

THE eQRM



BVARA Beaver County Pennsylvania

November 2015
THE eQRM

On the Cover : Photo from Handiham Headquarters. Ham radio for people with disabilities. A weekly podcast from the Courage Handiham System, <http://handiham.org>. Ham radio topics, including accessible equipment, blind ham radio, events, policy in the Amateur Radio Service, and more.

Special Note : There will be a " November-and-a-Half letter" coming out very soon with the BVARA Christmas Party information.

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CHECK IN TO THE NETS

Wednesday 2 Meter
8:30PM on 145.310 MHz

Wednesday 10 Meter
9:00PM on 28.470 MHz

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I don't want to hear this either!



Looks like all the Hamfests in our Western Pennsylvania area are over till next year. Now we turn our interests to using the treasures we purchased at the Hamfests we did attend. The days are shorter now, when it is cold and dark outside, it's time to get on the air. Hopefully during the warmer weather you got that antenna and radio ready for your use. As winter comes we will experience some radio calamity and collect other stories to share with friends at next year's Hamfests.

73 Hamfests 'til next year.

This Month

BVARA Club feature presentation this Month:

Speaker : Rich Soltesz K3SOM

Topic : Antennas and the Sark – 110 Vector Analyzer



Including : Continuing with our BVARA Presentation Series this year, our topic this month takes a look at an interesting tool for hams that was introduced at the 2015 Dayton Hamvention and also reviewed by QST in the November 2015 issue. This is a serious vector-impedance antenna analyzer that is loaded with many capabilities and each with significant accuracy for your antenna measurement needs. Measuring a mere 3.9 x 2.4 x 0.6 inches and equipped with an internal rechargeable LiPo battery, this analyzer can easily operate wherever you need it.

Do you also need an accurate signal generator with 1 Hz resolution or a time domain reflectometer to find that bad spot in your coax or connectors? What about multiband displays to adjust that multiband antenna? Are you into traps? No, not the beaver or muskrat kind! Want a detailed graph or data points for your archives or presentations? But wait, there's more: we'll run some actual numbers with our specially-designed balanced dipole to show off some of the Sark -110 capabilities. You may even come away thinking: "It's about time someone designed what I really need!" This is one exciting presentation you won't want to miss!

Rich's Background:
Extra Class Ham, Licensed since 1962, VE,
B.S. Electrical Engineering



Two-Meter Ringo Ranger SWR and Impedance Measurements

More this Month

VE TEST SESSION

Beaver County Emergency Services Center
351 14th Street
Ambridge, PA 15003

Tests begin 5PM Thursday, November 12th (walk-ins allowed).
All classes of amateur radio license tests will be 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.

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



WEEKLY

Thursday Morning Breakfast

The BVARA meets every Thursday at Steak 'n Shake in Center Township, by the Beaver Valley Mall, at 10:00 AM. All area amateurs are encouraged to come join us at our Thursday morning breakfast.

