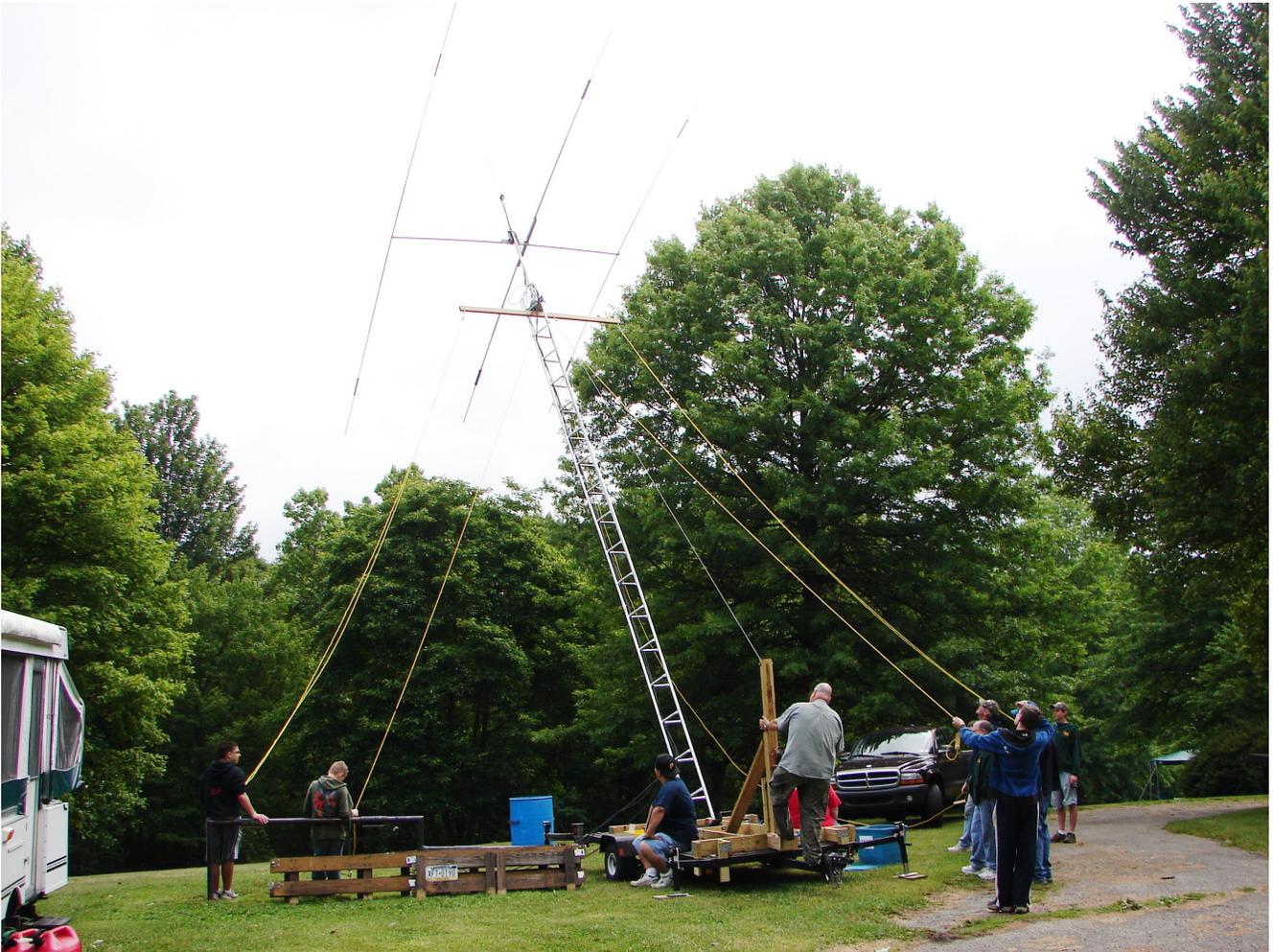


THE eQRM



BVARA anticipates a great time for all !

June 27-28 Field-Day 2015

'Bring you own dish dinner' 5PM on June 26,2015 we will be at shelter 1.

June 2015

THE eQRM

On the Cover : Members of the Club set up a yagi antenna. This picture was published in the June 2012 issue of QST Magazine on page 69. The BVARA will once again be participating in Field Day. Come see our setup and learn about amateur radio (ham radio). Please visit <http://www.arrl.org/field-day-locator> for more information. Everyone is welcome!

