The Mt. Vernon Amateur Radio Club
May, 2015 Newsletter

Meetings are held the 2nd Monday of each Month at 7:00 PM at the Knox County Chapter of the American Red Cross, 300 N. Mulberry Street, Mt. Vernon, Ohio

Local Ham Community

K8EEN Repeater: 146.790 Mhz (-600 Khz With PL of 71.9 Hz)
K8EEN-R Echolink Node: 809800
KD8EVR Repeater: 442.100 Mhz (+5Mhz With PL of 71.9 Hz)

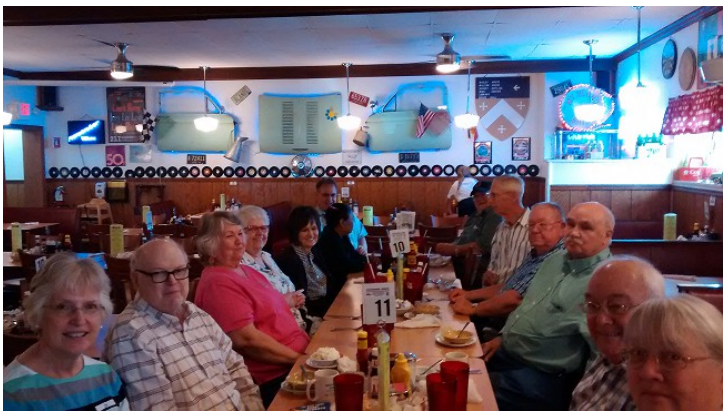
Sunday Night ARES Net at 9:00 P.M. on The K8EEN Repeater
Wednesday S. Main St. Wendy's Dinner at 5:00PM
Friday Breakfasts at Hardy's at 10:00AM

Ham Radio Rocks

Happy Birthday Larry "Doc" Heltzer AA8WP

The April 29th Wednesday dinner at Southside Dinner was a very special one for Doc, AA8WP. It was his birthday!

A record number of hams and friends showed up to celebrate with Doc and Linda. The group stuck around for much of two hours enjoying conversations and good stories.



In fact, we all enjoyed it so much we are returning to Southside Dinner May 6th for an encore.

After that, the location of the Wednesday night dinner will be determined each week by vote. Listen to the Sunday Night Net or contact Richard Huggins, N8RDH, or Don Russell, W8PEN, for updated information concerning the choice of restaurant each week.

Calendar of Events
Mt. Vernon Amateur Radio Club

May 11: Mt. Vernon ARC meeting. 7:00 PM Monday, May 11 at the Knox County Red Cross Training Center, 300 N. Mulberry St, Mt. Vernon, Ohio

Announced Dxpenditions:
http://www.ng3k.com/Misc/adxo.html

May 6: Dinner at Southside on S. Main St. 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location.

May 8: Breakfast at Hardy's on Coshocton Rd 10:00 AM

May 9: Breakfast at Allison's Finer Dinner, 11587 Gilchrist Rd. 9:00 AM

May 10: ARES Sunday Night Net at 9:00PM on the K8EEN Repeater. NCS: AC8FV

May 11: Pre -Meeting Dinner at 5:15 PM. This months dinner will be at Jake's Restaurant, 996 Coshocton Ave., Mt. Vernon, Ohio. Contact Jim Williams (N8IBR) or Scott Keys (AC8PT) for more information.

May 13: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

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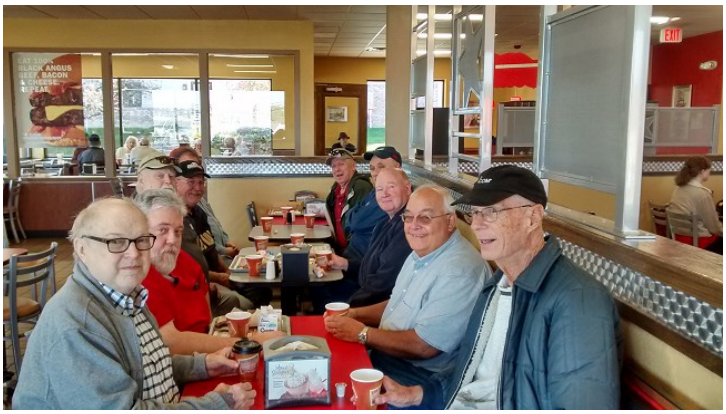
Club Breakfast Turnouts Are Good Too!

Okay, this club likes to eat! Maybe that is why they call us a HAM club. Friday morning breakfast at Hardy's on Coshocton Road is going strong. As many as twelve hams show up every week to enjoy solving all the worlds problems.



This picture was snapped at the April 24th breakfast.

Are You Still Hungry?

Scott Keys, AC8PT, and Jim Williams, N8IBR, have started a new club tradition. The Pre-Meeting Dinner will be held at 5:15 PM on meeting nights. The plan is to pick a different restaurant each month.

If interested in attending, please contact one of the above or check out coming events calendar in the Newsletter.

