

The OVH ARC Newsletter
OLE VIRGINIA HAMS' AMATEUR RADIO CLUB, INC.
Post Office Box 1255, Manassas, Va. 20108
OVH FM Repeaters - 146.970- & 224.660- & 442.200+ & 443.500+
OVH D-STAR Repeaters - W4OVH - 146.865- & 442.5125+ (now temporarily out of service)
Web Site at <http://w4ovh.net>

OLE VIRGINIA TIMES

July 2015

Next Meeting: Monday, July 20, 2015

PRESIDENT'S LETTER:

Hello to all. Hopefully everyone had an enjoyable and safe Independence Day while recovering from all of the June activities. Was June action-packed, or what!??

We barely finished the Hamfest dinner when it was time to begin trekking to the pavilion at Nokesville Park for Field Day! Check out the pictures from each later in this Newsletter.

As for Field Day, a big "thank you" to everyone... including Mother Nature; OVH had a taste of operating in the elements with all the rain and the unexpected, thankfully short duration flooding. First, to our co-chairmen who performed a superb job with all the coordinations- John, Byron, and Ken (KG4NXT, AK4XR, and KB4ABL respectively); also to Ken and Ed (KK4PHP) for their educational presentations relating to of the high altitude balloon radio package, and a digital RF signal strength meter using the Arduino. Thank you to those who provided support for: GOTA, all the operators, night watch, trailer & equipment delivery, VIP invite, antenna setup, whisper-quiet generator power, and the multitude of other details too numerous to mention that would make this column two more pages long. We even were blessed by the visit of an elected official, County Supervisor Michael May. No, I haven't overlooked our main headliner, Chef Phil (AC4PL)! Brisket, sausage, pork roast, dogs and burgers!! Only a few words to say about this for next year.....perhaps china tableware, Merlot, and Maitre d'. Phil, an outstanding job.

Looking ahead, the OVH will be filling a few vacancies, taking a post-analysis of our Hamfest and Field Day activities, and as always, soliciting for new ideas and opportunities to market our hobby.

Keep the thoughts/ideas coming; email me @ N7QLK@ARRL.net. See you at the next regular meeting on July 20th at 7:30 pm at the main conference room at Manassas Public Works, 8500 Public Works Drive, Manassas, Virginia. Be safe.



73 Wayne N7QLK

Ole Virginia Hams Amateur Radio Club, Inc.
 Post Office Box 1255
 Manassas, Virginia 20108

OFFICERS

President: Wayne Phillips	N7QLK	393-8447
Vice Pres: Clarence Meese	K4CNM	791-6424
Secretary: Byron Dillon	AK4XR	222-2095
Treasurer: Terry Erlacher	KC4DV	571-292-1490

DIRECTORS

Don (Butch) Blasdell	W4HJL	369-2877
Arthur Whittum	W1CRO	791-4330
Charlie Dale	WA4YGI	361-3091
Bob Zaepfel	K4HJF	282-2451

WEEKLY FM REPEATER NET COORDINATOR

Thurs - 8:00 PM Local Time	JOHN / KG4NXT	257-3566
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HAMFEST 2015 - Chairman

Terry	KC4DV	571-292-1490
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FIELD DAY 2015 - Co-Chairs

John	KG4NXT	257-3566
Ken	KM4ABL	753-7863
Byron	AK4XR	222-2095

CLUB ROSTER / DATABASE

Arthur	W1CRO	791-4330
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EDUCATION

Mark	WA4KFZ	818-8033
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CLUB EMERGENCY COORDINATOR

Clarence Meese	K4CNM	791-6424
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ARES - EMERGENCY COORDINATOR

David Lane	KG4GIY	703-628-3868
	email: KG4GIY@ARRL.NET	
Prince William County ARES website	http://pwcares.org	

