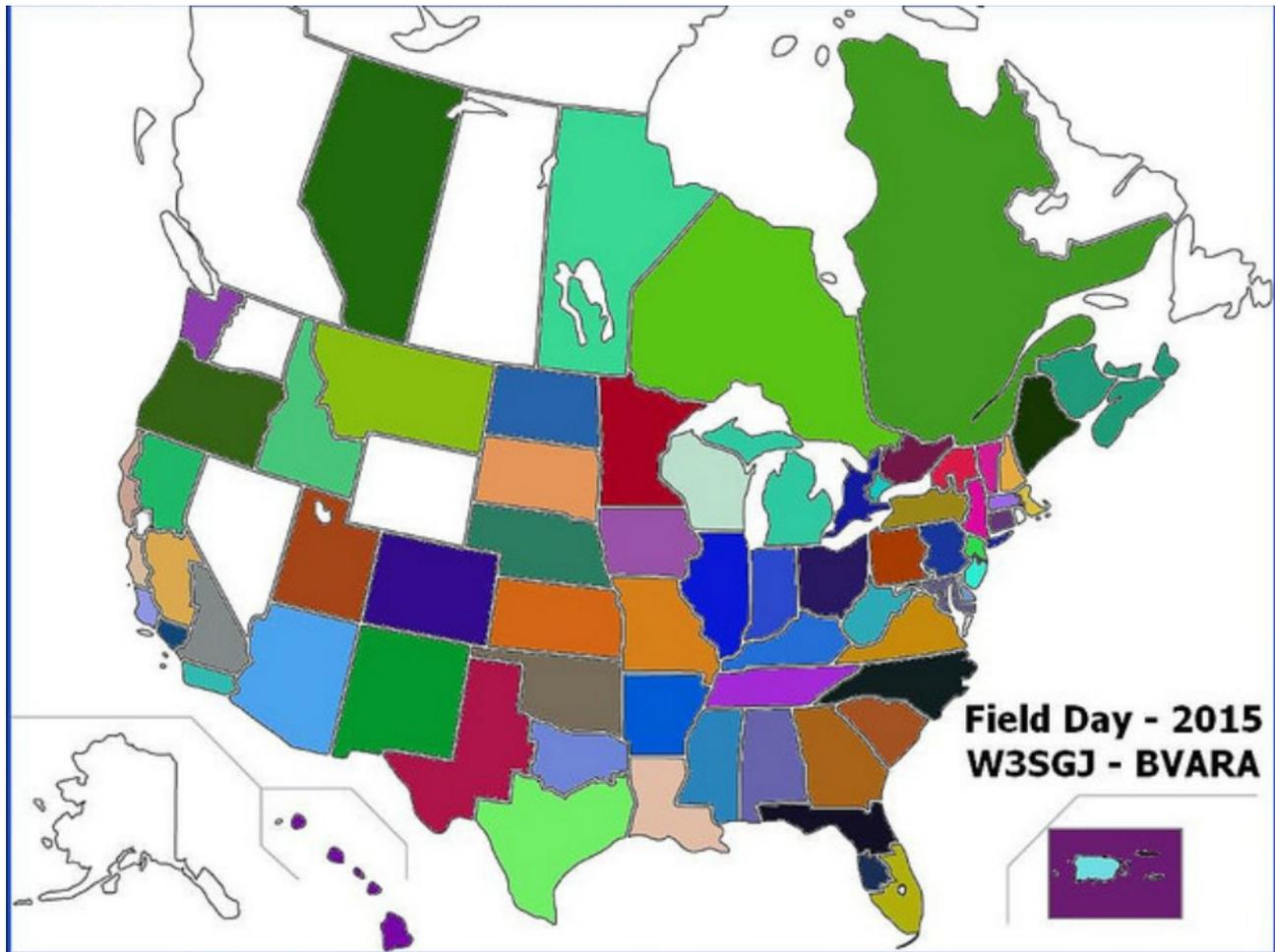


# THE eQRM



Everyone had a great time at the BVARA Field Day 2015 event!

We were at Shelter 1 in Economy Boro Park.

