



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

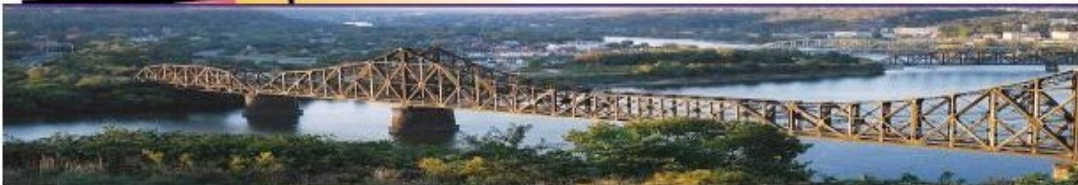
The eQRM Newsletter

Home of W3SGJ/R
145.310- 100 Hz PL

Volume III, Issue 12

April 2010

Grant, KB3QFQ, Editor



What's new in the BVARA

FEATURED ARTICLE PREVIEW

As recently as 25 years ago, shortwave radio was a preferred source of breaking international news in North America.

Most hours of the day, the BBC World Service boomed in, especially at night on 6175 kHz. There was also Radio Moscow - once the mouthpiece of old-style Soviet propaganda - the Voice of America

READ THE REST ON PAGE 5!

UPCOMING EVENT



May 2

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READER'S POLL OF THE MONTH

“What was your first experience with ham radio?”

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!

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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.

April 8 – Ambridge 911 Center

May 13 – Ambridge 911 Center

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

April

- 10:** Two Rivers ARC "Hams n Eggs" Breakfast
- 10-11:** Foothills Amateur Radio Club, W3LWW. "50th Anniversary of FARC".-1400-0200Z- 7.180.
QSL Card: Foothills ARC, PO Box 236, Greensburg, PA 15601. www.w3lww.org
- 10:** Breezeshooters "Ground Wave Contest" (All Contest Logs Must Be Submitted By This Date)
- 18:** Western Pa Repeater Council Meeting
- 18:** Cuyahoga Falls Amateur Radio Club-More Info:
<http://www.cfarc.org/hamfest2010.html>
- 18:** Tri-State Radio Fest-Center Stage Banquet Hall-1495 Old Brodhead Rd-Monaca, PA 15061
Flea Market & Auction-More Info:
<http://www.pittantiqueradios.org> - Phone: 724-942-1113
- 20:** Two Rivers ARC Club Meeting
- 25:** Two Rivers ARC Hamfest-The Boston Spectrum-6100 Smithfield Street-Boston, PA (McKeesport suburb)
More Info: 412-664-1683- Email: hamfest@tworiversarc.com
- Talkin:146.73 Mhz- <http://www.tworiversarc.com>
* VE Testing Available *
- 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

May

- 2:** Pittsburgh Marathon-ARES Communication Event (150 operators needed)
More Info: <http://marathon.central.org> - Allegheny County Public Service Net
- 8:** Two Rivers ARC "Hams n Eggs" Breakfast
- 14-16:** Dayton Hamvention-Hara Arena-Dayton, OH-More Info:
<http://www.hamvention.org/>
- 18:** Two Rivers ARC Club Meeting
- 29-30:** CQ World Wide WPX Contest (CW Mode)-More Info:
<http://www.cq-amateur-radio.com>

June

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

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>

For more information about these events, please visit
www.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

Starting on April 8 at the BVARA's monthly meeting, the "Speaker Series" will launch a vast array of topics and discussions!

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:
Robert De Marco,
WA3ZRM

Topic:
Computer Secrets:
How to Save Money and Time in Computer Selection and Repair

Mr. De Marco's Background Information:

BA, Social Sciences, Alliance College

MS, Mass Communications Law,
Ohio University

Mr. De Marco's Past Academic Affiliations:

Department Chair, Triangle Institute of Technology

Associate Professor, Community College of Beaver County

Assistant, Professor, Penn State University

Co-Founder, Tri-State Interlink- First Internet Service Provider in Beaver County

Retired, Director of Management Information Systems, Rochester Area School District

"...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 6-8 more weeks before it is delivered, making the arrival of the repeater near the end of May. It was ordered on March 15.

