



THE BEAVER VALLEY AMATEUR RADIO ASSOCIATION
WWW.W3SGJ.ORG
BEAVER COUNTYS ONLY 75 YEAR ARRL AFFILIATED CLUB!

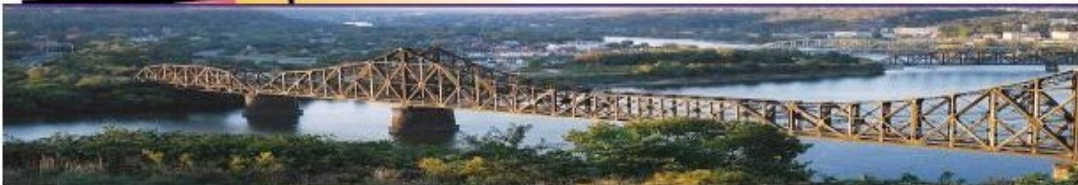
The eQRM Newsletter

Home of W3SGJ/R
145.310- 131.8 Hz PL

Volume 4, Issue 2

June 2010

Grant, KB3QFQ - Editor



What's new in the BVARA

EXCLUSIVE INTERVIEW with N3KN PREVIEW

In the USA, emergency communications is one of the two main ways we justify our access to billions of dollars' worth of spectrum. When we talk to Congress and the FCC about issues that affect us, we don't discuss the recreational side of ham radio – the radiosport, the rag chews, the fun stuff – but rather the technical experimentation hams do and

**READ THE REST OF OUR INTERVIEW
WITH KAY CRAIGIE, N3KN ON PAGE 7!**

UPCOMING EVENT



June 26-28

Inside this Issue:

RACES	2
Pittsburgh Area Calendar	3
Membership Info	4
BVARA Speaker Series	5
Club Announcements	6
EXCLUSIVE Interview	7
Technical article	11
BVARA 2 Meter Net Roster	13
QST Prop Charts	14
Monthly Section News	15
BVARA Schedule of Events	16

READER'S POLL OF THE MONTH

“What features would you like to see included on our new website?”

Answer by emailing Grant at KB3QFQ@W3SGJ.org

What would you like to see added to the newsletter?

Would you like to help, but don't know how?

Email me at
KB3QFQ@W3SGJ.org
and let me know!!

I need **YOUR**
opinion!

Check us out on the web by clicking the links below



[Facebook](#)



[Twitter](#)



[W3SGJ.org](#)



[Blog](#)



[Geocaching](#)

© Copyright 2010
The Beaver Valley Amateur
Radio Association

Letters and Emails to the Editor – Please email KB3QFQ@W3SGJ.org

The eQRM encourages letters/e-mails to the editor. Letters must contain your contact information for verification prior to publication. Preference will be given to letters of 200 words or less. Letters are subject to editing. Unused letters will not be acknowledged or returned.

The BVARA 10 Meter Net Lunch group will be meeting every Thursday at Rainaldi's in Center Twp at 11:00 AM. All area amateurs are invited and encouraged to attend the Thursday Morning Lunch.

VE TESTS are held by the BVARA VE Team at the Beaver County Emergency Operations Center in Ambridge. IF YOU DESIRE TO TAKE A TEST, CONTACT CHRIS, W3OUF, FOR THE DATE OF THE NEXT TEST SESSION.

All tests will begin PROMPTLY AT 6:00PM. Information and registration on a test session can be obtained by contacting the VE Team Coordinator, Chris Moratis, W3OUF.

His address, email and phone number are as follows:

Chris Moratis, W3OUF

1199 Highland Avenue

Ambridge, PA 15003

PHONE: 724-266-2866

cjmoratis@verizon.net

2010 BVARA Officers

President: Jack Spencer, KZ3Z
 Vice President: Robert De Marco, WA3ZRM
 Second Vice President: Evan Finkelstein, KB3QFR
 Secretary: Norm Trunick, K3NJT
 Treasurer: Pam Spencer, W3PMS
 Director: George Caffro, N3HOJ
 Director: Chris Moratis, W3OUF
 Trustee: Dick Hanna, K3VVY



BVARA Meetings

VE testing begins at 4:00.
E-Board meetings are held at 6:30,
Regular meetings are at 7:30.

June 10 – Ambridge 911 Center
 July 8 – Ambridge 911 Center
August - None, Corn Roast at Brady's Run
 September 9 – Ambridge 911 Center
 October 14 – Ambridge 911 Center
 November 11 – Ambridge 911 Center
 December - None, Christmas party

RACES & ARES

eQRM Urges ALL Beaver County Amateurs 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 (88.5 PL).

PITTSBURGH AREA HAM RADIO CALENDAR

From the Greater Pittsburgh VHF Society

June

- 5: Atlantic Division Convention (Rochester Hamfest) -
Rochester Amateur Radio Association
More Info: <http://www.rochesterhamfest.org>

- 6: Breezeshooters Hamfest & Computer Show-Butler Farm
Show Grounds-627 Evans City Road-Butler, PA
More Info: 412-366-0488 Email:
hamfest2010@breezeshooters.net - Talkin: 147.30 MHz
More Info: <http://www.breezeshooters.net>

- 12: Two Rivers ARC "Hams n Eggs" Breakfast

12-14: ARRL VHF Qso Party-More Info:
<http://www.arrl.org/contests/calendar.html>

- 15: Two Rivers ARC Club Meeting

- 18: Western Pa Repeater Council Meeting

19: ARRL Kids Day Activity-More Info:
<http://www.arrl.org/contests/calendar.html>

- 22: Two Rivers ARC Amateur Radio Exam Session

23-28: Boy Scouts of America, KA3PMW and N3TRF, W3S.-
Amity, PA-1800 to 1800z-Field Day at Camp Anawana for the
100th Anniversary of Boy Scouts. 28.400, 21.300, 14.200, 7.200
MHz. QSL: Dave Alexander, PO Box 153, Marianna, PA
15345-0153. Troops from SW PA will be participating and
cooking for the hams. www.w3sfieldday.com

