



September 2015

Volume IV, Issue III

## Q5er – The Official Newsletter of the Skyview Radio Society

Looking to Join  
Skyview Radio Society?  
Go to  
[www.skyviewradio.net](http://www.skyviewradio.net) to  
learn more about becoming  
a member and also to see all  
the club's activities

The Skyview Radio Society  
weekly net is on Thursday  
nights at 9:00 PM local time  
146.640 Repeater pl 131.8

### Skyview Officers for 2015:

**President:**  
John Hoffman – K3STL

**Vice President:**  
Dewey Chauvin – W3VYK

**Secretary:**  
Bob Bereit – K3RMB

**Treasurer:**  
Pat Cancro – NK3P

**Membership:**  
Bob Bereit – K3RMB

**Radio Officer:**  
Bob Bastone – WC3O

**Kitchen:**

Bob Bastone – WC3O

**Facilities:**  
Dave Dailey – N3TIN

**Chairman:**  
Bob Yusko – KB3OMB

**Trustees:**

Bob Siska – K3OFX  
Dave Dailey – N3TIN

John Italiano – WA3KFS  
Paul Rykaceski -WA3LCY

Frank Puskar – KB3YJQ  
Joe McElhaney – KR3P

Tom Varela – KB3MDL  
Jack Buzon – KA3HPM

Rich Ryba – WQ3Q

### A Letter from the Editor

Hi Everyone,

As we wind down from Summer it's time to roll the Fall Edition of the Q5er off the press!

The Skyview Hamfest was fortunate to have good weather on Hamfest day and the Hamfest was again a great hit this year. Everyone had a nice time and a lot of compliments were made, so I figured why not have a Skyview Hamfest section for this newsletter. I hope you enjoy all of the pictures and smiling faces. Kudos to John WA3FKS for yet another great Hamfest. John sure makes all that hard work look easy!!!!

Aside from the Hamfest section, This edition of the Q5er has a variety of topics:

The Skyview Spotlight shines on the Skyview's very own Jody Nelis K3JZD

Speaking of Jody, you will see a few articles written again by Jody for your enjoyment.

Rick WQ3Q aka "Quack Quack" is looking for people interested in participating in a DXpedition in Italy!

Bob W3CO wrote a great article in the Reflections section. Something to think about.

There's a few other surprises in this edition too ☺

I'm hoping to receive many articles from the membership and you can write about just about anything. You don't have to write a long article.

Let's have fun with the newsletter, it will be published quarterly and remember... **it's up to YOU to help make it happen.**

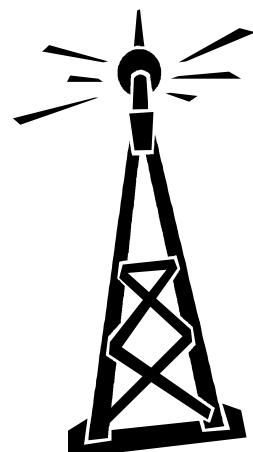
73 de John  
K3STL @arrl.net

**Skyview now has its own 440 repeater on the air!**

**Tune in to 444.525 MHz +5MHz**

**(pl 131.8)**

**Give us a call!**





### Did you know?

QRZed (QRZ.com) has several tiers of memberships?

Go to

<https://ssl.qrz.com/products/index.html> to learn more about the memberships QRZ has to offer.

Looking for a spotting site (cluster)?

Go to

DX Summit:  
<http://www.dxsummit.fi>

dxscape:  
<http://www.dxscape.com/>

Simons DX Cluster:  
<http://cluster.sdr-radio.com/Spots/HF.aspx>

DX Watch:  
<http://www.dxwatch.com/>

Looking for Solarscycle updates?

Go to  
<http://www.solarham.net/>

Want to join the ARRL or renew your ARRL membership?

Go to

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

## The Skyview Spotlight

The Skyview Spotlight for this quarter shines one of Skyview's finest:

**Jody Nelis, K3JZD**

**K3STL: Tell me what got you first involved with Ham Radio and what was your impression of it?**

K3JZD: I learned to do Morse Code by waving flags in the Boy Scouts. The Scoutmaster knew a ham and asked me if I wanted to work with that ham to get a ham license so I could use Morse Code with radios. I had read about that ham stuff in Boy's Life Magazine, so I went for it. With his tutoring, I soon had a Novice license. I obtained a simple receiver that covered from 6.5 to 17 Megacycles (that's what we called them way back then). While waiting for the license to show up, I managed to get a 40 meter dipole hung up a whole 10 feet off of the ground, and I began to listen to the activity on 40 meter CW. The local electronics store took my new HiFi record player as a trade-in on a Johnson transmitter kit. I built that kit, bought a 40 meter crystal, and I was soon on the air. Those were much simpler times, and it was truly amazing stuff. Within a few months, I had interested and elmered three of my friends, and they too became licensed.



**K3STL: How old were you when you got licensed? Any previous Callsigns?**

K3JZD: I was originally assigned KN5SCC/K5SCC while living in Ft Smith AR. Two years later I returned to Pittsburgh and I had to swap that for a FCC assigned "3<sup>rd</sup> Area callsign". That was when I obtained the phonetically challenged K3JZD.

I have been at it so long that I qualify for the Quarter Century Wireless Association twice: 57 years.