The May 11 dinner will be at Jake's restaurant on Coshocton Avenue in Mt. Vernon.

Several Hams Upgrade May 2nd

While the May 2nd VE Test Session was a bit disappointing, several club members were successful in upgrading.

Ed Liddle, KE8ANU, upgraded from Technician to General.

Terry Windsor, KE8ANS, successfully completed the Extra Exam.

Adam Frey passed the Technician Class test but was unsuccessful when trying the General test.

Two members of the General Class course failed to pass the exam. There were also a few that did not take the test for

Calendar of Events
Continued from Page 1

May 15: Breakfast at Hardy's on Coshocton Rd 10:00 AM

May 17: ARES Sunday Night Net at 9:00PM on the K8EEN Repeater. NCS: KD8WSI

May 20: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

May 22: Breakfast at Hardy's on Coshocton Rd 10:00 AM

May 24: ARES Sunday Night Net at 9:00PM on the K8EEN Repeater. NCS: KD8HSA

May 27: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

May 29: Breakfast at Hardy's on Coshocton Rd 10:00 AM

May 31: ARES Sunday Night Net at 9:00PM on the K8EEN Repeater. NCS: W8PEN

June 3: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

June 5: Breakfast at Hardy's on Coshocton Rd 10:00 AM

June 10: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

June 12: Breakfast at Hardy's on Coshocton Rd 10:00 AM

June 14: ARES Sunday Night Net at 9:00PM on the K8EEN Repeater. NCS: KC8BB

June 17: Dinner at 5:00 PM. Listen to the Sunday Night Net, contact Don Russell (W8PEN) or Richard Huggins (N8RDH) for more information on restaurant location. Restaurants will vary until the new Wendy's on South Main Street opens up.

June 19: Breakfast at Hardy's on Coshocton Rd 10:00 AM

June 27: ARRL Field Day June 27 – June 28, 2015
http://www.arrl.org/field-day

July 13: Mt. Vernon ARC meeting. 7:00 PM at the Knox County Red Cross Training Center, 300 N. Mulberry St, Mt. Vernon, Ohio

either personal reasons or did not feel ready to take the test.

Don, W8PEN, stated that he needs to create a better General Class Course. "We did struggle teaching parts of this course. All we can do work to improve this course for the next time."

Currently, plans are to hold another General Class course either this year in the Fall, or early next year.

One of the mistakes made was scheduling the Technician course and the General course so close together. Not only were the students getting burned out the instructors were not far behind.

Minutes of the April 13th, 2015 MVARC Meeting

Meeting called to order by President KC8EVS at 7:08 PM.

Motion to approve minutes from March 2015 meeting made by AC8PT and 2nd by W8TW. Approved.

Old Business Committee Reports

W8PEN stated that the repeater was working well. He also noted that the idea to purchase a back-up repeater had been shelved at this time.

KB8HSA then gave a detailed report on the GO BOX project. He suggested that we go with 2 go boxes instead of one. Putting the FT-857-D in one box, and the FT-8800 in a second box. This would give the club more flexibility when using the GO BOXES in a field operation. Group discussion then followed on what would be required to complete the project to go with the power supply and radios the club already had available. With Tom's suggestions voiced, it was determined we would need 2 boxes, 1 power supply, 2 speakers, 1 digital interface (Signal Link by Tigertronics), and 1 Automatic Antenna Tuner (LDG tuner was suggested and priced). The tuner would be needed for use with the FT-857-D on the HF bands. It was estimated that these items would cost the club approximately $700.00 to complete the project.

A motion to authorize $700.00 for KD8HSA to purchase the necessary items to complete the 2 GO BOX projects was made by AC8PT, 2nd W8PEN. Approved.

N8IBR reviewed the following changes in some of the clubs social get-togethers. As the Wendy's on the south end of town is closing for re-construction, the weekly Wednesday dinners for now will be held at 5 PM at the Pizza Hut on the south end of town.

For the benefit of new members, he then reviewed the other regular social events. In addition to Wednesdays get-together. Every Friday morning at 10 AM at Hardees on the East side. The 2nd Saturday of every month starting at 9 AM, at Allison's Finer Diner on the East side.

The Mt. Vernon Amateur Radio Club

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V. President: Tom Evans, KD8HSA
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Secretary: Jim Williams, N8IBR
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Phone: 740-392-7586

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Call & Repeater Trustee

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And, finally a new event started in March, a Dinner starting at 5:15 PM on the Monday of the clubs monthly meeting night. This event will rotate locations, so check the newsletter monthly for the next dining location.

President's Report

KC8EVS reported the following;

He discussed the upcoming Earth Day ½ Marathon on April 19th, 2015 at Kenyon College. Many members volunteered to work the event. He stated that the club again has approval to hold our field day operations at the Floral Valley community center complex in Apple Valley this June.

He remarked that the General Class study group was progressing well, and that an open VE session had been scheduled for Saturday, May 2nd, 2015. The testing session will be held from 9 AM to 12 PM at the Red Cross Annex Building.