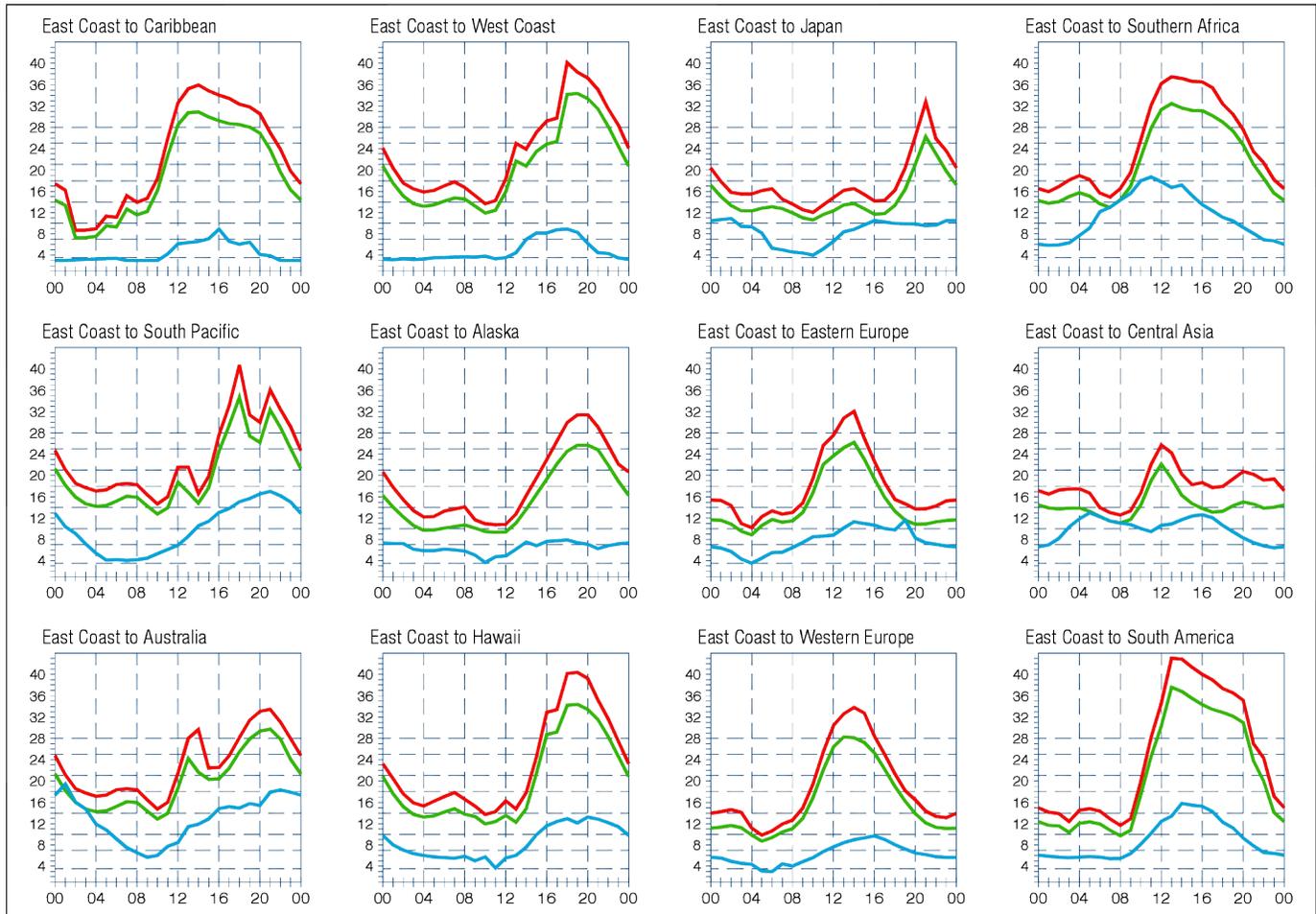


See you at



Propagation Charts

From the ARRL



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of **November** for the paths indicated. The horizontal axes show Coordinated Universal Time (UTC), and the vertical axes frequency in MHz. On 10% of the days of this period, the highest frequencies propagated will be at least as high as the upper red curves (HPF, highest possible frequency) and on 50% of the days they will be at least as high as the green curves (MUF, classical maximum usable frequency). The blue curves show the lowest usable frequency (LUF) for a 1500-W CW transmitter. For SSB or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994 *QST*, pp 27-30, and Feb 1995 *QST*, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 102. This is a **Medium** level of solar activity. See the detailed propagation tables on *The ARRL Antenna Book CD-ROM*.

PROPAGATION

The East Coast propagation chart listed above is for November 2015. If you would like more information on how to read these charts, or for more information on propagation in general, please visit <http://arrl.org/propagation>

RACES / ARES

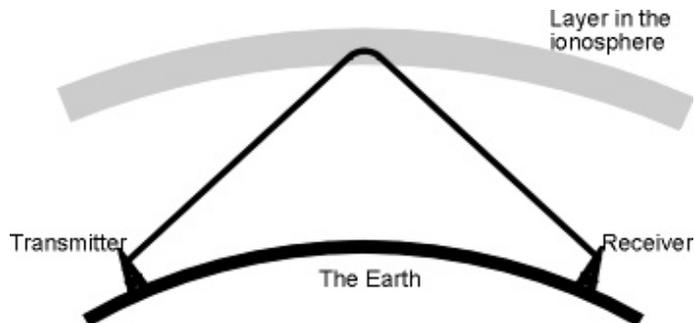
eQRM Urges All County Hams to Participate

As a matter of editorial opinion, the eQRM urges all Beaver County licensed amateurs to participate in the County's RACES and ARES programs.