**K3STL: What modes do you operate? What is your favorite and why?**

K3JZD: For many years, it had been SSB only. Since retiring in the Spring of 2014, I have been trying to rebuild my dormant CW skills. I have purchased some Softrock SDR transceivers to cover 40-10 meters, and I am seeing what can be done with QRP, using just 0.5 to 5 watts



#### Upcoming Hamfests:

##### September 13th 2015

Butler County Amateur Radio Association Location  
Unionville Fire Hall  
102 Mahood Rd  
Butler, PA 16001  
147.360+ 131.8pl

Contact: Rick Melton N3VKM  
[N3VKM@arrl.net](mailto:N3VKM@arrl.net)  
Web site:  
<http://www.w3udx.org/>

##### September 27th 2015

Cleveland Hamfest and Computer Show  
Cuyahoga County Fairgrounds  
164 Eastland Road  
Talk-in: 146.730- 110.9pl  
Contact: Glen Williams AF8C  
[af8c@arrl.net](mailto:af8c@arrl.net)  
Website:  
<http://www.hac.org>

##### November 1st 2015

WACOM Hamfest  
Washington County Fairgrounds  
2151 North Main St  
Washington, PA  
Website:  
[www.wacomarc.org](http://www.wacomarc.org)  
VE Session  
Breakfast and lunch served  
Free Coffee  
Talk-in: 145.190-  
Contact person:  
Bud Plants N3TIR  
[bud@n3tir.com](mailto:bud@n3tir.com)

out. I have also been working at getting all setup to try doing some RTTY and to use some of the digital modes. I did nothing but CW for the first three years that I was licensed, and would like to be able regain enough skill to return to calling that my favorite mode.

#### K3STL: What is your most favorite memory about a Ham Radio experience?

K3JZD: Probably has to be whenever I was working at Dravo Engineering in 1982 and the current customer that I was working with was the Timken Company. The Timken Company was betting the farm by building a brand new very highly computerized steelmaking facility in Canton, Ohio. Lee, K3DMG, who I knew from talking to while he lived in Derry PA, had been recently transferred from Timken's Latrobe PA facility to Canton to work at the existing Canton facilities. As it turned out, Lee was then selected to be in charge of the rolling mills in this brand new plant. That happened to be the area that I was most involved with, so Lee ended up being my customer contact. But wait, there is more to this story. In order to minimize training and spare parts inventory, we were pre-selecting vendors for all of the different areas within this new facility, and were going to buy stuff for the entire facility from only those chosen vendors. Lee and I were in the group that the local Gould Modicon Programmable Controller salesmen had taken to Massachusetts to get wined and dined along with a plant tour. We were to meet their CEO the next morning. That next morning, we waited there well over an hour, and no CEO. No message from him. The salesmen were quite nervous about how this was going to go down, because there was very little business out there in that time frame, and they wanted this business. They knew that their competitor had already done a full court press on us. We were getting ready to leave, since it did not seem like the CEO cared about getting our business. Just then, their CEO casually strolls in, and says: "Sorry to keep you folks waiting, but the DX was rolling in this morning, and I just couldn't tear myself away to come into the office". I guess he was lucky that Lee and I were among the decision makers in this group!!

#### K3STL: Are you a member of any other Ham Radio Clubs or any other organizations?

K3JZD: As far as clubs go, it is only Skyview and the Greater Pittsburgh VHF Society (146.01 Repeater) right now. I have been a member of the Two Rivers Amateur Radio Club and the Irwin Area Amateur Radio Association in the past. For on-the air activities, I have a Ten-Ten number, a SKCC number, and a NAQCC number. I recently joined the Trafford Sportsman's Club, where I have done some target shooting. And I am trying to learn to hit moving clay pigeons with a shotgun (trap shooting is going to take a while to become 'fun').

#### K3STL: It appears that the interest in Ham radio is growing. Why do you think that is?

K3JZD: Quite honestly, I'm not sure. Back when I got in, it was the only 'communications game in town'. So, when you showed off a voice-mode station working a little DX, you got some interest right away. But, back then, the tests were tougher, and that held a lot of folks back. Even so, the ranks grew. Whenever CB came along, with it's "anybody can have it right now" no barriers entry, there was soon a surge of folks who then wanted more than what they were legally allowed with CB. The tests had gotten somewhat easier by then, so a lot of these CB'ers ended up also becoming hams. Two meter repeaters with auto-patches were a quite a draw for quite a while. The novelty of being able to drive around all over the 'burg and hold a contact, as well as being able to make phone calls from your car in those pre-cell phone days, created a lot of new hams. Whenever the Internet, with its ability to 'communicate' via chat rooms and http connections to things all around the world came



## MotherBot builds her own offspring

### CREDIT:

<http://www.stuff.co.nz/technology/gadgets>

Submitted by Jody Nelis K3JZD

A Cambridge University robot has learnt to make more effective offspring based on how well earlier generations performed.

A "mother" robot which can build its own "children", test which ones do best then modify their design, has been developed by scientists at Cambridge University.

In a video released by the university, the robot was shown building its own "cube babies" before watching as they take their first steps.

<https://www.cam.ac.uk/research/news/on-the-origin-of-robot-species>

After monitoring the progress of its offspring, the mother-bot then selects which have performed the best and refines their design in the same way that evolution works in nature.

It is the first time that a process of natural selection has been built into a machine and marks an important step in the quest for artificial intelligence.