FINANCE

Arthur	W1CRO	791-4330
Mark	WA4KFZ	818-8033
Terry	KC4DV	571-292-1490

GENERATORS

Steve	N4OGR	361-0008
Keith	KM4AA	909-1512
Al	KB4BHB	368-4794

HISTORIAN

Theresa	KG4TVM	257-3566
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WEBMASTER — W4OVH.NET

Paul	W4ZB	754-0910
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EMAIL REFLECTOR — w4ovh@googlegroups.com

David Lane	KG4GIY	628-3868
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JOTA

Scott	KB8NUM	365-2642
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LEGAL

Bob	K4HJF	282-2451
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MEMBERSHIP CHAIRMAN

Luther	KJ4FDK	361-4885
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NEWSLETTER

Paul	W4ZB	754-0910
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NEWSLINE FOR THE WEEKLY NET

John H.	KG4NXT	257-3566
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PROGRAMS FOR MEETINGS

Terry	KC4DV	571-292-1490
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QUARTERMASTER

Steve	N4OGR	361-0008
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REPEATER CONTROLLERS

Keith	KM4AA	909-1512
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Steve	N4OGR	361-0008
David	KG4GIY	361-3042
George	K4GVT	791-5956
Russ	WB4HHN	368-6435

W4OVH / W4PVA — TRUSTEE

Keith	KM4AA	909-1512
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SCHOLARSHIP

Jim	W4JTP	392-0150
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SUNSHINE

Theresa (Acting)	KG4TVM	257-3566
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TECHNICAL COMMITTEE

Keith	KM4AA	909-1512
Arthur	W1CRO	791-4330
Butch	W4HJL	369-2877
Bill	N4SV	590-9562
Bob	K4HJF	335-1939
David	KG4GIY	628-3868

All telephone numbers listed above are for Area Code 703 unless otherwise noted. This is the official monthly publication of the Ole Virginia Hams Amateur Radio Club, Inc., a §501(c)(3) organization, dedicated to the promotion and enhancement of Amateur Radio. Copyright © 2015 by the Ole Virginia Hams.

The OVH ARC regular monthly meeting is at 7:30 p.m. every third Monday. In July, 2014, and is held in the Main Conference Room in the Manassas Public Works Building, 8500 Public Works Drive, Manassas, Virginia. Members, prospective members and other interested persons are invited to attend without obligation. Local information can also be obtained through the OVH's FM repeaters on 146.970-, 224.660-, 442.200+ and 443.500+ MHz. The OVH's two D-Star repeaters on 146.865- and 442.5125+ MHz are temporarily off the air due to maintenance work beyond the OVH's control. Up to date information about OVH activities and its meetings is also available during the OVH's nets on its FM Repeaters each Thursday night at 8:00 p.m. or on 80 meters (3710 KHz) LSB each Sunday night at 7:00 p.m. (8:00 pm in Summer) or through the OVH's web site at <http://w4ovh.net>

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Sunshine Corner:

Summer (July) birthday wishes to Steve / KB4OF, Ken / WB4ZOH, Philip / KI4WGC, Jeff / KM4FTK, Emmett / K2DJG, George / K4GVT, Michael / KC4ZNQ, Dwight / N4GSD, Bob / KI4IST, Mary / KK4GOW, James / AA4KG, Richard / KJ4ZIH, Luther / KJ4FDK and Tony / KK4YZK

Another successful Hamfest is in the books! Special thanks to chair Terry KC4DV and all our members who helped make this a memorable event. Be sure to look at the pictures later in this Newsletter.

Special thanks also to Jan / KE4TMW and Sandy / KM4JUS for picking up the bake sale table at the last minute and doing a great job! Thank you to everyone who contributed baked goods they were all a hit! The proceeds from the table will be donated to SERVE Inc in Prince William County.

Field Day – Yes it happened, yes it was rainy, yes we had a great time!!!! We were able to get into the true meaning of the event by surviving a brief flash flood. Our master chef, Phil / AC4PL was absolutely above all expectations for a great Saturday night dinner, as well as lunches and breakfast on Sunday. Three cheers to the co-chairs, John / KG4NXT, Byron / AK4XR and Ken / KM4ABL great job done for Field Day this year! Be sure to look at the pictures later in this Newsletter.