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

The PL tone will be 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: **4:00 P.M.**
(walk-ins allowed)

Date: **Thursday, April 8**

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 +

Volunteers Needed

de Edward Addy, KEØEG

The mission of The North American Center for Emergency Communications, Inc. (NACEC), founded in 1992, was refocused in January 2010 to provide commercial communication support to large scale disaster areas here in the US and around the globe. We will accomplish this by providing field teams which will include commercial communications technicians who hold an FCC GROL or equivalent license and at least 5 years of experience. The field team will be equipped so they can provide commercial radio and digital communications systems to meet the immediate communications needs of the aid and relief organizations and agencies serving within the disaster area. The field team technicians, if needed, will also provide their technical skills to assist in bringing local communications systems back online. We expect this last item will be used more in developing countries.

From time to time during large disasters our field team technicians may benefit from the assistance of volunteers from the amateur radio community.

Editor's note: For the complete article, and for more information, please visit our blog online at <http://blog.W3SGJ.org> and search for "volunteers from the amateur radio community." +

UPGRADE TODAY: Ham Test Online

de Bob DeMarco, WA3ZRM

Since many of you are interested in upgrading, my suggestion is to take the path of least resistance like I did to earn my Extra- Ham Test Online. It's the fastest way to prepare for the ham radio license exams.

What is it?

- Online courses for the ham radio license exams.
- All you need is a browser. Nothing to download or install. Access from anywhere!

How long does it take?

- Depending on your background and memory, most students pass easily after:
 - o Technician (entry-level license) course: 10 hours
 - o General course: 20 hours
 - o Extra course: 30 hours

What does it cost?

- A 2-year subscription to the Technician course is \$24.95. See the [price list](#) for other courses.
- They cost about the same as the license manuals, and it provides a lot more value.
- **News flash: 20/10 discount for 2010: Entry-level ("Technician")**

license for just \$20 and 10 study hours*!

How will you know it works?

- Read awesome [feedback](#) from their students
- They are rated 4.9 out of 5 in over 100 [reviews](#) on eHam.net.
- Try for yourself — the first 50 questions are free.
- Zero risk — if you fail the license exam, they refund your subscription!

LEARN not memorize!

** The 20/10 special doesn't limit you to 10 hours. The average student can easily pass after 10 study hours, but depending on your memory and background, you may take more or less. You can study on the site as long as you want. +*



A powerful combination

Meeting Minutes

de Norm Trunick, K3NJT

BVARA Meeting Minutes - Thursday, February 11, 2010

The regular meeting began at 7:45PM because there was a discussion regarding the TechFest whether to cancel it or go with it! It was decided to go with it on Sunday, February 14, 2010.

Last meeting minutes were read by Pam, W3PMS and approved by Jack, KZ3Z, and Rick, KB3RXP.

Treasurer's report read by Pam, W3PMS with a balance of \$455.76 and the \$200.00 was withdrawn from PNC Bank by Bob, WA3ZRM to be used for the TechFest. Report was approved by Jack, KZ3Z and George, N3HOJ.

Old Business -

Antenna installed has great coverage. Receiving and transmitting improved considerably. Rick, KB3RXP named many areas that he was able to receive and transmit that improved.

It was suggested to have stimulating ideas for meetings. Rich, K3SOM wanted to see four tech sessions for meetings offered. Agreed by Bob, WA3ZRM.

New Business -

Status on controller – waiting for funding to get another repeater.

Technical committee narrowed down type of repeater for next meeting for fundraiser.

Fern Hollow for JOTA (Jamboree on the Air) – October 16th – waiting for an answer back from Fern Hollow.

Will proceed with TechFest on Sunday, February 14th 8AM to 2PM.

Adjournment at 8:25PM approved by Jack, KZ3Z and George, N3HOJ. +

<http://www.hamtestonline.com>



FEATURED ARTICLE

Whatever Happened to Shortwave Radio?