He lastly reminded members of the upcoming NVIS antenna day on Saturday April 25th, 2015, from 9 AM to possibly 7 PM. This event will be held at the Foundation Park in Mt. Vernon. Members are invited to make up an antenna to test. All members are invited to a pot luck dinner which is being planned, and attending members were ask to bring a covered dish. The club will supply Hot Dogs, Hamburgers, and buns.

New Business

AC8PT stated as a fund raiser he would donate equipment to be auctioned or raffled off to help raise additional funds to offset various cost for projects such as our GO BOXES.

KC8EVS instructed Club Secretary, N8IBR, to write a detailed letter to AC8PT thanking him for these donations.

It was then suggested that we approach the Red Cross for a secure place to store our GO BOXES and associated equipment. The idea here being the equipment would be readily be available in a central location if an emergency situation arose.

KC8EVS stated he would like to get the inventory on all equipment owned by the club up to date.

N8IBR stated he had some radio accessory items available for sale from N8RPZ. She is cleaning out her shack of some items she no longer needed. Members could contact N8IBR if interested.

Motion to adjourn the meeting by AC8PT, 2nd W8UMH. Approved

The 50/50 drawing total was $27.00, and won by KC8EVS. With the winnings he donated back we added $25.00 to the treasury.

A door prize drawing for a Digital voltmeter donated by N8RPZ was won by KD8WSI. We thank N8RPZ for this door prize donation.

There were 14 members and 1 guest present.

Respectfully submitted,
N8IBR Secretary MVARC

Donated Items For Sale

At the April Club meeting, Scott Keys (AC8PT) donated some very nice items to help pay for the go boxes being worked on by Tom Evans, KD8HSA.

These items will be first offered to club members. If the items do not sell, then we will probably put them up on E-Bay or one of the Ham only sites.

Here is a list of the equipment Scott has offered to the club:

Ranger RCI-5054DX-100 6-meter tranceiver
http://www.eham.net/reviews/detail/6012
New: $319.00 Typical used: $250.00
Com-spec SS64 CTCSS encoder
New: $28.95 Typical used: $20.00
MFJ 1736 6 meter J-Pole
New: $29.95 Typical used: $20.00

The above items should go together but can be sold separately. If interested please feel free to make an offer. Contact Don Russell, W8PEN, at w8pen@arrl.net or 740-397-0249.

Fun Cube Dongle Pro+ SDR receiver
http://www.eham.net/reviews/detail/10056
New: $150 Typical used: $125.00

If interested please feel free to make an offer. Contact Don Russell, W8PEN, at w8pen@arrl.net or 740-397-0249.

AOR LA400 Loop receiving antenna
http://www.universal-radio.com/catalog/sw_ant/5051.html
New: 520.00 Typical used: ?
AOR GT Galvanic isolation transformer
New: $60 Typical used: ?
BNC Jumper
New: $15.00 Typical used: ?

The three items above should go together but can be sold separately. If interested please feel free to make an offer. Contact Don Russell, W8PEN, at w8pen@arrl.net or 740-397-0249.

Results of NVIS Day

On April 25, 2015, members of the Mt. Vernon Amateur Radio Club braved the cold, windy 42 degree weather and participated in the Ohio ARES NVIS Antenna Day. We had a really good turnout of 15 club members and 4 guests.

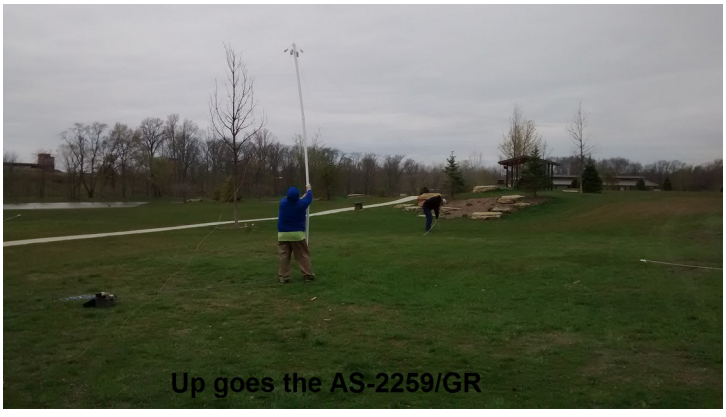
Antenna setup started shortly past 9:00 AM and at least two of the antennas where ready to go at 10:00 AM, the scheduled starting time for the event.

We installed two large tarps from Ed Liddle, KE8ANU, and Don Russell, W8PEN on the East side of our Shelter. This blocked most of the wind that was coming out of the East, helping to take the chill off. One coffee pot was going full time!

The object of this event was to test antennas specially designed for Near Vertical Incidence Skywave, or NVIS. These antennas are designed to radiate much of the RF energy straight up (vertical), thereby spreading out over a 500 mile area on its return. Compare this to having the low angle take off point normally used for Amateur Radio Communications to communicate thousands of miles. NVIS is a valuable propagation mode for amateurs wishing to participate in Regional nets and Regional Emergency Communication scenarios. If you like to check into Ohio Traffic nets, you should consider installing an NVIS antenna at your location.