The robot has been programmed to build a cube-bot with a small motor inside which is capable of movement then refine the design based on observations of how efficiently it moves. In five experiments the mother-bot was allowed to continue building her children until 10 generations had been created, each time using the "fittest" bot to inform the design of the next child.

along, that trumped both Ham and CB as far as being interesting, and ham radio took a back seat. It is only a guess, but I'd say that a lot of today's new hams are either folks with an interest in computers that are seeing the new digital communications modes as interesting; or are folks with a pent up interest that are retiring and now have the time to pursue it. And, I'd say that the significant relaxation in the testing is greasing the path. (this is probably a better question for the new hams to answer)

### K3STL: What kind of work do you, or did you do?

K3JZD: I'm retired now. I did a variety of steel mill installation engineering and startup tasks for 30 years. I did a year of programming and testing of the cooling water pump control system for a nuclear plant. I then did testing and startups of computerized central traffic control systems for railroads and rail subways for 12 years. I wrapped up my career doing testing of newly designed sleep apnea systems and home ventilators for 5 years.

### K3STL: Do you volunteer your skills for ham radio events?

K3JZD I have done some public service events in the past. After the Johnstown Flood in 1977, there was a flurry of activity with some local governments suddenly taking an interest in aligning themselves with ham groups. I was the Penn Township Civil Defense Communications Operator and I setup and coordinated drills with the township government agencies and hams. But, that faded away as the government folks lost interest. I have not done much in recent years. It seems like everything happens in the summer now, whenever there are so many other competing things that are going on – so it just has not been very schedulable for me. Whenever I have participated as a volunteer, I have felt that I did something worthwhile and I learned some communications skills. So, I encourage all who can make their time available to get out there and do it.

### K3STL: What other Hobbies do you have?

K3JZD: General tinkering with electronics, ham related and otherwise. Motorcycling, previously with dirt bikes, and currently with a Harley street bike. Self maintenance of automobiles and motorcycles (although with today's automobiles, it is pretty tough to be a shade tree mechanic). I'm pretty heavy into computers. I bought my first home computer in 1977 and taught myself how to program it in machine language. That has evolved over time, both in hardware and with new computer languages. Where I am sitting at the moment, there are eight networked PCs, as well as a handful of tablets, Arduinos, RaspberryPi's, Synapse devices, and some PIC stuff and some ESP8266 stuff that is still in boxes waiting for me to get to it. I did a variety of custom programming and supplied/supported computers and components for several small businesses, starting that back in the 1980s. That earned some beer money, but it was done mostly as a hobby. I am mostly retired from that sideline now.

### K3STL: What do you find to be most challenging about Ham Radio?

K3JZD: A lot of it is self-imposed, like my trying out new operating modes and the supporting software, and getting everything interfaced and working. Some of it is being able to overlook some of the bad behavior that occurs on the bands. Some of it is tolerating local government and their getting in the way of planting nice big towers where it suits you best. And it would be nice to get rid of that 12 year sunspot cycle challenge, and have really good days on 15 and 10 meters every day.



Researchers found that preferential traits were passed down through generations so that the last cube-bots performed their task twice as quickly as the first individuals.

"Natural selection is basically reproduction, assessment, reproduction, assessment and so on," said Dr Fumiya Iida of Cambridge's Department of Engineering, who worked in collaboration with researchers at ETH Zurich. "That's what this robot is doing - we can actually watch the improvement and diversification of the species."

The robot children were designed from five rules which governed its shape, construction and motor commands. Each child, which took the robot about 10 minutes to design, build and test, was assessed on how far it travelled in a given amount of time.

Over time design variations emerged and performance improved, not just through fine-tuning, but because the mother-bot invented new shapes and movement patterns, including designs which a human could not have built.

"It's a long way to go before we'll have robots that look, act and think like us," said Dr Iida. "But what we do have are a lot of enabling technologies that will help us import some aspects of biology to the engineering world."

The research was published in the journal PLOS One. - Telegraph London

**K3STL: What do you see changing about Ham radio in the next 5 years?**

K3JZD: I suspect that it is going to get more and more computer assisted and automated. From a standpoint of that making the communications better and more reliable, I suppose that would be a good thing for whenever our stuff is actually needed for emergency situations. From a standpoint of getting personal satisfaction from using these more automated communications techniques rather than the good old simple manual techniques, I'm not so sure. If the challenge is in getting it all setup and working, rather than in using it, it seems like the interest in the hobby could fade. But, this hobby has always been different strokes for different folks. So, if they do not take away or restrict any of the old KISS stuff that you can do with the old simple radios, I'll be OK with it.

**K3STL: If you weren't a Ham Radio Operator, what would you be doing with that time instead?**

K3JZD: I would be spending more time working with the computers and software.

**K3STL: What would a Ham Radio operator be surprised to know about you?**

K3JZD: When I am on anything but a voice mode, most seem to be surprised that "Jody" is not always a YL.

