THE eQRM

HAPPY
thanksgiving

The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association   W3SGJ

2M   Repeater   145.310   PL 131.8

On the Cover:

All of us from the Beaver Valley Amateur Radio Association wish you a very Happy Thanksgiving!

Inside this edition

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

Who We Are

2021 BVARA OFFICERS

President: Jack Spencer, KZ3Z

Vice President: Dan Grazulis, KB3VSP

2nd Vice Pres.: Open

Treasurer: Pam Spencer, W3PMS

Secretary: Norm Trunick, K3NJT

Director: Tony Pavilonis, K3AHP

Director: Jim Allen, KC3IXE

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
Nov 11
Dec 11 Christmas Party

Jan 13 2022
Feb 10
Mar 10
Apr 14
May 12
Jun 09
Jul 14
Aug 11
Sep 08
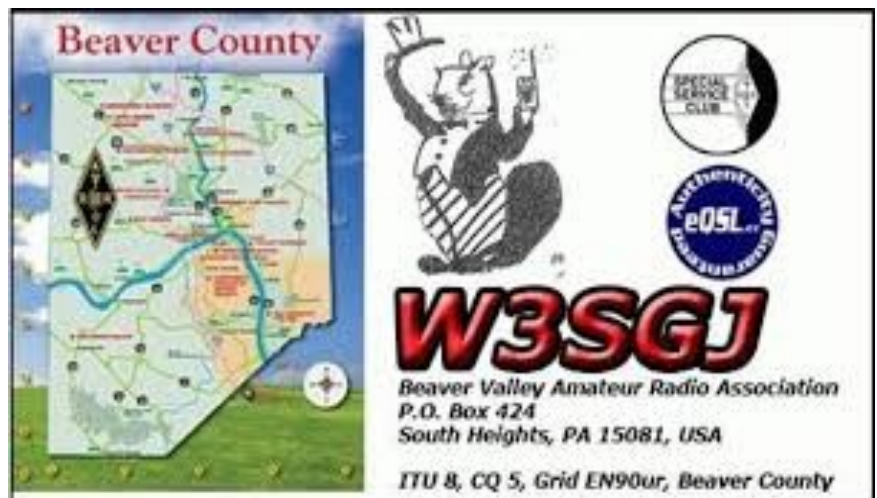
November Special Session

Topic: We are having an equipment auction

What's It All About?

A Yaesu

Complete Amateur Radio HF Station

will be sold to the highest bidder.

* Details start on page 12

Other activity this Thursday is the election of BVARA officers for 2022 and our Ham of the Year selection.

Rich Soltesz - K3SOM
Extra Class Ham, Licensed since 1962, VE,
B.S. Electrical Engineering

More this Month

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

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)

Weekly

Thursday Morning Breakfast
(or you can have lunch)

Come join us!

BREAKFAST

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

RACES / ARES
The eQRM Urges All County Hams to Participate.
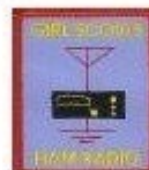
Get your License or Upgrade

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 only.
6. Your FRN Number. (free from the FCC, call for details)

Testing this month :
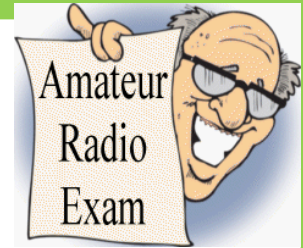
October 2021 VE Test Session Results

Our October VE Test Session had one candidate, with the participant achieving his goal of passing the exam. Our new electronic filing system once again worked superbly with completion of new and/or upgraded licenses available in just two days. A congratulations email was then sent to the candidate with a snippet of his license page with his new callsign and/or verification that all information was entered correctly.

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.

Congratulations to:

> Clay Poplin - KC3SXF, Rochester, PA, passed both the Technician and General exams

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

Reg Genola – W3REG,
Tony Pavilonis – K3AHP,
Mick Pyzoha – N3OJP,
Bart Stack – KB3NFM, and
Bob Winkle – N3AZZ
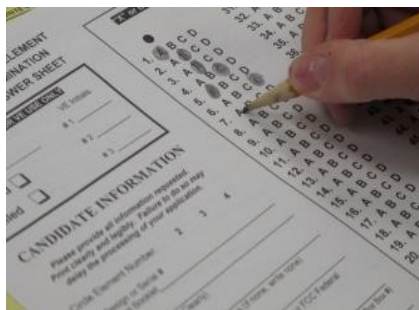
73 from Rich Soltesz - K3SOM, VE Liaison

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

Sign up for:	**Price**	
◯ BVARA full membership	25.00	_____
◯ BVARA student membership	15.00	_____
◯ 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.)

