

THE eQRM

SEPTEMBER 2020



The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310 PL 131.8

On the Cover: Here is a great Fall photo of Pittsburgh. Soon, cool Fall mornings will be here. Are you ready for that four letter word? Snow. It is time to finish those outdoor Ham ideas and prepare for the cold months ahead. The photo is from Wikimedia Commons.

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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

2020 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, W6PEF

Director: Bob Winkle, N3AZZ

Trustee: Rich Soltesz, K3SOM

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).

Club Meetings 2020

Sep 10

Oct 08

Nov 12

Dec Club Christmas Party

Club Meetings 2021

Jan 14

Feb 11

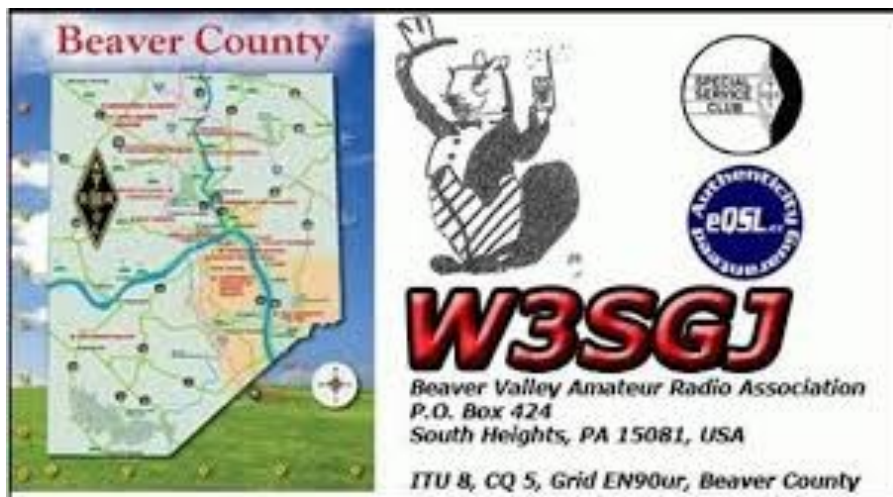
Mar 11

Apr 08

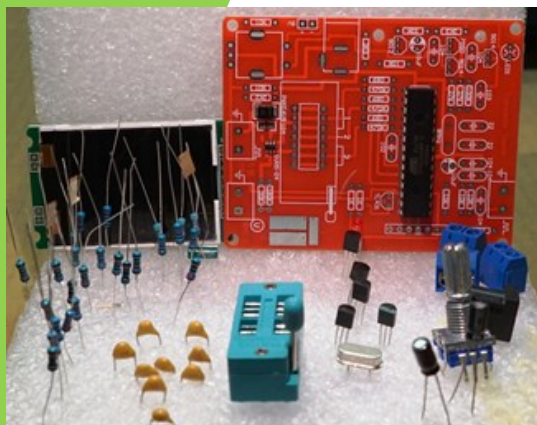
May 13

Jun 10

Jul 08



This Month



This Month:

Speaker:

Rich Soltesz, K3SOM

Topic:

A Transistor and Parts Tester

Including:

Continuing with our BVARA Presentation Series this year, our topic this month began with an interesting mention of an inexpensive testing device that many hams would find to be very useful. Do you have a 'junk box' of parts that you've acquired but don't remember or can't read the numbers on the part?

