# THE eQRM

MAY 2016



### The BVARA in Beaver County Pennsylvania

Beaver Valley Amateur Radio Association

W3SGJ

Repeater 145.310 pl 131.8

### On the cover :

Spring time is the time for outside projects. Seems everyone is thinking of a new antenna. This antenna is ready to be pulled up into place. Is a new tower install in your future? Go for it! Think safety with any new project. This is the tower of NN4ZZ Clifford Ludwick Jr of Loganville, Georgia.

# Inside this edition

Who We Are	3	Hamfests & General Announcements	10
This Month	4	Amouncements	
Propagation	6	Radio Sport	13
Get a license or Upgrade	7	Bits and Pieces	14
New license and Upgrades	8	Interesting links	15
Membership	9		

Check in to our nets

Wednesday 2 Meter

Wednesday 10 Meter

8:30PM on 145.310 MHz pl131.8

9:00PM on 28.470 MHz

The eQRM is a publication of the Beaver Valley Amateur Radio Association (BVARA) and is Copyright 2010 - 2016. 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

#### 2016 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: Bob Croft, KB3RHN

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

#### **2016 MEETING DATES**

May 12 Jun 09 Jul 14 Aug no meeting Corn Roast Aug 20th Sep 08 Oct 13 Nov 10 Dec no meeting Christmas Party Dec 3rd







Page 3

# This Month

### **BVARA Club Feature Presentation:**

Speaker : Rich Soltesz K3SOM

Topic :

Raspberry Pi and Ham Radio Applications

#### Including:

Continuing with our BVARA Presentation Series this year, our topic this month

borrows an idea from QST Magazine's *Eclectic Technology* page to explore a 'hands on' presentation of connecting a Raspberry Pi 2B to my ICOM-7000 to run the FLDigi and WSJT-X free software applications under the Ubuntu-Mate Operating System. This amazing credit card sized computer only costs around \$35 yet boasts an HDMI display output.

We'll examine what software support packages are needed to format and load the Operating System and also provide information on where to find the required Operating System and ham radio applications. Did I mention that these are all free?

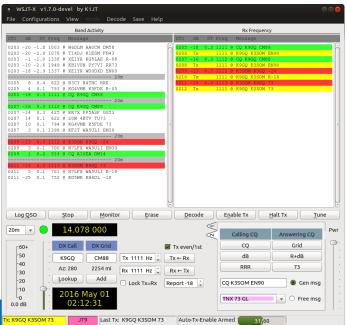
You may question whether the lowly Raspberry Pi has enough 'horsepower' to run these applications. Not to fear! We'll begin by talking about the history of the Raspberry Pi and

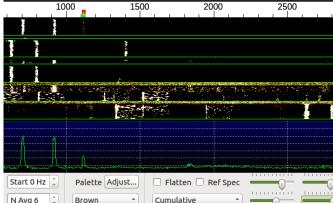
some of the evolving hardware changes. Then we'll describe what the Raspberry Pi 2B has 'under the hood'. You just may be amazed at what we find.

But wait, there's more! We'll connect all of this hardware and software to an antenna and run a live demo of these software packages in operation. 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







## More this Month

### Weekly

Dear Mr. Anonymous :

Thank you for paying for my lunch. We have very kind members in the BVARA Club.

KC3BXC.

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 radio amateurs are encouraged to come join us at our Thursday morning breakfast.

### See you Thursday at



RACES / ARES eQRM Urges All County Hams to Participate.



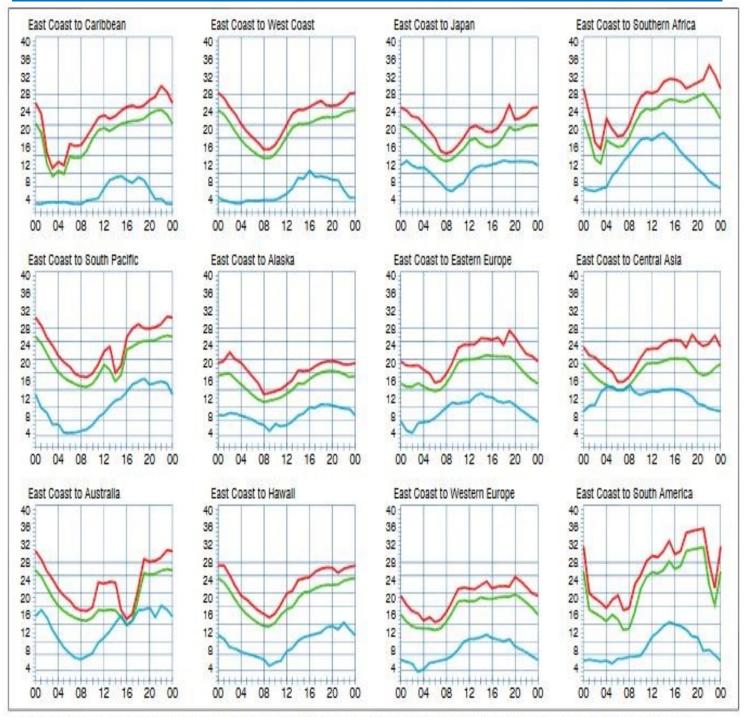
Beaver County licensed amateurs to participate in the **County's RACES** and ARES programs. **Any Beaver County** Amateur that is interested in participating in the RAC-ES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850