- 26-27 ARRL Field Day

July

10-11: IARU HF World Championships-More Info:
<http://www.arrl.org/contests/calendar.html>

- 10: Two Rivers ARC "Hams n Eggs" Breakfast

- 11: North Hills ARC Hamfest-Northland Library Grounds-300
Cumberland Road-Pittsburgh, PA
More Info: <http://www.nharc.org> - Phone: 412-760-7055 -
Email: nharchamfest@hotmail.com - Talkin: 147.09 Mhz

17-18: CQ World Wide VHF Contest -
More Info: <http://www.cq-amateur-radio.com>

- 18: Somerset County PA Hamfest-Somerset County Tech
Center-281 Technology Drive-Somerset, PA
Talkin: 147.195/443.25 MHz-VE Testing Available 10 am
More Info: <http://www.k3smt.org>

- 20: Two Rivers ARC Club Meeting

- 25: Portage ARC Hamfair-Portage, OH - <http://Hamfair.com>

August

- 7: Two Rivers ARC Family Picnic -
White Oak Park - Cedar Grove #2 - White Oak

7-8: ARRL UHF Contest - More Info:
<http://www.arrl.org/contests/calendar.html>

- 14: Two Rivers ARC "Hams n Eggs" Breakfast

15: Warren Amateur Radio Association Hamfest - More Info:
<http://www.w8vtd.org>

21-22: ARRL 10 GHz and Up Contest - More Info:
<http://www.arrl.org/contests/calendar.html>

- 22: Skyview Radio Society Hamfest / W.Pa. Section Convention
- Skyview Radio Society Grounds
2335 Turkey Ridge Road, New Kensington, PA-
Talkin: 146.64 MHz (PL 131.8 hz tone)
More Info: 412-860-0046 / Email: kg3f@arrl.net --
<http://www.skyviewradio.net>

- 22: CARA Hamfest and Computer Show -
Cambridge Amateur Radio Association -
More Info: <http://www.w8vp.org>

September

- 11: Two Rivers ARC "Hams n Eggs" Breakfast

11-13: ARRL September VHF QSO Party -
More Info: <http://www.arrl.org/contests/calendar.html>

- 14: Two Rivers ARC Amateur Radio Exam Session

18-19: ARRL 10 GHz and Up Contest -
More Info: <http://www.arrl.org/contest/calendar.html>

- 21: Two Rivers ARC Club Meeting

25-26: CQ WW RTTY DX Contest -
More Info: <http://www.cq-amateur-radio.com>

- 26: Cleveland Hamfest and Computer Show - Hamfest
Association of Cleveland - More Info: <http://www.hac.org>

For more information about these events, please visit
W3SGJ.org/calendar



BY BECOMING A MEMBER OF THE BVARA, YOU CAN HELP
SECURE THE FUTURE OF AMATEUR RADIO IN BEAVER COUNTY.
ADDITIONALLY, THE BVARA RECEIVES A PORTION OF EACH
ARRL AND/OR WORLD RADIO SUBSCRIPTION YOU PURCHASE!

Join the BVARA, ARRL and World Radio

Sign up for:	Price	Quantity
<input type="checkbox"/> BVARA FULL MEMBERSHIP	20.00	
<input type="checkbox"/> BVARA STUDENT MEMBERSHIP	15.00	
<input type="checkbox"/> BVARA ASSOCIATE MEMBERSHIP	10.00	
<input type="checkbox"/> BVARA SPOUSE/CHILD MEMBERSHIP	5.00	
<input type="checkbox"/> ONE YEAR ARRL MEMBERSHIP	39.00	

ARRL MEMBER ? YES NO Subtotal: _____
Donation: _____
Total: _____

Your License Class (if any):

- ☐ Novice
☐ Technician
☐ General
☐ Advanced
☐ Extra

Name _____
Address _____

Phone _____

Your Call Sign: _____ Exp. date _____

Signature _____

Make Check or Money order payable to:
The Beaver Valley Amateur Radio Association, P.O. Box 424
South Heights, PA 15081

Are you interested in writing for the eQRM newsletter?

There are many ways
you can help with the
newsletter, even if it is
simply sending me an
email. We are always
looking for new,
interesting content; if
you read something of
interest, tell me!

A publication is only
as good as its readers.

Even if you are not the
“writer type”, you can
still help!

Please help me out by
sending one radio-
related article, or an
announcement that
you have read.

So get involved!
You may end up
enjoying it.

To contact me, please
email me at
KB3QFQ@W3SGJ.org



Interested in becoming an
amateur radio operator?
Want to upgrade your license?

Jack Spencer, KZ3Z is **hosting a
class** for just these reasons.
For details, please contact Jack
at 724-869-2429
or visit www.W3SGJ.org

The BVARA Speaker Series

The BVARA Speaker Series provides a vast array of topics and discussions, with a new topic every month at our club meetings.

Here are a few words from Rich, K3SOM, explaining the idea behind the series:

“By adding a speaker program with a wide variety of topics, not all necessarily exclusively ham-radio, our club has an opportunity to create excitement, to stimulate discussion, to spark creativity, and to enable people to have some fun as they expand their normal comfort zones with new ideas and possibilities for them to pursue.”

Are you interested in attending?

Just show up at our club meetings, held on the second Thursday of every month. They are held at:

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

Would you like to speak? Contact me or any other BVARA club members to let them know when you would like to speak, and what you would like to speak about!

Potential speakers may want to present topics like:

On what frequency am I transmitting, and how close to the band edge can I operate?

What's it take to operate BPSK31?

How can I effectively compete in a contest?

What's a fox hunt?

How can I find DX?

Or anything that interests you!

This Month:

Speaker:
Rich Soltesz,
K3SOM

Topic:
The Dipole and EZNEC:

Basic definitions of resonance, the speed of light, antenna gain, and no heavy math!