◯   Technician   Name   _____

◯   General   Address _____

◯   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

Well….the WACOM Hamfest for this month has been canceled.

No hamfest in Washington Pa this month.

Bits and Pieces

Hello everyone,

Last month I talked about missing one of my favorite hamfests, looks like I will have to wait 'till next year to attend a hamfest. The Washington hamfest is canceled. This doesn't make me happy. I have somethings to look forward to in the new year…

I still want to put up a HF antenna. I also have a very nice 2-meter antenna (It was given to me by another ham, thanks Rob.) to put up. I am just going to have to make time before the snow flies. I am almost done with my "before winter to-do list". The few things left aren't important. If they don't get done till next spring it will be fine.

I am looking forward to this November BVARA Club Meeting! I have been absent from many of the Club activities for most of the Summer. I look forward to seeing everyone and talking with them. If you attend for your first time let me know, I would like to welcome you.

Winter is a great time to make some wonderful DX! I hope you dedicate plenty of time to get on the air and make some great long distance contacts. There should be some really good propagation conditions too.

Thanksgiving is right around the corner. I wish you a great get-together! Enjoy your family and friends. The Club Christmas party isn't far off either. Make plans to attend if you haven't already.

Clear, but I will be monitoring.

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

Tony, K3AHP and Rich, K3SOM activated Moraine State Park, K-1387 for POTA on October 13th using SSB on both 40 and 20 meters.

Rich, K3SOM activated Raccoon Creek State Park, K-1409 for POTA on November 6th after the race for veterans, using SSB on 40 meters.

Have you done a recent Activation that we can include?

Maybe you are a Hunter and have reached an Award Milestone.

Please let us know so that we can recognize your skills as a POTA Hunter Extraordinaire!

Of Interest to All

Rich Springer, KA3JRS (SK) Ham Equipment for Sale

General Information

An auction will be held at 7:30 pm on November 11th, 2021 at the Beaver County Emergency Services Center (the 911 Center), 351 14th Street, Ambridge, PA 15003. All items for sale are listed below as a **Single Package** and will be auctioned by the BVARA Club to the highest bidder with one price to include all listed items. Items are used, but in like-new condition. Your bid is final with no refunds or guarantees. The equipment has been powered up, operated, and examined by club members for any significant issues or suggestions or adjustments as described below.

Auction is for a Complete Station as a **Single Package** Including:

> Yaesu FT-840 HF Transceiver, 100 Watts
> Pyramid PS-36K Regulated 13.8 VDC, 35 Amp Regulated Linear Power Supply
> MFJ-949E 300-Watt Versa Tuner with Cross-Needle Output Power/SWR
> Heil Sound Pro Set PS–5 headset with attached boom microphone
> Yaesu adapter cable for the microphone,
> Heil Sound HS–2 ergonomic hand-switch for PTT operation

Highest acceptable bid will take home the above items subject to payment in full of the bid that meets or exceeds the minimum bid of $500. Minimum bid was determined by currently available prices paid for used items described above from various used equipment sellers. The BVARA believes that the minimum bid represents a very acceptable amount, considering the near-new condition of these items.

Detailed Equipment Information

The transceiver with power supply and antenna tuner connected were successfully operated with the connected Heil Pro Set PS-5 headset and boom microphone complete with the Yaesu adapter cable, and Heil HS-2 ergonomic hand-switch for PTT operation. The transceiver enclosure was opened to determine the condition as well as any options that had been installed. No additional filters, or an FM unit, or high-stability options were present. A new CR2032 Lithium Cell Button Battery for backup was installed at the time of our inspection. The internal transceiver appearance was observed as extremely clean, suggesting that the unit had never been opened before. This radio looks like it is brand new. Only one tiny mark on the outside bottom edge, below the handle was found.

The Pyramid power supply includes over-load and over-voltage protection as well as temperature protection and a built-in cooling fan. Specifications list the output ripple at 150 millivolts at rated output with load regulation at 2 percent, max with line regulation at 1 percent, max. Efficiency is 60 percent at rated output of 13.8 Volts and 35 Amps. Weight is 26.5 Lbs.