Thanks also to Clarence / K4CNM for putting together enough volunteers to help out at the Mini-Tri early on Sunday morning, June 28th while Field Day was still underway.

Happy Graduation to Lauren, Wayne N7QLK's daughter who graduated from Patriot High School Magna Cum Laude. Way to go Lauren!

Sending lots of Sunshine to Luther / KI4FDK for a continued quick and complete recovery.

Please do check into the Thursday night VHF/UHF FM repeater net which starts at 8:00 pm local time. More details on the W4OVH.NET web site under the "Radio Nets" tab!

73 Theresa KG4TVM email: kg4tvm@hotmail.com

Minutes of the Ole Virginia Hams Amateur Radio Club Meeting June 15, 2015:

President Wayne N7QLK called the meeting to order at 7:30 pm and led the club in the Pledge of Allegiance. Meeting was held at the Manassas Public Works Building conference room.

All present stated their names and call signs. There were 24 members and 2 guests.

Minutes from the June meeting were sent out in the newsletter, motion by Butch W4HJL to accept the minutes, and seconded by Mark WA4KFZ. Motion Passed.

Treasurer's Report – Terry KC4DV gave the report, motion by Bob K4HJF to accept the report,

and seconded by Butch W4HJL. Approved as presented. Terry will present a detailed report on this years successful Hamfest at our next meeting in July.

Membership –Chris / KK4ZUY was voted in as a new member.

ARES – No report. However it was mentioned that there may be a need for support with the World Police Olympics.

Repeaters – George / K4GVT reported that the link is a work in progress. It is being duplicated for easier repairs in the future.

Training – The VEC session at the Hamfest was conducted by the Mount Vernon ARC. There will be a Tech class in the fall. Hobby Hanger is interested in a class. Nothing firm yet.

Scholarship – Nothing to report till next year. Investigating sending scholarship information to homeschoolers. Process needs to be better documented.

Hamfest – We made money, though not as much as last year. If anyone picked up a Baofoung radio at the Hamfest, Ron's (N4RDZ's) radio of that type is still missing. Terry will send out a new Hamfest committee meeting date and time in August.

4H - youth Lounge reported that 41 code oscillator kits were assembled and went out the door with youngsters who visited. That's shows that the Youth Lounge is growing and will need more man power.

Field Day –Phil / AC4PL will be cooking again this year. We will be having Bratwurst, hamburgers and Hotdogs for lunch and smoked brisket, pork and sausage for dinner. Please bring a dish to share. Paul / W4ZB and Byron / AK4XR will be loaning generators for Field Day. Please invite your friends and neighbors. We should have some local dignitaries and a representative from FEMA show up. Come operate and make a contact or two. It is being held again at the Nokesville Community Park. Because of road construction come in on Fitzwater. A volunteer to help Steve / N4OGR with the trailer was requested and Wayne / N7QLK volunteered.

Sunshine Corner – Theresa / KG4TVM wished everyone with a birthday in June a “Happy Birthday”. It was reported that John Zorger's mother-in-law passed away.

Web Page – Paul / W4ZB reported “the web sites are working.”

Break

Presentation - was a video on Field Day done by a club was shown.

50 – 50 was conducted. \$23.00 was collected. The winner, Alan / WA2GTT, donated his winnings to the club. Thanks to all those that participated in the drawing.

Broadband - a 5.8 GHz link was established at the Fairgrounds parking lot during the Hamfest to Bull Run then a link from the parking lot to the Youth Lounge was setup ending in Linksys 2.4 GHz routers setup as a mesh network.

Motion to adjourn by Terry W5NTI, seconded by Alan / WA2GTT, motion passed, meeting adjourned.