Hands-On Analysis of Dipoles Including:
The impact of height, Inverted V's, Bent Dipoles, Fan Dipoles, Folded Dipoles, and much more!

Rich's Background Information:

Extra Class Ham, licensed since 1962

Amateur Radio VE
(Volunteer Examiner)

B.S. Electrical Engineering

Registered Professional Engineer, PA

“...our club has an opportunity to create excitement....”

Club Announcements

New Repeater Status

de Jack, KZ3Z

Our new repeater is currently on order. It is expected to take 2-3 more weeks before it is delivered, arriving near the end of May. It was ordered on March 15 and shipped on May 11.

The new repeater is a Maggiore Hi Pro "E" 35w version.

The PL tone is now 131.8.

It will come from the factory wired for our S-Com 7330 controller. It also has an optional IF filter installed, which would be needed if 2 meters goes to 15khz splits.

Our current Trustee, Dick K3VYY, has already downloaded and installed the latest firmware upgrades to the new controller. It will have 13 minutes of digital audio available for messages.

Below is the list of donors to the new repeater:

Pam, W3PMS
Jack, KZ3Z
Bob, WA3ZRM
George, N3HOJ
Norm, K3NJT
Dick, K3VYY
Rick, KB3RXP
Rich, K3SOM

All donated \$100 each.

The repeater cost is **\$1637**.

Further donations would be appreciated. +

VE Test Session

de Chris, W3OUF

The next test session will be at the:

Beaver County Emergency Operations Center

351 14th Street
Ambridge, PA 15003

Time: **5:00 P.M.**
(walk-ins allowed)

Date: **Thursday, June 10**

All candidates wishing to take the test should bring **ALL** of the following:

1. Two (2) forms of identification.
One should be a Photo ID.
2. A pencil and a blue or black pen.
3. Your original **AND a photocopy** of your current license (if any).
4. Your original **AND a photocopy** of any C.S.C.E's (if any).
5. The test fee of **\$15.00**.

All classes of amateur radio license tests will be administered.

Note: A new set of Technician test questions will be used starting on July 1, 2010.

For more information, please contact our VE Test Coordinator:

Chris Moratis, W3OUF
1199 Highland Avenue
Ambridge, PA 15003
PHONE: 724-266-2866
cjmoratis@verizon.net +

New W3SGJ Website

de Grant, KB3QFQ (*eQRM Editor*)

We are currently working on a new and improved website for our radio club. Why? Because we feel our site lacks the "community" essence that is amateur radio. Sites like eHam and QRZ are popular with the amateur radio community, not exclusively because of the content provided, although that does help, but because of the interaction between hams.

Our new site will provide a solid community focus when it launches in the near future, in addition to exclusive articles, photos, video, interviews, and more. It will also be easier to use with a simplistic design, so you know exactly where to find the information you are looking for.

Because of the community focus, we ask that you, our readers, provide us with valuable feedback. Please spend 1 minute of your time and [email us your answers](#) to the following questions:

What would you like to see on the new site?

What would make you want to check the site frequently?

What would you like to see on our website that can't be found on any other ham sites?

Sign up for the new site (it's free) on our website, W3SGJ.org

This new site is made for *you*. +

EXCLUSIVE INTERVIEW with ARRL President Kay Craigie, N3KN

2

Interview

**Kay Craigie, N3KN**

ARRL President

do you have any advice for other newsletter editors?

For me the most enjoyable part of doing a newsletter was the writing. I also enjoyed formatting the document to make it look nice and be pleasant to read. A lot of clubs have dropped their newsletters now, using web pages and e-mail notices instead. Whatever format and delivery method editors are using to communicate with club members, I have three pieces of advice. The first is never to complain about people not sending you information. Be a journalist. Go to the story, instead of waiting for it to come to you. Second, establish a publication schedule (or a web page update schedule, as the case may be), and stick to it. In 24 years as a club newsletter editor, I published every other month and never missed a deadline. Having a regular news schedule helps members feel connected to the club, because they know when to expect to hear from the club. Finally, write about your club's activities and mention as many members as possible in each issue to recognize what they are doing. When I see a newsletter that has next to nothing in it about the club's activities and the club's members, I wonder why it's worth using the club's resources to publish it.

In our exclusive interview with ARRL President Kay Craigie, N3KN, we talk with her about emergency communications, her ARRL career, the future of amateur radio, Star Trek and more.

GRANT, KB3QFQ

Thank you for joining us, Mrs. Craigie! First of all, I would like to congratulate you for your election as President of the ARRL. Could you tell our readers about your background and how you first became involved in amateur radio?

KAY CRAIGIE, N3KN

I'm originally from Atlanta, lived for several years near Washington, DC, and spent most of my adult life near Philadelphia. In 2007, I moved to Blacksburg, VA, home of Virginia Tech, to be near my grandchildren. I got my license in 1983 because I was jealous of all the fun my husband was having with ham radio. I was a computer hobbyist at the time and became a ham just when computers were starting to be integrated with amateur radio. It was good timing for me.

I understand that you were editor of your radio club's newsletter for 24 years. What aspect of creating each newsletter did you enjoy most, and

You have had a long and distinguished career in the ARRL: In 1986, you became Section Manager for Eastern Pennsylvania; in 1990, you were Atlantic Division Vice Director; in 1996, Atlantic Division Director; in 2006, First Vice President; and now, in 2010, President of the ARRL! What has each experience been like for you, and how have they differed? What is your most memorable position to date?