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Used equipment

And more

CHECK IN TO THE NETS

Wednesday 2 Meter

8:30PM on 145.310 MHz

Wednesday 10 Meter

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. Please visit us online at www.W3SGJ.org. To subscribe to our newsletter, please visit W3SGJ.org/newsletter.php

61st Annual

Largest Hamfest in the Tri-State Area

BreezeShooters

THIS IS AN ARRL SANCTIONED HAMFEST

2015 HAMFEST and COMPUTER SHOW

Web Site <http://www.breezeshooters.org>

Email: hamfest2015@breezeshooters.org

General Hamfest Chairman: **Bob Benna N3LWP (412) 366-0488**

BUTLER FARM SHOW GROUNDS Sunday June 7, 2015 * 8am to 3pm

Indoor tables on first come first serve basis. **\$20.00 per 8' table** and may be reserved by contacting Bob Benna, N3LWP (412) 366-0488 or mail to: P.O. Box 101018, Pittsburgh, PA 15237 - Table reservation **Cut-off Date May 30th**

Main Prize Drawing :

- | | |
|---|---|
| 1st Yaesu FT DX 3000 | 8th Eagle One Antenna |
| 2nd Kenwood TS-590 | 9th Heil Pro set Elite |
| 3rd Icom ID880 | 10th Signal link |
| 4th Rig Expert AA54 Digital Antenna Analyzer | 11th \$100 cash |
| 5th Elecraft W2 Watt meter kit | 12th Coaxial prep kit |
| 6th LDG-AT-100 Pro 2 Antenna Tuner | 13th 10 meter IMAX 2000 |
| 7th \$200 Cash | 14th \$50 Cash Prize |

6 Hourly prizes based on Admission tickets

Drone Drawing

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, or Drone 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/Flea Market spaces available \$ 10.00 for first space \$5 for each additional space

Farm Show Grounds open at 5:00pm Saturday June 6, 2015 for Vendor and Tailgater setup

