THE eQRM

JANUARY 2025



The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ



2M Repeater 145.310

PL 131.8



On the COVET It's winter here in Western Pennsylvania. I am hoping in about ninety days it will be more like Spring Time...

Inside this edition

Who We Are	3	Hamfests & General	11
This Month	4	Announcements	
Get a License or Upgrade	8	Of Interest to All	12
New License and Upgrades	9	Bits and Pieces	19
Membership	10	Radio Sport	20

Check into our nets

Wednesday 2 Meter	Wednesday 10 Meter
8:30PM on 145.310 MHz PL 131.8	9:00PM on 28.470 MHz

The eQRM is a publication of the Beaver Valley Amateur Radio Association (BVARA) and is Copyright 2010 - 2025 All material presented in this publication is not necessarily the views of the American Radio Relay League (ARRL), BVARA, or members of the said organizations. If you would like to contact the editor of the eQRM, please email David at kc3bxc.73@gmail.com. Please visit us online at www.W3SGJ.org. To subscribe to our newsletter, please visit W3SGJ.org/newsletter.php



Who We Are

2024 BVARA OFFICERS

President: Jack Spencer, KZ3Z Vice President: Dan Grazulis, KB3VSP 2nd Vice Pres.: Doug Lawrence, K3GTX Treasurer: Pam Spencer, W3PMS Secretary: Tom Stoops N3XC Director: Tony Pavilonis, K3AHP

Trustee: Doug Hanna, N4YKO

MONTHLY MEETINGS

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

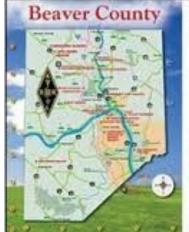
VE testing begins at 5:00 PM.

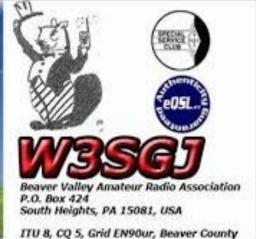
Regular meetings are at 6:30 PM

All meetings are held at the Beaver County Emergency Services Center (A.K.A. The 911 Center) 351 14th Street Ambridge, PA 15003 on the second Thursday of every month (unless otherwise stated).

2025 Jan 09 Feb 13 Mar 13 Apr 10 May 08 Jun 12 Jul 10 Aug Corn Roast Sep 11 Oct 09 Nov 13 Dec Christmas Party









This Month

This Month:

Speaker:

Rich-K3SOM

Topic:

The NanoVNA – Part 1

Including:

Continuing with our BVARA presentations this year, we kick off the New Year with an initial presentation on NanoVNA devices. These devices are significantly more affordable than the antenna analyzers that we looked at early last year. With a much wider frequency range and more precise calibration procedures, significant accuracy over the chosen frequency range can easily be obtained. Topics for our January meeting will include:

Overview of what's inside and a look at the market availability and prices

SWR measurements, the plus and minus side

Coax length and impedance measurements

Free software and connection to a NanoVNA

If you already own a NanoVNA, you are encouraged to bring it with you and compare your results with others. We'll try to answer your questions and learn together!

As we move forward in February, we'll continue with more hands-on topics that will build onto our initial session to include:

What you can easily do with one set of measured data

Bandpass filter measurements

Common mode currents and how to measure how different toroids behave Keeping RF current where you want it to go

As we gain familiarity with the NanoVNA, other possibilities may emerge that may suggest additional exploration.

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)

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

RACES / ARES The eQRM Urges All County Hams to Participate.



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)

A Fun Surprise !

Our Thursday Morning Breakfasts – A Surprise

On Thursday mornings, BVARA members have gotten together to enjoy breakfast, talk about our favorite topics within our mutual hobby, or a myriad of other topics about our activities and our community. With an opportunity to get to know each other a little better, we especially encourage newcomers to the hobby to join us in our many conversations. It's fun!