When I became Section Manager, the position was very new, having replaced the old Section Communications Manager position just a couple of years earlier. I could shape the job to suit myself and the members probably more than is possible today. When I became Vice Director, the Director (Hugh Turnbull W3ABC) allowed me to participate more in Division activities than some Vice Directors were allowed to do at that time. By the time I became Director, I was well prepared for the job and enjoyed working with my excellent Vice Director (Bernie Fuller N3EFN, former SM/WPA). As Director and Vice Director I did a tremendous amount of travel, because members in the Atlantic Division expected to see their Division officials at hamfests. With about 60 hamfests in

EXCLUSIVE INTERVIEW with ARRL President Kay Craigie, N3KN

Interview

the Atlantic Division every year, I was away from home nearly every weekend from February through November. Sometimes I attended two hamfests on a single weekend – for example, there was a Saturday one in Erie, followed by a Sunday one in Butler. Apart from designing the Education and Technology Program for President Haynie in 2000, I didn't have much work to do during my 6 years as Second Vice President. When I became First Vice President in 2006, on the other hand, President Harrison gave me a number of responsibilities such as chairing committees and doing some international travel. I'm still learning how to be President and am fortunate to have very well-qualified Vice Presidents on my leadership team. It's hard to

compare the various positions, but I think that following in the footsteps of Hiram Percy Maxim W1AW makes the presidency particularly memorable.

So far, how has your time as President of the ARRL been different than previous positions you have held?

I now have the responsibility of heading up the League's Washington team, so I am involved in working on legislative affairs. I am consulted on papers to be filed with the FCC before the documents are circulated to the Board's Executive Committee for their approval. I now see documents having to do with the USA's preparations for the next World Radio Conference in 2012. I've been brushing up on Robert's Rules of Order, because I will be chairing Board meetings, which are conducted quite formally. Finally, I'm keenly aware that although League policy is made by the 15 Directors whom the members elected, not by the President or the Headquarters staff, the President is the public face of the ARRL both to the membership at large and to the government and agency officials the League deals with. That's a serious responsibility.

I understand that you had previously chaired the National Emergency Response Planning Committee. What did you enjoy most about this position, and what were some of the challenges you faced?

Working with a group of experienced leaders of Amateur Radio emergency communications was a great experience. Not every expert is able to work well in a group, leaving their egos at home (so to speak), but the NERPC group was able to debate issues vigorously and then accept the results graciously even if their personal views did not win out. We tried to pick people for the committee who would be able to work collaboratively, but you never know until you actually work with people how they're going to be. In this case, the results of the study showed how well the committee members cooperated towards a common purpose.

You have served on the ARRL's Enforcement Task Force, the committee that pressured the FCC to assign Riley Hollingsworth to clean up the ham bands. What was your role in this committee?

I was a member of the Enforcement Task Force twice, once as a Vice Director and again later as a Director. In the beginning,

this committee reviewed the list documented cases of serious infractions such as malicious interference, exam cheating, and obscenity, and kept pressing the FCC about their inaction. Finally the committee was able to arrange a meeting with an FCC official who said the FCC had let ham radio down. He promised that if it was within his power he would change that. We thought it was wonderful to hear an FCC official speak so bluntly, but we didn't have much faith that anything would actually change. Fortunately, we were wrong, because shortly after that meeting, Riley Hollingsworth was appointed to restore enforcement in Amateur Radio. We consulted with him in the early days of his efforts, until it was clear that he had things in hand and didn't need us any more.

What do you see as the most significant change that has occurred in the hobby since you were first licensed?

"I think there will always be a role for ham radio in disasters. The question is whether we will be able to adapt to what is needed of us in the future. "

EXCLUSIVE INTERVIEW with ARRL President Kay Craigie, N3KN

Interview

There have been a lot of changes – elimination of the Morse code requirement, changes in the absurdly strict no-business communications rules that existed before 1993, increasing diversity in the ham radio community, use of personal computers with ham radio, and use of the Internet to communicate about ham radio. But if I had to pick just one change that stands out, I would say it was the Volunteer Examiner system. It's an outstanding success story of privatizing a governmental function while maintaining the integrity of the process. When the VE system was introduced in the mid-1980s, it was not a foregone conclusion that hams could shoulder this responsibility. A lot of us were nervous about it. But hams did it, thanks to thousands of Volunteer Examiners who have made the system work. Long years ago, before my time,

there were federal employees who openly discriminated against certain categories of Americans in giving license exams or just flunked people on a whim. There was no appeal, no recourse. Imagine that happening now! Today the system is scrupulously fair and honest, and shows how well hams can take responsibility for ourselves, administering exams and maintaining the syllabi and question pools. I've been a VE since very early in the program's existence and consider it a great privilege.

What are your thoughts on the old radio licensing structure, the "Incentive Licensing" era, and the current licensing structure? What is your opinion on the decision to get rid of the Morse Code requirement?

“Emergency communications is extremely important for the future of ham radio in the USA...”

I was not a ham during the incentive licensing uproar, so I can't comment on that. I know that many if not most other countries have only two license classes, so our

having three is fine with me. I wish the FCC had seen fit to grandfather the Advanced class into the Extra – the old Advanced class theory test was tough – and grandfather the remaining Novice licensees into Technician. I also wish we could have persuaded the FCC to establish something like the Australian Foundation license (which has been very successful) because I don't think the frequency privileges accorded to Technicians is well suited to introducing newcomers to the full range of today's ham radio. But the FCC didn't accept those ideas, and so we do the best we can with what we have. I enjoy Morse code and use it a lot, but objectively speaking, I don't see why proficiency in any one particular operating mode should be the *sine qua non* for getting on HF.

There appears to be growing interest in Morse code among American hams today, now that it is not being forced on anybody. The number of entries in Morse code contests is increasing. That's a great trend and I hope it continues.

Ham radio operators are often recognized for their quick response when disaster strikes. What is your position on emergency communications in the hobby, and do you believe that ham involvement in emergencies should be strongly encouraged? What is emergency communication's future role in the amateur radio?