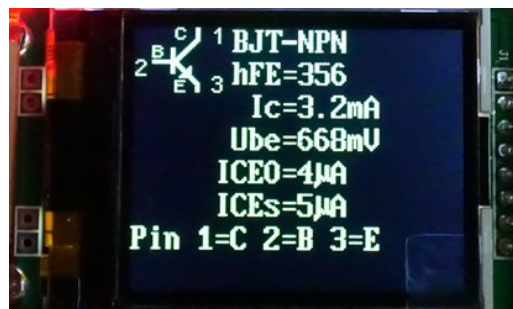
Perhaps this gadget may be just what you are looking for! This gem is built around an Atmel ATMEGA328-PU low-power CMOS 8-bit microcontroller. Your parts to be tested may include small signal transistors, diodes, resistors, capacitors, inductors, and more. If you plug in a mylar capacitor into the tester, a 16-color TFT LCD display indicates $C=236.4\text{ nF}$, $ESR=1.10$, $V_{loss}=0.1\%$ and the tester voltage source is 7.7 VDC and is OK. If you plug in an unknown transistor, the test tells you BJT - NPN, $h_{FE}=356$, $I_c=3.2\text{mA}$, $U_{be}=668\text{mV}$, $I_{CE0}=4\mu\text{A}$, $I_{CES}=5\mu\text{A}$, Pin 1=C, 2=B, and 3=E.

But wait, there's more! Two terminals measure AC frequency up to 25KHz, two more terminals output a square wave and PWM at predefined frequencies, and two more terminals will measure voltages up to 50 VDC. A full self-test with calibration can also be selected.

The price is too low to include here, so plan on coming to our meeting for more information and a demo. This is one exciting 'hands-on' presentation that you won't want to miss.

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)



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.

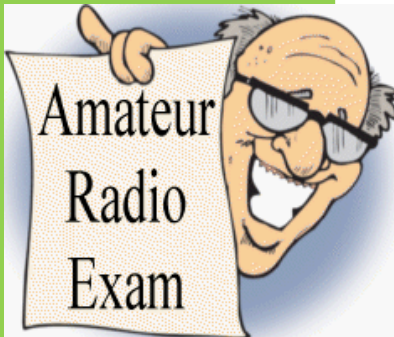


ALL candidates MUST bring ALL of the following:

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.

New License and Upgrades

BVARA VE Testing



Testing this month :

You're invited, come test with us in September!

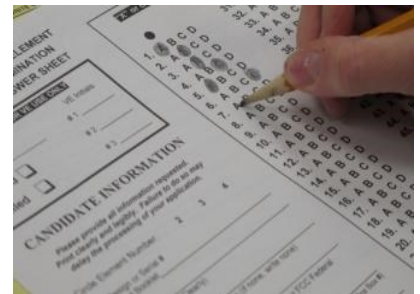
August VE Test Session Results

*** Because of our Club Picnic there was no testing for August.**

All of our 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

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

<input type="radio"/> 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	_____
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	_____
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

CANCELED - BCARA Swapfest

HAMFEST/CONVENTION

09/13/2020

Start Date: 09/13/2020

End Date: 09/13/2020

Location: Unionville Fire Department

102 Mahood Road

Butler, PA 16001

Website: <http://www.w3udx.org/>

Sponsor: Butler County Amateur Radio Association

Type: ARRL Hamfest

Talk-In: 147.36 (PL 131.8)

Public Contact: Dale Riley , KC3GYU

234 Whitmire Road West Sunbury, PA 16061

Phone: 1-724-831-8629

Email: kc3gyu@yahoo.com

This Hamfest has been Cancelled



Bits and Pieces

Hello all,

Ham radio comes through again... I was recently driving North on highway 279 when the right hand lane was blocked by a large piece of a car. This thing was about four feet tall and seven feet wide. The entire back end of a minivan was in the right hand lane of the road! I think it may have fallen out of a truck that was hauling car parts. This would certainly cause an accident. I was able to move over with no problem. I do not have a cell phone. I do have a 2 meter mobile in my vehicle so I put out a call on the BVARA repeater. No one responded. I put out the same call on the TAARA repeater. Sean Schwartzmiller, K3UKE and Mike Leasure, AA3WV responded. My signal was too weak for Mike to copy. Shawn was also mobile and relayed to Mike, at a base station, my report of danger. Mike contacted the authorities from his home phone. This was a great use of the amateur airwaves. Their help in this situation could very well have saved lives. Great job you gentlemen Hams! I stand and give a thank-you salute to Mike and Shawn for their professionalism and assistance.