*As recently as 25 years ago,
shortwave radio was a
preferred source of
breaking international
news in North America.*

What happened since then?

*By James Careless
from Radio World Online*

FEATURED ARTICLE

As recently as 25 years ago, shortwave radio was a preferred source of breaking international news in North America.

Most hours of the day, the BBC World Service boomed in, especially at night on 6175 kHz. There was also Radio Moscow — once the mouthpiece of old-style Soviet propaganda — the Voice of America, Radio Netherlands, Deutsche Welle from West Germany and Radio Berlin International from East Germany.

If you wanted to know what was happening in Cuba, Tel Aviv or what was then called Bombay, you could tune to Radio Havana, Kol Yisrael or All India Radio directly.

120 million people

At the time, the BBC estimated global shortwave listenership to be in excess of 120 million people weekly. Granted, most of that audience was outside of North America. But back when there was no awareness of the Internet and no international satellite TV, shortwave was where many news-hungry North Americans went first.

Scan across the shortwave bands and you'll find that much has changed. In North America and Europe, many of the major broadcasters have disappeared or minimized their presence. In fact, the BBC World Service no longer beams programming via shortwave to the Americas or most of Europe.

"There has been a massive decline in shortwave listenership, especially in Europe and North America," said Andy Sennitt. He is one of the world's most respected experts on shortwave radio and the editor in charge of the Radio Netherlands

The HCJB shortwave transmission site outside Quito, Ecuador.
(Image credit Radio World Online)



Worldwide "Media Network" Web site.

"Media Network" began in 1981 as a weekly shortwave program; in 2000 that show ended in favor of its current online presence.

"Other regions vary from country to country," said Sennitt. "Shortwave is still significant in much of Africa, South Asia and parts of Latin America."

What changed?

It is easy to blame the Internet and international satellite television for the decline in shortwave radio listenership. But shortwave was in trouble before these new media took hold, said Larry Magne.

He is publisher of Passport to World Band Radio, the annual shortwave radio tuning guide that thrived for 25 years but suspended publication in 2009.

"We reached an apex in shortwave radio listenership in 1989, when the Cold War ended," said Magne.

"Shortwave audiences have been in decline since then."

"AM broadcasting is expensive, and, since the end of the Cold War, many Western governments don't see the need to spend large amounts on transmitting their output on shortwave," said Sennitt. "As a result, some have closed down their shortwave services altogether. Others have created satellite services and/or partner with local stations in key targets, and most now stream their programming on the Internet."

Magne said he believes it was the BBC World Service that speeded shortwave's decline in North America. In 2001, then-BBC World Service Director Mark Byford decided that local AM/FM rebroadcasting, satellite radio and the emerging Internet made it possible to stop shortwave broadcasts to North America. (Byford is now BBC deputy director general.)

The move, hotly contested by avid shortwave listeners, had a domino effect.

"After the BBC ended its North

FEATURED ARTICLE

American broadcasts, other broadcasters followed suit,” said Magne. “The result is that North Americans don’t get much in the way of shortwave programming these days. Spectrum that once carried international news and programming is now host to U.S. fundamentalist religious stations.”

Kim Andrew Elliott, a former VOA contributor who reports on international broadcasting at his Web site, www.kimandrewelliott.com, adds that BBC World Service was attracting more listeners via U.S. public radio stations than via shortwave when the shutdown occurred. “Those FM listeners are, however, not exposed to as wide a variety of BBC programming than was available on shortwave,” he said.

In Elliott’s day job as audience research analyst for the International Broadcasting Bureau, he has seen audiences migrate to FM overseas as well.

“For example, a 2009 survey shows that of Cambodians who listen to VOA Khmer, 63 percent do so via FM affiliates in the country, 31 percent via the medium-wave relay from Thailand, and only 6 percent via shortwave,” Elliott said.