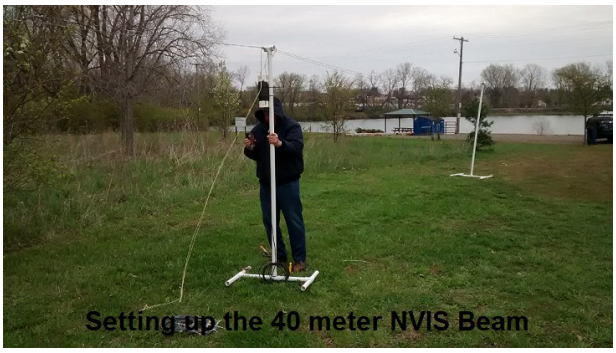
The club tried several different antennas. Each antenna was successful to varying degrees.

Voted our number one antenna was Frank Counts (KC8EVS) home brew version of the military AS-2259/GR NVIS antenna. This antenna uses two shortened Inverted V antennas at an apex of 15 feet. One antenna is used for 80 meters, while the other is used for 40 meters. This antenna received great signal reports.



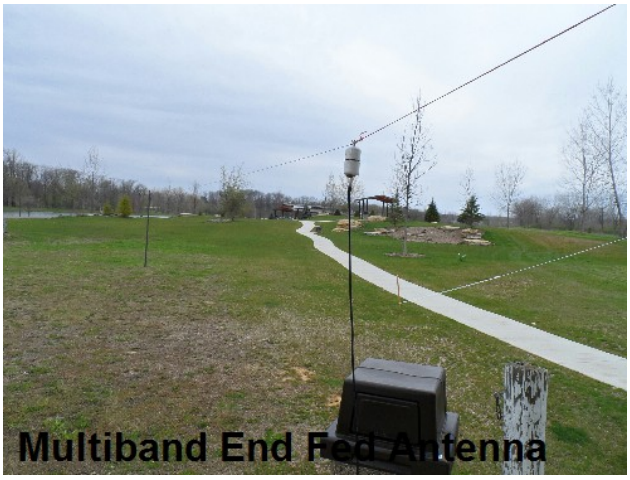
Up goes the AS-2259/GR

The antenna voted number two was Terry Windsor's(KE8ANS) 40 meter NVIS beam. This antenna is a folded dipole at 7 feet off the ground. Three radials are placed on the ground under the antenna, helping to reflect some ground lose signal straight up. Terry had good signal reports using this antenna.



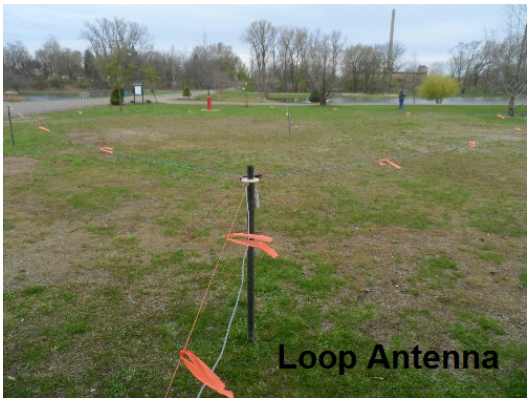
Setting up the 40 meter NVIS Beam

The number three antenna was Barry Butz's (N8PPF) end fed multi-band antenna at 8 feet. This antenna was also voted the easiest to set up and a version of this antenna may end up in our soon to be assemble HF Go Box.



Multiband End Fed Antenna

Jim Williams's (N8IBR) loop antenna at four feet high came in forth in the voting. The antenna performed well receiving some S9 reports, however, the general feeling is that it would have been much better if it were 10 or 15 feet in the air. We heard one station using a loop up 15 feet and that station had a very impressive signal. This is another easy to set up antenna that should be considered as part of a go box.



Loop Antenna

Overall, all the antennas were close in performance and it is hard to tell which would be better in any give circumstance. Members did prove that if all one wanted to do is get on the air and talk, you don't need a high antenna. All these antennas would be a breeze to set up permanently and would allow one to make plenty of close in contacts and possibly a few DX contacts as well.

Statistically speaking, here are the results:

1. AS-2259/GR: 10 contacts with reports ranging from 55 to 10 over S9
2. 40 mtr Beam: 10 contacts with reports of 53 to 59
3. End Fed: 3 contacts with reports of 57 to 59
4. Loop: 3 contacts with reports of 53 to 59

All contacts were on 40 meters. We would have had to stay later to do 80 meters. There is always "next year".

I am sure we could have made a lot more contacts if we had called CQ, but we search and pounced the entire day.

During the event, the club had a small cookout for the participants. Hotdogs and hamburgers were served as well as potluck from the participants. Even with the cold, it was a really fun event.