For the last few months, the ARRL propagation charts have not been available for the eQRM. Here is the ARRL's recommendation of a new propagation method called *VOA Cap Online* it is available online. It is much better . . . You can put in many specifics that pertain to your particular amateur radio station. The chart is custom-rendered according to your input statistics. Give it a try and let me know what you think. See page 12 for more information.

I was day dreaming... back, way back when you could go to a hamfest. I sure have missed all the comradery of hamfests this year. I also miss the fun of finding that certain something I just can't live without and purchase it. I can hardly wait 'til this Covid 19 pandemic is over and we can return to some kind of normal.

One last thing, I hope you are beginning to wrap up your outdoor radio projects. Did you inspect your connections, coax, antennas, your grounds, guy wires and anything else that needs to be maintained? Now is a time to get to it before old man winter comes back. The nice cool Fall weather should help make working outside very pleasant.

Be courteous on the air, be safe and have fun with your hobby.

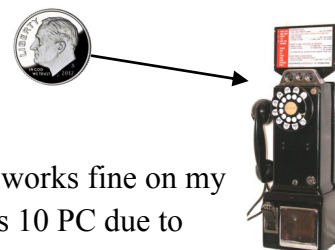
Till next month, 73 KC3BXC.

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

MINI60S Antenna Analyzer

My *MINI60S* Antenna Analyzer, a Chinese clone of the *Sark 100*, works fine on my Android phone device, but will not connect via USB to a Windows 10 PC due to the Chinese manufacturer using a counterfeit FTDI Chip for its USB connection.



I started my Internet search for a solution by searching for *Sark 100*. The search process finally landed me at <http://radio.denied.org.ua/index.php?dir=SARK-100/> where I found the software for both my Android and my Windows 10 PC. The Android software ends in .apk and the Windows software ends in .exe.

Because my desktop and laptop PCs both have Bluetooth, here is how to connect the Mini to the PC software:

Start the PC software for the Sark 100. It defaults the USB to COM6. You can check in the Device Manager under the Ports (COM & LPT) tab to be sure that the COM Port says: "Standard Serial over Bluetooth Link (Com6)". This is the ONLY port that is installed and works on my computer.

Place the Mini60 Analyzer in "PC Link" Mode. Do this by pressing the "Set" Button twice and the "Down" button once. "Waiting Link" will be displayed.

Click the "Connect" Button on the software and wait about 4 seconds and it should change to 'grayed out' status and the Mini60 should show "PC Link" is now "ON".

You are good to go!

If you have an antenna connected, try one of the preset "Band Quick Setup" selections. The scan should start.

I hope this helps you in finding an alternate connection method when FTDI problems occur.