In the USA, emergency communications is one of the two main ways we justify our access to billions of dollars' worth of spectrum. When we talk to Congress and the FCC about issues that affect us, we don't discuss the recreational side of ham radio – the radiosport, the rag chews, the fun stuff – but rather the technical experimentation hams do and the emergency communications we do. Emergency communications is extremely important for the future of ham radio in the USA, and it is a great challenge to meet increasing expectations about disaster communications. The time span between the onset of a disaster and the re-establishment of satisfactory normal communications decreases all the time. We have to be able to meet the needs of emergency managers and charitable relief agencies and do it faster and more effectively than ever before. This puts demands on volunteers that many hams don't like – things like formal training and credentialing, like learning to use new modes and networks. I think there will always be a role for ham radio in disasters. The question is whether we will be able to adapt to what is needed of us in the future.

Where do you see amateur radio heading three to five years from now, and how is it going to get there? What

EXCLUSIVE INTERVIEW with ARRL President Kay Craigie, N3KN

Interview

do you believe will change in the hobby, and will this change be a good thing?

I think the ham radio population will continue to diversify. We have to reach out to groups of people who can marry ham radio to their other personal interests, whether those are recreational interests such as boating or traveling in RVs, or safety considerations such as emergency preparedness. Those of us who came into ham radio from personal computers in the early 1980s changed the hobby, and any future incoming group of people with nontraditional interests will change the hobby, too. We have to challenge ourselves to expand our personal horizons in ham radio and learn about new things, not get stuck in comfortable ruts and become bored and boring. One of the things we can learn from the early 20th

century hams is that they were always itching to try something new, achieve something new. We should follow their example.

I am an Eagle Scout, and I learned about amateur radio from a Merit Badge class taught by our local radio club. What are your ideas on how to get more youth involved in the hobby, beyond the summer teaching academies offered by the ARRL?

In addition to promoting wireless literacy in the classroom, where the idea of ham radio may plant itself in young people's minds, the ARRL has relationships with the Boy Scouts and the Civil Air Patrol, and we're working on a relationship with the Girl Scouts. Working with existing groups like that is an efficient way to get the message to a lot of young people. We also have a presence on the major social networking sites and plan to improve that effort.

Another step in the right direction would be to ask hams under 18 why they got into ham radio, what they like about ham radio, and what aspects of ham radio they believe are most appealing to their peers. We haven't done that in an organized way, and I think we should. Who would know better how to appeal to kids, than kids?

I have read that you enjoy DXing. What DX contact are you most proud of, and what country

do you enjoy speaking to the most?

I got into ham radio to be a DXer, and although I've pursued a lot of other interests over the years, I always come back to DXing. The most meaningful contact I had was back in 1992 with the VP8SSI DXpedition in the South Sandwich Islands. I had been very ill, in the hospital for 10 days, and had come home feeling absolutely terrible. Finally I dragged myself into the shack and worked the DXpedition. The adrenaline rush from busting the pile-up felt good. It was the psychological turning point in starting to get well again.

What other non-radio hobbies or pastimes do you enjoy?

I like reading books on my Kindle – especially murder mysteries and historical non-fiction. I enjoy my dog, a Jack Russell Terrier named Frodo. I enjoy travel. Well, I enjoy being in other parts of the country and the world. Nobody in his right mind enjoys the process of getting there, especially if it involves airlines. They can invent a Star Trek transporter any time they want to. Yes, I'm a Star Trek fan and have been since the original series went on the air.

What advice do you have for those interested in getting started in ham radio?

Join a local radio club. Then get active in club activities, even if you don't quite know what you're doing yet. I didn't have a clue how to edit a club newsletter when I volunteered to do one for my club, but I made it up as I went along. Find some way to contribute to the club, and it will pay you back many times over.

Thank you so much for your time! Do you have any closing comments for our readers?

Remember that the person who represents you on the ARRL Board is your Director. He wants to hear from you and appreciates the chance to engage you in conversation. Talk to him. Listen to him. Ask questions before you jump to conclusions. Be open minded as you think about the answers. The League depends on respectful dialog between Directors and the members they represent. Thanks for the chance to do this interview. +

Did you enjoy this interview? Do you have someone you would like to see interviewed? Please email me your comments at KB3QFQ@W3SGJ.org

TECHNICAL

Multiband Vertical Antenna Project

By Harold Melton, KV5R, from [his website](#)



If you could only have two antennas, what would they be?

It has been observed that the 160-meter horizontal dipole (and full-wave loop), fed with ladder line and a tuner, provide excellent multiband performance. However, on 20 meters and above, the large horizontals present an azimuth pattern with many deep nulls. It is essentially an NVIS (regional lowbands) antenna, and unsuitable for DX work. The purpose of this project is to design a simple multiband vertical dipole antenna for 20 meters and above, with a tuner, that will provide gain and a circular pattern on the higher bands. It will supplement the big horizontal dipole by providing good omnidirectional coverage, with some gain, from 20 through 6 meters. It will be physically designed as an experimental assembly, so that it may be adjusted in the field for a variety of experiments and other purposes.

Electrical Design

The hardware may be assembled into several different designs. This first experiment will be a center-fed dipole. This design will provide 1-4 dbi gain and a low angle of radiation (under 20 degrees predicted) without any need for ground plane or matching systems. Modeling was performed on a vertical dipole, with elements tapered, over average ground, using MMANA. The antenna will be useable from 20 through 6 meters with gain and a circular pattern. It will be center-fed with ladder line and an antenna tuner with internal balun. This will greatly reduce feedline losses. If coax is used, expect 50 to 75 percent feedline loss (unacceptable).