For a change, the weatherman was right. Just as predicted, rain started at 2:00 PM. Through sprinkles and light rain the antennas were taken down and equipment packed up.

Everyone went away feeling this was a really good event. We will be back next year.

Just as with Field Day, one always wonder what could be done better.

One idea is to have several stations around Mt. Vernon operating on the same frequency but with different antennas. Then, as stations are worked we compare signal reports. Another idea is to run one transmitter with an antenna switch and switch between antennas during each QSO to see which antenna is working better.

Those participating in the event were:

Emery Bennett	W8TW
Nichole Williams	(Emery's daughter)
Terry Windsor	KE8ANS
Bill Bradely	KC8BB
Scott Keys	AC8PT
Martha Keys	
Don Russell	W8PEN
Carl Payne	N8FU
Barry Butz	N8PPF
Rick Gilson	K8KWL
Ed Liddle	KE8ANU
Jackson Liddle	
Nathan Liddle	
Jim Williams	N8IBR
Don Bunner	KB8QPO
Nick Alstatt	KD8NGS
Frank Counts	KC8EVS
Tom Evans	KD8HSA
Larry Brengman	K8LSY

APRIL 19TH, 2015 EARTH DAY CHALLENGE REPORT

First off, let me start by thanking the 16 members of the Mt. Vernon Amateur Radio Club who gave their time and effort to help provide communications for this year's Earth Day Half-Marathon Challenge held at Kenyon College in Gambier, Ohio. Without these members, we could not have put together such an outstanding communications effort.

We had some awesome weather this year. A light breeze, bright, sunny skies, with temperatures in the fifties to start, and the mid-sixties to finish. The event organizers couldn't have asked for better race conditions for the over 400 runners participating.

While some members were on site longer, with the excellent weather conditions, no runners needing assistance, and great event planning, the Nets services were only needed for a total of 3 hours. We activated the Net at 7:45 AM, and closed it at 10:45 AM.

With the advanced planning provided by W8PEN's committee, we were not only able to have a Net Control Station manned by 3 Amateurs, we were able to place 5 groups of 2 Amateurs each of the 4 Aide Stations and the Turn Around Check Point on the Earth Day Challenge Course. Along with having an additional roving station manned by 2 Amateurs.

A special thanks goes to the following folks;

KD8EVR, who again secured the use of the four wheel All-Terrain Vehicle used to provide the roving station. (This roving station was valuable in keeping Event Organizer's informed with the overall status of Runners around the course.)

And to AC8PT, who provided the use of his great van as the Net Control platform.

On a personal note, I liked some of the things we did during the event;

First off, having 2 Amateurs at each location meant we could handle more than one situation at a location if required to do so. Plus, if not busy, they could take breaks one at a time, leaving the location still manned.

Secondly, we operated the event with the repeater in Net Mode. (I can't remember if we have done that in the past.)

Lastly, in addition to checking with the stations located around the course, Net Control made periodic announcements about the event, and announcements asking non-event stations to use alternate area repeaters or simplex to hold local QSO's if at all possible.

Along with testing our capabilities, there are side benefits from participating in events like these.

We get a chance to test our operating skills for any possible future Emergency situations that may arise.

And the non-Amateur Radio public, and various Public Service Agencies, can actually see and hear that we are capable of providing well-organized communications when called upon to do so. This is a big public relations plus for our group. So these type of events are a win-win situation for Amateur Radio.

If you weren't able to help this time, or haven't tried working this type of event, I encourage you to do so when you can. Even if you can only participate on a limited basis, it can be a big help to the effort. The more folks participating, the easier and more fun the event becomes.

I would also like to mention that 3 of the participants helping out this year were recent graduates of our Technician Licensing class. KE8ANS, KE8ANV, and KE8ANY got their first taste of operating a Public Service Event. Welcome folks, it was great to have your help.

The following is the complete list of MVARC members who donated their time, equipment, and effort for this event (Listed in no particular order) : W8PEN, AC8PT, W8UMH, KE8ANS, W8TW, KC8BB, KD8HSA, KE8ANY, KD8WSI, KC8EVS, KD8LPP, KD8EVR, KD8NGW, KB8QPO, KE8ANV, and N8IBR.

Thanks folks, your services were greatly appreciated.

Finally. A good time was had by all, and after the initial reviews, things went well. But, as with all event operations of this type, there may be areas we need to fine tune. So, let's review our performance, and make changes if necessary for future operations.

73,
N8IBR, Secretary MVARC

Broadband-Hamnet

Issues New Release of Firmware for Linksys and Ubiquiti

From the ARES E-Letter, April 15, 2015

Broadband-Hamnet (BBHN) has released version 3.1.0 firmware for the Linksys WRT54G and Ubiquiti families of products. This firmware returns to the use of patch updates, while also supporting add-on tools such as HamChat created by VE3NKL and a tunneling solution optimized by K5DLQ. This firmware release continues support for emergency communications data networking in the 2.4 GHz, 5 GHz and 900 MHz bands using Ubiquiti equipment and in the 2.4 GHz band using Linksys equipment. By creating solutions with Commercial Off The Shelf (COTS) hardware and Broadband-Hamnet firmware, a high-speed IP network can be deployed in the time required to set it in place and power it on.

