

# WIRELESS HILL BEACON

## Delaware Valley Radio Association



### OFFICERS

#### President

M. Juza, KC2TGM

#### Vice President

S. Costanzo, KC2VDL

#### Secretary

L. Weight, KC2MTO

#### Treasurer

R. Kubinski, KC2PQC

### DIRECTORS

#### Membership

L. Weight, KC2MTO

#### Radio Station

M. Juza, KC2TGM

#### Repeater Operations

L. Price, N2KPC

M. Juza, KC2TGM (asst)

#### Physical Plant

H. Gold, AB2VG

D. Norcross, K2DRN (asst.)

#### Public Information

T. Reeg, K2TFR

#### Training & Examinations

D. Wright, AA2F

#### Publications

A. Flinsch, AB2RC

#### Programs

G. Wilson, K2GW

#### Immediate Past President

R. Schroeder, N2HK (SK)

#### Web Service

M. Juza, KC2TGM

#### Hamfests

Open

### Meeting – February 11<sup>th</sup> 2015

The regular monthly meeting will be held at 7:30 PM on Wednesday, March 11<sup>th</sup>, at Our Lady of Good Counsel Church, on Upper Ferry Road at Wilburtha Road in West Trenton. The site is easy to reach from I-95 or NJ-29. Talk-in is available on the 146.67 (PL 131.8) and 442.65 repeaters. The directors meeting takes place 1 hour earlier at 6:30 PM.

### **DVRA Nets**

2-meter & 70-cm nets on the club repeaters 146.670 pl 131.8, 442.650 pl 131.8

2-Meter Nets:

The Pepper Net 10:00 PM Daily

Mercer Co. Emergency Net 7:30 PM Tuesdays KB2EGI, coordinator.

### **Training & Upgrade Classes**


Don Wright, AA2F, periodically holds Technician and General classes.

Classes are held at various locations. Call Don at 609-737-1723 to register.

### **Exam Schedule**

January 17, March 21, May16, July18, September 12 and November 14. All are at 12:15 at the Hopewell (Township) Branch of the Mercer County Library at 245 Pennington-Titusville Road, midway between Route 31 and the Hopewell Valley Central High School. Please bring \$15, cash or a check made out to ARRL-VEC, and a photo identification - driver license, passport, etc. Contact Don/AA2F [aa2f@arrl.net](mailto:aa2f@arrl.net) or 609-737-1723 for details.

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[sales@cheapham.com](mailto:sales@cheapham.com)

### **Fame and Fortune Await**

Want to become rich & famous – write an article for the DVRA Beacon. Fame among local hams almost guaranteed – fortune is up to you (and your luck in Powerball). Deadline for submission is one week before the monthly meeting (that would make the deadline the first Wednesday of the month). For details contact Alex / AB2RC – [ab2rc@ab2rc.net](mailto:ab2rc@ab2rc.net)

**Website**

Our website has been updated, and looks better than ever. Take a look at it <http://www.w2zq.com>

**Logbook of The World**

On February 23, 2015, Mike AB2IO reported the latest QSLs for W2ZQ logbook of the world were:

W2ZQ records as of Feb 23, 2015

```
DL6MIG 2009-03-08 14:17:26 20M SSB 14.18660 FEDERAL REPUBLIC OF GERMANY
IQ0PG 2006-10-28 16:19:02 20M SSB 14.26300 ITALY
N2LEC 2006-06-25 17:26:42 20M SSB 14.25800 UNITED STATES OF AMERICA
```

5471 matches out of 16557 QSLs submitted, so 33.0% matched to date.

**February 2015 Meeting Minutes**

At 6:45 pm, February 11, 2015, President Mark Juza KC2TGM opened the combined regular/director's meeting of the DVRA (based on requests from members, the regular and director's meeting are now held as one meeting) held at Our Lady of Good Council Church, West Trenton, Ewing, NJ.

MINUTES: Minutes are sent to the members via email. The January 2015 minutes were accepted as posted.

TREASURER'S REPORT: Treasurer Ron Kubinski KC2PQC said the balance is \$8477 which is just barely enough to cover expenses like electricity, insurance, heating oil and basic shack repairs. This amount includes the \$1000 repeater fund. It does not include the separately funded \$2000 for the newly purchased Ten-Tec Orion.

ACTIVITIES: Director needed.