We meet every Thursday at the Freedom Square Diner in Center Township, just to the right of the Cinemark Center Township Marketplace in Monaca at about 09:30 AM. We've learned that weekends can be very busy for people who only have the weekends for family activities and home maintenance projects. Still, we have an enjoyable time no matter what the weather or who is able to join us.

Below is a photo taken at our December 19th get-together where 11 of us gathered to continue discussing our many favorite topics.

From left to right are Rich – KC3TOO, Rob – N3OJL, Brad – KC3ZXG, Tim – KA3JRT, Norm – K3NJT, Tom – N3XC, Tony – K3AHP, Larry – KC3ROS, and Keith KC3TMC. Not shown on the left is Greg – KC3TFW, and Rich – K3SOM who took the picture.



Surprise !

Once a year, the Freedom Square Diner offers a chance to win a full-size replica of the Leg Lamp that was featured in the 1983 movie: *A Christmas Story*. *A Christmas Story* is about an average middle-class family living in a small town in the 1940's. The film contains an average family of a regular husband and wife relationship and two young boys. The eldest of the boys is named Ralphie (Peter Billingsley) who is the star of the film. All that Ralphie wants is to have a perfect Christmas containing the perfect gift, a Red Ryder carbine-action BB gun.

To my surprise, I received a phone call on December 22nd from Bill, the Manager of the Diner informing me that I had won the replica Leg Lamp. In the movie, the father, old man Parker, won the Leg Lamp and placed it in his front window by his Christmas tree for all to see. Below shows the camaraderie among Shani (the head waitress), me, and Roxi, our waitress at our breakfast meeting on December 26th.



The lamp, just like in the movie, is proudly displayed beside my Christmas tree just inside my front windows for all to see.

Rich-K3SOM

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)



Page 8

New License and Upgrades

BVARA VE Testing

Testing this Month :



December 2024 VE Test Session – No Testing This Month

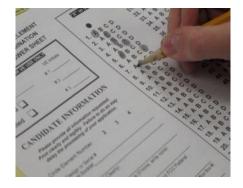
Our November VE Test Session was not held because, as customary with the BVA-RA, our Christmas Dinner replaced our regular monthly club meeting. So, no meeting, no VE Test Session. However, we all had a great time at our Christmas Dinner.

Our January 2025 VE Test Session will be held on January 9th just before our regular club meeting. Are you ready to get your ham radio license or upgrade your current license? We hope to see you there!

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

Keith Custard – KC3TMC Reg Genola – W3REG Tony Pavilonis – K3AHP Scott Pelkofer - KC3KYZ Mick Pyzoha – N3OJP Bart Stack – KB3NFM Ron Victorelli – KC3TZT Bob Winkle – N3AZZ and Frank Witkowski – W3FJW

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 u	up for:	Price			
\bigcirc	BVARA full membership	25.00			
\bigcirc	BVARA student membership	15.00			
\bigcirc	BVARA associate membership	10.00			
\bigcirc	BVARA Child under 21 at home 1	membership 5.00			
	One year ARRL membership	59.00			
	A Club Donation				
ARRI	Member? Yes No	Total Enclosed			
Your	License Class (If you have one.)				
\bigcirc	Technician	Name			
\bigcirc	General	Address			
\bigcirc	Advanced				
\bigcirc	Extra Class	Email			
		Phone			
		Your Call sign			

Make check or money order payable to:

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

Hamfests & General Announcements

Okay!



There will be a Hamfest

in February!

02/23/2025 - WASHFest 2025

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: <u>kc3bxc.73@gmail.com</u>

Propagation of Broadcast Signals

https://www.arrl.org/propagation-of-rf-signals

(*Reproduced*, *courtesy of the Amateur Radio Relay League for this wonderful collection of information*)

Introduction

Radio waves, like light waves and all other forms of electromagnetic radiation, normally travel in straight lines. Obviously, this does not happen all the time, because long - distance communication depends on radio waves traveling beyond the horizon. How radio waves propagate in other than straight-line paths is a complicated subject, but one that need not be a mystery. This page provides basic understanding of the principles of electromagnetic radiation, the structure of the Earth's atmosphere and solar-terrestrial interactions necessary for a working knowledge of radio propagation. More detailed discussions and the underlying mathematics of radio propagation physics can be found in the references listed under additional resources.