He also noted that in a 2003 survey in India, 7 percent of respondents said they listened to shortwave radio

“There has been a massive decline in shortwave listenership, especially in.... North America.”

yesterday, and 7 percent to FM. By 2008, that changed to 18 percent for FM and 2 percent for shortwave. (Under current broadcasting rules, private FM stations in India cannot carry news programming, which means VOA, BBC, RFI and other international broadcasters do not have local FM partners, as they do in other nations.)

International radio now

Today, the BBC and other international radio broadcasters are indeed available on the Web and satellite radio. But most of the attention that went to radio services is now directed toward Web sites and international television stations.

Meanwhile, the attempt to save money by distributing international programs to domestic broadcasters is backfiring, said German shortwave expert Kai Ludwig.

“Often they cease because the programming from the foreign broadcaster is just no longer considered as appealing,” said Ludwig. “For example, Radio Free Europe/Radio Liberty lost its full-coverage FM rebroadcasts in Ukraine when their partner station reformatted to adult contemporary music.”

Even when domestic stations do carry international radio programs, they cannot match the coverage and reach of shortwave radio, he added. “Online streaming is of course a valuable addition, but here the competition is just overwhelming.”

Meanwhile, the religious stations that have moved onto shortwave do not appear to be making money from it.

“Are people listening? The answer can be found in such developments

like Christian Vision withdrawing its programming from transmitters in Germany and Australia; HCJB not replacing the shortwave plant it recently closed in Ecuador, and Evangeliums-Rundfunk, the German partner of Trans World Radio no longer using shortwave,” Ludwig said.

Digital shortwave

There had been hopes that digital shortwave receivers using the Digital Radio Mondiale standard, which do not suffer analog shortwave’s traditional audio problems, would be the savior of the medium.

Unfortunately, “DRM was a decade too late, and badly marketed,” said Sennitt. “It has its uses for specialist tasks — such as Radio New Zealand delivering its shortwave programs to Pacific partner stations — but as a mainstream shortwave broadcasting platform it’s as dead as a dodo. ... The other problem, of course, is that the shortwave receiver companies didn’t keep their side of the bargain to develop affordable mass-produced DRM receivers.”

As well, “in many cases I’ve heard DRM stations using telephone-grade bitrates because it’s the only thing that would get through to the target,” said Elliott. “Higher bitrates, with better audio, often don’t get through.” Given these facts, Andy Sennitt said he expects “shortwave broadcasting to Europe and North America will be almost totally phased out, but there will still be shortwave services to Africa and parts of Asia.” These services will continue until those regions develop radio, TV and Internet infrastructures akin to the developed world.

CONTINUED ON PAGE 11...

TECHNICAL

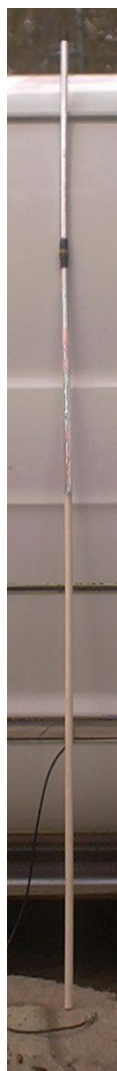
Portable Sleeve Dipole Antenna

By Harold Melton, KV5R, from [Athens ARC](#)

A Popular Project

Lots of people are building this antenna! One fellow even improved upon it by making the elements out of aluminum – inside a 3/4" PVC pipe — see QST August 06.

Antennas just cost way too much! You can build this one for well under \$10. It's a: cheap, easy, stealthy, good performing, no ground plane, portable/ mobile/marine/base, fun project antenna!



This is an off-center-fed sleeve dipole, made of 1/2-inch CPVC and aluminum foil tape.

The elements are fed 3-1/4 inches below center, with the coax inside. Off-center feed is required because of the interaction of the lower element with the coax inside.

Note: if you make it center-fed, the SWR will be about 2.5:1 across the band. Lowering the feedpoint by 3-1/4 inches lowers the SWR to under 1.5:1.