Bulletins Hamfests & General Announcements

Breeze Shooters Hamfest and Computer Show

06/07/2015

Location: Butler Farm Showgrounds

627 Evans City Road

Butler, PA 16001

Website: <http://www.breezeshooters.net>

Sponsor: Breeze Shooters ARC

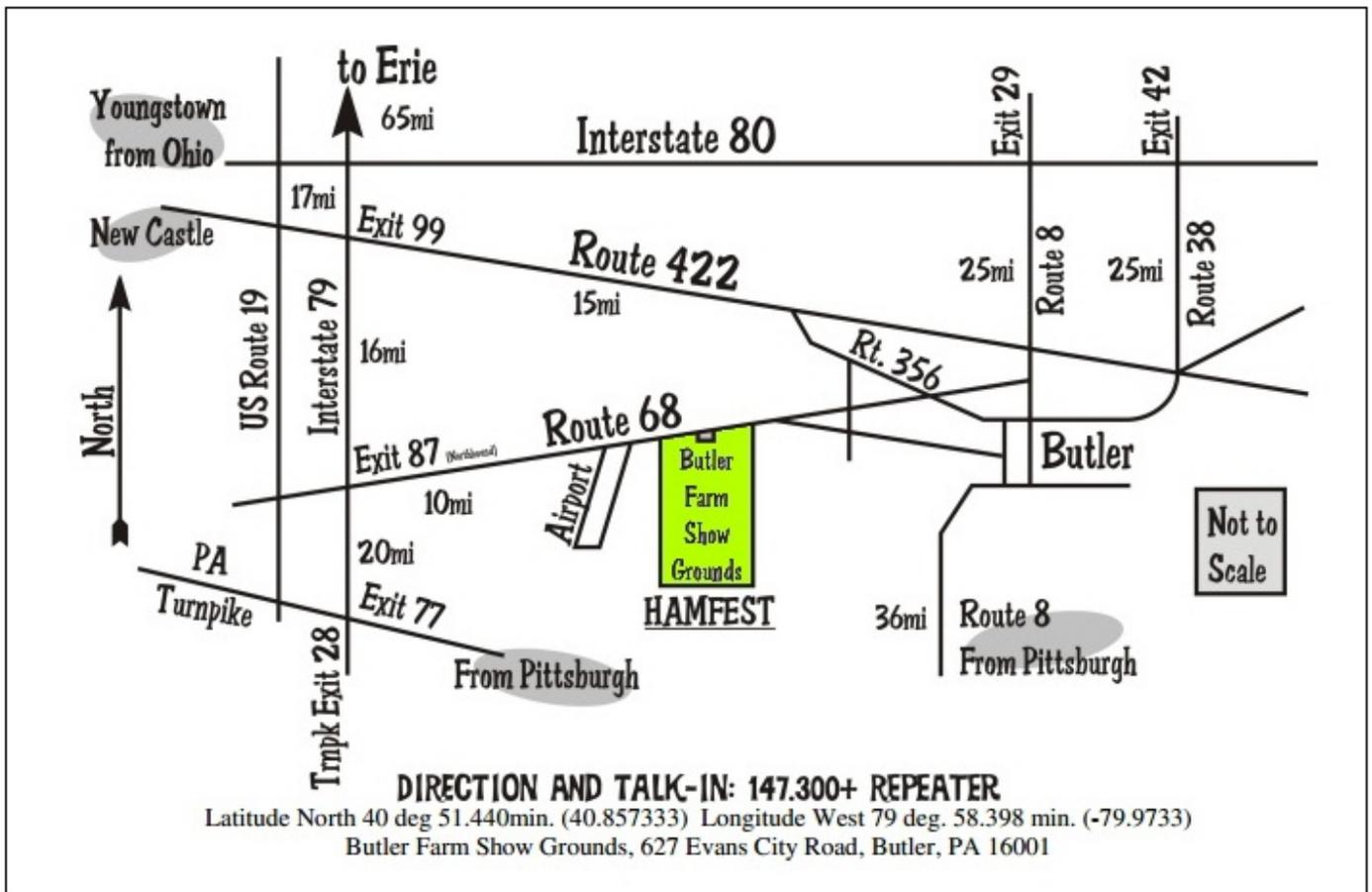
Type: ARRL Hamfest

Talk-In: 147.300+

Public Contact: Robert Benna , N3LWP

1010 Willow Drive Pittsburgh, PA 15237

Phone: 412-366-0488





Celebrating 50 Years of Family Entertainment!

Review of the May 2015 Dayton Hamvention

K3SOM Rich Soltesz Personal Observations of Hamvention 2015 in Dayton, OH

The 63rd Dayton Hamvention, sponsored by the DARA Organization emphasized the theme of the 'Homebrew' aspect of our amateur radio hobby. With forums devoted to 'Kit Building Techniques for Success' and 'IOS & Android Rig Control' that reflected the theme, little else in the forums directly supported that theme. Out in the Flea Market area, FAR Circuits continued to offer custom PC boards and several kits that included board components for small homebrew projects that had been previously published in *CQ* or *QST Magazine*. Over \$55,000 in prizes were awarded for those in attendance. I am still waiting for that phone call or email that I had won something.

The entire Ball Arena within the Vendor area was devoted to the many aspects of the American Radio Relay League (ARRL), their many well-received activities, and their publications. Their large presence mirrored their year-long theme of 100 Years of QST all throughout 2014. Many people were bringing in their VHF/UHF hand-held transceivers to be lab tested by their very knowledgeable technicians for many important parameters. I was impressed by the thoroughness of ARRL technicians.

Weather

Scattered showers each of the three days served several purposes. The threat of rain kept many people from attending the event this year. The benefit of light, short showers was the cleansing of the Flea Market area and the drastically reduced dust clouds in the parking lot in the field across from the Hara Arena. The official attendance for last year (2014) was 24,873 people. Published attendance for 2015 has not yet been made available.

Hara Arena Condition

The continued deterioration of Hara Arena, the overcrowded and poorly-maintained rest rooms, the warmth and humidity inside, along with the largely wasted fan seating space inside the main arena continue to be an embarrassment to our country when international hams visit that facility. Is that the best venue for an international event? What about the I-X Center in Cleveland or similar locations in Chicago or other cities with more modern facilities? The DARA Organization presented information about renovation efforts on Hara Arena that is scheduled for completion before the 2016 event.



Hotel space in Dayton was quite limited and prices were set at whatever the traffic would allow. My wallet still has a big gouge in it from my hotel room with the ripped draperies. At least I did not have to pay for parking. A limited continental breakfast (suitable for me) allowed me to enjoy a brief breakfast before heading to Hara Arena. But the town of Dayton has continued to deteriorate as well. With several large employers no longer in the area, the decline of business and tourist dollars has slowly impacted many other businesses into a slow downward spiral.

First Impressions

As I entered the East Hall Entrance I took a few minutes to have my ticket laminated and I attached the lanyard and ticket around my neck so that I would look like everyone else. I saw the huge *LUSO* rotatable tower to my left (it eventually was sold) and to the right I couldn't help noticing the *Scootaround* location with a larger number of motorized wheel chairs than in previous years for those in need.



I got the impression that the average age of hams had crossed that magical age of 65 and was rapidly climbing. I hope that was a false impression. As I walked about, sometimes I would need to wait for as many as six wheel chairs in a row before I could continue down that aisle. People with towers on their hard hats have been replaced with people with web cams for live streaming over the internet.