PUBLIC RELATIONS: Ed Drannbauer W3TEC is the new director.

SHACK: Co-directors Hy Gold and Lloyd Price (1.) Outside lights: Hy Gold AB2VG will take a look at the 70 watt high pressure sodium lamps and repair or replace. Mike Fedor AC2MW will assist by replacing capacitors or other parts in the light fixtures, where possible, make them operational. (2.) The door locks will be repaired or upgraded as necessary. (3.) Burglar Alarm: Various companies such as "Simply Safe Alarm" will be checked out and the most practical installed.

THE RADIO STATION: Director Mark Juza said: The 440 was moved to the shack. There is a problem with the 440 antenna and a new one will be needed. New grounding will be needed. A new Green Heron rotator and cable will be needed. Frank Palecek KC2TKD is donating a 7 band Mosby Pro 96. A new

tower is being considered SW of the shack; initial physical planning is starting. The PSEG power lines may have to be moved to accommodate the new tower.

REPEATER: Gary Wilson K2GW bought a YAESU DR-1X repeater for 2M at cost of \$500 which he funded as a donation to DVRA. THANKS GARY! This is a major step to up-grade our repeater system!

EDUCATION AND TESTING: EXAMS: Don Wright AA2F said he has seven students.

WEB SITE: Bob Cardone KD2EIM is continuing to update our web site. He is looking for input.

ROSTER: A current list of paid up 2015 members will be provided by Lance to President Mark. A email reminder will be sent to those who have not remitted their 2015 dues. DUES ARE DUE!

PROGRAMS: Gary Wilson, Program Director listed the March programs.

PICNIC: The picnic is the 2nd week of August. Exact date to be determined.

RADIO FUND: Hy Gold donated \$517 to achieve the \$2000 goal for the new radio Ten-Tec Orion radio for the shack. Thanks Hy!

HAMFEST: Frank Paleck KC2TKD who is currently in Texas on a job has said that planning meetings will be kicked off shortly for this year's hamfest. But he needs a co-chair and a committee!

FIELD DAY: Need a committee head and committee to plan this activity. A question is "Should we (DVRA) go back to Mercer County Park adjacent to Mercer County College as we have in the past?" Last year we operated from the yard at the shack.

CONTESTING COMMITTEE: Mike Moreken will take leadership of this activity.

JOTA – The BSA Jamboree On The Air weekend each Fall. Our Gary Wilson, who is a BSA official, brought a plaque commemorating DVRA's member's participation with the Scouts in Fall 2014. (This is one of several Scout activities, such as the January Merit Badge Day, that DVRA members support.

NOVA NORDISK Bike Ride: Steve will take the lead on this June 14 bike activity which DVRA will continue to support by providing radio communication support.

FUND RAISING OPPORTUNITIES: Earl and Fatu are attempting to make up a list of potential fund raising activities. Some mentioned were: (1.) Amazon Smile; (2.) Texas Road House dinner; (3.) a PSA;..... Give other ideas to Fatu and Earl! Make sure you fill out the survey to be sent out via email to each member.

CONTEST: "Re-design of the interior of the shack Contest!" Think of the interior of the shack as a blank slate (No, the door can't be moved! But, beside the door just about everything else is game!) Criteria: several (3-4) operating positions with sound/noise separation; and who says the positions have to be next to each other..... Submit your design. Based on the winning design(s) the interior of the shack will be rebuilt. Like any other unofficial contest...rules are subject to changes and multiple winners divide the \$50 prize, open to current DVRA members. (Not discussed and no info on scale e.g. 1"= 1' or 2"=1'; views (top/floor plan view, each wall view, each operator view); power: #20 A 110v and 220v circuits & outlets per circuits per operator&; air/heat delivery-returns; RF cabling); phone, TV, TV cable, repeater location & power, ac, RF needs; rf grounding; min size of op station (width, height, depth); etc.) Not clear if every station would need space for laptop, radio, panadapter, ps, meter, amplifier, tuner, outlets, surge protector, battery backup, chair, coffee pot, cup holders, refrigerator, ronco chicken cooker, george foreman grill, etc. comment by Lance)

GOOD OF THE ASSOCIATION: Good health wishes to John Gardner is having spine issues; Russ who is in Marcella.

PROGRAM: Thomas "Skip" Arey, N2EI, ARRL Section Manager (Southern New Jersey)

The meeting ended at 7:50 pm.