73

Reg, W3REG

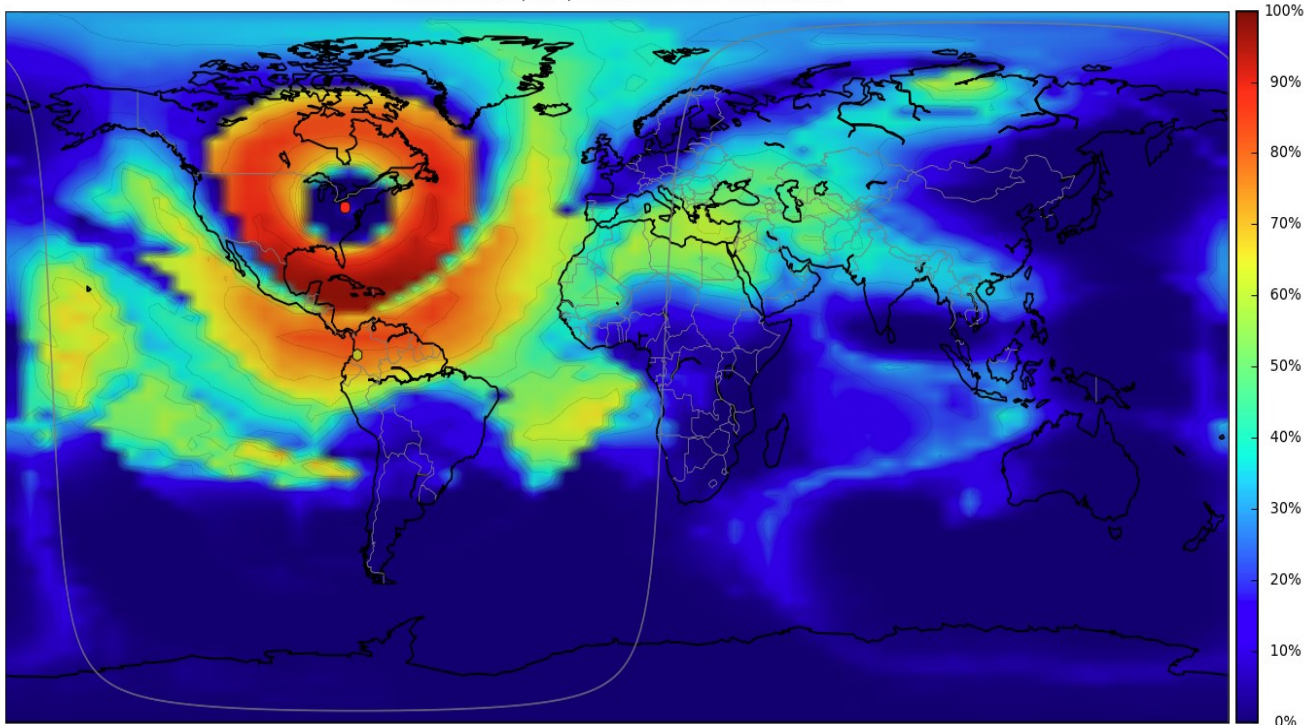
Of Interest to All

In previous issues of the eQRM Newsletter, we used to include propagation charts from the ARRL. They are no longer available. Here is the ARRL's recommendation to get the propagation information that you need:

<https://www.voacap.com/hf/>

Below is an example of a prediction for September 17th at 02:00 UTC, for 20-meter FT8 worldwide propagation. Dipoles at 30 feet have been selected from a pull-down for both locations and 50 watts was selected. You now have much more control over the information that you need for normal conditions for the season, the frequency, the mode, the antennas, etc. for this point in the sunspot cycle.

FN00AJ (40.40N, 80.00W), Sep, 17 UTC, 14.100 MHz, 40 W, SSN: 3, REQ.SNR: 13
TX Ant: D10M.ANT, -1.0°, RX Ants: D10M.ANT, Noise: -145 dBW



The red dot is Western PA and the blue area around it is where the sky wave signal has skipped over. Where the sky wave first lands is the re-orange 'doughnut'. The next bounce lands just beyond California, covers Ascension Island, most of the Caribbean and Northern South America, and extends upwards in the North Atlantic. The third bounce reaches Hawaii and eastward in the South Pacific towards Chile. Now it gets interesting! The third wave continues on toward North Africa and the Middle East through towards Siberia. That third wave has a 50 to 65 percent chance of a contact under normal conditions. Should conditions improve just a bit, a rare DX contact might easily be made under the given conditions outlined above. Many more graphical and table depictions of forecasts are very easy to pull up.