The Sun, being the largest engine in our solar system, has a great effect on propagation as its "exhaust" interacts with our <u>Earth's magnetic field</u>. A rudimentary knowledge of <u>sunspots</u>, <u>solar flares</u> and mass ejections will help the amateur take advantage of these effects to enhance his pleasure, or understand his plight.

Articles

- <u>The Sun, the Earth, the Ionosphere</u>: *What the Numbers Mean, and Propagation Predictions--a brief introduction to propagation and the major factors affecting it. By Carl Luetzelschwab, K9LA*
- <u>An Introduction to Gray-Line DXing</u> *QST* November 1992, pp. 80-82 *The transitions from darkness to daylight and daylight to darkness cause drastic changes in the iono-sphere. Use this to your DX advantage.*
- <u>Catch a Falling Star</u> *QST* October 1997, pp. 63-67 *A Beginner's guide to meteor-scatter communication*.
- <u>Sporadic E--A Mystery Solved? Part 1</u> *QST* October 1997, pp. 39-41 One of the world's leading ionospheric scientists explains the physics of sporadic E.
- <u>Sporadic E--A Mystery Solved? Part 2</u> *QST* November 1997, pp. 38-42
- <u>HF Propagation: The Basics</u> *QST* December 1983, pp. 11-15 Say it's 10 P.M. in Savannah, and you'd like to reach out and QSO someone in southern Europe. A solid knowledge of how signals travel will help you decide if you've got a fighting chance.
- Radio Waves and Communications Distance QST, January 1985, pp. 31-33

- <u>Here Comes the Sun</u> *QST*, Lab Notes, October 1996, pp. 74-75
- <u>Radio Waves and the Ionosphere</u> *QST*, November 1999, pp. 62-64
- Propagation Broadcasts and Forecasts Demystified QST November 1991, pp. 20-25
- <u>ARLP029: Propagation de K7VVV</u> W1AW broadcasts a weekly Propagation Bulletin. In this one Tad Cook, K7RA, formerly K7VVV, gives a summary of what the numbers in a propagation forecast mean and how they are compiled.
- <u>The Brendan Trophies: Insights for the New Millennium</u> *QST* August 2002, pp. 36-39 *Can amateurs cross the Atlantic on 144 MHz without satellites or moonbounce?*
- <u>Understanding Solar Indices</u> *QST* September, 2002, pp. 38-40 *When someone tells you that the flux is up to 200 and the K is 3, do you know what they are talking about? You will after you read this article!*
- <u>What is VOACAP Trying to Tell Me?</u> A Presentation to The Yankee Clipper Contest Club Feb. 1, 2003, Milford, CT, by Dean Straw, N6BV, Senior Assistant Technical Editor, ARRL
- <u>Why We Stack 'Em! Covering All the Angles</u> A Presentation to The Yankee Clipper Contest Club, Feb. 1, 2003, Milford, CT, by Dean Straw, N6BV, Senior Assistant Technical Editor, ARRL
- <u>Microwave Propagation in the Upper Troposphere</u> *QEX* July/August, 2003 *Amateur microwave work need not be restricted to operation*
- <u>Propagation Planning for DXpeditions</u> 6 Steps for a More Successful Trip by Carl Luetzelschwab K9LA
- <u>Propagation Planning for Contests</u> Using Propagation Predictions to Develop a Band Plan by Carl Luetzelschwab K9LA
- <u>Practical Radio Aurora</u> QST March 1990, pp 20-25. While solar events such as coronal mass ejections can seriously disturb HF propagation, the same events can also enhance VHF propagation.