Submitted by: Lance E. Weight KC2MTO, Secretary, DVRA

### **New Member**

The DVRA officers would like to present the following people for membership: Jeffrey Owens NZ2U of Stockholm, NJ and Roger Ding KD2FDT of Hamilton, NJ.

## Repeater Talk –

This months Repeater Talk article will focus on the propagation of the Yaesu System Fusion technology though out our fine country and especially in the greater Tri-State area.

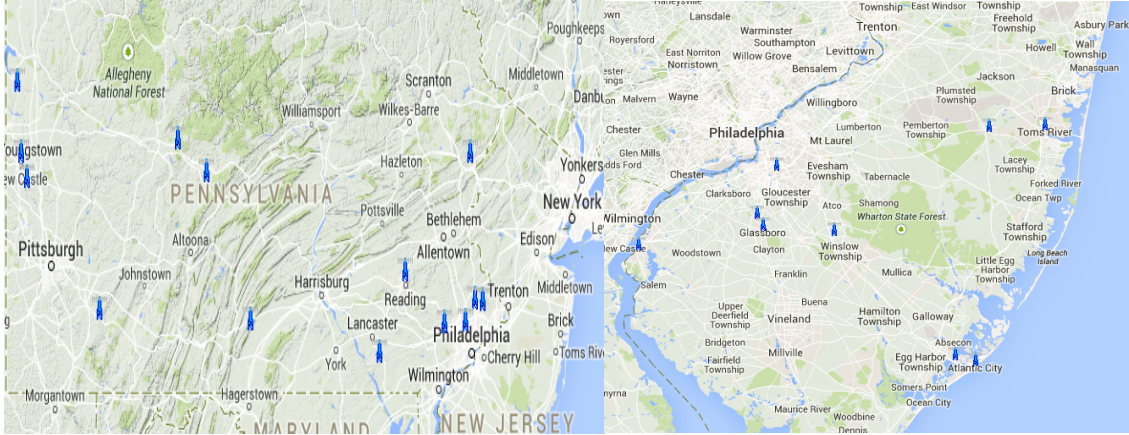
However before jumping into that topic I wanted to let everyone know that as I prepare to write this article the first of the new DVRA Club DR-1X repeaters is making its way towards NJ ! Delivery is expected this week and hopefully we will be able to get this new machine on the air in the coming weeks. As such we are still looking for interested members to express their desire and to take part in the repeater working committee. This approach is being taken so that the path forward for the clubs repeaters meets and/or exceeds members and users' expectations and requirements. Contact NJ3U at ARRL dot NET to express your interest in being part of this repeater working committee.

So I'm sure by now you have heard that the DVRA club is installing new Yaesu System Fusion C4FM technology repeaters – you've primed yourself with the idea of improved reliability, coverage and capability of this new generation of radio communication. Now you're weighing in on the usefulness of investing in new gear ? Is this another fad in the radio community of will it have the staying power of SSB !? If so is it time to socialize with the YL or OM to the idea that you want to order some new gear ?

As to predicting the staying power, my crystal ball lost its "magic smoke" years ago. However if we can use past performance as a indicator we can with certainty say that the precursor technology *audio frequency shift keying* (AFSK) has proven itself and should translate into a bright future for System Fusion.

Now that we have established this technology is viable, the next question is where beside inside of our W2ZQ coverage area can I utilize my nifty new System Fusion radio ? Many of the repeater directories list the features and capabilities of each machine – most likely you are using either the ARRL Repeater Book or an online version such as [Repeater Guide](#) or a Smart Phone App such as [Repeater Book](#). Lately these and other repeater guides are adding the ability to search for Yaesu System Fusion capable machines. Take a look at this mapping of NJ – PA and listings from other clubs [webpage](#);





Nationally overall guides now list over 312 Fusion repeaters. Of course many more are coming online as a result of the promotion Yaesu is running. Many of you may have heard that the Sarnoff club is in line for a Fusion Repeater as well ?! Other NJ clubs are working on upgrading their repeaters as well.

In closing I would remind you that the most significant differentiator of the Fusion approach is that these radios are capable of traditional FM analog AND C4FM Digital– that means that in addition to having new capabilities you will have a fall back position to work in place repeaters. Explain that to your YL or OM when pleading your case for radio bucks !