The MFJ-949E Tuner uses a 'T' matching network and covers all bands between 160 and 10 meters. This antenna tuner will tune dipoles, inverted Vs, verticals, mobile whips, beams, random wires, and many other antennas. Rear panel connectors include coaxial, single wire or two wire feedlines. A built-in 4:1 balun allows the use of balanced open wire, twinlead, or twin-axial feedlines. The illuminated cross-needle meter measures the peak or average FORWARD power, REFLECTED power, and SWR.

The Heil Sound Pro Set PS-5 is lightweight and comfortable to wear. The headset needs a pair of these foam inner earpads to be considered fully restored:
   https://heilhamradio.com/products/ear-pad-foam-proset-pair/
The ear-pad cups themselves are in good condition as they had the cotton "booties" installed, which, by the way, washed up well.

User manuals for the Yaesu Transceiver and the MFJ Versa Tuner are available as PDF files and will be emailed to the successful bidder. Descriptions of optional accessories for the Yaesu Transceiver are included in the specifications below. Some optional accessories may be out of production/inventory but can often be found from time to time on the used equipment market.

Photos and Specifications

Yaesu Specifications and Photos courtesy of www.rigpix.com

SPECIFICATIONS

GENERAL

Type:	Amateur HF transceiver
Frequency range:	TX: 10-160 m + WARC RX: 0.1-30 MHz
Tuning steps:	10/100 Hz, 1 KHz
Mode:	AM/SSB/CW (FM option)
Channels/memory management:	90 regular 10 split/PMS Lithium battery backup
Repeater shift/offset:	±0-500 KHz
Power supply:	13.5 VDC ±10%
Current drain/power consumption:	RX: 1.2-1.4 A TX: Max 20 A
Antenna impedance/connector:	50 ohms / SO-239
Dimensions (W*H*D):	238*93*243 mm (9.37*3.66*9.57")
Weight:	4.5 Kg (9.92 lbs)
Other features:	CTCSS/PL encoder. IF shift. NB. 12 dB attenuator. CAT control.

RECEIVER SECTION

Receiver system:	**Double conversion superheterodyne (AM/SSB/CW)** 1st IF: 47.055 MHz 2nd IF: 8.215 MHz **Triple conversion superheterodyne (FM)** 1st IF: 47.055 MHz 2nd IF: 8.215 MHz 3rd IF: 455 KHz
Sensitivity:	**AM (10 dB S+N/N, 6 KHz BW)** 0.15-0.25 MHz: 40 uV

0.25-0.5 MHz: 16 uV
0.5-1.8 MHz: 8 uV
1.8-30 MHz: 1 uV
FM (12 dB SINAD, 8 KHz BW)
28-30 MHz: 0.5 uV
SSB/CW (10 dB S+N/N, 2.4 KHz BW)
0.15-0.25 MHz: 5 uV
0.25-0.5 MHz: 2 uV
0.5-1.8 MHz: 1 uV
1.8-30 MHz: 0.25 uV

Selectivity:	AM wide: 6 KHz (-6 dB), 14 KHz (-60 dB), with optional YF-112A AM narrow: 2.2 KHz (-6 dB), 5 KHz (-60 dB) FM: 8 KHz (-6 dB), 19 KHz (-50 dB), with optional FM-747 SSB/CW: 2.2 KHz (-6 dB), 5 KHz (-60 dB) CW narrow: 500 Hz (-6 dB), 1.8 KHz (-60 dB), with optional YF-112C
Image rejection:	>70 dB (above 1.8 MHz)
AF output power/speaker:	1.5 W at 10% distortion / 4 ohms
External speaker connector:	3.5 mm, 4-8 ohms

TRANSMITTER SECTION

RF output power:	AM: Max 25 W FM: Max 100 W (with optional FM-747) SSB/CW: Max 100 W
Modulation system:	AM: Low-level, early stage FM: Variable reactance (with optional FM-747) SSB: Balanced, filtered carrier
Max FM deviation:	±2.5 KHz
Spurious emissions:	Less than -40 dB
Microphone impedance/connector:	500-600 ohms / 8-pin

MISCELLANEOUS

Manufactured:	Japan, 1993-200x (Discontinued)
Additional info:	New price 1994 in Sweden: 10025:- SEK
Related documents:	User manual (4.9 MB) Service manual (7.9 MB)
Modifications:	