Reminders about some upcoming events / calendar dates:

HAMFESTS:

August 2, 2015 - Sunday. Berryville, Virginia Hamfest sponsored by the Shenandoah Valley Amateur Radio Club for the 65th time! Details at <http://www.shenvalarc.org/hamfest> and see Flyer later in this Newsletter. About an hour from Manassas, lots of OVH members go each year.

SPECIAL HAM RADIO SEMINARS / EVENTS:

August 8, 2015 - Saturday - Noon until 4:00 pm - BBHN Workshop at the Central Community Library Community Room, 8601 Mathis Avenue, Manassas. The main emphasis will be applications / advertised BBHN services. See BBHN article below and contact Clarence / K4CNM for more.

August 29, 2015 - Saturday - Noon until 4:00 pm - BBHN Workshop at the Bull Run Regional Library Community Room, 8051 Ashton Avenue, Manassas. See BBHN info below and contact Clarence / K4CNM for more. This is set but could change based upon interest shown at the August 8th Workshop.

October 9 - 11, 2015 (Columbus Day Weekend), Digital Communications Conference sponsored by the ARRL and TAPR - being put on for the 34th year near Chicago, Illinois this year. For more info, check out <https://www.tapr.org/dcc.html>

Third Thursday evening each month - AMRAD meets in McLean, Virginia - meetings usually consist of high level amateur radio related technical presentations on specific topics. Check the <http://amrad.org> web site for upcoming topics, and exact dates, times and places.

PUBLIC SERVICE / TRAINING / ARES EVENTS

Always check the online Calendar by David / KG4GIY at <http://www.pwcares.org> for the latest updates. David maintains a comprehensive calendar for upcoming events at that web site. Complete direct contact information for David appears on page 2 of this Newsletter.

BBHN and PWC/BBHN Updates from Clarence / K4CNM

Note: these updates (lightly edited) have already been disseminated by Clarence / K4CNM to those known to be interested in BBHN; they are repeated here because of their potential general interest.

June 16, 2015. For those that did not make the Manassas Hamfest this year, following is a short update on what happened there concerning the BBHN and PWC BBHN.

Keith, KB3TCB, presented a 2 hour program on BBHN and also had his fully equipped van with the 40-foot mast (<http://remoteamateur.com/Articles/2004Van/HomeVan.aspx>) for BBHN at the Hamfest. He was able to connect from the fairgrounds parking lot to the BBHN system on Bull Run Mountain run by Ken/KE2N which has SSID: W4BRM and uses a Sector Antenna. We also had a couple of 5.8 GHz dishes at the Hamfest location providing a connection across the fairgrounds. At one end we connected to a Linksys 2.4 GHz router that provided the link to the remaining Linksys routers on site. I forgot to count the number of routers in the mesh net, but as I recall there were around ten more or less. I remember seeing KB3TCB, KV4UC, WA5NTI, K4CNM, and I believe KK4ZUU call signs on the mesh at one time or other.

After some adjustments we were able to pass video from Keith's camera onto the mesh. Don't know all the technical reasons we were having trouble with the video at the Hamfest, but I was able to get feeds from two IP cameras on my mesh after returning home from the Hamfest using the same **Cont'd on next page**

procedures. Keith noted we needed more practice (when not under pressure of some deadline) in getting services up and running on the network; I agree. That was kinda what I wanted to do at the last workshop, but we did not get very far. So, our next workshop (future date to be determined) will cover this subject again. In the meantime, I plan to get streaming video across BBHN Linksys routers to the judges stand at the 4th of July parade in Dale City. If you have services working on your network, let us know what you have and how you did it. Plans, parts list, diagrams, procedures, etc that would help others should be shared on this list.

I have a really simple chat program working on my network - HamChat. It can be installed in the Package Management section on the Administration page. See, <http://www.broadband-hamnet.org/hsmm-mesh-forums/view-postlist/forum-1445/topic-1445-hamchatpk.html> for details. Only extra thing I needed to do that was not clear in the instructions was to add HamChat as an Advertised Service and including "cgi bin/hamchat.pl" in the far right blank box. Try it out and report back.