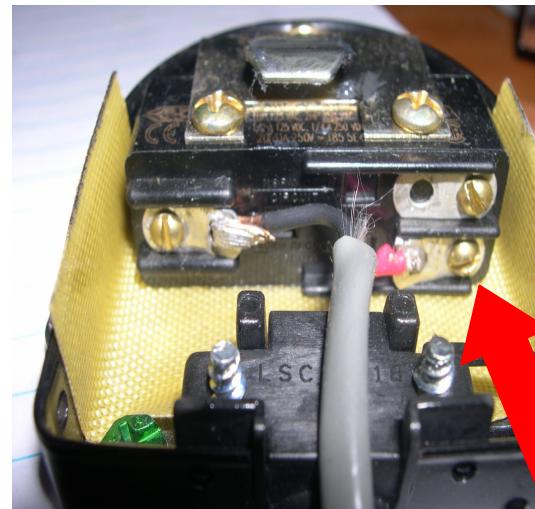
**K3STL: What do you wish those who do not operate Ham Radio knew about it?**

K3JZD: That sitting in basement, surrounded by strange looking radios and things, and getting excited about chatting with some stranger somewhere on the other side of the planet, or getting excited about very briefly connecting with 'x' people in 'y' countries within a weekend, is not really as strange as it may appear to them!! (and, yes, we really do need these big ugly antennas).

**K3STL: What are your strongest beliefs about Ham Radio?**

K3JZD: It is certainly not for everyone. But, those who do see something in it and become a ham, will end up meeting more people than they can imagine. And some of those people may turn out to be good people to know.

Sometimes the fix is so easy that it's difficult. During the ARRL Centennial Event, I kept getting signal reports about a sound similar to clipping. I thought at first my coax or antenna was damaged. But, an in-depth inspection couldn't find anything wrong. Next was to inspect the footswitch to look for worn out components. After disassembling the footswitch to re-grease the contacting surfaces and inspect all springs and parts, it turns out the positive connection was loose (see arrow). Sure enough, the positive terminal screw was tightened and all was back to normal. -K3STL





## **Rich (WQ3Q) and Leeanna invite you to join us for RTTY in ITALY 2016**

We have reserved VILLA CATOLA in beautiful Tuscany, Italy from September 17<sup>th</sup> to October 1<sup>st</sup> in the village of Bucine, Arezzo, Italy. This is to coincide with the CQ Worldwide RTTY contest for 2016. Arrangements are being set up for equipment and operating location at this time. We hope to operate at the villa. As the villa reservations run only from Saturday to Saturday and the contest begins on the beginning of a weekend, we will need to plan our arrival the week before, on the 17<sup>th</sup>. To give us time to prepare ourselves.



During that prep time and right after the contest we will experience the fantastic food, wine, culture, history of Italy. As for Villa Catola, [[www.villacatola.it](http://www.villacatola.it)] you will not find a more congenial host than Fabio Catola and his family. Villa Catola has room for 16 guests. 4 full baths (yes they are shared), 1 powder room, a full kitchen and a lovely garden and pool. Bucine is a small friendly village with a modestly-sized grocery store, coffee/pastry shops, small variety stores markets, laundry, and as several restaurants in the area and a Catholic Church.

### **Let's get to the details...**

The cost of the villa will depend upon the number of guests. With a "full house," and assuming the current rate of the Euro, the cost will be approximately \$300-\$325 per person per week. There maybe extra charge for heating, but it may not be necessary either. Fabio Catola, our host/landlord, requests that we send a deposit of 50% by April 30<sup>th</sup> 2016. We will need a monetary commitment by then from those who have decided to join us. The final payment (50%) will be due in August of 2016. We would like to have a list of interested people early enough to be able to calculate the amount of the deposits. We also recommend travel insurance. We've never had to use it, but knowing it is there allows us to rest easy about any bumps in the road. Remember this too... my wife and I are not travel agents or a travel agency. We need only those who are truly committed to coming to sign up. Once the deposit is due to be sent to the villa owner, we cannot refund any money. This is just our personal vacation time we are willing to share with anyone who wants to come with us. So please decide carefully. We are basing the costs upon the number of people attending filling the villa.

Your biggest expense will be your flights. Flights run around \$1200 roundtrip/person. There are ways to keep the cost down, like leaving and returning on a weekday instead of a weekend, but you'll need to look into that based on your own preferences. We have flown in to Milan, Rome, Venice and Florence. If you rent a car your drive time to the villa will be approximately 3 hours from all of those destinations, except Florence which is only 45 minutes from the villa. There is a train station in Bucine and you can use the train system to reach the villa if you prefer not to rent a car. Car rental costs are so varied you'll need to look into that on your own.



Once we're there we'll have many choices for eating. To dine-in, many times we have cooked in the kitchen and have even had a group-cooked dinner. To dine-out though, we can walk to nearby Piero's "Il Paguro" restaurant, just 2 blocks away. Another favorite restaurant about a half mile down the road is "La Vecchia Fornace" and just another mile or two from Bucine in the other direction is "Antica Portale." Prices are reasonable and comparable to what we would pay in the US. This time of year is festival time, so there will be many festivals to entertain us and to sample some great Italian food.

#### Next will be things to do...

Remember that while we are going to be doing RTTY on the weekend of the 24<sup>th</sup> we want to take the time to enjoy ourselves in Italy the rest of the stay.

Many of Italy's major cities and sites are but a day-drive or train ride away.

Nearby towns offer shopping and sightseeing opportunities to satisfy your desires as well. The Bucine train station connects to larger cities and is located about 3 blocks from the villa if you choose to use rail travel. Yes even Brescia, Italy (home of Begali keys, Franchi and Benelli firearms.)

There is usually no set schedule of things to do while in Bucine. People who plan to come should consider paring up or be independent and go out on your own. Everyone travels on day-trips by themselves or in a small group. We are able to plan some day trips for groups that might be interested. Possibilities include a hot springs spa, a cooking class/dinner, winery tours, historical sites, etc. Fabio himself can take us on some sight-seeing trips.