Radio Sport

Bruce Draper, AA5B, aa5b.corral@gmail.com

Contest Corral

September 2020

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	Start Date-Time	Finish Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
2 1700	2 2000	144		VHF-UHF FT8 Activity Contest	Dig	4-char grid square	f5activity.eu/index.php/en
2 2000	2 2100	3.5		UKEICC 80-Meter Contest	Ph	4-char grid square	ukeicc.com/80m-rules.php
2 2300	4 2300	3.5-28		G3ZQS Memorial Straight Key Contest	CW	RST, SPC, name, mbr or power	www.f5t5na.org
3 1700	3 2100	28		NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/activity-contests
3 1900	3 2100	1.8-50		SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skocgroup.com
5 0000	5 2359	1.8-28		CWops CW Open	CW	Serial, name	cwops.org/cwops-tests
5 0000	6 2359	3.5-28		All Asian DX Contest, Phone	Ph	RS, 2-digit age	www.jarl.org/english
5 0600	5 0800	7, 14		Wake-Up! QRP Sprint	CW	RST, serial, suffix of previous QSO	qrp.ru/contest/wakeup
5 1300	6 0400	1.8-UHF		Colorado QSO Party	CW Ph Dig	Name, CO county or SPC	pprasa.org/coqp
5 1300	6 1259	1.8-28		IARU Region 1 Field Day, SSB	Ph	RST, serial	darc.delder-club.de/referate/contest
5 1300	6 1300	3.5-28		RSGB SSB Field Day	Ph	RS, serial	www.rsbgoc.org/hf
5 1400	6 1400	145		IARU Region 1 145 MHz Contest	CW Ph Dig	RS(T), serial, 6-char grid	iaru-r1.org/en-the-air
5 1600	5 1900	7		AGCW Straight Key Party	CW	RST, serial, class, name, age	agcw.org/index.php/en
5 2000	6 2000	3.5		PODXS 070 Club Jay Hudak Memorial 80-Meter Sprint	Dig	RST, SPC	www.podxs070.com
6 1000	6 1400	144		WAB 144 MHz QRP Phone	Ph	RS, serial, WAB square or country	wab.internip.net
6 1800	7 0300	1.8-UHF		Tennessee QSO Party	CW Ph Dig	RS(T), TN county or SPC	tnqp.org/rules
7 1900	7 2030	3.5		RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsbgoc.org/hf
7 2300	8 0300	1.8-50		MI QRP Labor Day CW Sprint	CW	RST, SPC, mbr or power	micqp.net/contest
8 0100	8 0300	3.5-28		ARS Spartan Sprint	CW	RST, SPC, power	arsqp.blogspot.com
9 1700	9 2000	432		VHF-UHF FT8 Activity Contest	Dig	4-char grid square	f5activity.eu/index.php/en
12 0000	12 2359	3.5-28		Russian RITTY WW Contest	Dig	RST, oblast or CO zone	qz.ru/contest/detail/93
12 0000	13 2359	2.3 GHz +		ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
12 0000	13 2359	3.5-28		WAE DX Contest, SSB	Ph	RS, serial	darc.delder-club.de/referate/contest
12 1000	13 1000	1.8-28		SARL Field Day Contest	CW Ph Dig	RS(T), number of xmits, category, province or "DX"	www.sarl.org.za
12 1200	13 2359	1.8-50		SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skocgroup.com
12 1400	12 2200	3.5-28		Ohio State Parks on the Air	Ph	Park abbreviation or "OH" or SPC	ospota.org
12 1400	13 2000	1.8-UHF		Texas QSO Party	CW Ph Dig	RS(T), TX county or SPC	www.txqp.net
12 1500	13 0300	3.5-28		Alabama QSO Party	CW Ph	RS(T), AL county or SPC	alabamagsoqparty.org
12 1500	13 0959	3.5-28		Russian Cup Digital Contest	Dig	Serial, 4-char grid square	qz.ru/contest/detail/96.html
12 1800	14 0300	50 +		ARRL September VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/september-vhf
13 0000	13 0400	3.5-14		North American Sprint, CW	CW	Other station's call, your call, serial, name, SPC	ncjweb.com
14 0000	14 0200	1.8-28		4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqgp.com