MHz repeater (131.8 PL)

The eQRM urges all

Page 5

# Propagation



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of May 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 88B or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994 Q87, pp 27-30, and Feb 1995 Q87, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 111. This is a High level of solar activity. See the detailed propagation tables on *The ARRL Artenna Book CD-ROM*.

#### PROPAGATION

The East Coast propagation chart listed here is for May 2016.

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

# 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 Nine One One 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, May 12, 2016. 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

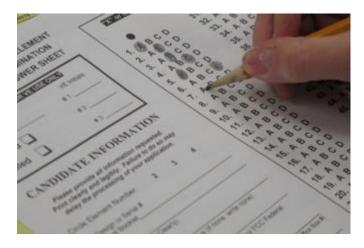
#### BVARA VE Testing





Ken Musgrave - KC3GZJ from Beaver, PA passed both his Technician Class and General Class exams at our April testing session.

Charles Young - KC3GZK from Beaver, PA passed his Technician Class exam at our April testing session.



Special thanks to Al Belardia -WA3GFM for sitting in for me for this session.

Rich - K3SOM

# 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 A	ARRL		
Sign up for:			Price		
<b>B</b> VA	RA full membership		20.00		
BVA	RA student member	ship	15.00		
<b>D</b> BVA	RA associate member	ership	10.00		
BVA	RA Child under 21 a	at home membership	bership 5.00		
One y	ear ARRL membersl	nip	49.00		
	ub Donation ber? Yes No		Total	Enclosed	
Your Licens	e Class (If you have Technician	one.) Name			
	General Advanced	Addres	s		
$\overline{\Box}$	Extra Class	Email			
		Phone			
		Your Call sig	n		
		You Signatur	e		

Make check or money order payable to:

The Beaver Valley Amateur Radio Association, P.O. Box 424

South Heights, Pa 15081

### Hamfests & General Announcements



It's another one of "those months".

No Hamfests in Western Pennsylvania the month of May.

I think I will just go back to sleep...

Wait, when is that Breeze Shooters Hamfest?

### Hamfests & General Announcements

62nd Annual

Largest Hamfest in the Tri-State Area

### BreezeShooters

#### 2016 HAMFEST and COMPUTER SHOW

NEW LOCATION !!!

Web Site http://www.breezeshooters.org

Email: hamfest2016@breezeshooters.org

BIG BUTLER FAIRGROUNDS

1127 New Castle Road (Rt 422)\*Prospect PA 16052



\*\*\*\* ARRL WPA SECTION CONVENTION \*\*\*\*

HAMFEST QUESTIONS OR TABLE RESERVATIONS CALL JIM KB3IYS @ 412-600-1979

Sunday June 5, 2016 \* 8am to 3pm

Indoortables on first corre first serve basis. \$2000 per 8" table . CALL JIM @ 412-600-1979 or mail to KB31 YS@hotmail.com: P.O. Box 101018, Pitaburgh, PA 15237 - Table reservation Cut-off Date May 30th

#### Main Prize Drawing:

Ist ICOM 7300 2nd Kenwood TS-590 3rd AMERITRON 811 4th YAESU FTM 400 5th KENWOOD V71 6th MFJ 257-SWR ANTENNA ANALYZER 7th N3ZN KEY 8<sup>th</sup> AT-100 PRO 2 A NTENNA TUNER 9th BUDDY POLE 10th Signal link 11th IMAX 2000 12th 100 FEET LMR 400 COAX 13th SOLDERING KIT 14th \$50 Cash Prize

11 Half Hour prizes based on Admission tickets HONDA 2KW GENERATOR WITH INVERTER

These tickets will be available at local hamfests prior to the Breezeshooters Hamfest. Check Breezeshooters.org for locations.