July 2015

# THE eQRM

**On the Cover :** The colored-in locations on this map represent ARRL Sections that were contacted by the BVARA during Field Day 2015.

---

3 - 9  
Bulletins  
Hamfests and general  
announcements

14 & 15  
Who We Are  
Club officers, meetings and  
membership information

10 & 11  
This Month  
VE testing, Breakfast

16  
Bits and Pieces  
interesting extras

12  
Propagation Charts  
Propagation charts for  
the East Coast

17  
Radio Sport  
contests

13  
VE Test Results  
New Hams and Upgrades

18  
Interesting Links

And more

---

## CHECK IN TO THE NETS

Wednesday 2 Meter

Wednesday 10 Meter

8:30PM on 145.310 MHz

9:00PM on 28.470 MHz

The eQRM is a publication of the Beaver Valley Amateur Radio Association (BVARA) and is Copyright 2010 - 2015. 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](mailto:kc3bxc.73@gmail.com). Please visit us online at [www.W3SGJ.org](http://www.W3SGJ.org). To subscribe to our newsletter, please visit [W3SGJ.org/newsletter.php](http://W3SGJ.org/newsletter.php)

# Bulletins

Hamfests & General Announcements



14th ANNUAL 2015 NW PA HAMFEST Hosted by the Wattsburg Wireless Association

Saturday, July 11, 2015 Hamfest Opens at 7:30 am!

**PRIZES!**

Main Prize: MFJ-994BRT Remote Tuner

Talk-In Prize: \$75 Gift Certificate

Entrance Tickets are \$5 at the Gate, under 16 years - free. Advanced Tickets are \$4.

Tailgating available

Vendors spaces available. Tables prices \$5 per table at the gate, advanced \$4 payable in advance.

Make your plans now to attend!

You may purchase advanced tickets by mailing a #10 SASE (self-addressed stamped envelope) and \$4.00 per admission ticket and \$4.00 per table to:

2014 NW PA Hamfest

9333 Tate Rd., Room #114

Erie, PA 16509

All advanced requests must be postmarked by June 30, 2015. Ticket requests received after June 30, 2015 will be held at WILL CALL gate for you to pickup when you arrive. If you are unable to have tickets mailed to you because you are traveling, you may request that the tickets be held at the Will Call gate for you. (Please make checks payable to Wattsburg Wireless Association.)

# Bulletins Hamfests & General Announcements



## NORTH HILLS AMATEUR RADIO CLUB

An ARRL Special Service Club

### 30th ANNUAL HAMFEST SATURDAY JULY 18, 2015

GENERAL ADMISSION \$5 EACH  
Gates open 8:00 am to 1:00 pm

RAFFLE : 3 Grand Prizes  
Plus Hourly Prizes and 50/50 Raffle

Set-up Time: 6:00 am  
Indoor Tables \$10  
Tailgaters \$5/Space  
Advance Reservations  
Available from:

Eric Fowler—WV3E  
319 W. Ingomar Rd.  
Pittsburgh, PA 15237  
wv3e@nharc.org  
412-436-WV3E (9833)  
REGISTER NOW!

#### Location

Parkwood Presbyterian Church  
4289 Mt. Royal Boulevard  
Allison Park, PA 15101

Talk-in Frequency 147.090 PL 88.5  
FREE PARKING

Vendors: KJI and others + Flea Market  
Handicap Accessible

Light Breakfast and Lunch Available  
Refreshments and Pie. Bring your appetite!  
VE Sessions to be held

To Parkwood U.P. Church:

From Rte. 8 south - Travel to light at Mt. Royal Blvd., turn left. Continue to Parkwood Church on right, just past Royalvue.

From Rte. 8 north -Travel to Mt. Royal Blvd., turn right. Continue to Parkwood Church on right, just past Royalview.

From Rte. 19 or McKnight Rd. south -Turn right on Cumberland Rd. past UPMC Passavant Hosp. Continue across Peebles on Sample to Mt. Royal Blvd., turn right to Parkwood Church on right.