Although it was about four years since I last visited the Dayton Hamvention, many of the larger exhibitors reserved the same general location as before. That was a comforting situation. As I went outside, the tent for *Mendelson's Electronics* was a familiar landmark. While walking up and down the aisles of the Flea Market area, I couldn't help but wonder why so many people went to so much trouble to try and sell 30 to 50 year old electronics that was in such terrible shape. Rust, missing and obsolete components, and, in one brief word, junk was to be easily found everywhere. I envisioned possible reasons for bringing this stuff to Dayton: local environmental laws prohibited putting it out at the curb, trash collectors were behind on their tetanus shots, neighbors might begin to talk about what must still be inside that ham's house, or even worse. As I looked at one piece of commercial test equipment, the front-hinged protective panel had a small problem. As I rotated it up to see if it would latch, water began to pour out of the bottom of the panel. That was not a good sign. "Move along, the Droid that you are looking for is not here!"

I really don't expect much in the way of food offerings at the Dayton Hamvention and was therefore not surprised at my lunch choices. I typically use that time to review my bag of goodies and to reflect on my plan of action for the afternoon. Sometimes I meet friends and spend some time talking with them. This year was no exception. It was nice to speak with Doug – K3GTX, N3TIR - Bud, and others from Western PA and Medina County, OH.

New Products

"Hear what others can't . . . because every contact counts" was the message from the *Top Beam* company. Their specialty was a high performance receiving antenna beam for the top band, 160 meters, but also quite functional for 80, 60, 40, and 30 meters. Imagine an antenna with four fiberglass elements on an 8-foot

boom where each element is about 18 feet in length. Instead of a conventional configuration, the first two elements and the last two elements form two rectangular wire loops that are carefully fed to a special amplifier. These loops require an included high-performance preamp with 40 dB of gain and phasing that can easily provide 11 dB of forward gain and significant f/b performance. Can you say: 'DXCC on 160 meters'? I was impressed with their innovative engineering.

Elecraft offered the re-engineered K3S transceiver, their Software Defined Superheterodyne transceiver offering. Their booth was crowded and there were three lines waiting to buy products. It's nice to see a US company capturing some market share with good products.

FlexRadio announced their Maestro plug-and-play control console for the Flex-6000 series of transceivers. They offer that Maestro is 'orchestrating radio any way, any where . . .' Imagine that you are outside on your deck talking to your friend from Bujumbura, Burundi who is looking out from his tent on the shores of Lake Tanganyika with your Maestro and no wires, no cables, just your favorite Bluetooth® headset. Once again, this US company's lines were long with their billing system experiencing some delays from the large amount of Internet sales, as well.



Expert Linears America introduced their Expert 1.3K-FA solid-state 1500 watt amplifier with coverage from 1.8 MHz to 50 MHz. With an internal switching power supply with power factor correction, this amplifier that is manufactured by *SPE* in Rome, Italy tips the scales at just over 16 lbs.

Both *MFJ* and *SteppIR* introduced graphical antenna analyzers in the same price range. I'll bet one of those companies did not want that to happen. The SARK-110 Vector Impedance Antenna Analyzer from *SteppIR* breaks new ground with many useful features. The MFJ-225 Graphic Analyzer from *MFJ* provides functionality as described while addressing some shortcomings of their MFJ -269B line.

The 'big three' Japanese manufacturers, *Icom*, *Kenwood*, and *Yaesu* seemed to be less interesting to many hams with respect to HF radios. Their HF sales have met some serious competition from US companies. Their resources seem to have been re-directed into VHF/UHF digital technology. But I can't help but wonder if the *VHS* vs. *Beta* fiasco isn't repeating with *D-Star* and *Fusion* systems. Why can't one standard be followed? Who would spend/gamble on an expensive technology when the other one might be the surviving winner? I did stop briefly at the *Yaesu* booth to pick up my free *Yaesu* baseball hat.



From China the *Baofeng* VHF/UHF handhelds were selling for \$24.95 and at that price you could buy several and still have money left over to pay for your hotel bill rather than buy one of the 'big three' offerings priced at over \$500. That's just my opinion! Those Chinese handhelds were flying over the counter to frugal, bargain-hunting hams that only require basic communications 90 percent of the time. From Italy the *Begali* Morse Code keys commanded attention because of their quality, performance, and styling. Many CW operators claim that these are some of the best keys in the world. Also from Italy, the *Elad* SDR FDM-DUO attracted a crowd. This 5-watt standalone or PC-supported transceiver caught the attention of many hams. *SPE* with their three versions of the Expert Linear Amplifier now has two reputable distributors with service and support in the US. Their rugged, nylon travel bag is the stylish epitome of class

for those special DXpeditions to Neville Island and beyond. *RM Italy* who had earned a poor reputation for 'cheap' amps for CBers was now showing some quality linear amps in their new lineup with sufficient low-pass filtering to pass FCC certification requirements.

Roy Lewallen - W7EL announced his Version 6.0 of EZNEC/EZNEC+ Antenna System Analysis Software. Upgrades from previous versions were offered at reduced rates. Because of how much I have learned by using EZNEC 5+, upgrading to Version 6+ was an easy decision for me.