Initial design parameters:

- Resonant frequency: 14.175 MHz
- Length overall 33.5 feet (402 inches, 10.2 meters)
- Feed: Split-center using PVC pipe; 1.25 inch handmade ladder line, to ATU in shack
- Expected SWR fed with 1.25-inch ladder line: 5:1 at 20 meters; between 3:1 and 4:1 on higher bands (nine times higher with coax)
- Expected gain (dbi): 1.0 at resonance, rising to 4.3 at 29 MHz (higher if antenna elevated)
- Expected elevation angle at 20 meters: 19 degrees, lowering to 12 degrees at 10 meters (lower if antenna elevated)
- For the only known treatise on this design, see <http://www.cebik.com/v20.html>

Physical Design

The use of 7 six-foot sections of 0.058 slip-fit aluminum tubing will allow easy adjustment of the feedpoint (and overall length) by varying the overlap of tubing sections. Tube ends will be slotted and clamped with SS hose clamps (not drilled). The feedpoint insulator will be 2 feet of 1-inch Schedule 40 PVC, which will be heated and formed to slip-fit outside of sections 4 (1.125") and 5 (1"). This has an ID 1.049. The lower half of the insulator will be heated and forced over section 4; the upper half heated and swaged (not drilled). The feedpoint insulator will be 2 feet of 1-inch Schedule 40 PVC, which will be heated and

TECHNICAL

O.D.	WALL	I.D.	LBS./FT.	\$/FT.
6063-T832 DRAWN ALUMINUM TUBING				
.375"	.058"	.259"	.044	\$0.70
.500"	.058"	.384"	.095	\$0.80
.625"	.058"	.509"	.104	\$0.90
.750"	.058"	.634"	.127	\$1.00
.875"	.058"	.759"	.150	\$1.10
1.000"	.058"	.884"	.202	\$1.20
1.125"	.058"	1.009"	.229	\$1.35
1.250"	.058"	1.134"	.255	\$1.55
1.375"	.058"	1.259"	.283	\$1.75
1.500"	.058"	1.384"	.309	\$1.95
1.625"	.058"	1.509"	.336	\$2.25
1.750"	.058"	1.634"	.363	\$2.50
1.875"	.058"	1.759"	.384	\$2.75
2.000"	.058"	1.884"	.416	\$3.00
2.125"	.058"	2.009"	.443	\$3.50
6061-T6 EXTRUDED ALUMINUM TUBING				
.188"	SOLID	SOLID	.032	\$.25
.250"	SOLID	SOLID	.058	\$.45
1.125"	.058"	1.009"	.229	\$1.10
1.250"	.058"	1.134"	.255	\$1.25
2.000"	.120"	1.760"	.833	\$4.50
2.000"	.250"	1.500"	1.616	\$8.00
6061-T6 EXTRUDED BAR STOCK				
4.000"	.375"	SOLID	1.8	\$6.50

Table 1: Texas Towers Aluminum from <http://www.texastowers.com/aluminum.htm>

formed to slip-fit outside of sections 4 (1.125") and 5 (1"). This has an ID 1.049. The lower half of the insulator will be heated and forced over section 4; the upper half heated and swaged down to section 5 (apply 2 hose clamps while pliable). The center of the insulator will be slotted 3/8 x 2 inches with a router to provide feedline connection. A sleeve of 1 1/4-inch schedule 40 (ID 1.380) will then be slotted, heated, and slipped over the termination point to add strength. The base insulator should be 10 feet of 1 1/2-inch schedule 80 PVC pipe, which has an ID of 1.500 inches. The base of the antenna should be raised at least 8 feet to prevent RF burns. If schedule 80 is not available, schedule 40 may be used by heating and swaging down with hose clamps. However, raising the antenna without breaking schedule 40 may be tricky. The antenna will be guyed with 3 lines of #36 nylon mason's line. These will attach just above the center insulator and slope outward at a reasonable angle to trees or driven stakes. For hurricane duty, the guys should be 1/4-inch nylon, tied to driven 1-inch (by 48") galvanized steel pipe

Sec.	Size	/ft	#Ft.	Cost
8	0.625	0.90	6	5.40
7	0.750	1.00	6	6.00
6	0.875	1.10	6	6.60
5	1.000	1.20	6	7.20
4	1.125	1.35	6	8.10
3	1.250	1.55	6	9.30
2	1.375	1.75	6	10.50
1	1.500	1.95	6	11.70
Base Total				\$64.80
Delivered + Texas Tax				\$87.09

Table 2: Aluminum Materials (6063-T832 in 6-foot sections)

Notes: Section 8 not used in this project. Sections 1-4 are the lower element; sections 5-7 are the upper element. May be made with only six sections but lower element will not be as strong.

sections, overlapped about 6 1/2 inches, for low weight. Sections are slotted and clamped with worm gear hose clamps. Use Penetrox at every joint and at the feedline connection.

Analysis

MMANA optimization shows a constant of 474 (not 468) using 14.175 MHz and actual section radii. For multiband use, MMANA shows the best feedline to be 450-ohm ladder, side-fed, which will produce a wide SWR curve from 14 to 29 MHz, between 5:1 and 3:1, respectively. Ladderline will handle 5:1 SWR easily with no appreciable loss. Fed in this manner, the gain will be about 1.0 at 14, rising to 4.3 dbi at 29 MHz.

Description	OD	ID	/ft	Quant.	Cost
1 1/2" Sch-80 PVC Base Insulator www.usplastic.com	1.900	1.500	1.27	10'	12.70
1" Sch 40 Center Insulator	1.315	1.049		2'	
1 1/4" Sch-40 Reinforc. Sleeve	1.660	1.380		1 1/2'	
2" SS Worm Gear Hose Clamp				2	
1 3/4" SS Worm Gear Hose Clamp				2	
1 1/2" SS Worm Gear Hose Clamp				4	
1 1/4" SS Worm Gear Hose Clamp				4	
1" SS Worm Gear Hose Clamp				4	
Misc sheet metal screws				2	
1 1/4" homemade ladder line, #14 AWG				40-80'	
Ring Lugs, #8 hole				2	
Silicone spray can				1	
Aluminum anti-corrosive (Penetrox)				1	

Table 3: Other Materials

stakes. One guy line must be opposed to the feedline so that it may be pulled taut. The feedline should run horizontal for 40 feet or more.

Overall Cost

This antenna may be constructed for about \$100.

Construction Notes

The lower element uses 4 sections, overlapped about 29 inches, for strength. The upper element uses 3

Will be even higher on 50 and 144 (up to 7 dbi gain, but at 45 degrees). Elevation angles: 2 and 6: 45 degrees; 10: 12 degrees; 15: 15 degrees; 17: 16 degrees; and 20: 18 degrees.