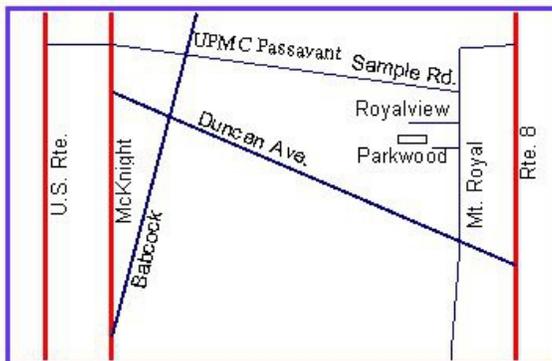
From Rte. 19 or McKnight Rd. north -Turn left on Cumberland Rd. past UPMC Passavant Hosp. Continue across Peebles on Sample to Mt. Royal Blvd., turn right to Parkwood Church on right.

#### THREE GRAND PRIZES

1. **FLEX-1500 QRP Software Defined Radio** —The FLEX-1500™ is a low-cost, low-wattage SDR that is positioned to allow ham radio operators the ability to experience the incredible capabilities and just plain fun of operating a software defined radio without breaking the budget. The FLEX-1500 is packed with features that make it ideally positioned to be the ultimate low cost, high performance IF deck for VHF-microwave transverter operation. With a price point set below \$700 USD and the ongoing improvements and upgrades provided by PowerSDR, the FLEX-1500 is by far the best value of any entry level amateur radio available today.

2. **ICOM ID-880H Dual Band Mobile Radio** — D-STAR ready VHF/UHF switchable dual band. Wideband receiver covers 118-173.995, 230-549.995, 810-999.990 MHz. 1052 memory channels, multiple scan functions, CTCSS/DTCS encoder/decoder, keypad navigation, and more!

3. **MFJ-223 Graphic VNA Antenna Analyzer** — Pocket-Size, Incredible Performance! Truly accurate SWR, R, X and Z! This pocket-sized wonder breaks the mold for analyzer design with user-friendly convenience, top notch accuracy, and a vivid TFT multi-color display. Don't let the size fool you, MFJ-223 is packed with all the VNA features and performance you need!



#### OTHER RAFFLES

**50/50 Raffle** 50% of the amount collected in the Prize Jar all day. The winner need not be present. We'll call you if you win the prize.

**Hourly Door Prizes** We will raffle a prize every hour beginning at 9 am until 1 pm. Prizes will include gift certificates for various ARRL

Publications and other useful items. Prizes will be called by number from your admission ticket so please don't toss it. Winner must be present.

# Bulletins Hamfests & General Announcements

## Somerset County PA Hamfest



Presented by the Somerset County Amateur Radio Club  
P.O. Box 1241  
Somerset, PA 15501  
Talk-In on K3SMT Repeaters  
147.195+ pl 123 and 443.250+ pl 123



ARRL  
Sanctioned

Free Parking

Sunday, July 19, 2015– 8:00 AM to 1:00 PM

Where: Somerset County Technology Center  
281 Technology Drive, Somerset, PA 15501  
Grounds Open at 6:00 AM for vendors and tailgaters.

Entrance Fee: Adults \$5.00, children under 13 FREE  
Indoor Tables: Pre-Registration Required  
Outside Tailgating: **FREE**

ARRL VE Testing  
at 10:00 AM  
Fee \$15.00

Free Coffee

### Main Prizes by KJI Electronics

#### FIRST PRIZE

Kenwood TM-V71A with dual band mag-mount antenna or ICOM ID-51 HT  
or \$400 KJI Prize Certificate

#### SECOND PRIZE

LDG AT-200Pro Tuner or MFJ-259C Antenna Analyzer  
or \$200 KJI Prize Certificate

#### THIRD PRIZE

Bearcat CRS-345 scanner or Bearcat BCD-75L scanner  
or \$100 KJI Prize Certificate

Main Prize Tickets \$1.00 each

PLUS Black Box Drawing 50 tickets at \$5.00 each

KJI Electronics

Created By Amy



No-cost Pre-Registration  
**REQUIRED**  
for indoor space  
contact Stew, AK3J at  
ak3j@arrl.net or 814-444-0637  
for flyer updates visit  
[www.k3smt.org](http://www.k3smt.org)

#### Directions from PA Turnpike Exit 110

Go straight off ramp and turn left at 4th stoplight onto Route 31 East

Go 2.0 miles and turn left onto Technology Drive.