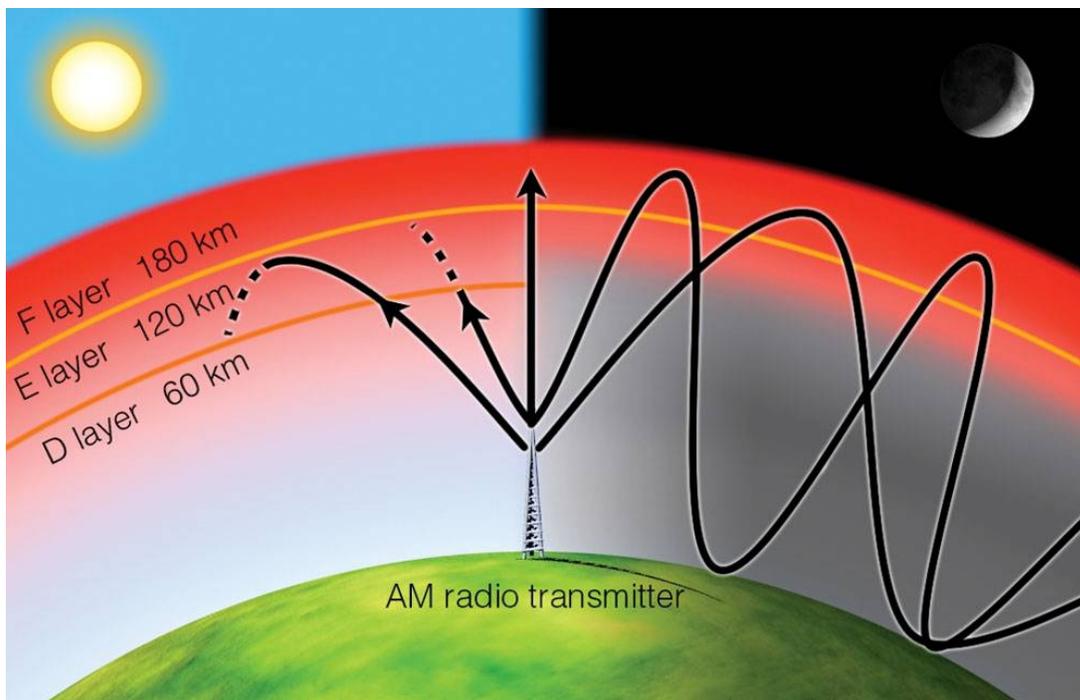
Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850 MHz repeater (131.8 PL)



Propagation

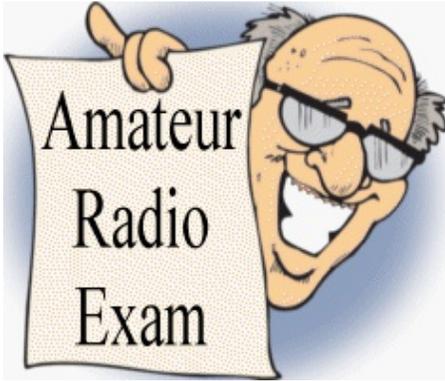


Be sure to check out the 10, 12, 15, and 17 meter bands in November for some significant openings. See the propagation charts on Page six for local times for specific areas. Hint: look at the graphs for a given geographic area for any time of day where the graphs go above 30 MHz!



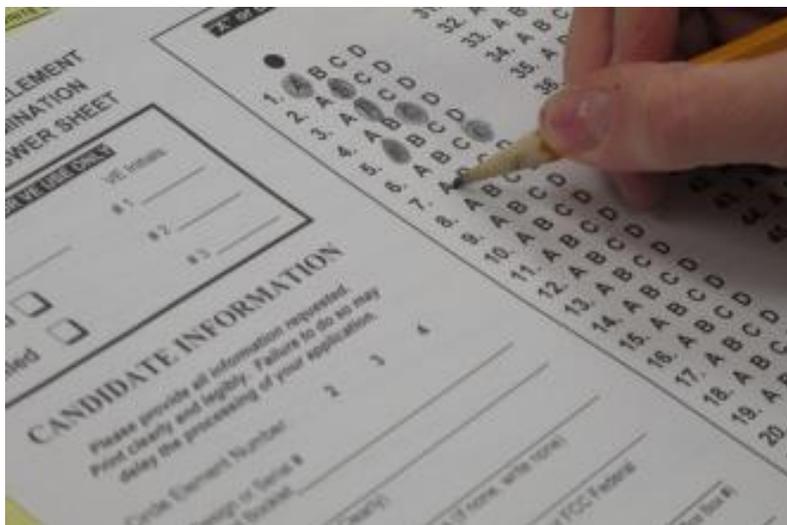
© 2007 Thomson Higher Education

New License and Upgrades BVARA VE Testing



The BVARA would like to congratulate and acknowledge:

- Frank Rocco - KC3BHP from Scottdale, PA passed the General Class exam
- Charlie Kulbacki, Jr. - KC3FNG from Sewickley, PA passed both his General and Extra Class exams
- Jim Miller from Sewickley, PA passed his Technician Class exam. His new call is KC3FRW



Who We Are

Membership Information and Club Officers



2015 BVARA OFFICERS

President: Jack Spencer, KZ3Z
Vice President: Dick Hanna, K3VYY
2nd Vice Pres.: Rob Miller, N3OJL
Treasurer: Pam Spencer, W3PMS
Secretary: Norm Trunick, K3NJT
Director: Bob Winkle, N3AZZ
Director: Jeff Waite, K3SLK
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.
Regular meetings are at 6:30.

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

MEETING DATES 2015

Nov 12
Dec 06 Sunday 5-9 PM
Club Christmas Party

Jan 14 2016
Feb 11
Mar 10
Apr 14
May 12
Jun 09
Jul 14
Aug 11



Technical Info

Radio Frequency Interference – A Different Perspective for the Ham Chapter 2 – Finding External Noise Sources

Introduction :

Last month, Chapter 1 gave us an introduction to Radio Frequency Interference (RFI) along with some basic definitions and terminology so that we can build on a common framework for this and subsequent chapters. An important topic was a description of how undesirable signals travel, i.e., RFI. In truth, the signals from our transmitter try to travel via the same mechanisms so it is important that we add ‘undesirable’ to our nomenclature because those signals are RFI to us and spoil our ability to hear and communicate with others with weak signals. Let’s get started!

You are the detective

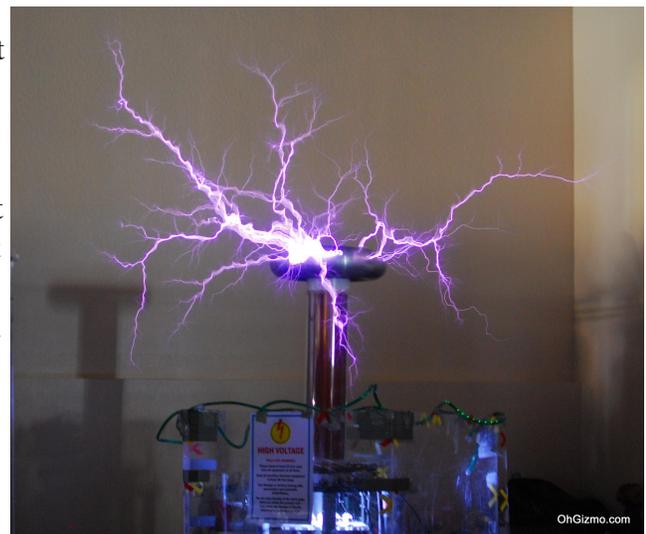
It’s time to put on your Sherlock Holmes deerstalker hat because you must do some detective work to find the guilty parties. You will find many more than one RFI source, so some preliminary data collection is important so that a baseline can be established. With that baseline, improvements in the reduction of RFI will be much easier to recognize. One method is to record the no-signal s-meter level by band and by hour. Sometimes the RFI is so obvious that this step seems like overkill. At the WACOM Hamfest one local ham told me about how quiet the bands are at his location except for 15 meters. There his s-meter is recording an unusually high 10 dB over S9 across the entire band. He knows he has a severe RFI problem on that band! When the bands are dead, that is a great time to find local sources of RFI.



Establish your priorities

RFI is usually strongest within your own home so the logical place to start is right in your own back yard. Once you have an understanding of your baseline background levels by band and time of day, now you can proceed along one of many paths. An easy way to determine if the noise level can be significantly reduced is to find a way to power your radio from an independent power source like a 12-volt car battery. Remember, we don’t have to transmit; we are interested in reception so the power requirements are much more modest for this technique. Find your worst noise source on the dial and then kill the power to the whole house at the power distribution panel to the entire house. Seek qualified help if you are uncomfortable with doing this. Did the noise go away? Are any of the bands quieter? Did some of those annoying drifting buzzes also go away? Did some repetitive birdies 5 to 30 KHz also go away? What about those annoying repetitive clicks – are they now gone? If you can answer “yes” to any of these, then now you know that the noise is originating from within your home. Grab that deerstalker hat and begin to turn the power back on, one circuit at a time. By now you have a baseline reference and a new list of specific RFI sources with a description of what it sounds like and where on the bands it can be found. Now you can add a column with the identity of the circuit breaker that contains that noise source. If your RFI list contains over 10 entries, it’s time to go after the worst offender and make that one the highest priority.