There is no obligation to do these activities but we have had fun doing some special side-trips with our friends. Many other things can be done but space just doesn't allow for us to list them all. Besides the adventure is seeking out things to do or see.

We hope you will consider joining the fun September 17<sup>th</sup> to October 1<sup>st</sup>. 2016.

Call us for more information 724-337-8372, or email us [rybar@nb.net](mailto:rybar@nb.net)

If you wish to do a virtual visit of VILLA CATOLA online, go to [www.villacatola.it](http://www.villacatola.it)



## Skyview Hamfest

Some of the sights seen during the August 30<sup>th</sup> Skyview Hamfest



Jerry K3FKI having his usual fun selling items at the Skyview tent



ARRL Atlantic Division Director Tom W3TOM having a chat with WACOM President Bill NY9H



Paul W3PRL takes a break from work to enjoy a Skyview breakfast



Rich K3RWN chatting with Frank K3FS

### Congratulations to the 2015 Skyview Hamfest Prize winners!

QRP Book and Antenna – Pat Ramsey KC3AED      \$50 ARRL Certificate - Michael A Kowalcheck KV3L

\$25 ARRL Certificate - Nate Firestone W3SVJ      PEET Weather Station – Mike Felock

Digital Clock – Teri Grizer K8MNJ      DX Engineering Coax Tool Kit – Paul Byers N3LQE

\$25 ARRL Certificate – Howard Coleman W3WTJ      50/50 Drawing – Carol Danko KB3GMN

DX Engineering Coax Tool Kit – Mike Peltz N3MRU      \$25 ARRL Certificate – Jack Spencer KZ3Z

Begali Key Prize Winner – Richard Danko N3SBF

# SKYVIEW

Skyview Radio Society, K3MJW

K3MJW  
2335 Turkey Ridge Road  
New Kensington, PA 15068



Daniel K3ISO spending time at the Hamfest with his granddaughter Sara



Sara drawing a winning ticket for a lucky ham



ARRL Affiliated Club Coordinator Joe W3BC pictured with Public Information Officer Bryan WA3UFN



ARRL Western PA Section Manager Tim K3LR filling out raffle tickets with Teri KD8TYW



Bob WC3O, Bill N3WMC, and Joe AJ3O workin hard so everyone can enjoy Skyview's good cookin!



Bill N3BPB is raffling off a prize



Skyview Radio Society, K3MJW

K3MJW  
2335 Turkey Ridge Road  
New Kensington, PA 15068



John KB3SVJ with a bag full of goodies



Dave KOJRS is giving the Begali key a test before purchasing raffle tickets



Another Green Hornet Sighting Bob W3GH



Jim KQ3S enjoying the day at Skyview

## Stop up and see us at Skyview Radio Society!

2335 Turkey Ridge Road  
New Kensington, PA 15068

**Business** meetings on the first Tuesday of the month at 7:30pm.

**Weather Group** meetings on the second Tuesday of the month at 7:30pm.

**Social** meeting on the third Tuesday of the month at 7:30pm.

**Elmer Night** on the fourth Tuesday of the month at 7:30pm.



Tom W3TOM presenting to a packed house during the ARRL Western PA Section Convention



"General" Pat KC3AED with a smiling face



Andy K3APD looking for some Hamfest deals



Bob KB3OMB getting some campfire tips from Paul W3PRL

## Skyview Radio Society is on Facebook!

Give us a "Like" to keep up on  
the latest club news and events!



# SKYVIEW

Skyview Radio Society, K3MJW

K3MJW

2335 Turkey Ridge Road  
New Kensington, PA 15068



Mike KC3CBQ and Jody K3JZD stop for a picture during their Hamfest volunteering



Green Hornet W3GH, Rich K3RWN, and Frank K3FS share some Ham Radio stories with each other



Jerry K3FKI working on some deals in the Skyview tent



Frank KB3YJQ taking food orders



John K3STL takes a selfie with Captain Jack KA3HPM



Dave N3TIN and his nephew making some deals



## Happenings

Monday nights at 8:30 PM (local time), WC3O conducts code practice sessions. Anyone at any proficiency can participate in code practice.



Think you'd like to give Morse Code a shot? Tune in to the Skyview repeater 146.640 pl 131.8 and/or listen for WC3O on 28.102 MHz.

### Fireside Net

Friday nights at 9:00 PM (Local Time) on 28.464MHz



### WAN Repeater System

Have you heard about the Wide Area Network Repeater System with coverage from the New York State line down into Maryland (and even farther via Echolink)?

Learn more about the WAN Repeater System at:

<http://www.wanrepeater.net/>

## Skyview Radio Society has its own weather station!

Click the "Skyview Weather Group" tab on Skyview's webpage and see for yourself!





The following is the final chapter in Bob Bereit K3RMB's series about direction finding

## Setting up and Running an ARDF Fox Hunt

A typical fox hunt makes use of five ARDF transmitters, scattered over a wide area. Each transmitter is identified by a flag and has a control punch nearby. 'Foxes' should be widely separated so that when positioned at any one of them, none of the others are visible. For a walking hunt, the stations may be positioned up to two miles apart.

Each of the five stations requires the following equipment: 1) Transmitter, programmed with a unique ID; 2) Transmitter housing for weather protection; 3) Orienteering style flag; 4) Control punch.