Tutorials

• <u>An Introductory Tutorial to W6ELProp</u> (96,641 bytes, PDF file) *A Guide to Running Your Own Propagation Predictions, by Carl Luetzelschwab, K9LA. W6ELProp is named after the amateur call sign held by Sheldon C Shallon.*

- <u>An Introductory Tutorial to VOACAP</u> (92,076 bytes, PDF file) *A Guide to Running Your Own Propagation Predictions, by Carl Luetzelschwab, K9LA*
- <u>Electronics Technician Volume 7—Antennas and Wave</u> Propagation NAVEDTRA 14092 Large 3.11MB download.

Steve Nichols G0KYA and Alan Melia G3NYK wrote a series of propagation articles for the RSGB that is now an ebook. It can be downloaded from <u>Steve Nichols' blog</u>.

Propagation Reports and Forecasts

- <u>Radio Signal Propagation</u> Many articles on how radio signals travel great distances at different frequencies. Topics include sporadic E, sunspots, troposcatter, meteor scatter, sudden ionospheric disturbances, and ground wave propagation.
- <u>hfradio.org propagation</u> This page is dynamically created from many sources using automation, and the information contained is as fresh as possible. This page will reload every 15 minutes, which will refresh any content that has changed since last viewing.
- <u>W1AW Propagation Bulletins</u> W1AW, the Hiram Percy Maxim Memorial Station provides informational bulletins to Amateur Radio Operators.
- <u>DX-Listeners' Club Solar Terrestrial Activity Report</u> The Solar Terrestrial Activity Report is generally updated once a day. The report contains a graphical view of the last 2 months' solar flux values, sunspot count and planetary A index. In addition, there is information on recent solar events as well as predictions for the next days. Charts of all sunspot cycles from cycle 1 are available as well as comparisons of the most recent cycle with previous cycles
- <u>D-Region Absorption Prediction</u> Presented by the NOAA/Space Environment Center
- <u>Today's Space Weather</u>
- <u>Welcome to The Aurora Page</u> Information, forecasts, links and images about the "Northern Lights".
- <u>VHF / UHF Tropospheric Ducting Forecast</u> Paul Kelley N1BUG maintains <u>Aurora Sentry</u>, a page with satellite maps that show auroral activity
- <u>VOACAP.com</u> Monthly point to point and coverage area predictions for HF propagation.

Propagation Beacons

• <u>G3USF's Worldwide List of HF Beacons</u> Martin Harrison G3USF maintains a list of HF beacons.

- <u>G3USF's Worldwide List Of 50MHz Beacons</u> Martin Harrison G3USF maintains a list of 50MHz beacons.
- <u>VHF/UHF BEACONS by WZ1V</u> Ron Klimas WZ1V maintains a list of VHF/UHF beacons.

Propagation Software

- <u>Ham CAP 1.5</u> *HF propagation prediction tool for Amateur Radio. Freeware by Alex Shovkoplyas, VE3NEA.*
- <u>HF Propagation Models from NTIA/ITS</u> U.S. Department of Commerce NTIA/ITS Institute for Telecommunication Sciences High Frequency Propagation Models. The package includes ICEPAC, VOACAP, and REC533. Freeware.
- <u>Radio Mobile Freeware by VE2DBE</u> This software by Roger Coude VE2DBE predicts the performance of VHF and UHF radio systems.
- <u>PropView</u> *PropView uses the included IonCap propagation prediction engine to forecast the minimum and maximum useable frequencies between two locations over a specified 24-hour period.*
- <u>ACE-HF Professional Propagation Software for HF Radio Operators</u> *QST* Product Review, <u>November 2002</u> \$200 program with 30 day trial (2022).
- <u>DX Atlas by VE3NEA (Afreet Software, Inc.)</u> Alex Shovkoplyas VE3NEA provides this software program. \$30 program with 30-day trial (2022).