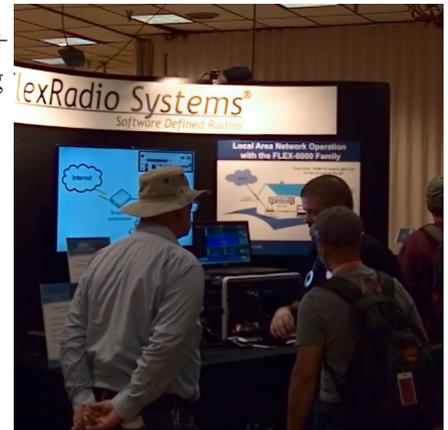
Other Vendors

The *Array Solutions* booth always exhibits quality products for the ham. I always enjoy stopping by. *DX Engineering* had a large presence in the Arena area. Noticeably absent was *Amateur Electronic Supply* who decided not to have a presence at Dayton. Could there be some competition in Northeast Ohio for the ham radio dollar?



GigaParts was showing the *Apache Labs* SDR radio that is based on the *FlexRadio* open-source Power SDR software from earlier platforms before the FlexRadio 6000 series. The *Hilberling* booth presented their line of expertly-engineered craftsmanship at corresponding prices. I can't imagine a line forming to buy an \$18,000+ transceiver or some of those wonderful accessories that they were showing with their flagship transceiver.

I spent some time talking to the people at the *Miami Valley Mesh Alliance* regarding my early venture into mesh networking with a re-flashed *Cisco* router. My success was short-lived when the larger next release of their mesh firmware made my inexpensive *Cisco* router obsolete because of flash memory limitations on that model. The three gentlemen were very knowledgeable and helpful with several excellent suggestions should I wish to pursue mesh networking further. They also described their experiences with coverage and performance achievements. That time spent with them was worthwhile time.



Palstar showed many of their high-quality auto antenna tuners. I really enjoyed drooling over the one with the servo motors on the inductor and capacitors inside. *RF Concepts* showed their motorized auto antenna tuner with an impressive Smith Chart showing on the LCD display. I wonder how many hams even know what information is available in a Smith Chart. *Rigol* had a very high quality spectrum analyzer on display at a very reasonable cost.

I was looking for some replacement element parts for my *SuperAntenna* Yagi-in-a-Bag that had sustained some damage from this last winter. The original manufacturer had gone out of business several years ago. The new owners must have purchased the naming rights but they offered no inventory of spare parts for the earlier line and no viable suggestions for replacement parts. The trail was now as cold as last winter.

Universal Radio was doing a brisk business with lots of stocking stuffers and bathroom reading material as I call it. From the UK *Vortex Antenna Systems* was showing V-Beam antennas that were very ruggedly built. I couldn't help but feel that the antenna looked top heavy and perhaps might rotate 180 degrees around the boom. As rugged as it was, I'm sure that would never happen. This was another example of excellent

engineering construction. *Optibeam* several years ago reminded me of how to properly build a beam antenna – simply awesome.

Forums

With four concurrent forums over the two and a half days, DARA put together some significant talent and great presenters in all of the forums that I attended. Plenty of knowledge transfer, ideas, techniques, interesting topics, etc. that should always be a ‘must attend’ item for anyone going to the Hamvention.

Amateur of the Year

Congratulations to Tim Duffy - K3LR for his significant contribution to amateur radio with his Contest University and by his example, both professional and personal. Now as the ARRL Section Manager for Western Pennsylvania I look forward to witnessing his leadership make a significant difference within the WPA Section.



You don't want to miss this!

Field Day is always the fourth full weekend of June, beginning at 1800 UTC Saturday and running through 2059 UTC Sunday. Field Day 2015 is June 27-28.



County Commissioners PROCLAMATION

A PROCLAMATION
OF THE BOARD OF COMMISSIONERS
OF THE COUNTY OF BEAVER
IN THE COMMONWEALTH OF PENNSYLVANIA,
PROCLAIMING JUNE 26th THROUGH JUNE 28th, 2015, AS
"AMATEUR RADIO WEEK"
IN BEAVER COUNTY.