It is very broadband, being useable from about 142 to 152, and all of the 440 band as a 3/2 dipole. Also works quite well as a VHF/UHF public service band scanner antenna.

Note: I do not claim origination of this general

design. OFC sleeve dipoles have long been used as marine HF antennas, and more recently, are widely used in small UHF wireless consumer devices.

This dipole was constructed following these 13 steps:

1. Cut 7 feet of 1/2-inch CPVC.
2. Drill 7/32nds holes at 22-1/4 and 58 inches from the "top" of the CPVC pipe.
3. Cut upper element tape (2" wide aluminum duct tape) at 22-1/8th inches. Make two.
4. Cut lower element tape at 15-5/8ths inches. Make two.
5. Apply two overlapped layers of the tape to the upper and lower parts of the CPVC, leaving a 1/4 inch gap at the hole which is 22-1/4 from the top. The overall length of the two elements should be 38 inches.
6. Take 6-12 feet (or as needed) of RG-58 and apply the appropriate connector to one end.
7. Strip about an inch of the other end; fold the shield back. Bend a curl in the end of the center conductor.
8. Push the coax into the lower hole with the curl "up" and guide it into the pipe, pushing and twisting as needed, until it pops out of the upper hole, between the elements.
9. Strip out about 5/8ths inch of the center conductor. Apply a little Penetrox to both center and shield.
10. Pull the coax back until just the conductors exit the hole.
11. Lay the greased conductors on the elements and tape them down with a couple little strips of aluminum tape.
12. Tape the whole feed with several layers of tightly-stretched electrical tape (Scotch 33+). Secure the end of the tape with small cable ties.
13. Seal the ends to keep out water and bugs.

"Antennas just cost way too much! You can build this one for well under \$10."

TECHNICAL

To make it look cool, spray paint it glossy white, dry, then spray every other six inches with flourescent orange (portable or bicycle); or olive drab (“covert” ops). I painted mine white because that’s what I had handy. Don’t use conductive (metallic) paint!

The same idea (CPVC and foil tape) may be employed to build small yagi antennas also.

Ignore the ruler — it should read 22-1/4 (from the top), not 19 (photos taken on first try).



The coax conductors are connected to the tape elements by being (1) greased, (2) sandwiched between aluminum tape, and (3) compressed with several layers of tightly-stretched electrical tape. Again, ignore the ruler — it should read 22-1/4, not 19. Make sure to use conductive grease (Penetrox) and lots

of pressure at the feedpoint, to ensure that it can handle moderate current.

The antenna can be stuck down the back of the shirt, carried, or easily mounted on bicycles, etc. With a little more weatherproofing, it will make a fine dual-band base station antenna of moderate gain (2.2 dbi) and stealthy appearance (paint it the same color as your roof then clamp it to a vent pipe).

How Does it Work?

Fabulously! The 1/2-wave dipole,

20-30 miles away with ease with 4 watts – and even get full quieting into a repeater 9 miles away on 1/2 watt!

Notes:

Many people asked me for a formula for the offset. I don’t have one. The antenna described herein has the feed point about 8.5% below center. This will vary with the coax and PVC used.

How to determine the offset:

Build one with the foil tape elements a few inches too short. Wrap aluminum foil around the ends, with rubber bands. Move the foil ends up and down till the SWR comes into line. Measure. Peel off the tapes and apply new ones, cut to the proper length. Test it a final time and if ok, seal the feed. That’s how I did it.

Don’t use gray PVC. It just won’t work – there is something about the plastic. +

Did you find this tech article useful?