This is just an excerpt of the article.

To read the rest of the article, including assembly dimensions, results and conclusions, please visit **KV5R's website**. +

BVARA 2 Meter Net Roster

A list of who is running the June and July weekly 2 Meter nets will be posted in this column next month.

Below is the net protocol. Please PRINT THIS OUT as a reference for when you run the net.

CQ, CQ, CQ. Calling the Beaver Valley Amateur Radio Association Two Meter Net. (BK)

CQ, CQ, CQ. Calling the Beaver Valley Amateur Radio Association Two Meter Net. (BK)

This is (**your call**), your net control station for this evening. (BK)

This net meets every Wednesday evening at 8:30 PM local time on the 145.310 W3SGJ repeater with a PL of 131.8 Hz. (BK)

The Beaver Valley Amateur Radio Association is an American Radio Relay League affiliated club and we invite you to visit our website at www.w3sgj.org. (BK)

The purpose of this net is to exchange general information about the amateur radio service in the tri-state area. this net is also part of the National Traffic System. (BK)

I will now stand by for any stations with emergency traffic. Any stations with emergency traffic please call (**your call**). (BK)

I will now stand by for any stations with priority traffic. Any stations with priority traffic please call (**your call**). (BK)

I will now stand by for any stations with routine traffic. Any stations with routine traffic please call (**your call**). (BK)

I will now stand by for any stations with ARRL Bulletins. Any stations with ARRL Bulletins please call (**your call**). (BK)

I will now stand by for any stations having any announcements for the net. Stations having announcements please call (**your call**). (BK)

Make sure the following are mentioned either by you or by an announcement station:

Mention webpage (www.w3sgj.org) for our newsletters & information

Mention Rainaldi's Thursday luncheon @ 10:30AM / 11:00AM

Mention monthly membership meeting on the second

Thursday of every month at 911 Center in Ambridge. VE testing begins at 5:00PM.

Executive board meeting begins at 6:30PM.

Business meeting begins at 7:30PM.

I will now stand by for any mobile stations wishing to check in. Mobile stations only please call (**your call**) (BK)

I will now stand by for any portable stations wishing to check in. Portable stations only please call (**your call**). (BK)

I will now stand by for any stations wishing to check in to the beaver valley amateur radio association two meter net. Stations wishing to check in please call (**your call**). (BK)

Record all call signs and then allow for comments. After all stations make comments, stand by for any late or additional check-ins.

I would like to thank all stations that have checked into our net. Listeners are reminded that the Beaver Valley Amateur Radio Association's 10 Meter net on 28.470 MHz will follow this net at 9:00PM local time. Everyone is invited to check in. (BK)

I will now close the net at _____ local time and return the repeater to general amateur use. This is (**your call**) wishing you 73's and a good evening.

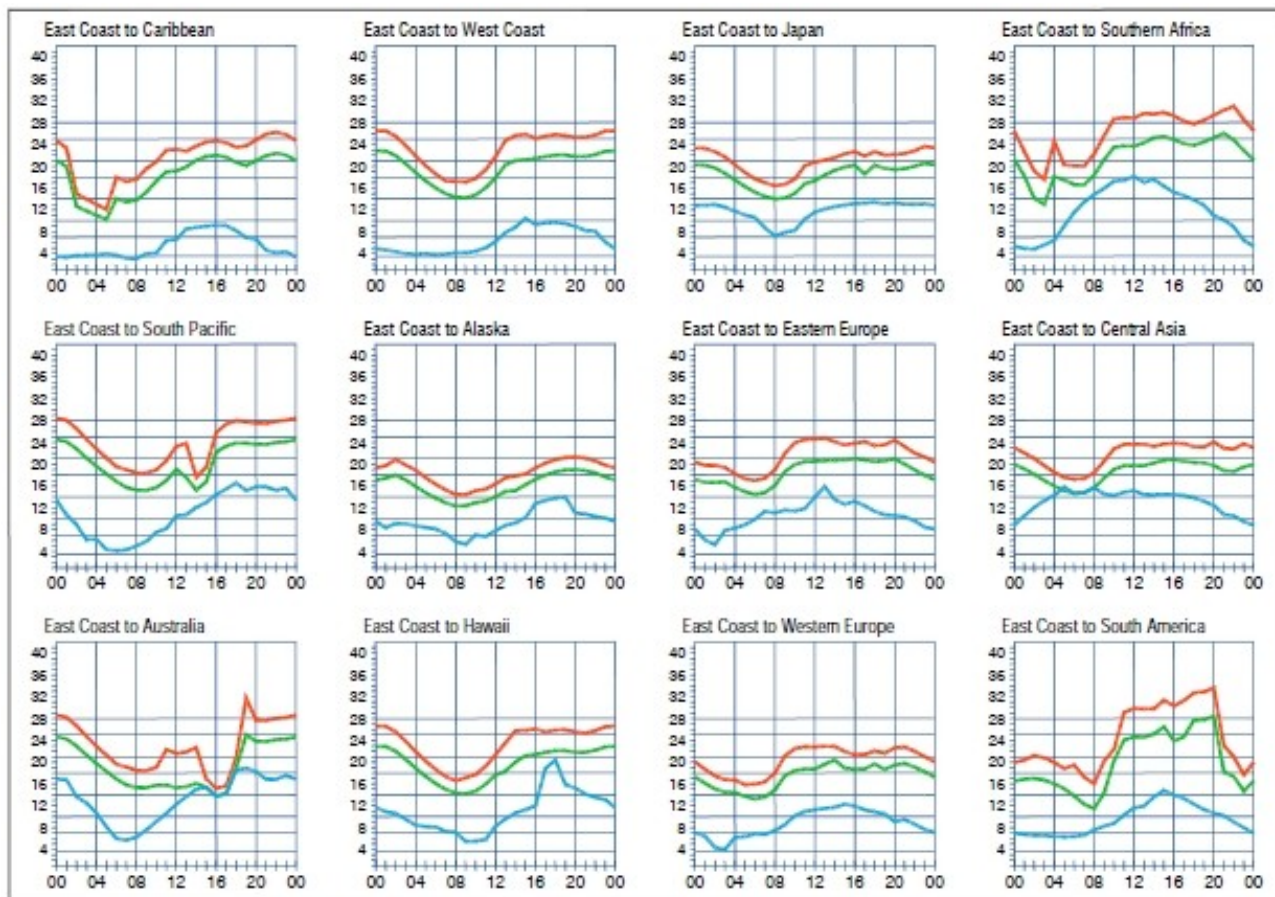
notes: a (BK) means to pause to allow the repeater tail to beep.