Options/Accessories:	DVS-2	Digital voice recorder
	FC-10	Automatic antenna tuner
	FC-800	External remote automatic antenna tuner
	FIF-232C	CAT interface for RS-232C
	FM-747	FM option
	FP-800	Matching AC power supply. 13.8 VDC, 20 A
	FP-1023	Switching power supply
	FP-1030A	Linear power supply
	LL-5	Phone patch unit
	MD-200A8X	Ultra fidelity desktop microphone
	MH-31	Standard microphone
	MMB-20	Mobile mounting bracket
	SP-6	External filtered speaker with dual inputs
	TCXO-4	High stability crystal unit (±2 ppm)
	YF-112A	AM wide filter, 6 KHz

YF-112C	CW narrow filter, 500 Hz
YH-77STA	Lightweight stereo headphones

Specifications and Photos courtesy of www.rigpix.com

Yaesu Inside, Top PC Photo

Yaesu Inside, Bottom PC Photo

MFJ-949E 300-Watt Versa Tuner with Cross-Needle Output Power/SWR

Of Interest to All

Our BVARA Club provided communications support for the 5K, 10K, and 20-mile races for veterans as part of the *Outdoor Immersions Organization* event at the Raccoon Creek State Park near Hanover, PA on Saturday morning and early afternoon, November 6th. This event was not held last year, but the BVARA supported the event in November, 2019. Once again, the club deployed a high-power station with an elevated vertical antenna at the Lodge for close support and coordination with the event administrators.

At the six Aid Stations, BVARA and Triple "A" ARA members provided localized support as aides offered water and beverages, pickles, and granola bars to assist runners.

       Assigned numbers for each racer were also recorded and relayed to our Lodge Base Station and to the event administrators. Sometimes the trails crossed State Highways, so particular support was required at these Aid Stations. Each of the three race courses involved both uphill and downhill running, as the park has considerable changes in elevation.

Some photos of the event will be uploaded to our Flickr.com web site when all the photos become available