The Hamfest will be on your right behind the building



For more local events and attractions see: [www.laurelhighlands.org](http://www.laurelhighlands.org)  
for Hamfest updates [www.k3smt.org](http://www.k3smt.org) and  
[www.arrl.org/hamfests/somerset-county-arc-hamfest](http://www.arrl.org/hamfests/somerset-county-arc-hamfest)

# Bulletins

This year's BVARA field day was a great event! Brochures and literature about Amateur Radio were available for visitors. Three separate gasoline generators powered the three W3SGJ WPA 3A Field Day stations to make twenty one digital contacts and two hundred thirty nine Single Side Band contacts (SSB phone). Fun was had by all.



I brought my young nephew from Beaver to this, his first Field Day. He is twelve years old and in the the seventh grade. Sam told me he enjoyed seeing how Ham Radio works. We came Saturday to spend only a couple of hours. We were having so much fun, we stayed till after dark. We were enjoying fellowship with our ham radio friends, rag chewing with others, food & drinks and the field day operations of the stations. Sam also commented on how the adult operators gave him the leeway/respect to call them by their first names. They all treated him as a fellow amateur radio operator, they didn't treat him like a kid. For the day he was an equal. I think the ham radio bug may have bitten him!

Denny Herbuth KR3DX showed Sam and I how to use an air-energized cannon to get antennas put up high in the trees.



# Bulletins



There were three stations on the air for most of the entire 24 hours of Field Day operations. Tom Kavic, AA3TK operated station number one in digital mode as his son Mark KB3LED looked on. Tom ran PSK31 on 20 & 40 meters connected to a fan dipole and a doublet antenna. Tom made twenty one contacts.

Pam Spencer W3PMS and Jack Spencer KZ3Z had station number two. Pam and Jack were on 40 meters with a vertical antenna. They made sixty single side band phone contacts. I'm in the middle watching Jack's impressive operating style.



# Bulletins

Rich Soltesz K3SOM had the third station. Rich used an eighty five foot vertical antenna on 6 meters, 15 meters and 20 meters to make one hundred forty three single side band phone contacts.

The operators listed with the three stations were the primary operators; other licensed operators made contacts too.

Jeff Waite, K3SLK made twenty five contacts. Henry Wilde, WB3IBM had two contacts and Denny Herbuth KR3DX made nine. Others helped by logging contacts on the computers for the person operating the radio or helped with setup and take down activities.



The food was scrumptious. Norm Trunick, K3NJT, made a great breakfast for everyone Saturday and Sunday morning. The eggs, bacon, toast and muffins were very tasty.

Thanks Norm!

Everyone blessed us with so much good food. On the Friday, June 26th, the pot-luck dinner was well attended.

Special thanks to Bob Croft, KB3HRN. He brought Oram's donuts and was of great help in both setup and tear down activities. Adam Horniak, KG3L treated us with some Yolanda's Pizza. Special thanks also to Pam & Jack for Shop and Save chicken, Police Station pizza, snacks, beverages, and many surprises.

Although the number of contacts was down from the 2014 results, we felt a sense of satisfaction knowing that under adverse conditions we were able to continue to safely operate. But beyond that, we acted as a proving and training ground for newer hams to the hobby and welcomed visiting hams to try their hand at operations. For the oldest club in Western Pennsylvania (established in 1923) we took pride in continuing the tradition of our early founders.

If your tummy wasn't full it was your fault!

# Bulletins

**To sum it all up...**

Fun was had by all who attended.