Stay tuned to this feature column RepeaterTalk for the latest on our DVRA/W2ZQ System Fusion repeater upgrade.

73 NJ3U Rory

## Make your own dipoles with these center insulators

By Dan Romanchik, KB6NU

One of the things that always gets my goat is the price some companies charge for dipole antennas. It's not that they're charging an outrageously large sum of money, and I certainly don't begrudge them making a profit for their efforts. It's just that if hams would just buy their own wire and parts, they would not only save money over the long run, but be encouraged to experiment with antennas. That's what I started doing about ten years ago, and I've been very happy with the results.

One of the first things that I did was to purchase ten Budwig HQ-1 center insulators and ten HQ-2 end insulators (<http://www.budwig.com/antenna-connector-insulators.html>). I've made a bunch of antennas with these insulators, including several 40m/20m inverted vees for portable use (such as Field Day and special events), a 17m dipole, and a 10m loop antenna. These insulators are very well-made, and can easily be reused, too.

Universal Radio sells the set (<http://universal-radio.com/catalog/antsup/1782.html>) for \$18.50. I just placed another order for ten HQ-1s and 20 HQ-2s (the minimum number that you can purchase to get a quantity discount). The price, including shipping, is \$143.

There are a bunch of other center insulators on the market, including:

- \* The Alpha Delta Delta-C antenna hardware kit (<http://universal-radio.com/catalog/antsup/0297.html>) consists of a Delta-C Center Insulator, antenna connecting hardware, 1 SEP Arc-Plug™ static protector (installed in Delta-C) and 2 Delta-CIN end insulators. This is a little heavier-duty than the Budwig insulators, but it costs more, too (\$30 at Universal Radio). Unless you're going to be running a kW, I don't see the need to spend nearly twice as much money on these insulators.</li>

- \* The TEN-TEC ACRO-BAT Antenna Connector & Hanger (<http://www.tentec.com/products/ACRO%252dBAT-Antenna-Connector-%26-Hanger.html>) is an interesting product. Unlike the Budwig and Alpha-Delta insulators, this product does not have an SO-239. Instead, this insulator clamps over the coax and antenna wire, and in doing so, provides strain relief. I haven't tried this one, but it seems like a nice design. The cost is \$10, directly from TEN-TEC or from Universal Radio.

- \* The Unadilla W2AU ANsulator (<http://universal-radio.com/catalog/antsup/0913.html>) is made from PCV tubing and include



eyelets for terminating the antenna wire and for supporting the insulator in the middle. For \$15, I think I'd rather have the Budwig insulator. Also, you should be able to make one of these insulators for less than 15 bucks.

\* The Hy-Gain C-1C Center Insulator (<http://www.hy-gain.com/Product.php?productid=C-1C>) has a screw for tightening down the antenna wire, so you don't have to do any soldering, but overall, I don't think I like the looks of this model. And, at 30 bucks, it seems kind of pricey.

\* The W8AMZ Dipole Antenna Starter Kit ([http://www.w8amz.com/W8AMZ\\_ACC\\_Page.html](http://www.w8amz.com/W8AMZ_ACC_Page.html)) comes a center insulator made from PVC pipe, similar to the Unadilla W2AU ANsulator and two end insulators. It costs \$18.

If none of these strikes your fancy, you can always make your own. WP4AOH has some very good instructions on how to do this using PVC pipe and fasteners that you can find at your local hardware store (<http://wp4aoh.blogspot.com/2012/07/dipole-antenna-center-insulator.html>).

Whatever route you take, I encourage you to keep several on hand and enough antenna wire and coax to complete the antenna. You never know when the urge will strike you to build an antenna, and if you don't have the parts you've missed an opportunity to do some experimenting.

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When not checking his stock of antenna parts, you'll find KB6NU working on updates to his "No Nonsense" study guides, blogging about amateur radio at [www.kb6nu.com](http://www.kb6nu.com), or working 30m CW.

## STRAYS

Rory NJ3U suggested that we start a 'strays' column in the newsletter, and I think this is a great idea. I invite all members to send me a 1 or 2 line post similar to the strays columns in QST & on <http://eham.net>, for now we will start with a stray 'stray'



Please send me any of your own strays (but please no more black cats) to [ab2rc@ab2rc.net](mailto:ab2rc@ab2rc.net)