I had a short talk with Ed / KK4PHP on June 16ht. He's working on a high altitude balloon project (in the 100,000 foot range, if I recall correctly) and might have some room left in his space, weight, and power budget to have a Linksys router board on some of the flights. The plan would be to reduce a router to just the board and two hi gain antennas; power from Ed's on-board battery. We need to check all our routers to find the ones that are the least power hungry. The testing I've done on mine show that some want upwards of 1000ma while others seem to be happy with just about 500ma. Please check yours and let me know what you find. Who knows, your router might be the first to go into space (or at least close to near space). The launch point is planned for the I-66 / I-81 area with recovery somewhere in the Manassas area. If we do get a router on-board, everyone should plan to get to an open area on launch day with routers and see if anyone connects. We also might be able help with ground communications if needed. More to follow, but for now check the power requirements of your routers and prepare for possible portable operations.

July 11, 2015.

1. We did get streaming video across BBHN Linksys routers to the judges stand at the 4th of July parade in Dale City; more about that below.

2. Only thing new with the high altitude balloon project are several suggestions on how we should proceed regarding the airborne router. I did discover that some of my Linksys routers only require about 200ma. And Terry WA5NTI showed me the easy (and nondestructive) way to disassemble a Linksys router. This project will be discussed more in future updates.

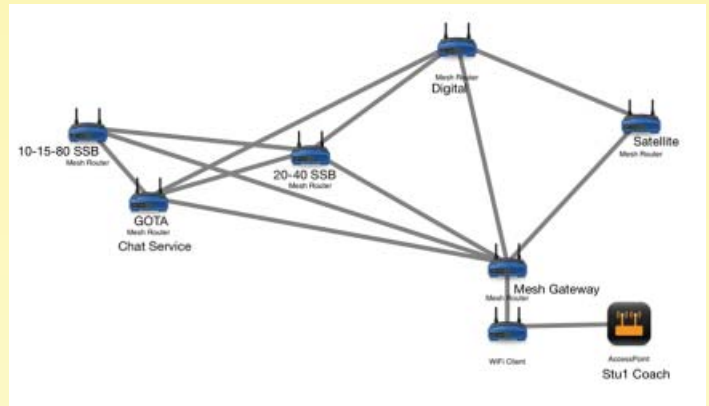
Following is the report from Mark / KV4UC (Woodbridge Wireless) on Woodbridge Wireless' use of BBHN during its Field Day operation:

We did achieve a first for the club in implementing a practical operational mesh network in the field. Although Terry WA5NTI and I were not able to successfully attach to the local public cable internet access point, Stu WA0DYJ came through for us by providing use of his coach access point. Linking a wifi client and mesh gateway at his coach, we were able to deploy mesh routers at the satellite (1 PC), digital (2 PCs), 20-40m SSB (2 PCs), GOTA (1 PC), and 10-15-80m SSB (2 PCs) positions. The mesh self-configured so that every node connected redundantly with at least two other nodes. Terry WA5NTI installed a chat service in the GOTA node which gave us text capability for short text messages between the eight connected PCs, if desired. With a bit of soggy sneaker-net configuring, we were able to collect and input the different PC mesh IP address information into N1MM+ and implement our first ever wirelessly connected network logging system. Bob KV4MJ provided master station logging from his computer where we centrally logged 1948 QSOs for SSB operations. Throughout the scoring period, even with the intense rain, the mesh maintained reliable connection service and Internet access for all connected PCs. Even though we weren't able to get everything logged through the mesh due to time constraints for configuration, we learned a lot which will let us develop a better plan for next year. Thanks to everyone helping out to get our first mesh working in the field (under less than optimal conditions) and our collective patience working around each