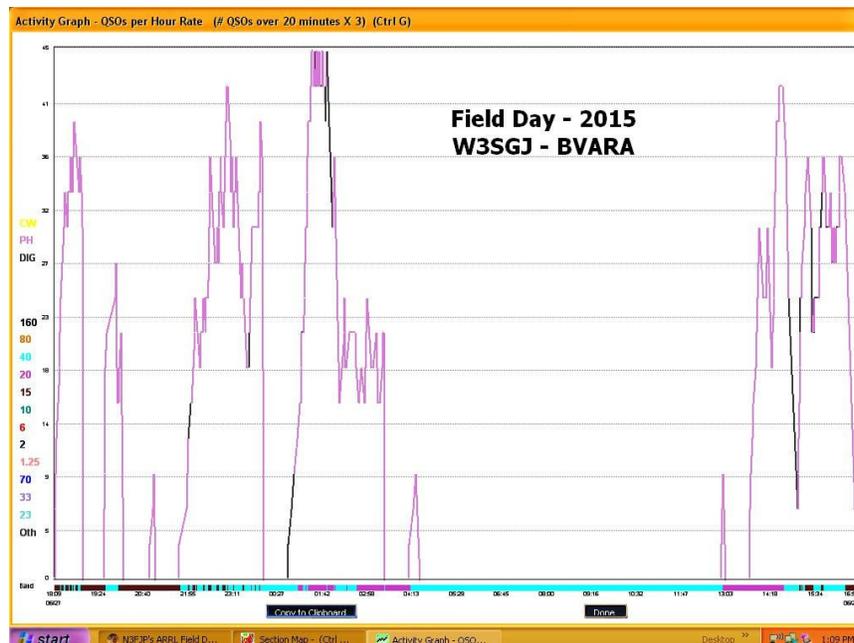
W3SGJ (call sign) 3A (operating class) WPA (section Western Pennsylvania)  
Three gas generators powered the radios.

21 digital contacts			
239 SSB phone contacts	band	contacts	sections
260 total contacts	6 meter	3	3
	15 meter	66	36
	20 meter	76	48
	40 meter	115	33

(74 sections were contacted out of 84)

Contacts we didn't get :

- RI Rhode Island
- EB East Bay
- AK Alaska
- NV Nevada
- EWA East Washington State
- WY Wyoming
- BC British Columbia Canada
- NL Newfoundland
- SK Saskatchewan Canada
- NW Northwestern Territory Canada



# This Month

## This month's BVARA Club feature presentation:

This Month: K3SOM

Speaker: Rich Soltesz

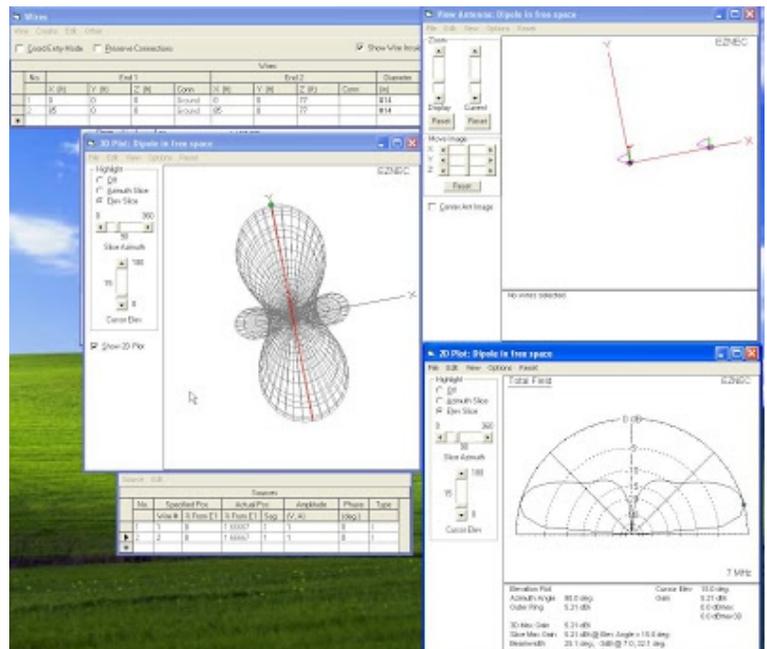
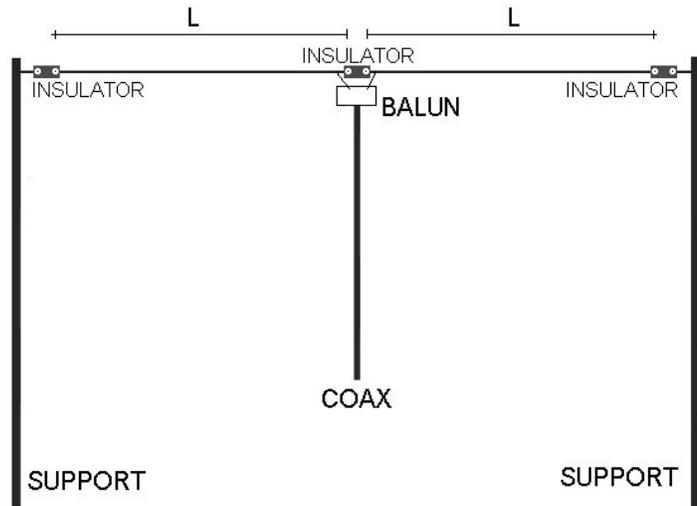
Topic: The Lowly Dipole Antenna