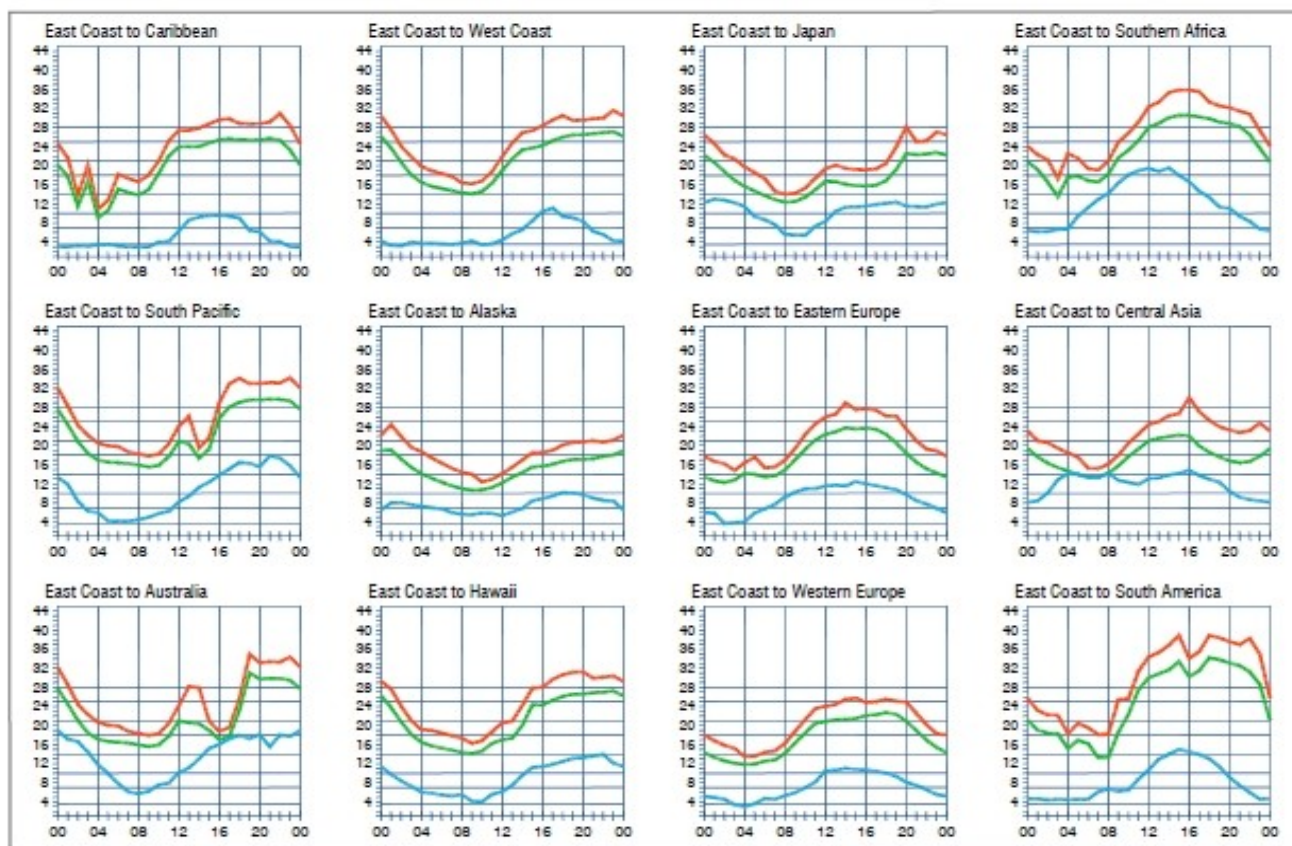
Do you have a “tech tip” that you would like to share with other readers?

Contact me and it can appear in the newsletter!

even quite near the body (which you can use as a reflector if needed), works so much better than the H-T’s duck – there’s just no comparison. With the six-watt H-T on a full 12.7 volt, 7AH lead-acid battery, and the dipole, it performs as well as a mobile of the same power. I can walk around with this rig and hit several repeaters

“I can walk around... and hit repeaters 20-30 miles away.”

QST Propagation Charts



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of April 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 (HPP, 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 GSB 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 115. 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 **April**.

For information on how to read these charts, please visit <http://www.arrl.org/qst/propcharts/hall1094.pdf>

W3SGJ
Beaver Valley Amateur Radio Association
P.O. Box 424
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ITU 8, CQ 5, Grid EN90ur, Beaver County

MONTHLY WPA SECTION NEWS

de John Rodgers, N3MSE

March 10, 2010

The snow is finally melting here in Western Pennsylvania and with the warmer weather the weather service is now predicting some rain for the next few days. This may serve as a need for amateurs to help provide communications in the event of flooding in some of the low lying areas.