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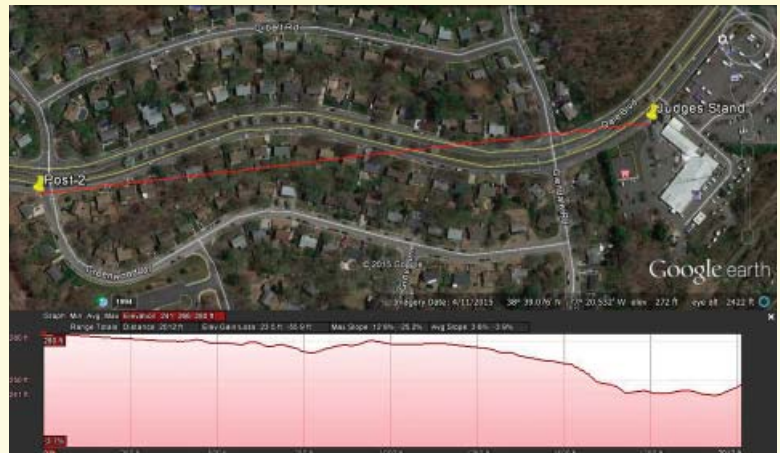
other to get everything configured. I mapped how the mesh network interconnected in the attachment illustration to the right.

We did not need to advertise any services for N1MM+ to work on the mesh. We used the mesh routers in mesh (not NAT) configuration to DHCP mesh addresses to the attached PCs and collected the individual bios names and mesh IP addresses to manually input all of the individual names/IPs into N1MM+’s network address configuration table in each N1MM logging PC and assigned one N1MM logging PC as the master. Although N1MM will self discover other stations on a 255.255.255.x subnet, it doesn’t perform self discovery across the 10.x.x.x mesh addresses the routers generate. Nonetheless, once the addresses are input and all N1MM files updated, it works pretty well directly addressing by mesh IP address.



Report by Clarence / K4NCM on streaming video over BBHN at the Dale City July 4th parade:

I was able to get video from Greenwood Drive to the table behind the Judges SSB chairs in front of the COMCAST building. Used a total of five routers. But since we had no extra help and I was stationed at Post 2 on Greenwood Drive calling the last minute out of order parade units, there was no one to keep an eye on the laptop. So I really don’t know if anyone ever saw the video feed. I did ask once to have it checked and the report was “Connecting...” which is a sign of no connection. But it does auto recover, so that might have been a temporary thing - or not.



The diagram is a Google Earth view of the parade route between Post 2 and the judges stand. The straight line distance between these two points is approximately 2,000 feet. Dale Blvd has several curves between these two points and there are many trees in the median. I did see video between the two points right before I left the judges stand for my parade route post, so I know we can do it. Configuring routers for streaming video will be discussed at the next BBHN workshop, see below.

With the rain and no help (except for John KG4NXT during setup), I didn’t get everything working until about 15 minutes before the parade started. And then had to quickly get to my parade route post. After the parade Dale Blvd became a totally grid-locked parking lot with masses of people walking between the stopped cars. So I was not able to get the last router recovered and headed out of that mess until 1:30 PM.

Some lessons learned about setting a mesh network up at an event like this:

1. We need help setting up, monitoring, and recovering.
2. Everyone who owns a mesh router should consider deploying it. That means having a means to power it and get it up in the air so that it can mesh. As a minimum one needs a battery (recommend a 12Ah one - enough run time yet small enough to easily hand-carry to site), a power cord long enough

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to get from the battery to the router, a 15-foot pole (or four 4-foot poles) to get the router up above the crowd, a gallon ziplock-type freezer bag (to hold the router and protect it from rain/snow/etc), and a supply of duct tape.

3. Have more than just a straight line arrangement of routers. For this parade, for example, we could put a router at each roadway sign along the route between the camera(s) and the viewing laptop to get redundancy and probably keep a 100-percent connection.