There have been many requests for tunneling capability to allow interaction between remote Broadband-Hamnet networks. While this has been done before, the resources and complexity were quite high. With the new VTUN capability this feature becomes feasible for all Broadband-Hamnet users.

The HamChat server is a real innovation that allows keyboard-to-keyboard chats between any connected users on the same mesh. By using your web browser instead of chat client software, the complexity is reduced and the speed to deploy is increased. The HamChat server is not installed but is a downloadable package option for the Broadband-Hamnet 3.1.0 firmware.

The organization hopes that hams interested in high-speed data networks will look at the new Broadband-Hamnet 3.1.0 firmware. For more information, click on the group's website: www.Broadband-Hamnet.org

Broadband-Hamnet Coming to Mt. Vernon

By Don Russell, W8PEN

There is a movement by many hams in the Mt. Vernon area to create a Broadband Hamnet Mesh Network. While I had played with the idea a few years ago, I really did not put much effort into it. An article in the ARES E-Letter rekindled my interest.

Broadband Hamnet is basically a high-speed digital network using modified off the shelf routers to create a mesh network of nodes. These nodes can be individual hams with their own modified routers, club sponsored routers on high towers, and just about anything in between. The routers operate on ham frequencies (wifi channel 1) and only hams are allowed access to the network. Nodes automatically mesh with other nodes as as they are discovered. You only need to link with one node in the mesh to use the whole system.

The router firmware has to be upgraded to support Broadband Hamnet and once done, it will not communicate with any other wifi unit. It only talks to other routers upgraded for the Broadband Hamnet.

What this means is that if you want to use the network, you must be connected to a modified router. This can be done with an eithernet cable connected to your modified routher.

Most hams are using the Linksys WRT-54G routers. This is because these units allow their firmware to be upgraded and they can use external antennas. There are some other supported hardware out their, but our group is going to start with the WRT-54G line of routers.

If you are interested in joining us, caution needs to be used when selecting the router. In a nut shell, routers labeled WRT-54G VER 4 or less can be upgraded. Routers labeled WRT-54G VER 5 or higher will not work. It is safe to buy any of the WRT-54GL's as these are VER 1 and VER 1.1 and go no higher. It might be best to contact me or one of the other hams in our group for help in this. Besides the router, an omni direction antenna or a directional beam will probably be needed unless you are truly Line-of-Site. The routers have two antenna ports. I plan on using one port for the omni directional antenna and one port for the beam. Typically, the routers are mounted up high next to the antenna. Alternately, one can use high quality coax or hardline and keep the router in the house. Approximate cost would be:

- WRT-54GL router: $20 - $40 used
- 15 Db Yagi antenna: $24 or homebrew for almost nothing.
- 50 feet of 9913 coax: $75
- Various antenna fittings: $20

If you eliminate the coax by installing the router in a box on your antenna mast next to the antenna, you could save some money and have a better signal. You would still need to factor in the cost of running 12 volts up to the router and cat cable to access the router.

The major obstacle in the beginning will be getting a few nodes working together. This is line-of-site microwave communications in the 2.4 GHz band! Arlin Bradford, KD8EVR, has offered to host a node on his tower East of Mt. Vernon. The same tower that the KD8EVR repeater is on. This should be an excellent site with Line-of Site to much of the North, South, and East ends of MT. Vernon. It is our hope to also put a node at the Water Tower on Wooster Road where the K8EEN repeater is located. This should cover much of the North, West, and South ends of Mt. Vernon. I have a few more sites in mind that are strictly nodes. The long range plan is to have four or more nodes in high places around Mt. Vernon and perhaps one node in or close to downtown Mt. Vernon. Then we would have all the user nodes around town which hopefully would be left on 24/7 like our packet stations used to be.

Then what do we do?

Not sure about this. Realistically you should be able to do much the same as you do on the internet. Create Web Pages, Email Servers, Stream Video, Voip, Chat rooms, and much much more. All without the burden of advertisements, and all on the ham radio bands.

Once our network is established, there is a good possibility to branch out to other towns or cities. Indeed, it is possible to have all of Ohio connected via Broadband Hamnet.

I was also reading that it may be possible to change the frequency of the WRT-54G routers so that the hams could get away from Part 15 devices. I hope that happens. I believe all it would take is a firmware upgrade. It would be great to have our own channel void of interference from non hams.

As of this writing, here is the group working on the project to bring Broadband Hamnet to Mt. Vernon:

Barry Butz	N8PPF
Ruben Clark	KB2SAI
Frank Counts	KC8EVS
Arlin Bradford	KD8EVR
Scott Keys	AC8PT
Emike McCardel	KC8YLD
Zach McCardel	KC8YLE
Jim Williams	N8IBR
Tony Spiegel	KC8UR
Bill Bradely	KC8BB
Enery Bennett	W8TW
Don Russell	W8PEN

If anyone else is interested in this project, please contact me at w8pen@arrl.net and I will put you on my mailing list to keep you informed.