If any stations have traffic, ask if any stations on frequency can take the traffic. If not, take the traffic and contact Bob, WA3ZRM at 724-378-7070.

THANK YOU!

To Bob, WA3ZRM for the donation of an antique 1940's radio to the club. The radio has an estimated value of approximately \$150-\$200.

QST Propagation Charts



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of June 2010 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 1000-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 121. This is a high level of solar activity. See the detailed propagation tables on The ARRL Antenna Book CD-ROM.

The above chart is for the month of **June**.

For information on how to read these charts, and on propagation in general, visit

<http://www.arrl.org/propagation>

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

MONTHLY WPA SECTION NEWS

de John Rodgers, N3MSE

May 2010

I want to congratulate Harry Bloomberg, W3YJ and Dave Kleber, KB3FXI for an outstanding article on a Digital Simulated Emergency Test article published in the June QST. The article is printed on pages 76-77. These two individuals have worked diligently to promote and develop uses for NBEMS in our section. If you do not know about this digital mode contact Harry or Dave. My personal thanks to both of these guys for all the help they have provided me through their efforts. Thanks Guys!!

Good weather is finally with us and hamfests will be a common event for the next few months. The largest hamfest for the W.Pa. Section will take place on June 6 in Butler. This year the Breezeshooters will host their 56th hamfest. I will be at the hamfest at the ARRL table and invite you to stop and say hello. Larry Keller AB3ER has arranged to have a forum regarding ARES at the hamfest so check the schedule in the main building. Additional information is available at <http://www.breezeshooters.net>. Hope to see everyone there for this great event.

In just a few short weeks Field Day 2010 will be in operation June 26-27. This event is the most enjoyable thing for me with the exception of the PA QSO Party. I am able to travel around the section and visit with area clubs at their field day sites. It is amazing to see the ingenuity of the hams as they set up their station and engineer antennas for the weekend

event. This event is designed to demonstrate emergency preparedness and show people in our community how we can provide a service in times of need. While it is not a contest many strive to score higher than neighboring clubs and we all check the results as soon as they are posted to see where our favorite club placed. Another wonderful aspect of field day weekend is the social aspects. The wonderful food and the camaraderie that is paramount at every location. If you would like me to stop by for a visit send me an email at n3mse@arrl.org providing the request and a location.

Several months ago I posted information regarding a bill that was introduced into the House of Representatives here in Pennsylvania. The bill was designated HB-2070. This bill was designed to prohibit hand held cell phones from being used while a vehicle was in motion. Unfortunately the wording of the bill is such that amateur radio devices particularly handhelds could also be prohibited with the passage of this bill. While we have worked for the past several months to get this bill amended it has not been done at this time. I strongly urge every amateur and their relatives and friends to write, email or call their state senators and oppose the passage of this bill unless specific language is added to exempt amateur radio devices from the bill. Some legislative people feel that all our radios are permanently installed in vehicle as part of the bill exempts devices that are physically or electrically integral to the vehicle.

This needs all of our immediate attention to contact our local reps and oppose passage. If you need help determining your state officials check the following web site <http://www.legis.state.pa.us/> in the upper right corner you can enter your zip code to get the officials for your district.

Again I am asking for someone to step up and volunteer to handle the duties of the Section Traffic Manager. This position has been vacant since late last summer and I have been handling those duties. Often this is difficult for me to nightly make the net to collect the data. I am asking for your help in this function. Duties include participating in the nightly section net on 3983hz and collecting the net reports each month then compiling the data to forward to myself and to HQ. Additionally you would work with the Section Emergency Coordinator in planning the Simulated Emergency Test. If you are willing to help in this area, please contact me directly for any additional information.

As always I encourage you to join one of the various traffic nets and help deliver messages to individuals in your community and throughout the country as operators struggle to keep the keep this activity running strong. The section net is on 3983 every evening at approximately 6:00 PM local time. Join the nets and lets all get Radio Active.

73

John V. Rodgers, N3MSE
W. Pa. Section Manager +

BRAD'S CAMPER RENTALS
(724) 561-6682
www.BradsCamperRental.com

**Located at 457 Constitution Blvd.
New Brighton, PA 15066**



Don't want to sleep in a tent?
Brad's PopUps have got you covered!

**Jack, KZ3Z and Bob, WA3ZRM have
recently rented themselves each a PopUp
for Field Day 2010.**

You can too!
**Just mention the Beaver Valley Amateur
Radio Association and receive an
extra 10% on the already low prices!**

**So, what are you waiting for? *Call Brad's
Camper Rentals at (724) 561-6682 today!***

**The BVARA
Calendar of Events**

For more information,
please visit www.W3SGJ.org

June 25 – 27:
ARRL Field Day
in Brady's Run Park,
Shelter 12

August 7:
Annual Corn Roast
in Brady's Run Park,
Shelter 15

September 24 – 26:
Campaganza
in Moraine State Park,
Butler, PA

October 15 – 17:
Jamboree on the Air
at Fern Hollow Nature
Center, Sewickley, PA

December 4:
Christmas Party
at the Baden Municipal
Building, Baden, PA