Including:

Continuing with our BVARA Presentation Series this year, our topic this month is the lowly dipole antenna. With a very low cost and simple construction, what could possibly go wrong with such a marvelous approach? We'll find out at our July BVARA Club Meeting! If you are unfamiliar with antenna modeling, we'll use EZNEC 6+ to build a simple model of the dipole and then examine its performance in a typical Western Pennsylvania back yard. But wait, there's more: we'll see what the effect of height above ground is on several parameters. What about an inverted 'V' configuration? Should we be concerned about our dipole sagging in the middle? How much does the impedance change with height and other factors? Is a balun really necessary at the feed point? Does the feed line radiate even if it is coax? You will be fascinated at how easy it is to use EZNEC in learning about this simple antenna. Some club experts will be along to provide first-hand stories of this antenna's performance. 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

## VE TEST SESSION

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

Tests begin 5PM Thursday, July 9th (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.

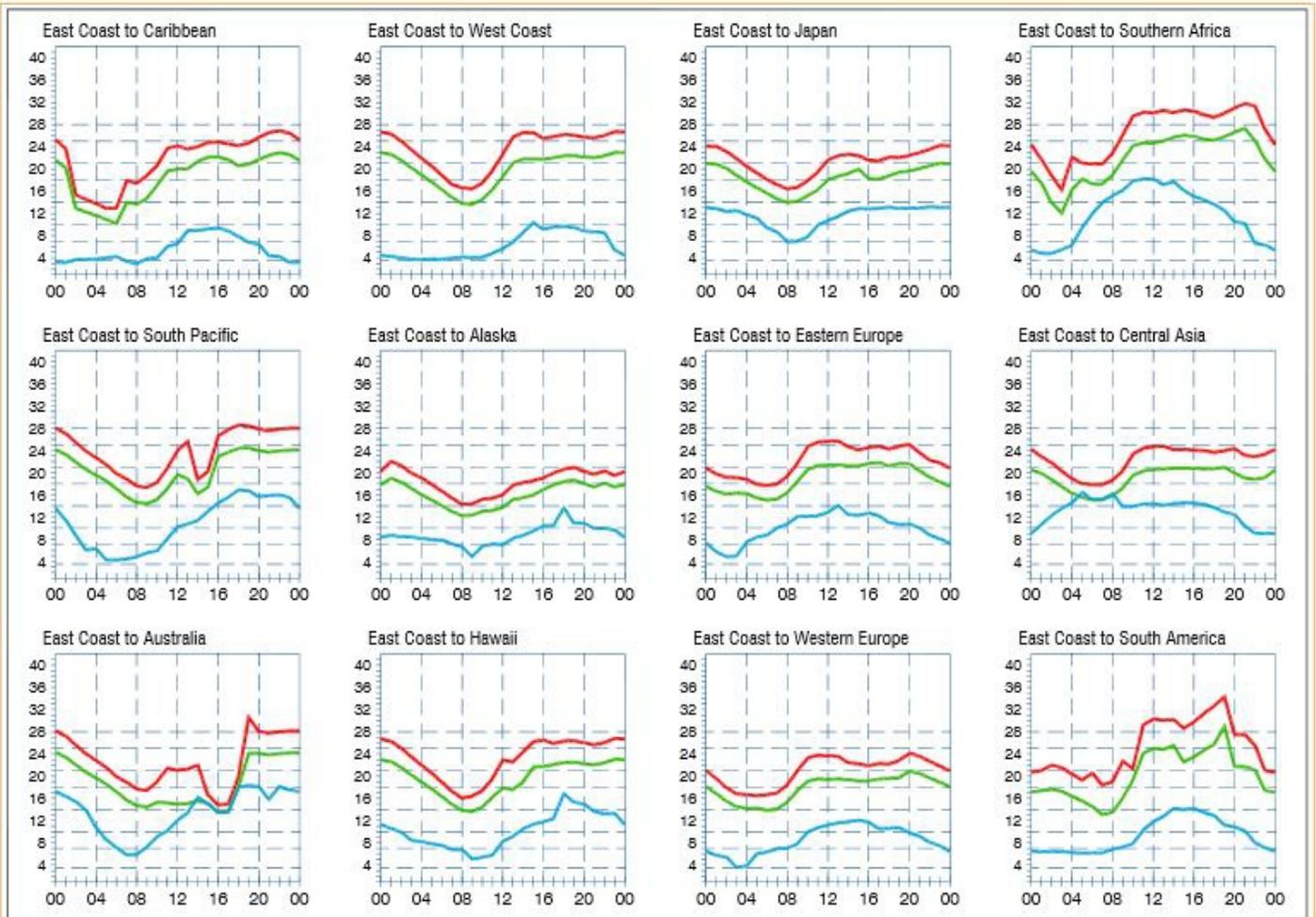


See you at



# Propagation Charts

From the ARRL



When are the bands open? These charts, generated using CAPmen, show probabilities for average HF propagation in the month of July for the paths indicated. The horizontal axis shows Coordinated Universal Time (UTC), and the vertical axis 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 128. This is a Very High 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 July 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

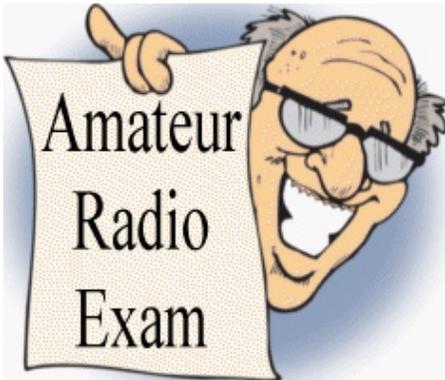
eQRM Urges All County Hams to Participate

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)



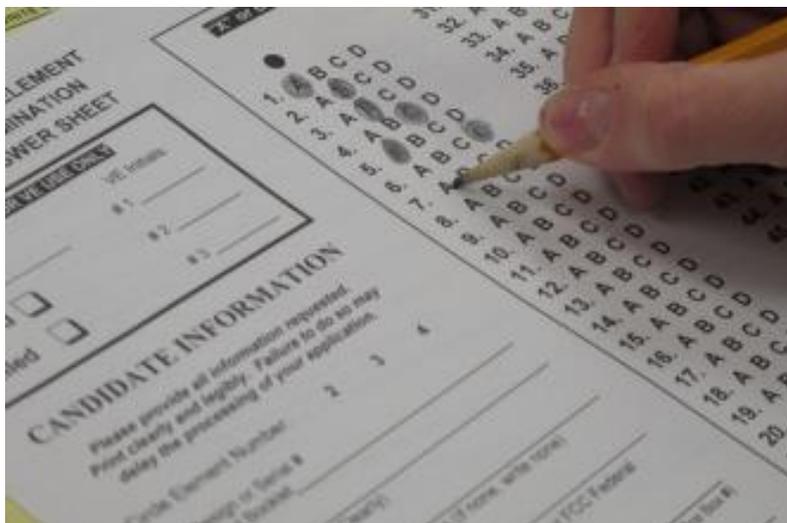
# New License and Upgrades BVARA VE Testing



The BVARA would like to congratulate and acknowledge :

Doug Lawrence – Beaverfalls, Pa K3GTX for successfully advancing to the Extra Class for amateur radio licensing. Doug achieved his goal at the June 2015 Breezeshooter's Hamfest.