WHEREAS, Amateur Radio has continued to provide a bridge between people, societies and countries by creating friendships and the sharing of ideas; and

WHEREAS, Amateur Radio Operators have also provided countless hours of community services throughout these decades; and

WHEREAS, these Amateur Radio's services are provided wholly uncompensated; and

WHEREAS, the Commonwealth of Pennsylvania also recognizes the services Amateur Radio's people also provide to our many Emergency Response organizations, including the Pennsylvania Emergency and Beaver County Emergency Management Agencies; and

WHEREAS, these same individuals have further demonstrated their value in public assistance by providing free radio communications for local parades, bike-a-thons, walk-a-thons, fairs and other charitable public events; and

WHEREAS, the County of Beaver, Pennsylvania recognizes and appreciates the diligence of these "hams" who also serve as weather spotters in the Skywarn program of the U.S. Government Weather Bureau; and

WHEREAS, Amateur Radio once again proved its undisputed relevance in the modern world by providing emergency communications when other systems failed in the devastation of Hurricanes Katrina and Rita in the U.S.A. and in the Tsunami catastrophe overseas; and

WHEREAS, the ARRL is the leading organization for Amateur Radio in the U.S.A.; and

WHEREAS, the ARRL Amateur Radio Field Day exercise will take place on June 26-28, 2015 and is a 24-hour emergency encampment exercise and demonstration of the Radio Amateurs' skills and readiness to provide self-supporting communications even in fields without further infrastructure;

NOW, THEREFORE, BE IT PROCLAIMED, by the Board of Commissioners of the County of Beaver, a fourth class county under the laws of the Commonwealth of Pennsylvania, AND IT IS HEREBY PROCLAIMED:

1. That the Board of Commissioners of the County of Beaver recognizes Amateur Radio Week at the Old Economy County Park, 5 Forcey Drive, Baden, Pennsylvania 15005 in Beaver County located at Shelter 1, in the park.

2. That the Board of Commissioners, for and on behalf of the County of Beaver, hereby designates June 26th through June 28th, 2015, as:

"AMATEUR RADIO WEEK"
IN BEAVER COUNTY

In witness thereof, we have hereunto set our hand and caused the seal of the Commissioners of Beaver County to be affixed this 14 day of May, 2015

BOARD OF COMMISSIONERS

Tommy Amadio
Chairman

Joe Spaw
Commissioner

Dennis E. Nichols
Commissioner



Tracey Antoline-Patten
Attest

Our Field Day space in Economy Park has been reserved. It's time to get your cooler, main dishes, snacks and come!

This Month

This month's feature presentation:

This Month:

Speaker:

Rich Soltesz

K3SOM

Topic:

Field Day 2015 Setup and Predictions

Including:

Continuing with our BVARA Presentation

Series this year, our topic this month is about

Field Day 2015. Club members have performed a site survey at Old Economy County Park so that we may better utilize the available space at our shelter area while minimizing interference and noise between stations. We'll begin with our planned operating conditions so that you will better understand what constraints that we face. With our distributed stations approach, you'll find out where each station will be located as well as corresponding antenna locations that will minimize interactions. Placement of Generators has also been addressed. Our network-based software logging program has been upgraded and is ready to easily support our planned setup. But wait, there's more: using the free Online VOACAP we'll examine propagation conditions to eight areas in the US and Canada and compare how propagation predictions have changed since last year. Get out the bug spray and warm up the chili, this is one presentation you won't want to miss!

Rich's Background:

Extra Class Ham, Licensed since 1962, VE,
B.S. Electrical Engineering,



Field Day 1960s

More this Month

VE TEST SESSION

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

Tests begin 5PM Thursday, June 11th (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.

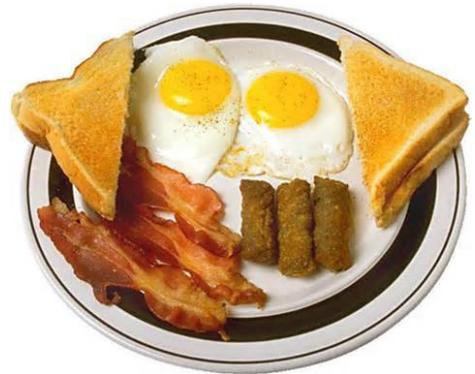
For more information, contact :
Rich Soltesz, K3SOM
(724) 847-0610
k3som@arrl.net