Announcing The 1st Annual BVARA CW Roundup!

Date: Feb 27, 2025 Time: 7:00 to 8:30 PM (Local Time) Frequency: 28.04 to 28.06 MHz 100W Max Feb 28, 2025 Time 0:00 to 01:30 UTC

Operating Classes: CLASS A - BVARA member - Experienced CW operator

CLASS B - Newcomer or newer CW operator (BVARA member or non-member)

CLASS C - Non-BVARA member - Experienced CW operator

CLASS D – Listeners who copy only (log calls of participating stations you heard)

CQing: Send "CQ CWR CQ CWR"

Exchange: Signal report (including operating class) / QTH (your location) / Name

Example: You are a newer CW operator and you are in a QSO with K3XYZ whose signal

is readable, their signal strength is registering a '7' on your S-meter and their signal tone is good. Your (example) callsign is W3ABC, you live in Ambridge, and your name is Bruno. You would then send something like:

K3XYZ DE W3ABC (K3XYZ this is W3ABC) BT (break)

RST IS 579 B 579 B BT (signal report and class)

QTH IS AMBRIDGE, PA AMBRIDGE, PA BT

NAME IS BRUNO BRUNO BT

HW CPY? (how did you copy my transmission?)

K3XYZ DE W3ABC K (over)

The other station would then reply with their information using the same format. After the exchanges are completed, short informal remarks can be made during the QSO if desired, after which the contact would end with something like:

TNX FER QSO (thanks for the QSO)

GL ES 73 (good luck and best wishes)

K3XYZ DE W3ABC SK (end of contact)

Description of event: <u>This 1½-hour event is not a contest.</u> Rather, it is a celebration of our area

> newcomers new to CW, returners to the mode of CW, and listeners. Also, it is an invitation to our veteran CW operators to enjoy helping the newcomers in making live, on-air CW contacts. There are no points scored, and no results or standings posted. You do NOT have to be a member of the BVARA to participate.

A handsome certificate will be issued to each participant submitting a log entry from the event (see above)

Send logs no later than Saturday, March 8, 2025, to Rich Soltesz – K3SOM, 115 Brooks Dr, Beaver Falls, PA 15010 or: Electronic log: K3SOM@ARRL.net

Attach Cabrillo file: [call].log





Page 17





January 2025

Straight Key Night, CW, All Authorized Bands, January 1st from 0000 – 2359 UTC

ARRL Kids Day, January 4th, PH

North American QSO Party, January 11th – 12th, CW

ARRL January VHF Contest, January 18th, 50 Meters and Up, CW, PH, Dig

North American QSO Party, January 18th – 19th, SSB

CQ 160 Meter Contest, January 24th – 26th, CW

Winter Field Day, January 25th – 26th, CW, PH, Dig (No FT8)

Australia Day, January 25th – 26th, CW, PH, Dig

February 2025

WASHfest 2025 Home Economics Building, South Park, Sunday, Coming soon!

1st Annual BVARA CW Roundup, February 27th, 7:00 to 8:30 PM Local Time 28.040 to 28.060 MHz, 100 Watts Max (See Flier in this Newsletter for Details)

Bits and Pieces

Happy New Year,

What awaits us? Have you made any radio plans yet? An upgrade to your transceiver, a new antenna, an amplifier, a tower & rotor or something else? I am looking forward to this new year! I have plans! I want to attend as many hamfests as I can and to finally get that "Dadgum Poled" horizontal antenna up and running. I still have the dadgum poles I need to "skin" and then plant them in the ground. I have been saying this for so long. But I think this will be my year. My many projects



on the farm have kept me overwhelmed. I was too unorganized to have a clear path that would ensure I got things completed in a timely manner. Last year in January I decided to get organized and get stuff done so I could play at my radio hobby and not feel guilty that I stole time to play when I should be working on farm things.