Rich – K3SOM



Could Junior's Science Project be the source of some of your RFI problems?

Bits and Pieces

November is here!

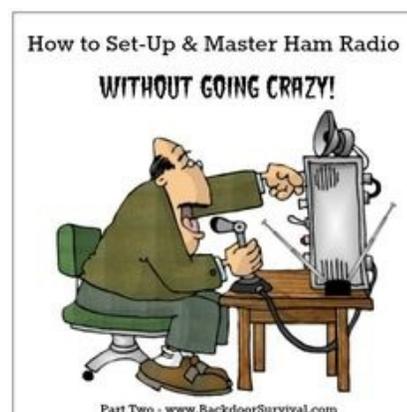


When was the last time you sharpened your mind. Education is always a good thing. How about a class in electronics. What about learning Morse code, maybe a class to just brush up your speed. Keeping your mind fed is important. If learning isn't your interest then how about sharing what you know.

What about teaching some subject you are well versed in? You could volunteer to present a forum (lecture) at your next Club meeting. Share your knowledge with other Hams. Could you explain how contesting works? What is spotting and how could that help a new ham. You could show the new Ham where to find software or a web site for spotting. Do you have a favorite software package for logging and/or spotting? You could give a demonstration on the logging software you use. How do you do QSL cards? Is there a simple way to send and receive them? To a new Ham there are many basic things to learn that you old pros take for granted. It's all new to the person just starting into Amateur Radio.



You know my motto, in all your radiopursuits think...
Safety! Safety! Safety!



Radio Sport

- November 2015 Contest -

ARRL November Sweepstakes

Contest Period: Begins 2100 UTC Saturday and runs through 0259 UTC Monday.

Objective: For stations in the United States and Canada (including territories and possessions) to exchange QSO

information with as many other US and Canadian stations as possible on 160, 80, 40, 20, 15 and 10 meter bands.

CW: First full weekend in November (November 7-9 2015).

Phone: Third full weekend in November (November 21-23, 2015).

EME Contest

Objective: To work as many amateur stations as possible via the earth-moon-earth path on any authorized amateur frequency above 50 MHz.

Full weekend 48-hour periods (0000 UTC on Saturday through 2359 UTC Sunday).

50 to 1296 MHz - Nov 28-29

For more information go to the ARRL web site with the Keywords: "contest calendar"