16 1900	16 2030	3.5		RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsbgoc.org/hf
17 0030	17 0230	3.5-14		NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info/contests.html
17 1930	17 2059	3.5		BCC QSO Party	CW Ph Dig	RS(T), T-shirt size	bavarian-contest-club.de/2325
18 2100	18 2359	3.5		AGB NEMIGA Contest	CW Ph Dig	RST, serial, mbr (if any)	evsbgoc.com/index_eng.html
19 0000	19 2359	1.8-UHF		FOC QSO Party	CW	RST, name, mbr (if any)	g4foc.org/gsoqparty
19 0000	20 2359	1.8-UHF		Collegiate QSO Party	CW Ph Dig	School name, RS(T), operating class	collegiateqsoqparty.com
19 0600	20 2359	10 GHz +		ARRL 10 GHz and Up Contest	CW Ph Dig	6-char maidenhead locator	www.arrl.org/10-ghz-up
19 1200	20 0800	144, 432, 1296		SARL VHF/UHF Digital Contest	Dig	RST, 6-char grid locator	www.sarl.org.za
19 1200	20 1200	3.5-28		Scandinavian Activity Contest, CW	CW	RST, serial	sactest.net/blog
19 1200	20 1200	1.8-28		All Africa International DX Contest	CW Ph Dig	RS(T), serial	www.sarl.org.za
19 1400	20 0200	1.8-UHF		Iowa QSO Party	CW Ph Dig	RS(T), IA county or SPC	www.w4yl.com/IQAP
19 1500	19 2100	1.8-28		QRP Afield	CW Ph Dig	RS(T), SPC, mbr or power	newenglandqrp.org/qrp-afield-2018
19 1600	19 2300	3.5-144		Wisconsin Parks on the Air	Ph	WI park abbreviation or SPC	w4pota.com
19 1600	20 0359	3.5-28		New Jersey QSO Party	CW Ph Dig	RS(T), NJ county or SPC	k2td-bcra.org/njqp
19 1600	20 2200	1.8-UHF		New Hampshire QSO Party	CW Ph Dig	RS(T), NH county or SPC	w1wqm.org/nhqpso
19 1800	20 2359	1.8-144		Washington State Salmon Run	CW Ph Dig	RS(T), WA county or SPC	w4dxc.org/salmonrun
19 1900	19 1959	1.8-50		Field Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/fieldhellclub
20 0000	20 0400	3.5-14		North American Sprint, RITTY	Dig	Other station's call, your call, serial, name, SPC	ncjweb.com
20 1700	20 2059	3.5-28		BARTG Sprint 75	Dig	Serial	bartg.org.uk
20 2300	21 0100	1.8-28		Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
21 1900	21 2300	144		144 MHz Fall Sprint	CW Ph Dig	4-char grid square	svfhs.org
23 0000	23 0200	1.8-28		SKCC Sprint	CW	RST, SPC, name, mbr or power	skocgroup.com
24 1900	24 2030	3.5		RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	rsbgoc.org/hf
26 0000	27 2359	3.5-28		CQ Worldwide DX Contest, RITTY	Dig	RST, CQ zone, US state or VE area (if US/VE)	www.cqwwrty.com
26 1200	27 1200	1.8-28		Maine QSO Party	CW Ph	RS(T), ME county or SPC	w4sm.com/MEQP.html
26 1400	26 1800	144, 432		AGCW VHF/UHF Contest	CW	RST, serial, power, 6-char grid	agcw.org/index.php/en
28 1900	28 2030	3.5		RSGB FT4 Contest Series	Dig	4-char grid square	www.rsbgoc.org/hf
29 1900	29 2300	222		222 MHz Fall Sprint	CW Ph Dig	4-char grid square	svfhs.org
30 2000	30 2100	3.5		UKEICC 80-Meter Contest	CW	4-char grid square	ukeicc.com/80m-rules.php

There are a number of weekly contests not included in the table above. For more info, visit: www.qrpfoxhunt.org, www.nccsprint.com, and www.cwops.org.

All dates refer to UTC and may be different from calendar dates in North America. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or NCJ. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.contestcalendar.com and is extracted for publication in QST 2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.