Winners need not be present for Main Prize or Generator Drawing- Main Prize Drawing at 3:00 pm - All prizes subject change due to availability

#### Icom, Yaesu, Kenwood & MFJ prizes from K JI Electronics

Admission \$ 5.00 donation per person, (Age 12 and over)

Tailgate/Fiea Market spaces available \$ 10.00for first space \$5 for each additional space

Fairgrounds open at 5:00pm Saturday June 4, 2016 for Vendor and Tailgater set up

ADVANCED TICKET SALES								
Main Prizes Drawing	\$2 Each	3 for \$5	7 for \$10	15 for \$20	40 for \$50	90 for \$100		
Generator Drawing	\$5,00 ONLY 300 TICKETS SOLD							
ENCLOSED CHECK IN THE AMOUNT OF: \$	Send a Self-Addressed Stamped Envelope to: Advance Ticket Sales, Breezeshooters Hamfest PO Box 101018, Pittsburgh, PA 15237							
Make check Payable to the Breeze sho	sters, Inc. 3	rs, Inc. Mail Deadline is May 30, 2016. Ticket Stubs returned in your SASE!						
NAME		CALL:		PHONE: (	)	-		
ADDRESS:								
СПҮ		STATE ZIP						



# Radio Sport

### Contest Corral — May 2016

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.

late	Start Time	- Fi	nish te-Time	Bands	Contest name	Mode	Exchange	Sponsor's Website
1	1300	1	1900	3.5-7	AGCW QRP/QRP Party	CW	RST, serial, class	www.agow.org/index.php/en
2	1900	2	2030	3.5	RSGB 80 Matar Club Championship, SSB	Ph	RS, serial	www.rsgbco.org/hf
3	0100	3	0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
ŧ.	2300	5	0300	A	MIE 33 Contest	CWPh	RS(T), age, "ME" or "MEJ"	www.ztv.ne.jp/isoda/33
;	1700	5	2100	28	NRAU 10 Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	www.neu.net/activity-contests
r	0001	8	2350	28	10-10 International Spring Contest, CW	CW	Name, mbr or *0," SPC	www.ten-ten.org/index.php
	0800	7	1400	902 and up	Microwave Spring Sprint	CW Ph Dig	6-char grid square	sites.google.com/site/springvhfupsprin
	1200	8	1150	1.8-28	ARI International DX Contest	CW Ph Dig	RS(T), province or serial	www.arLit
r	1200	8	1200	3.5-28, 144	FaAA Cup, PSK	Dig	RST, sorial	www.site.uro.asso.fr
	1200	8	2350	1.8-50	SKCC Weekend Sprintation	CW	RST, SPC, name, mbr or "none"	www.skcogroup.com
•	1300	8	0700	1.8-144	7th Call Area QSO Party	CW Ph Dig	RS(T), SPC or 7th area 5-letter state/ county code	ws7n_net/7QP
	1500	8	0300	1.8-28	Indiana QSO Party	CW Ph	RS(T), county or SPC	www.hdxcc.org/inqp/rules.html
	1700	8	2350	1.8-VHF	Delaware QSO Party	CW Ph	RS(T), county or SPC	www.fsarc.org/qsoparty/rules.htm
	1700	7	2100	3.5-28	FISTS Spring Slow Speed Sprint	CW	RST, SPC, name or power	fistsna.org/operating.html#sprints
	2000	8	2350	3.5-28	New England QSO Party	CW Ph	W1: RS(T), county, state. Non W1: RS(T), SPC	www.neqp.org/rules.html
	1900	11	2030	3.5	RSGB 80 Meter Club Championship, Data	Dig	RST, serial	www.rsgbco.org/hf
1	0030	12	0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqoo.info/sprint201605.html
I.	1200	15	1150	3.5-28	HPC World Wide DX Contest	Dig	RST, mbr or serial	pskolub.gr/contest
Ļ	1200	15	1150	1.8-28	CQ-M International DX Contest	CW Ph	RS(T), serial	www.oq-m.ru/en/rules.html
ŧ.	1200	15	1200	3.5-28	VOLTA WW RITTY Contast	Dig	RST, serial, CQ Zone	www.contestvolta.it
ł	1400	15	0200	3.5-28, 144	Arkansas QSO Party	CW Ph Dig	RS(T), county or SPC	www.arkqsoparty.com/#!rules/c205j
ł	1400	15	2350	3.5-28	MARAC USA QSO Party	CW	RST, state, county (or "DX")	countyhunter.com
ŀ	1500	15	1500	3.5-28	Portuguese Navy Day Contest	CWPh	Mor or serial, CQ zone	www.nmi.pt
ł	1700	14	2100	3.5-28	FISTS Spring Unlimited Sprint	CW	RST, SPC, name, mbr or power	fistsna.org/operating.html#sprints
Ļ	2300	15	0300	50	50 MHz Spring Sprint	CW Ph Dig	6-char grid square	sites.google.com/site/springvhfupspri
i,	1000	15	1400	7	WAB 7 MHz Phone	Ph	RS, serial, WAB square or country	wab_intermip.netContests.php
i	1300	15	1650	3.5-14	UA2 QSO Party	CWPh	RS(T), RDA ID or sorial	www.grz.ru/contest/detail/382.html
I.	0100	16	0300	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	fpqrp.org/pigrun
,	1900	19	2030	3.5	RSGB 80 Meter Club Championship, CW	CW	RST, sorial	www.rsgbcc.org/hf
1	1800	20	2159	1.8-3.5	Slobozhansky Sprint Contest	CWPh	Serial, Administrative District	tdr.at.ua/index/iules2015/0-13
	0600	21	2100	3.5-28	UN DX Contest	CW Ph	RS(T), District Code or serial	undxo.kz/bez-rubriki/2015-2
	0800	22	1100	3.5	NZART Sangster Shield Contest	CW	ZL: RST, branch, pwr. Non-ZL: RST, sorial	www.nzart.org.nz/activities
	1200	22	1200	3.5-28	Aegean RTTY Contest	Dig	RST, sorial	www.aegeandxgroup.gr
l	1200	22	1200	3.5-28	EU PSK DX Contast	Dig	RST, EU area code or serial	www.eupsk.com
I	1200	22		1.8-28	His Majosty King of Spain Contest, CW	CW	RST, province or serial	concursos.ure.es/en
I	1600	21	2150	1.8-28	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
L	2100	22	0200	3.5	Baltic Contest	CW Ph	RS(T), serial	www.irsf.it/boontest/english
5	0000	25	0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skcogroup.com
3	0000	29	2350	1.8-28	CQ WW WPX Contest, CW	CW	RST, serial	www.oqwpx.com/rules.htm
8	0800	28	2350	3.5-28	Portuguese Nevy Day Contest, Dig	Dig	Mor or serial, CQ zone	www.nm.pt
5	1300	29	1600	3.5-14	SARL Digital Contest	Dig	RST, serial	www.sarl.org.za