**Transmitter:** Article #2 of this series described the Micro-Fox transmitters and how they can be programmed. For purposes of the first hunt, I programmed each unit to send a 30 second burst with the ID. There would then be a 4 minute & 30 second period of silence before the cycle repeated. Each of the five transmitters were powered up at one minute intervals. The net effect is that the transmitters took turns sending out their signal. Standing in one spot, a hunter would hear one transmitter ID, 30 seconds of silence followed by the next transmitter ID, etc.

**Transmitter Housing:** The photo on the right shows a housing constructed out of 1-1/2" PVC pipe, and eye bolt and some PVC fittings. The cap at the base of the pipe allows the transmitter to

easily be slipped in and out. The eye bolt at the top permits hanging the unit on trees, building overhangs, etc. It is important to label each housing with the name, call sign, and contact info for the licensee running the hunt, lest anyone finding the housing interpret it as a bomb.



**Orienteering Control Flag:** By convention, transmitters used for Fox Hunting are marked with a triangular orange and white flag, making it easy to see the unit once the hunter has come within a



few feet of it. Most hunts use the flags manufactured by Suunto and available for about \$9 each.

**Control Punch:** Each transmitter also has a control punch close by that the hunting teams use to mark their score card, to prove they reached and correctly identified the fox. Suunto makes these punches which are available as two different sets of ten punches. Each punch has a different pin pattern. Sets of punches cost about \$50.

When setting up the course you may also wish to set up one or more 'dummy' foxes (housing, flag and punch but NO transmitter), to add some challenge to the hunt. I find it a good idea to at least have one 'dummy' at the starting point of the course, so the teams can see what they are looking for out in the field.

For scout fox hunting we're using a slightly different set of rules than proscribed by the IARU for international competitions. While scouts often work with maps and compasses for orienteering activities, we do not employ those tools for scout ARDF hunt.

Scouts participate in a hunt working in teams of 2-8 persons. Each team is provided a receiver (or transceiver), directional

1	K3RMB		K3RMB		K3RMB		K3RMB		
<b>K3RMB</b>									
									
<b>ARDF FOXHUNTING</b>									
2	DATE: 3RMB								
3	FINISH TIME: 3RMB								
3	START TIME: 3RMB								
3	ELAPSED TIME: 3RMB								
4	TEAM NAME: K3RMB								
	TEAM MEMBERS: K3RMB		K3RMB		K3RMB		K3RMB		
5	K3RMB								
	K3RMB: K3RMB		K3RMB		K3RMB		K3RMB		

yagi antenna, attenuator (optional, depending on the receiver used) and a score card. Teams set out from a common starting point and attempt to find and correctly identify each transmitter. The team's start time is recorded on their score card. The transmitters do not have to be located or identified in any particular order.



Watching the S-Meter on the receiver, team members point the antenna in the direction that gives the strongest signal. If the signal overloads the meter, they use the

attenuator (or switch to a harmonic of the transmitter frequency) to reduce the signal strength until the meter reading is usable. Once the strongest signal bearing is determined, the team walks in that direction. At the next transmission cycle (4 minutes & 30 seconds later) they have another opportunity to 'refine' the bearing, and continue walking toward the transmitter. They walk until they see the control flag, marking the transmitter location. Once positioned at the transmitter, the team marks the scorecard by punching the oval which matches the ID of the transmitter, using the punch at that location. They proceed in this way until all five transmitters have been located and



identified, after which the team returns to the starting point and the end time and hunt duration are noted on the score card. The team which correctly identifies all five transmitters in the shortest period of time is the winner of the competition.

**First hunt:** The first fox hunt I ran was at Camp Conestoga while our troop was attending Summer Camp in June, 2014. The foxes were widely scattered around the camp property near the Nature area, Scoutcraft, the Pool, Camp Headquarters and the Rifle Range. The shortest path between these stations was about 2.5 miles. The maximum line-of-sight distance between two transmitters was about 1 mile. All transmitters could be heard from all five locations, as well as from the Catawba site which was the start-finish of the course.

**Lessons Learned:** 1) At 20wpm CW speed, Scouts had difficulty telling the difference between 'MOH' (transmitter #4) and 'MO5' (transmitter #5). Need to cut the speed back for future hunts. 2) The 9v batteries in the Micro-Fox transmitters only lasted for two days of continuous operation. Because of their separation, it was not practical to turn the units off at night. 3) While the timing between transmissions worked well at first, several of the units drifted so that the time between unit-transmissions did not stay consistent. And, there was a point of time when two of the foxes overlapped transmissions. 4) Teams took more than two hours to complete the course in this initial configuration – a bit too long for a 'fill-in' camp activity.

- Bob Bereit, K3RMB



## Ham Radio Wordfind

Try to find 13 Ham Radio Related Words in the puzzle below. Answers are below.