This might serve as a good time to check your grab and go kit to be sure they are properly stocked and also to charge the batteries on your handhelds. While I am sure we all are hoping that flooding will not take place with the amount of snow melting and the rainfall expected we may experience problems due to run off conditions.

Be sure to monitor your local repeaters and be prepared should the local EC need to activate. In the near future we will be working together with PEMA to combine communications resources into a platform called ACS. This will be a combination of what is currently races, ares, CAP, react and other communications forms. Section emergency coordinator Larry Keller will be posting information as he receives it on to the ARES website and also distribute the info to the DEC's and EC's as it becomes available.

A tentative meeting of emergency leaders will be scheduled for early June. Larry is working on the details for the event and we will announce more details in the near future. Part of this will involve a bit of restructuring of the ARES program in the section. Individuals with ideas for topics should contact Larry at ab3er@arrl.net.

A reminder to members is to be sure to check the data you have in your member profile at the ARRL website. If you change your email service be sure to update that info on the members only section of the website. The new website is expected to be functional the end of March barring no further difficulties. HQ wanted to provide the best experience so

as problems were found delays were inevitable.

I will be announcing the name of the new section traffic manager in the very near future. This has been a difficult position to fill and I will be glad to finally have someone handling the functions. It has taken a bit longer than I had wished for me to decide on a suitable individual.

Hamfest coming up in our area begins with the Foothills hamfest on Sunday March 14. Information is available at <http://www.w3lww.org/> I unfortunately will not be able to attend as I will be with my grand daughter for her fourth birthday.

The next hamfest is the Two rivers hamfest on April 25. Additional information is available at <http://www.tworiversarc.com>.

An area of information for hamfest officials is that HQ has a new policy with regard to information brochures for hamfest. The material to be sent from HQ must be selected by the hamfest chairperson. The info is included in your approval letter. There is NO Charge for this material to be sent to the hamfest. That has been changed and HQ will paid shipping costs. If you need assistance in what to order contact me at n3mse@arrl.org.

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 4:45 PM local time due to poor band conditions.

Join the nets and let's all get Radio Active.

73,
John V. Rodgers, N3MSE
W. Pa. Section Manager +

“Shortwave”

Continued from page 7

Irreplaceable advantage

For all its transmission expense and audio problems, analog shortwave radio has one clear advantage over the Internet and domestic radio/TV: It cannot be easily blocked — even when states try to disrupt its signals using jamming transmitters.

Webcasts can be filtered or blocked through IP geolocation techniques that block access to sites based upon the IP address of the site or the user.

Access to local radio transmitters can be withdrawn by officials. For example, Radio Azadliq, the RFE/RL service for Azerbaijan, along with VOA and the BBC World Service, was forced off local FM and medium-wave frequencies at year-end 2008 after its often critical coverage of that year's elections.

“The Internet, satellite signals and placement AM/FM can all be blocked by a determined officialdom,” said Magne. “Yet properly executed analog shortwave tends to get through when others fail. Because of this, international broadcasters have the potential of saying pretty much what they please, when they please, and to whom they please; they don't have to self-censor their messages to appease gatekeepers.

“According to Lech Walesa, Václav Havel and other freedom leaders behind the former Iron Curtain, this ability to circumvent gatekeeping was the main reason communism was defeated in Eastern Europe,” he added.

Information is still being censored not just in North Korea, Iran and Saudi Arabia, but Tunisia, Vietnam, Cuba and China, among other nations. Shortwave advocates argue that their favored platform remains relevant at a time when outside information is as important as it was in the Cold War. +

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**The BVARA
Calendar of Events**

For more information,
please visit www.W3SGJ.org

May 2:
Pittsburgh Marathon
in Pittsburgh, PA

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