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.homucopla.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 Hom, 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.

QST<sup>®</sup>-Devoted entirely to Amateur Radio www.arrl.org May 2016 79

### Bits and Pieces

It's Spring time here in Western Pennsylvania. Finally the weather is getting nice. It's time to start our outside projects. With any project, it is extraordinarily important to slow down and think about safety. Let that sink in... Our hobby is fun and habit forming. Form a habit of thinking safety first. Always



take time to think things through with a particular emphasis on safety. If in



doubt, ask another Ham their safety opinion. Any time you think what you're about to undertake is unsafe, STOP. Rethink. This would be a great time to invite other ham friends

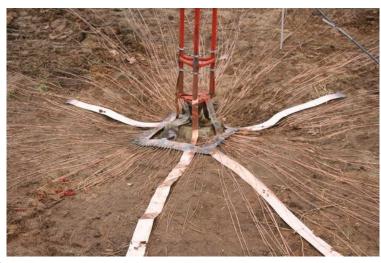
to come have a "Radio Party" at your station. Providing the food for

your party is far cheaper than any injury from unsafe acts connected to your radio hobby.

Spring is a great time to check all the grounds and grounding joints. Starting with the ground system is important. We may be thinking about all the other more glamorous items that



make up our stations like radios, microphones, antenna tuners, antennas, and etc. Grounding is the important first foundation building block in your station. A poor or



bad ground system can lead to many difficulties. By ensuring a good ground system we head off problems further down the line in our station systems. A poor ground system will limit our stations. They will never live up to their highest potential.

### Some Interesting Links



 65 Great Things About Ham Radio
 http://www.cq-amateur-radio.com/cq\_great\_things.html

 How to, Using Ham Radio
 http://www.instructables.com/id/How-to-Talk-to-Someone-Using-Ham-Radio/

 Guide to Amateur Radio for New Hams
 http://www.eham.net/newham/

 Amateur Radio Satellites
 http://www.n2yo.com/satellites/?c=18

 Digital Radio link
 http://wb8nut.com/digital/

 Useful Radio Site, general info
 http://www.radioreference.com/

# For All Radio Operators



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.



It will be here soon. Field Day 25-26 June 2016