrough nano chips that use photonic energy to amplify the overall rf energy. The nano chips convert photons into energy much the way *photovoltaic* semiconductors do. As photons strike the nano chips they slightly increase the power of the RF transmitted energy present on the antenna. Photons directly from the sun or reflected from the moon power the nano chips. The chips have a small effect on the overall power, they only contribute a small amount. This increase is almost the same amount as is lost by “filling in the nulls”. The physics involved show us that there is a loss involved with the RF when you fill in the nulls. There has to be some loss as the energy is moved/reflected from the most pronounced transmission lobes to the nulls. The nano chips generate only a small amount of energy, it brings the losses back to the RF transmission power levels before null filling, well almost.

Of Interest to All

Our Investigation of the Codswallop Scientific Industries Product.

One of my Ham buddies was able to get Codswallop Scientific Industries to send him a pint of the RF Reflective Amp Paint (He has a relative that works for Codswallop Scientific Industries) to experiment with for amateur radio use. My pal convinced the scientists at Codswallop Scientific Industries that if it worked, this could open the lucrative amateur radio market for their paint sales.

On April 1, 2021 I was invited to an antenna party at my pal's ham shack. The weather was perfect for antenna improvements. It had been snowing, breezy and it was cold. I was informed the universal ham radio rule for antenna work is that the nastier and more unpalatable the weather conditions the better the outcome of the antenna improvement. This endeavor should prove to be magnificent! The objective was to give the paint a try. I volunteered to be the tower climber. We had a group of five and myself to help at this antenna party. We place safety above all else. The team of five is very experienced in tower safety as well as general amateur radio knowledge. I am the least experienced of the group. I trusted their experience and expertise to safely guide me in the task that awaited as I ascended and descended the tower. Tests were made to record the antenna's performance prior to the RF reflective amp paint being applied. An azimuthal map was generated to show the antenna's lobes and nulls.



After a lull in the wind, the paint was applied as recommended. We waited for an hour for it to dry (frozen solid may be a better description). I was cold up there! As I was warming up in the house and drinking some hot chocolate, the other team members began the process of testing the antenna again. The nulls were affected! The nulls were not perfectly filled to the same power levels as the more powered lobes in the first tests, however the paint did have a positive effect on the omni directional performance of the antenna.

Over all the experiment showed a noted improvement in omnidirectional signal power levels. There is more room for experimentation. This is a great start!

An interesting note here: As I started up the tower, I had forgotten my hard hat. One of the safety team members grabbed me by the leg, there is an abundance of this going on here, and began pulling it. Just like I am pulling yours. Happy April Fools Day!

Radio Sport

Contest Corral

April 2021

Check for updates and a downloadable PDF version online at www.arrl.org/contest-calendar.

Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish Date-Time Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1 1700 1 2000	3.5	SARL 80-Meter QSO Party	Ph	RS, serial, grid locator	www.sarl.org.za
1 1800 1 2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrrfcontest.no
1 1900 1 2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
2 2000 2 2100	1.8-14	K1USN Slow Speed Test	CW	20 WPM max, Name, SPC	k1usn.com/sst.html
3 1000 4 0400	14	PODXS 070 Club PSK 31 Flavors Test	Dig	SPC, mbr or name	www.podxs070.com
3 1400 4 0200	1.8-144	Louisiana QSO Party	CW Dig Ph	RS(T), LA Parish or SPC	laqp.louisianacontestclub.org
3 1400 4 0200	1.8-144	Mississippi QSO Party	CW Ph Dig	RS(T), MS county or SPC	www.arrlmiss.org
3 1400 4 2200	3.5-28	Florida State Parks on the Air	CW Ph Dig	Park ID or SPC	flspota.org/rules
3 1500 4 1500	1.8-28	SP DX Contest	CW Ph	RS(T), SPC province or serial	spdxcontest.pzk.org.pl
3 1600 4 1600	3.5-28	E-ARTTY Contest	Dig	RSQ, EA province or serial	concurso.ure.es/en
4 0000 4 0400	3.5-14	North American SSB Sprint Contest	Ph	Other's call, your call, serial, name, SPC	ssbsprint.com/rules
4 1500 4 1730	3.5, 7	DAHC Easter Contest	CW Ph	RS(T), DOK or serial	www.darc.de
5 1900 5 2300	144	144 MHz Spring Sprint	CW Ph Dig	4-char grid square	sites.google.com/site/springvhfupprints
6 0100 6 0159	1.8-50	Worldwide Sideband Activity Test	Ph	RS, age group (OM, YL, or Youth)	www.sac.com/rules.html
6 0100 6 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqr.blogspot.com
6 1700 6 1900	3.5-14	RTTYops Weekspint	Dig	Other's call, your call, serial, name	rttyops.wordpress.com
7 1300 7 1400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
7 1700 7 2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
7 1900 7 2000	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
7 1900 7 2030	3.5	RSGB FT4 Contest Series	Dig	4-char grid square	www.rsqbcc.org/hf
7 2000 7 2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.php
8 0300 8 0400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
10 0000 10 0600	1.8-28	QRP AHC Spring QSO Party	CW	RS, SPC, mbr or power	qrparc.org/contest
10 0700 11 1300	1.8-28	JIDX CW Contest	CW	RST, JA prefecture or CQ zone	jidx.org/jidxrule-e.html
10 1200 11 1200	1.8-28	OKOM DX Contest, SSB	Ph	RS, county code or serial	okomdx.crk.cz
10 1200 11 1200	3.5-28	FTn DX Contest	Dig	RST, state or province or serial	europeanft8club.wordpress.com
10 1200 11 1800	3.5-28	IG-RY World Wide RTTY Contest	Dig	RST, 4-digit year first licensed	igry.webs.com/ig-ry-ww-contest
10 1200 11 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
10 1300 11 2200	1.8-144	Nebraska QSO Party	CW Ph	County or SPC (or grid for F-18)	www.nebraskagsoparty.org
10 1400 11 0200	1.8-144	New Mexico QSO Party	CW Ph Dig	Name, NM county or SPC	newmexicogsoparty.org
10 1600 11 0400	1.8-28	Georgia QSO Party	CW Ph	RST, GA county or SPC	gagsoparty.com
10 1800 11 1800	1.8-144	North Dakota QSO Party	CW Ph	RS(T), ND county or SPC	ndarrfsec.com
10 2100 11 2100	1.8-28	Yuri Gagarin International DX Contest	CW	RST, ITU zone	gc.qst.ru/en/section/32
11 1000 11 2100	3.5-14	WAB 3.5/7/14 MHz Data Modes	Dig	RS, serial, WAB square or country	wab.intermip.net
11 1200 12 1100	3.5-28	DIG QSO Party, CW	CW	RST, mbr or "none"	diplom-interessen-gruppe.info
11 1500 11 1600	3.5	Hungarian Straight Key Contest	CW	RST, serial, power	hskc.ha8kux.com
11 1900 11 2030	3.5	RSGB HoLo SSB	Ph	RS, 6-char grid of previous QSO	www.rsqbcc.org/hf
12 0000 12 0200	1.8-28	4 States QRP Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
12 1900 12 2030	3.5	RSGB 80-Meter Club Championship, CW	CW	RST, serial	www.rsqbcc.org/hf
14 0030 14 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
14 1700 14 2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
16 2100 17 2100	1.8-28	Holyland DX Contest	CW Ph Dig	RS(T), 4X area or serial	larc.org/larc/#HolylandContest
17 0500 17 0859	3.5, 7	ES Open HF Championship	CW Ph	RS(T), serial	www.erau.ee/en
17 0600 18 0559	3.5-28	Worked All Provinces of China	CW Ph	RS(T), province or serial	www.mulan2x.com
17 0700 18 0659	3.5-28	YU DX Contest	CW Ph	RS(T), YU county or serial	yudx.yu1srs.org.rs
17 0900 18 2359	3.5-28	CQMM DX Contest	CW	RST, continent	www.cqmmdx.com
17 1400 18 2000	All	Texas State Parks on the Air	CW Ph Dig	RS(T), TX park or SPC	www.tspota.org
17 1600 18 0400	3.5-28	Michigan QSO Party	CW Ph	Serial, MI county or SPC	misp.org/!rules.htm
17 1700 18 1200	3.5-28	EA-QRP CW Contest	CW	RST, category code	www.eaqrp.com
17 1800 17 2159	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
17 1800 18 1800	1.8-144	Ontario QSO Party	CW Ph	RS(T), ON county or SPC	www.va3cco.com
18 1800 18 2359	3.5-28	ARRL Rookie Roundup, SSB	Ph	Name, 2-digit year licensed, SPC	www.arrl.org/rookie-roundup
18 2300 19 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrptest.com/pigrun
21 1900 21 2030	3.5	RSGB 80-Meter Club Championship, SSB	Ph	RS, serial	www.rsqbcc.org/hf
24 0001 25 2359	28	10-10 International Spring Contest, Digital	Dig	Name, mbr or "0," SPC	www.ten-ten.org
24 0800 24 1800	3.5-21	QRP to the Field	CW Ph	RST, SPC, name or SOIA ID	www.zianet.com/grp
24 1300 25 1259	1.8-28	Helvetia Contest	CW Ph Dig	RS(T), HB canton or serial	www.uska.ch/contest
24 1600 25 2159	7-28	Florida QSO Party	CW Ph	RS(T), FL county or SPC	floridagsoparty.org/rules
25 1200 25 1800	3.5, 7	International Vintage Contest HF	CW Ph	RS(T), 6-char grid square	contestvintage.beepworld.it
25 1700 25 2059	3.5-28	BARTG Sprint /5	Dig	Serial	bartg.org.uk/wp
28 0000 28 0200	1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
28 2000 28 2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
29 1900 29 2030	3.5	RSGB 80-Meter Club Championship, Data	Dig	RST, serial	www.rsqbcc.org/hf