Lastly, at the May meeting we will be have Eli Cochran, KD8RBH, presenting more information on Broadband Hamnet. Eli is Barry Butz's nephew and is heavily involved in a similar project in Delaware, Ohio.

Radio-Activity

By Don Russell, W8PEN

Some of the older club members will remember that a few years ago I had a remote station set up. Several club members where using this remote station over the internet. It was a fun project but basically once the uniqueness of it wore off and fewer stations used the remote station, I finally removed it from service.

The remote station consisted of my Yaesu FT-847, the popular software called "Ham Radio Deluxe", and my 160 meter Windom antenna into an MFJ autotuner. The only mode available was SSB. "Ham Radio Deluxe" allows you to create a server for a remote station. From there you can allow stations to use a remote as long as they have a user name and password that the server recognizes.

This system worked pretty good. Although I think it was probably more suited to listening than transmitting. You could get on SSB and talk to other stations without much of a problem though.

I had almost forgotten about that experience. It was interesting and I learned a lot.

Fast forward to the present. A year ago I bought a new Kenwood TS-590S. I was not thinking much about a remote station at the time, however I did see in the features that the transceiver could be controlled over the internet using the "Kenwood Network Command System". Sounded like something I might want to try later.

Well, latter is now! I got the remote station bug again a month or so ago and started to seriously look into what the "Kenwood Network Command System" offered.

This system uses two different pieces of software, both available as a free download from the Kenwood web page.

To control the transceiver, one uses the Kenwood program called "ARHP-590". This is a stand alone program and if all you want to do is control your transceiver from your computer with the USB cable or RS-232 cable connecting the computer to the transceiver, then this is the only program you will need. With this program, you can also configure it to use your home network or the internet. In this case you would need to have a computer in the shack acting as the Server and another computer acting as the Client. Installed on each computer would be the ARHP-590 software. Since I had quite a bit of experience setting up the last remote station, this one was a breeze and I had the "kenwood Network Command System" up and running in no time.

Now all I needed to do was get audio from my radio to the client computer. This turned out to be really easy using Kenwoods Voip program called "ARVP-10". This was also fairly simple to set up and beat the heck out of using Skype like I did on the previous remote.

So now I had control of my transceiver via my home nework. Just by changing IP address settings it would also work over the internet. I tried that and it worked too. Initially, I decided that I only needed to receive signals from the radio. I did not need to send audio to the transmitter because I was interested in using my remote on CW rather than SSB.

This worked great! I could sit upstairs in my living room and listen to the transceiver down in the basement. Kenwood even provided a small program that alowed me to send CW over the radio via the computer keyboard. It also had CW memory functions. So I could do a limited amount of CW work in this fashion. It was not ideal, but it did work pretty decent.

There were several things I did not like about this setup:

- You had to type what you wanted to send and then press "enter" for the radio to send CW. I was looking more for a program that sent the CW as you typed. Otherwise the operator on the other end might think you weren't there anymore.
- I could not use any logging software. Nor could I use contest software. Well, I could run these programs but had to log everything manually. This was really a pain.

I started thinking that there was a better way. I found that way while searching the internet to solve my problem.

What I needed was a VPN program. VPN stands for Virtual Private Network. The idea is to have a VPN server. This server would be installed with the programs needed to be run remotely. In a nut shell, VPN allows the Client computer to take control of the Server computer. Once you have control of the Server computer, you can use it just like you were sitting at the desk with it. Only you could be anywhere using the client computer.

This looked exactly like what I needed.

I tried several free VPN software systems and ended up using one called "Quick VPN". It seemed to be the most reliable.

Again, because I had has some experience in networking two computers, I had Quick VPN up and running in no time.

Using the shack computer, I loaded all the progrmas I wanted to use remotely:

- The Kenwood ARHP-590 and ARVP-10 control and Voip software.
- N3FJP's "Amateur Contact Log" program.
- A keyboard keyer that sent CW as you typed it.
- Contest software for various upcomming contests.
- Misc programs to make it all com together.

Of course, I had to have all the programs working properly on the shack computer. This means all the control cables and audio cables had to be installed correctly and working with being remoted.

With the Server program on my Shack computer and the Client software on my laptop things worked flawlessly! I could control frequency, band, mode. I could tune the antenna with the radios internal antenna tuner. I could send CW without a sweat. In other words, I could do everything sitting upstairs that I could do sitting at the radio. Nice.....

Okay. I had CW licked. I even entered a CW contest or two using only remote control from upstairs. I would say it was a good experience.

The only thing I had not done was set up audio so I could work SSB. That was my next step. The usual way to accomplish this is to use a Sound Card interface. I had several and was planning on doing this. But then I was reading about Kenwoods "USB audio" feature. I could actually run my audio both to and from the Kenwood TS-590S with one USB cable. Of course, this required one more program. My poor little old laptop I use for the Shack computer might end up struggling.