WEEKLY

Thursday Morning Breakfast

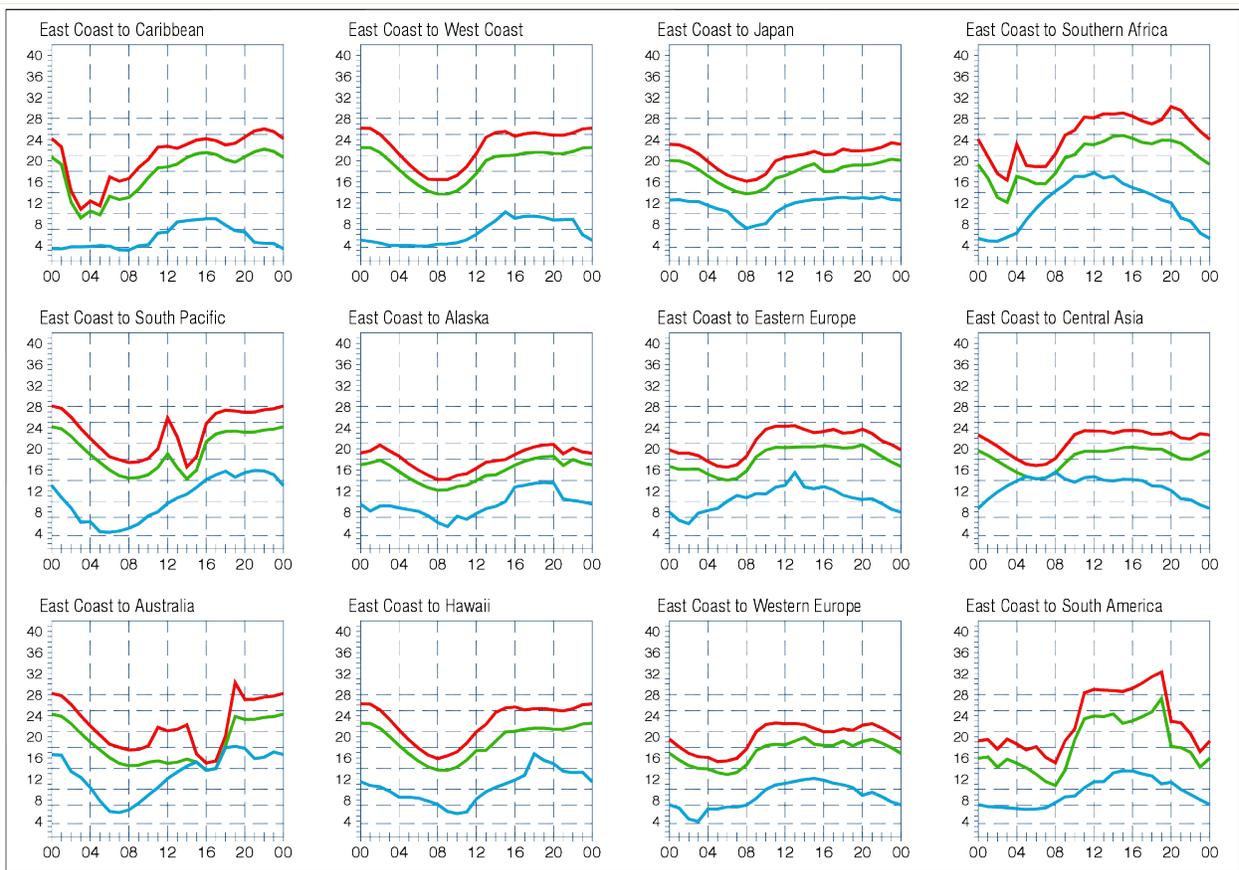
The BVARA meets every Thursday at Steak n Shake in Center Township, by the Beaver Valley Mall, at 10:00 AM. All area amateurs are encouraged to come join us at our Thursday morning breakfast.



See you at Steak n Shake!

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 **June** 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 110. This is a **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 June 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

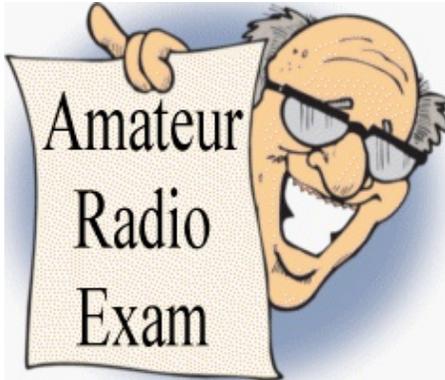
eQRM Urges All County Hams to Participate

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)

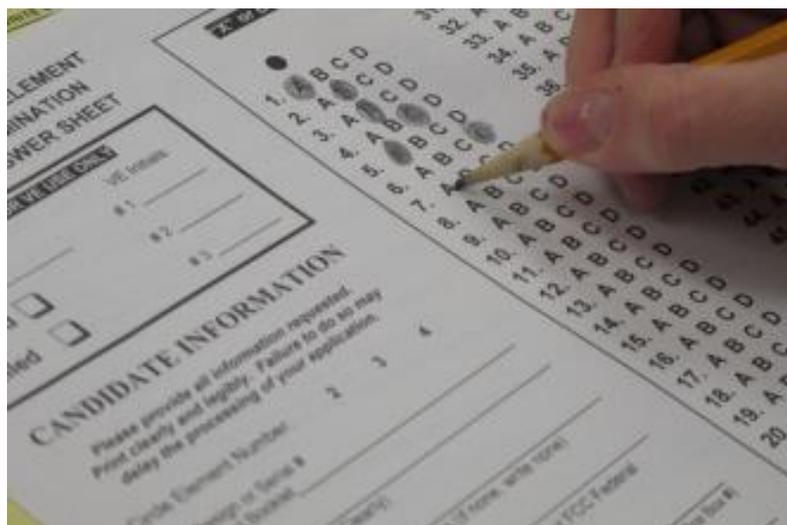


New License and Upgrades BVARA VE Testing



The BVARA would like to acknowledge :

Our newest ham Scott Blint - KC3FBD from Portersville, PA. Scott successfully passed the Technician test for his new ham radio license at our May meeting.