Last year I wrote a list of over three hundred things I needed to take care of here on the farm. With my wife's help and some others, we are below fifty things that took precedent over my Ham radio hobby. We have been working hard to get the farm things completed. So... things are looking good to finally get to my dream antenna build. I am crossing my fingers that everything works out to finally, finally get to that Dadgum Pole installation!

I hope your radio dreams come to fruition way quicker than mine have. Before the cold weather set-in I stole a day from the "farm doings" to re-install my existing HF antenna. Well, that didn't work out. It turned out that my coax to the antenna was smashed and it shorted the center conductor to the shield. I may still take the antenna down and put a new coax on that HF antenna. It has been cold and snowy. I really would like to wait for a much warmer time to do this "new coax install". If I get adventurous I will put some vigor into that old antenna before spring.

I am planning to add a new page to the eQRM. I will call it "Who Did'ya Contact Recently". I will send out by email a request for you to fill out and return to me. I will make it simple and to the point. I want to know who you made contact with recently in your radio doings. It is my hope that this will encourage our group to get on the air more often and let me know who you got to contact. So be looking in your email for this invitation to help me make our newsletter even better!

This month's eQRM just about wrote itself. I am excited to hear from you all. Please help with your radio contact inputs. Till next month...



Clear on your final, but I will be monitoring.

KC3BXC



Radio Sport

Contest Corral

January 2025

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.