Not to worry. The software needed is called ARUA-10 from Kenwood. Darn if Kenwood doesn't make it easy! Once again, this is a free program. All I did was install the software, set it up according to Kenwoods suggestions, and Vola, I had audio both ways. Transmit and Receive!

To check my audio, I scheduled a contact with Bill Bradely, KC8BB on 10 meters. Bill only live a couple of miles from me, so I figured we would have good signals and easy assesment of the audio quality.

The audio was considered excellent going both ways. I was using my computers buit in microphone, so I was really shocked when Bill told me it was like I was sitting next to him.

I have continued to use the remote base both at my house and via the internet. I can control the transceiver to such an extent that I can power it off and on, get into menus, make power adjustments, and check swr. It has really been fun.

Sorry, I am not planning on openning this one up to club members. This is going to be my own personal remote base. But it is easy to do. If you have a Kenwood, there are versions of the contol software for your rig.

73. See you at the meeting.

AFFILIATED CLUBS COORDINATOR REPORT

By: John Myers, KD8MQ - ACC
kd8mq@arrl.net

Hi everyone, welcome to springtime. It's beginning to look like we may actually have a springtime, and dare I say, a summer this year. I'm looking forward to getting around to as many Hamfests, and club meetings as possible this year. I'm definitely planning to be at the Athens Hamfest on the 26th. The Jackson Hamfest on the day before will definitely be weather dependent, as I plan to do some camping in the area that weekend.

That weekend is also the day of the Ohio ARES NVIS Antenna test, which you'll read more about in this issue of the Ohio Section Journal. Does your club or ARES group have plans to participate? It's not too late to join in the fun.

Earlier this month, a piece entitled "I'm the Person" came across one of the mailing lists that I belong to. It tells of someone who comes to a meeting, is largely ignored, and just doesn't come back. Over the years, you've likely read similar stories, or maybe even had this happen to you. I know that I have. This is something that all organizations should be on the lookout for. If someone takes that first step by coming out to a club meeting for the first time, it's in our best interests to make their experience a positive one.

If you'd like to read the story, you can find it on my blog, at kd8mq-acc.blogspot.com/2015/04/im-person.html. Speaking of my blog, you can also get to it via the link at arrl-ohio.org. I've not been as active a blogger as I'd like to be, however I hope to be posting more information there this year.

Every month I mention the importance of keeping those club report forms up to date with the league, and you are listening. As of April 3rd, we are up to 99 ARRL affiliated clubs in the Ohio Section. Of those, 76 are up to date on their affiliation paperwork. We currently have 12 Special service Clubs with at least two more that should be approved this month. With apologies to McDonalds, I'm Lovin It!

Is your club interested in pursuing Special service Club status, but maybe has some questions? Give me a call, or an E-mail, and I'll do my best to answer them. My contact info is on the Ohio section website at arrl-ohio.org. What I find interesting is that most clubs are already doing everything that's required for Special service Club status. They just need to send in their paperwork.

Notes from all over – This is where I try to give some highlights of what clubs around the section are doing. This comes mostly from your newsletters. I realize that not all clubs have newsletters these days. So, feel free to drop me a line and tell me how your club is doing, or about the great program you had this month. I'll do my best to share your story with the rest of Ohio.

If you do have a newsletter, please, please add me to your mailing list. I can't be at every club meeting, so I have to rely on you to keep me informed on what your club is doing.

So, without further ado, here's some of what is happening from around the section.

Wayne ARC has kicked off a "Continuing Education" series at their meetings. A recent subject has been Kirchhoff's voltage & current laws.

Portage County ARS (PCARS) as usual has a lot of irons in the fire. They have a dry run for Field Day coming up in a few weeks. Each May, they go out to a city park, set up their Field Day stations, and make contacts. Besides being a ton of fun, this helps them better prepare for the real thing several weeks later. They are also outfitting an electronics test lab at their club site.

A new club, the Stark State College ARC is hosting a "Color Run" later this month. I suspect that we'll be hearing more from this group in the future. I'll be the first to admit that I hadn't a clue what a Color Run is. You can find out more at thecolorrun.com

The Massillon ARC's mentoring program continues, with their May session focusing on fox hunting.

Members of the Mt. Vernon ARC and Knox County ARES have again provided communications in support of the Kenyon College "Earth Day Challenge" half marathon. They are also making plans to participate later this month in the Ohio ARES NVIS Antenna Day.

The folks at the Dayton ARA took time out from Hamvention planning to hold their annual auction at their April club meeting. Members bring in their old equipment, and get it auctioned off by a professional
auctioneer. And lastly, the Alliance ARC held their latest "Wacky Key Night". The idea is to come up with the wackiest, but still functional key for the amusement of the audience at our April meeting.

And that wraps it up for another month. Remember to "Think Outside Of The Meeting Room"!

Till next time, 73 DE KD8MQ