Brian Bair - of Canonsburg, PA successfully completed his exams for both Technician and General Class Amateur Radio at our VE Test Session.



# 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

July 9  
Aug 15 Corn Roast no meeting  
Sept 10  
Oct 8  
Nov 12  
Dec TBA Christmas Party no meeting

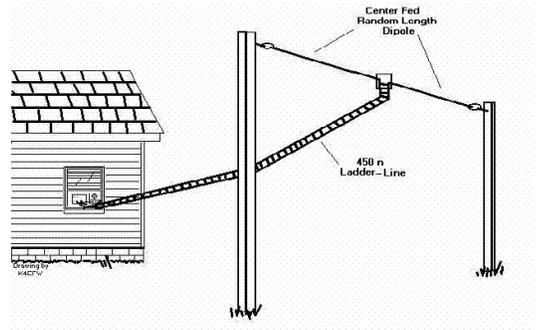




# Bits and Pieces

July is here!

Is a new antenna on your agenda?



Safety! Safety! Safety!

This section is to get you to think about safety and it can be just for fun.... This month I ask the question "It's summer, is it time to experiment with a new antenna?". Experimenting with a new antenna can lead to some interesting fun. The antenna you chose can be simple or complex... a dipole, a quad, sloper, inverted V, inverted U, a delta, a loop, a Yagi, a vertical, a horizontal. How about giving a DIY satellite antenna a try? Your imagination is your only limitation. The support can be your car, a tree, chimney, a pole, the roof, maybe a shed, a tower or tall barn. You should invite folks for an antenna party. The fun of just visiting can be quite rewarding all by itself. Getting an antenna up and on the air is just icing on the cake. Be sure to include a new Ham or a non-Ham for the party.

You know me, Mr. Safety. Everyone present should put on safety glasses and a protective helmet for your gray matter as a minimum. Keep control of anything you will be using above your ground crew. Be very careful when climbing a ladder or tower. You are at risk anytime your feet leave the ground. That goes for your ground crew also. When you are off the ground you can drop something on them. **BE CAREFUL!**

Never, ever, ever use an electric supply public utility pole! If your antenna could make contact with the public electric supply you better think that through a lot more. Have a great time and be safe.



photos from  
Yahoo images

# Radio Sport

## - July 2015 Contest -

July 11-12, 2015

The second full weekend of July, beginning 1200 UTC Saturday and ending 1200 UTC Sunday. Both Single and Multi operator stations may operate the entire 24-hour period. 160, 80, 40, 20, 15 and 10 meters. No contest QSOS on 12, 17, 30 or 60 meters.

Entries must be postmarked or emailed no later than 30 days after the end of the contest (1200 UTC Tuesday, August 11, 2015). Entries sent as attachments to email must be sent to IARUHF@arrl.org. By submitting a log to the IARU HF World Championships, the entrant agrees the log may be open to the public.

For contest information contact

contests@arrl.org

or (860) 594-0232

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

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

# Some Interesting Links

Pluto New Horizons <http://www.nasa.gov/feature/nasa-s-new-horizons-a-heart-from-pluto-as-flyby-begins>

Pluto New Horizons [http://www.nasa.gov/mission\\_pages/newhorizons/main/index.html](http://www.nasa.gov/mission_pages/newhorizons/main/index.html)  
Spacecraft  
closest approach: July 14, 2015

Radio Active Hams <http://www.radioactivehams.com/~n0rc/rm/>

Small wonder labs <http://ww4.smallwonderlabs.com/?kwrf=http%3A%2F%2Fwww.pg1n.nl%2F%3Flng%3Den>

A Dutch radio amateur's <http://www.pg1n.nl/index.php?lng=en>  
web page with many  
home brew projects

New Hams web site <http://www.eham.net/newham/>

Amateur Radio News <http://www.arnewsline.org/>

American Radio Relay League <http://www.arrl.org/home>  
(ARRL)

Background to Space Weather <http://www.spaceacademy.net.au/env/spwx/spwxtute.htm>

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

## 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.