Da	Start te-Time		nish ate-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1	0100	3.5	AGB New Year Snowball Contest	CW Ph Dig	RST, serial, mbr (if any)	www.qsl.net/eu1eu/ agb_nysb.htm
1	0800	1	1100	3.5,7	SARTG New Year RTTY Contest	Dig	RST, serial, name, happy new year (native language)	www.sartg.com
1	0900	1	1200	3.5-14	AGCW Happy New Year Contest	CW	RST, serial, mbr (if any)	www.agcw.de
1	1400	1	1800	144,432	AGCW VHF/UHF Contest	CW	RST, serial, pwr class, 6-char grid square	www.agcw.de
1	2000	1	2100	3.5	UKEICC 80m Contest	Ph	6-char grid square	www.ukeicc.com/80m-rules. php
2	0000	3	0300	7	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrpcontest.com/pigwalk40
2	1800	2	2200	28	NRAU 10m Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/nrau-contests-in- general
2	2000	2	2200	1.8-28,50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
3	0100	3	0130	See rules	NCCC FT4 Sprint	Dig	4-char grid square	www.ncccsprint.com
3	0230	3	0300	See rules	NCCC Sprint	CW	serial, name, QTH	www.ncccsprint.com
4	0000	4	2359	3.5-28	PODXS 070 Club PSKFest	Dig	RST, SPC	www.podxs070.com
4	0700	4	2100	3.5-14	Marconi Club ARI Loano QSO Party Day	CW	RST, serial, "MC" (if mbr)	www.ariloano.it
4	1200	5	1200	1.8-28	WW PMC Contest	CW Ph	RS(T), PMC abbrev or CQ zone	www.s59dcd.si
4	1300	4	1700	3.5,7	RSGB AFS Contest, CW	CW	RST, serial	www.rsgbcc.org
4	1800	4	2359	3.5-14,18,21,24, 28,2-m rptrs	ARRL Kids Day	Ph	Name, age, QTH, favorite color	www.arrl.org/kids-day
4	1800	5	2359	3.5-28	ARRL RTTY Roundup	Dig	W/VE: RST, SP; non-W/VE: RST, serial	www.arrl.org/rtty-roundup
4	2000	5	0700	1.8	EUCW 160m Contest	CW	RST, name, mbr or "NM"	www.uft.net
7	0100	7	0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, pwr	ars-qrp.com
11	0000	11	2359	3.5-28	YB DX Contest	Ph	RS, serial	ybdxcontest.com
11	1200	12	1200	3.5-28	UBA PSK63 Prefix Contest	Dig	ON: RSQ, UBA section or serial (starting with 001)	www.uba.be
11	1200	12	2359	1.8-28,50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
11	1800	12	0559	1.8-28	North American QSO Party, CW	CW	Name, SPC	www.ncjweb.com/NAQP- Rules.pdf
12	0630	12	0830	3.5,7	NRAU-Baltic Contest, SSB	Ph	RS, serial, 2-letter fylke/län/province/region	www.nraubaltic.eu
12	0900	12	1059	28	DARC 10m Contest	CW Ph	RS(T), serial, DOK (if any)	www.darc.de
12	0900	12	1100	3.5,7	NRAU-Baltic Contest, CW	CW	RST, serial, 2-letter fylke/län/province/region	www.nraubaltic.eu
12	1300	12	1700	3.5,7	RSGB AFS Contest, Data	Dig	RST, serial	www.rsgbcc.org
13	0100	13	0300	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or pwr	www.4sqrp.com
14	1800	14	1929	3.5,7	DARC RTTY Sprint	Dig	RST, serial, DOK (if any)	www.darc.de
15	2300	19	2300	1.8-14	AWA Linc Cundall Memorial CW Contest	CW	RST, eqpt year, input power (see rules for format)	www.antiquewireless.org
16	0000	_	0300	14	Walk for the Bacon QRP Contest	CW	Max 13 WPM; RST, SPC, name, mbr or pwr	qrpcontest.com/pigwalk20
16	0130		0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or pwr	naqcc.info/sprint_rules.html
16	1900	16	2000	3.5-14	NTC QSO Party	CW	Max 25 WPM; RST, mbr or "NM"	pi4ntc.nl/ntcqp
18	1200		1159	1.8-28	Hungarian DX Contest	CW Ph	RS(T), serial, 2-letter county (if HA)	ha-dx.com/en/contest-rules
18	1200		1159	3.5-28	PRO Digi Contest	Dig	RST, serial, "ME" (if mbr)	proradiocontestclub.com
18	1300		1700	3.5,7	RSGB AFS Contest, SSB	Ph	RS, serial	www.rsgbcc.org
18	1800	19	0559	1.8-28	North American QSO Party, SSB	Ph	Name, SPC	www.ncjweb.com/NAQP- Rules.pdf
18	1800		0559	1.8-28	NA Collegiate Championship, SSB	Ph	Name, SPC if NA	www.w9smc.com/nacc
18	1900	_	0359	50 and up	ARRL January VHF Contest	CW Ph Dig	4-char grid square	www.arrl.org/january-vhf
18	2000	19	0559	1.8-7	Feld Hell Sprint	Dig	See rules	sites.google.com/site/ feldhellclub
19	2300	20	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	qrpcontest.com/pigrun
22	0000	_	0200	1.8-28,50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
23	0130		0330	1.8	NAQCC CW Sprint	CW	RST, SPC, name, mbr or "none"	naqcc.info/sprint_rules.html
24	2200		2200	1.8	CQ 160m Contest, CW	CW	RST, SP or CQ zone	www.cq160.com
25	0600	-	1800	3.5-28	REF Contest, CW	CW	RST, French dept or serial	concours.r-e-f.org
25	1200		1200	3.5-28	BARTG RTTY Sprint	Dig	Serial (no signal report)	bartg.org.uk
25	1300		1300	3.5-28	UBA DX Contest, SSB	Ph	RST, serial, ON section (if ON)	www.uba.be
25	1600	_	2159	No WARC	Winter Field Day	CW Ph Dig	Category, ARRL section, MX or DX	www.winterfieldday.com
25	2200		1000	1.8-28	Australia Day Contest	CW Ph Dig	RST, 4-char grid square	www.wia.org.au
29	2000	29	2100	3.5	UKEICC 80m Contest	CW	6-char grid square	www.ukeicc.com