<http://www.arrl.org/contest-calendar>

Radio Sport

Contest Corral – November 2015

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

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

Start Date-Time	Finish Date-Time	Bands	Contest name	Mode	Exchange	Sponsor's Website
1 0900	1 1700	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	www.highspeedclub.org
3 0100	3 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	www.arsqrp.blogspot.com
4 2000	4 2100	3.5	UKEICC 80 Meter Contest	Ph	4-ch grid square	www.ukaicc.com
5 1800	5 2200	28	NRAU 10 Meter Activity Contest	CW Ph Dig	RS(T), 6-ch grid square	www.nrau.net/activity-contests
7 0600	7 1800	3.5-28	IPARC Contest, CW	CW	RST, serial, "IPA" (if member), US state (if US)	www.iparc.de
7 1200	8 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
7 1200	8 1200	1.8-28	Ukrainian DX Contest	CW Ph	RS(T), 2-letter oblast or serial	urdx.org/rules.php?english
7 2100	9 0300	1.8-28	ARRL Sweepstakes, CW	CW	Serial, precedence, your call sign, check, section	www.arrl.org/sweepstakes
7 2100	9 0300	1.8-28	NA Collegiate ARC Championship, CW	CW	Serial, precedence, your call sign, check, section	www.collegiatechampionship.org
8 0600	8 1800	3.5-28	IPARC Contest, SSB	Ph	RS, serial, "IPA" (if member), US state (if US)	www.iparc.de
8 0800	8 1200	Any	EANET Sprint	CW Ph Dig	RS(T)	fediea.org/news/?news=20151108
8 1100	8 1700	28	DARC 10 Meter Digital Contest	Dig	RST, serial	www.darc.de/referate/ukw-funksport
11 2000	11 2100	3.5	RSGB 80 Meter Club Sprint, SSB	Ph	Other's call, your call, serial, name	www.rsgbcc.org/hf
14 0000	15 2359	3.5-28	WAE DX Contest, RTTY	Dig	RS, serial	www.darc.de/referate/dx/contest
14 0001	15 2359	28	10-10 Int. Fall Contest, Digital	Dig	Name, mbr or "0", SPC	www.ten-ten.org
14 0700	15 1300	3.5-28	JIDX Phone Contest	Ph	RST, prefecture or CQ zone	www.jidx.org/jidxrule-e.html
14 1200	15 1200	1.8-28	OK/OM DX Contest, CW	CW	RST, district or serial	okomdx.crk.cz/index.php?page=english
14 1400	15 0200	1.8-50	Kentucky QSO Party	CW Ph Dig	RS(T), county or SPC	www.wkdx.com/mainsite
14 1900	16 0500	1.8-144, 432	CQ-WE Contest	CW Dig	Name, location code, years of service	cqwe.cboh.org/rules.html
15 1300	15 1700	3.5-7	Homebrew/Oldtime Equipment Party	CW	RST, serial, class	www.qrppc.de/contestrules/hotr.html
16 0200	16 0400	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	fqrp.org/pigrun
19 0130	19 0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info/sprint201511.html
20 1600	20 2200	3.5	YO International PSK31 Contest	Dig	RST, serial, YO county or country	www.yo5crq.ro/Rules2014EN.htm
21 1200	22 1200	3.5-28	LZ DX Contest	CW Ph	RS(T), LZ district or ITU zone	lzdx.bfra.org/rulesen.html
21 1600	22 0700	1.8	All Austrian 160 Meter Contest	CW	RST, serial, OE district code (if any)	www.ovsv.at/
21 1700	21 1859	1.8-7, 21-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
21 2100	23 0300	1.8-28	ARRL Sweepstakes, SSB	Ph	Serial, precedence, your call sign, check, section	www.arrl.org/sweepstakes
21 2100	22 0100	1.8	RSGB 2nd 1.8 MHz Contest, CW	CW	RST, serial, UK district code (if any)	www.rsgbcc.org/hf
21 2100	23 0300	1.8-28	NA Collegiate ARC Championship, SSB	Ph	Serial, precedence, your call sign, check, section	www.collegiatechampionship.org
25 0000	25 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
25 2000	25 2100	3.5	UKEICC 80 Meter Contest	CW	4-character grid square	www.ukaicc.com
26 2000	26 2100	3.5	RSGB 80 Meter Club Sprint, CW	CW	Other's call, your call, serial, name	www.rsgbcc.org/hf
28 0000	29 2359	50-1296	ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
28 0000	29 2359	1.8-28	CQ Worldwide DX Contest, CW	CW	RST, CQ zone	www.cqww.com/rules.htm

All dates refer to UTC and may be different from calendar dates in North America. Times given as AM or PM are local times and dates. No contest activity occurs on the 60, 30, 17, and 12 meter bands. Mbr = Membership number. Serial = Sequential number of the contact. S/P/C = State, Province, DXCC Entity, XE = Mexican state. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at www.hornucopia.com/contestcal and is extracted for publication in QST 2 months prior to the month of the contest. The ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service. 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.

Some Interesting Links

Reddit Amateur Radio <https://www.reddit.com/r/amateurradio/>

Ham Radio School <http://www.hamradioschool.com/>

Ham Radio Practice tests <http://aa9pw.com/>

Makers Intro to Ham Radio <http://makezine.com/2015/06/30/a-makers-introduction-to-ham-radio/>

Ham Radio resources W5YI Group <http://www.w5yi.org/page.php?id=3>

Electronics Learning Site <http://www.101science.com/basicelectronics.htm>

Ham Radio site <http://www.hamuniverse.com/>

GPS information site <http://gpsinformation.net/>

Amateur Radio Newslines Report <http://www.arnewslines.org/>

Dr. Tamitha Skov Space Weather
for Radio Amateurs <http://spaceweather.tv/category/amateur-radio-resources/>

The Amateur's Code

CONSIDERATE ...never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL ...offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE ...with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY ...slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED ...radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC ...station and skill always ready for service to country and community.