Contest Corral

November 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	0000	1	0100	1.8-28	K1USN Slow Speed Test	CW	20 WPM maximum; name, SPC	www.k1usn.com
1	0600	1	0859	3.5, 7	Silent Key Memorial Contest	CW	RST, SK call sign you want to recognize	skmc.hu/en/rules.html
1	2000	1	2130	3.5	RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	www.rsgbcc.org/hf
2	0100	2	0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wwsac.com/rules.html
2	0100	2	0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
2	1700	2	1900	3.5-14	RTTYops Weeksprint	Dig	Other's call, your call, serial, name	rttyops.com
3	0230	3	0300	1.8-21	Phone Weekly Test – Fray	Ph	Name, SPC	perluma.com/Phone_Fray_Contest_Rules.pdf
3	1300	3	1400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
3	1700	3	2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
3	1900	3	2000	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
3	2000	3	2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.php
4	0000	5	0300	7	Walk for the Bacon QRP Contest	CW	13 wpm max; RST, SPC, name, mbr/power	qrpcontest.com/pigwalk40
4	0300	4	0400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
4	0700	4	0800	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
4	1700	4	1900	3.5-14	RTTYops Weeksprint	Dig	Other's call, your call, serial, name	rttyops.com
4	1800	4	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrrlcontest.no
4	1900	4	2000	3.5,7	EACW Meeting	CW	RST, mbr (if any), nickname, EA province or DXCC	eacwspain.es/eacwmeeting
4	2000	4	2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
5	0145	5	0215	1.8-21	NCCC RTTY Sprint	Dig	Serial, name, QTH	www.ncccsprint.com
5	0230	5	0300	1.8-21	NCCC Sprint	CW	Serial, name, QTH	www.ncccsprint.com
5	2000	5	2100	1.8-28	K1USN Slow Speed Test	CW	20 WPM maximum; name, SPC	www.k1usn.com
6	0500	6	1200	3.5-28	IPARC Contest, CW	CW	RST, serial, IPA, US state (if USA)	www.iparc.de
6	1200	7	1200	1.8-28	Ukrainian DX Contest	CW Ph	RS(T), 2-letter Ukraine oblast or serial	urdxc.org/rules.php?english
6	1300	6	1330	144	Two-Meter Classic Sprint	CW Ph	serial + 4-char grid square	fwrc.info
6	2100	8	0259	1.8-28	ARRL Sweepstakes Contest, CW	CW	Serial, precedence, your call, check, ARRL/RAC Section	www.arrl.org/sweepstakes
7	0500	7	1200	3.5-28	IPARC Contest, SSB	Ph	RST, serial, IPA, US state (if USA)	www.iparc.de
7	0800	7	1200	Any	EANET Sprint	CW Ph Dig	RS(T)	fediea.org/news/?news=20201108
7	1400	7	1700	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	www.highspeedclub.org
10	1700	10	2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
10	2000	10	2130	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org/hf
13	0000	14	2359	3.5-28	WAE DX Contest, RTTY	Dig	RS, serial	darc.de/der-club/referate/conteste
13	0000	14	2359	3.5-144	Day of the YLs Contest	CW Ph	RS(T), YL/OM	ka1uln.blogspot.com
13	0000	15	2359	1.8-7	PODXS 070 Club Triple Play Low Band	Dig	RST, SPC	www.podxs070.com
13	0001	14	2359	28	10-10 International Fall Contest, Digital	Dig	Name, mbr or "0," SPC	www.ten-ten.org/
13	0500	14	1100	50-1296	SARL VHF/UHF Analogue Contest	CW Ph	RS(T), 6-char grid locator	www.sarl.org.za
13	0700	14	1300	1.8-28	JIDX Phone Contest	Ph	RST, JA prefecture number or CQ zone	jidx.org/jidxrule-e.html
13	1200	14	1200	1.8-28	OK/OM DX Contest, CW	CW	RST, 3-letter OK/OM district code or serial	okomdx.crk.cz/index.php?page=english
13	1200	14	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
13	1600	13	1800	3.5-28	FISTS Saturday Sprint	CW	RST, SPC, name, mbr or "0"	fistsna.org/operating.html#sprints
13	1900	15	0500	1.8-432	CQ-WE Contest	CW Ph Dig	Name, location code, years of service	cqwe.cboh.org/rules.html
13	2300	22	0300	1.8-14	AWA Bruce Kelley 1929 QSO Party	CW	RST, name, QTH, equipment year/type/power	antiquewireless.org/homepage
14	0700	14	1700	3.5-28	FIRAC HF Contest	Ph	RS(T), serial	www.firac.de
14	1400	17	0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, rig manuf/model	www.classicexchange.org
15	0100	15	0300	1.8-28	4 States QRP Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
18	0000	19	0300	14	Walk for the Bacon QRP Contest	CW	13 wpm max; RST, SPC, name, mbr/power	qrpcontest.com/pigwalk20
18	0130	18	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
19	1600	19	2200	3.5	YO International PSK31 Contest	Dig	RST, serial, country or YO county	www.yo5crq.ro/Rules.htm
20	0000	21	2359	50-1296	ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
20	1200	21	1200	3.5-28	LZ DX Contest	CW Ph	RS(T), 2-letter LZ district or ITU zone	lzdx.bfra.org/rulesen.html
20	1600	20	2359	1.8	All Austrian 160-Meter Contest	CW	RST, serial, district code (if OE)	www.oevsv.at
20	1700	21	0100	1.8	REF 160-Meter Contest	CW	RST, serial, department code	concours.r-e-f.org/reglements/index.php
20	1900	20	2059	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
20	1900	20	2300	1.8	RSGB 1.8-MHz Contest	CW	RST, serial, district code (if UK)	www.rsgbcc.org/hf
20	2100	22	0259	1.8-28	ARRL Sweepstakes Contest, SSB	Ph	Serial, precedence, your call, check, ARRL/RAC Section	www.arrl.org/sweepstakes
21	1300	21	1700	3.5, 7	Homebrew and Oldtime Equipment Party	CW	RST, serial, class	qrpcc.de/contestrules/hotr.html
21	2100	21	2300	3.5-28	FISTS Sunday Sprint	CW	RST, serial, SPC, name, mbr or "0"	fistsna.org
21	2300	22	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
24	0000	24	0200	1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
24	2000	24	2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
25	2000	25	2130	3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsgbcc.org/hf
27	0000	28	2359	1.8-28	CQ Worldwide DX Contest, CW	CW	RST, CQ zone	www.cqww.com/rules.htm
29	2000	29	2130	3.5-14	RSGB FT4 Contest Series	Dig	4-char grid square	www.rsgbcc.org/hf