M	A	Q	H	A	M	V	E	N	T	I	O	N	B	K	N	C	D	I	Z
X	O	N	L	J	W	P	S	W	T	Y	E	A	O	O	I	A	O	U	Q
R	H	R	N	Y	I	L	R	A	U	E	N	O	I	F	G	L	O	S	A
J	Y	K	S	E	U	F	L	D	S	D	B	T	J	N	Y	L	W	H	Y
X	I	O	Y	E	T	P	O	K	P	G	A	J	T	B	D	S	N	U	Y
I	B	W	P	A	C	N	G	L	O	G	W	D	B	O	V	I	E	W	L
Y	X	N	O	Y	U	O	A	L	A	C	Q	C	Q	C	G	K	Q	F	
B	A	F	X	A	B	N	D	P	E	M	E	I	N	F	Z	N	R	D	O
Y	L	E	W	I	L	Y	O	E	T	V	J	A	I	U	N	Z	U	P	H
J	J	R	S	Y	X	R	W	E	I	V	Y	K	S	K	U	G	O	G	H
A	L	Y	E	U	P	M	Z	Y	R	B	P	N	A	W	R	Y	W	G	A
P	J	S	C	J	B	S	B	N	O	J	Q	M	Y	T	J	D	W	U	E
F	J	K	E	A	T	U	O	N	S	Z	Z	R	Q	U	Z	D	L	R	I
Y	U	F	G	U	W	O	U	M	Y	Y	C	O	E	G	M	S	X	S	C
G	Z	Q	E	D	X	H	F	G	C	N	C	Z	B	P	L	N	Z	F	O
L	I	J	T	F	B	D	S	O	M	T	M	S	Y	Z	F	N	X	I	M
A	X	R	L	M	J	T	X	J	C	V	I	M	V	O	N	Z	M	K	Z
U	P	P	V	G	M	N	Q	D	A	J	V	W	K	U	A	X	N	E	B
M	Y	V	V	O	B	P	L	B	M	S	C	H	R	X	M	O	V	Q	Y
I	A	S	W	G	P	F	X	R	U	K	B	I	S	E	M	J	J	P	T

**WORDFIND ANSWERS:** 1. ANTENNA 2. BANDPLAN 3. CALLSIGN 4. CQCQCQ 5. HAMVENTION 6. ICOM  
7. KENWOOD 8. LOGBOOK 9. MORSECODE 10. PROPAGATION 11. QRZ 12. SKYVIEW 13. YAESU



## Skyview Antenna Switch Redux

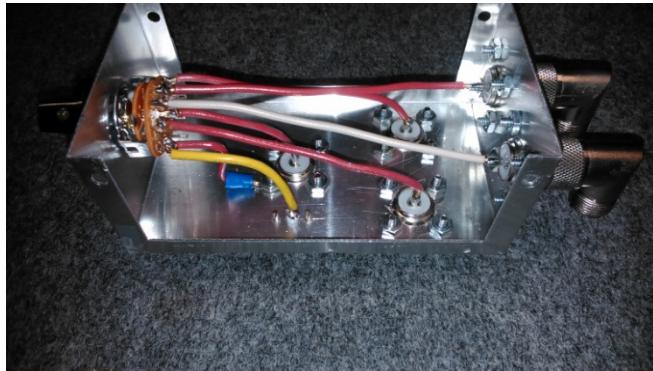
Jody - K3JZD

I had to revisit my Skyview Antenna Switch to add another position to it. My original build was done earlier this year during the Tall Guy's Solder Smoke session up at the Joint. At that time, I ordered enough parts from John, who conceived and managed that project, to build a 4-way switch. That seemed like more than enough positions at the time. But as usual, it was not.

I should mention that I use this switch as a 'Rig Switch', not as a 'conventional Antenna Switch'. Since I can't seem to part with any of the rigs that I have had many enjoyable QSOs with over the years just because I have added a new one, I just keep jamming more into my congested space. I try to keep them all operational for whenever I want to go back in time and operate one of the older ones. (Each rig has its advantages and disadvantages – seems like over the years the receivers have gotten better while the output power has deceased). So, I use my exiting Antenna Switch to select an antenna and route that selection to this Rig Switch. This Rig Switch then connects that selected antenna to the rig du jour.

The connection that I just added was for the RTL-SDR radio that I use at my computer to be able to listen in on the bands whenever I'm doing other stuff at the computer. Since transmit performance was not an issue and space was, I used a SMA connector and mini coax to get over to that monitor-only radio.

While one could argue that a homebrewed switch like this will not work, I can report that RF seems to flow through it quite well, both ways, without any complaining. Since I had it apart, I thought I'd share some photos. (Since the newsletter is in Word, you should be able to zoom in on these if you wish).



Breadboarding the circuit turned out to be a good plan, as it made it easy to evolve when I added some bells and whistles like 'PTT Active' & 'Keyed' LEDs and a second



## Random Happenings at Skyview



The new "Customized Skyview Lawn Tractor"



Dewey W3VYK Grinding Stumps



Skyview's 13 Colonies Award



Bob WC3O cookin burgers with Bill WB3BUW Supervising



Workin all that DX tires some of us out



Rich WQ3Q asking if you want fries with that



## Sometimes "Dead Bands" Are Not Really Dead

Jody - K3JZD

As we head down-down-down towards the bottom of the sunspot cycle, I'm finding that the 15 meter and 10 meter bands are already pretty quiet most of the time. I have had my Ham Radio Deluxe software scan across those bands, and it comes up with zip. But, is the band really dead, or is it just that no one is transmitting? Like maybe there are 500 listeners out there.

There are low power beacons on 10 meters and 15 meters that are intended to let you know what part of the world is coming in. But since these beacons are generally low power transmitters, I do not hear very many of them whenever these two bands are marginal.