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

June 11
July 9
Aug 15 Corn Roast no meeting
Sept 10
Oct 8
Nov 12
Dec TBA Christmas Party no meeting



Beaver County

W3SGJ
Beaver Valley Amateur Radio Association
P.O. Box 424
South Heights, PA 15081, USA
ITU 8, CQ 5, Grid EN90ur, Beaver County

Bits and Pieces

June is here!

When was the last time you invited someone to a Ham Radio function?



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 "When was the last time you invited someone to a Ham Radio Function?". Amateur Radio is interesting and fun. Help keep Ham Radio growing. Invite someone to your shack. Show them the fun of making a radio contact, maybe something in the digital side of Ham Radio... Bring someone into the hobby. Pass on your knowledge to some younger person. What are some ways to get a person interested? Maybe a gift subscription to a Ham Related magazine? Maybe the gift of a receiver? Use your imagination to capture someone's interest for a lifetime of Radio fun.

Keep thinking safety. Instill that into your next radio student. Make sure they keep safety first in their mind as you Elmer them about Amateur Radio.

Again, think Safety.



photos from
Yahoo images

Radio Sport

- June VHF Contest - June 13-15, 2015

For amateurs in the US and Canada (and their possessions) to work as many amateur stations in as many different 2 degrees x 1 degree Maidenhead grid squares as possible using authorized frequencies above 50 MHz. Stations outside the US & Canada (and their possessions) may only work stations in the US (and its possessions) and Canada.

Stations in KH0-9, KL7 & KP1-KP5, CY9 and CY0 count as W/VE stations and can be worked by DX stations for contest credit.

The second full weekend in June. Begins 1800 UTC Saturday, runs through 0259 UTC Monday.

- Kids Day- Sunday, June 21 2015

Kids Day always runs from 1800 UTC through 2359 UTC. Operate as much or as little as you like.

Twice a year, ARRL offers an event designed to promote Amateur Radio to our youth. Share the excitement with your kids or grandkids, a Scout troop, a church or the general public! Kids Day is designed to give on-the-air experience to youngsters and hopefully foster interest in getting a license of their own. It is also intended to give older hams a chance to share their station and love for Amateur Radio with their children.

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

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

Some Interesting Links

- Ham Radio license plates <http://www.cafepress.com/+amateur-radio+license-plates>
- A resource for your MFJ 259-b <http://www.dxzone.com/dx31013/mfj-259b-problems-.html>
- Sporadic E <http://www.dxzone.com/dx31027/sporadic-e-dx-map.html>
- Loop antenna <http://www.dxzone.com/dx30733/magnetic-loop-40-12m.html>
- G5RV antenna <http://www.dxzone.com/dx30724/easy-g5rv.html>
- JT65 digital mode <http://www.dxzone.com/how-to-get-on-the-air-with-jt65a/>
- QSL software <http://www.dxzone.com/dx30731/qs1-wizard.html>
- Pluto New Horizons Spacecraft
closest approach: July 14, 2015 http://www.nasa.gov/mission_pages/newhorizons/main/index.html
- American Radio Relay League (ARRL) <http://www.arrl.org/home>
- Background to Space Weather http://www.spaceacademy.net.au/env/spwx/spwx_tute.htm
- 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.

For Sale

The Beaver Valley Amateur Radio Association has ham equipment for sale.

The following equipment is for sale as an entire package:

FT-767 GX Transceiver, S/N 1J470108, AM, CW, SSB, NBFM
with integrated 117 VAC power supply, owner's manual, schematic, etc.
with 600 Hz CW Crystal Filter Installed

MD-1-C8 Desk dynamic microphone, manual

SP-767 External speaker with passive HP and LP audio filters, manual

FEX-767-6 6-meter plug-in module, manual (all plug-ins)

FEX-767-2 2-meter plug-in module

FEX-767-7 70-cm (440) plug-in module

FIF-232C Cat system interface, manual (one cable missing)

MH1-B8 Hand microphone

FTS-8 CTCSS Tone PC board

MFJ-815B Peak reading SWR/Wattmeter, 1.8-60 MHz

MFJ-564 Deluxe iambic paddle

CATY by N3HGW (software) for the FT-767 GX (floppy and CD)

Entire package price \$1100 (price firm) plus shipping and insurance, unless you can pick up.

For sale in the lower 48 states only with the buyer to pay packing, shipping, and
insurance charges.

Point of contact is : Rich - K3SOM@ARRL.net

Photos of equipment on next page

For Sale