What I have found to be more useful is the Reverse Beacon Network (RBN) which will tell you where your signal is being heard. I had thought that the RBN was only useful when you were transmitting your call in CW. However, unbeknownst to me, some of the RBN stations also pick up and report on RTTY transmissions that they hear. I found this out by accident. A few days ago I was transmitting in RTTY, doing some system configuration and tuning adjustments on the "dead 15 meter band", figuring that I would not interfere with anyone there. The next day, I happened to click on the RBN tab on my browser by mistake, and I lo and behold, I found that my RTTY transmissions as well as my CW transmissions were being heard on this "dead band". I was heard in KS and Curacao whenever I was IDing in CW because my RTTY was only a solid carrier then and later in AZ and NV when I finally got the RTTY stuff to actually be RTTYing:

REVERSE BEACON NETWORK

SSN:46 SFI:110 A:53 K:5 callsign lookup:

show/hide my last filters

showing spots for DX call: K3JZD

search spot by callsign

de	dx	freq	cq/dx	snr	speed	time
N7TR	K3JZD	21095.20	RTTY CQ [LoTW]	9 dB	45 bps	2317z 24 Aug
K07SS	K3JZD	21095.11	RTTY CQ [LoTW]	8 dB	45 bps	2317z 24 Aug
AC0C	K3JZD	21058.5	CW CQ [LoTW]	18 dB	16 wpm	1757z 24 Aug
PJ2A	K3JZD	21058.4	CW CQ [LoTW]	5 dB	15 wpm	1757z 24 Aug

options:  
show/hide

K3JZD frequencies on last 15 minutes:  
no spot...

Three takeaways here: (1) Dead Bands are not always "Dead". Get on and make some noise to see what happens. (2) The Reverse Beacon Network can be useful to prove that the band is not "Dead" (Sorry, not with SSB - If you do not do anything else, get a key and learn to send your call sign out 4-5 times in CW and you can still benefit from this tool). (3) Some Reverse Beacon Network stations will report their hearing RTTY transmissions as well as CW transmissions.



## Reflections

### **Babblings of the Radio Officer**

By Bob Bastone WC3O

Where has summer gone?

Dayton, ice cream social, KORN roast, 13 colonies, Field Day/s, Swap N Shop – All in the past for 2015. We still have some great things to look forward to? JOTA is coming up, and contest season starts soon! There are still some hamfests on the horizon. Soon the furnace will be firing up and we will be looking for ways to stay warm. It's all a big sinewave, you know. We'll freeze our butts off and before you know it, it will be time for the WASH-fest. The cycle starts all over again.

I am very happy to report that various members got their towers/antenna up this summer! Others are in the works. Progress is of highest importance. As they say, if you are not moving forward – You are going backwards. Learn something new. Teach a newbie something you learned. Be an elmer. Never be afraid to make a mistake. It's a frickin hobby. Have fun damn it!

I really can't tell you how happy I am to see the new Skyview sign. It looks fantastic. The gravel on the driveway is a very welcome improvement. I have heard nothing but good things about the S&S. I am very happy to see all the public service events Skyview has been involved with. Actually, if there is one thing I would love to see Skyview more involved with it would be EMCOM and public service. For a while Dave, KB3FXI was a driving force at Skyview. Dave kept us up to date with FLDIGI and in touch with our served agencies. Unfortunately, Dave is now working at a job that does not allow him time to devote to these things that he so enjoyed doing. We could use a new spark plug to bring these aspects back to the club. We have a perfect opportunity with a clubhouse, equipment, power and great people. Any takers?

Contesting? What can I say? We have done pretty damn well for a little Podunk club. I learned early on that it is less the equipment and much more the operators that make a winning team, although equipment doesn't hurt. I know well that not everyone is a contestor and that's fine. If contesting has one super redeeming value, it encourages people to get on and OPERATE. The experience of operating has WAY more value than any book you will ever



read. The hallmark of a good contest operator is to do well with this contest, and better the next. Look at what you did, look at what others did, and make improvements for the next event. Those are lessens for life, not just contesting. I look forward to operating with you folks this year. Don't forget that you can also contest at home. Play. Enjoy. Have fun. There is so much to learn.

BTW the grounds are SOOOOO much easier to mow without all the stupid tree stumps in the way. We ground over 20 stumps! It's night and day now. The new mower is great and really does a FB job.

Progress continues on the 80 meter four-square project. Tower sections are being painted and I hope we can do some tree removal this fall. Hopefully we might have the project complete by the end of next summer? Big doins. The four-square should really put up on the map as 80 meters goes.

Other projects that still need considered this year are tuning the HyTower and water proofing the repeater shed. Hopefully the grass will not start growing much and that will allow time to complete these two projects. We'll keep a good thought.

Projects to think about:

1. How to get people operational and involved on the radio after passing their Tech test. How many times have we had a very successful VE session only to NEVER EVER hear that person on the air, anywhere, EVER! We really need to bug these folks into getting on the air. I think they will thank us later.
2. We always have a great JOTA. From what I have witnessed, the Scouts have a GREAT time. It's hard to get them to leave! The issue (I think) is that they are involved in so many activities that the real problem is that it's the PARENTS that we can't get to bring them back. With the Radio Merit badge they are 80% of the way to a Tech license. How do we make a connection to allow them to return and get their Tech license? What I am hoping for is critical mass. Where enough young hams get licensed so where they get on the radio and talk to each other, not just us old farts. If they could chat with their own peer groups that would keep them active, at least until they get overcome by fumes. (Gas fumes and perfumes) Then they would return when they are older.

Think about it