4. Each person sets up and recovers his own router(s).

5. One person stationed at the viewing laptop to bring in “customers” and discuss potential uses for BBHN.

6. Extra laptop(s) and ham(s) at the camera location(s) to make any necessary adjustments.

7. A separate communications channel for the mesh network folks.

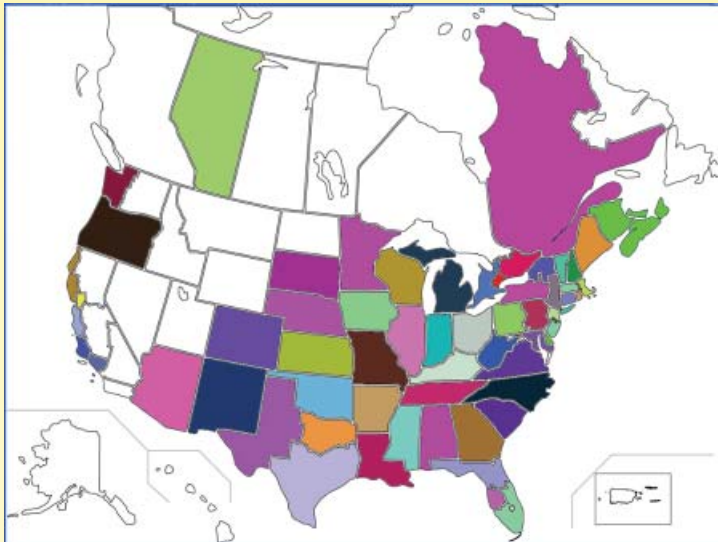
Thanks Clarence for these reports and insights about BBHN activities in Prince William County!

A Few Pictures From the 2015 OVH Manassas Hamfest



More next month!

OVH / ARRL Field Day -- Station Operating Results Wrap-Up



To the left, the colored areas designate the ARRL sections areas for other stations worked / contacted by W4OVH using all modes (Phone/SSB, Digital & CW) and all bands.

Bands used (meters): 80, 40, 20, 15 and 6

Number of contacts made by modes used

CW (Morse Code): 181

Phone (SSB & FM): 128

Digital (PSK31, etc.): 60

Total number of contacts made: 369

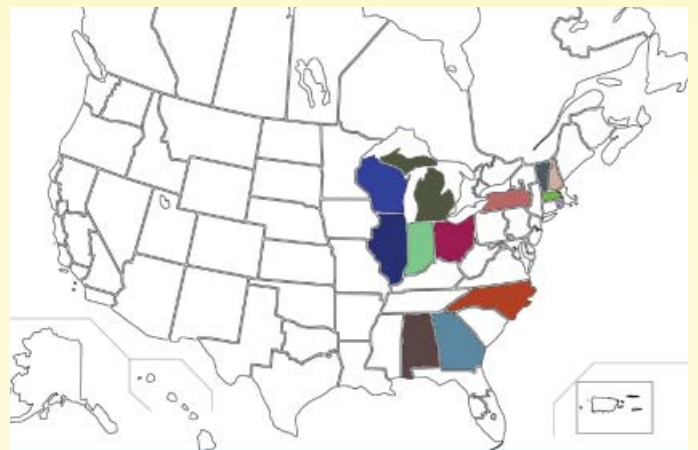
To the right, the colored areas designate the ARRL sections areas for other stations worked / contacted by N4H using all modes (just Phone/SSB was used) and all bands.

Bands used: just 40 meters was used

Number of contacts made by modes used

Phone (SSB only was used): 20

Total number of contacts made: 20



A Few Pictures From the 2015 OVH / ARRL Field Day Event



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More Field Day pictures next month!



The Shenandoah Valley
Amateur Radio Club, Inc.



ARRL APPROVED HAMFEST

65th Annual Berryville Hamfest

Sunday, August 2, 2015

Clarke County Ruritan Fairgrounds
890 W. Main St., Berryville, VA

- GATE OPENS AT 6:00 AM • VENDOR BUILDINGS OPEN NO LATER THAN 8:00 AM

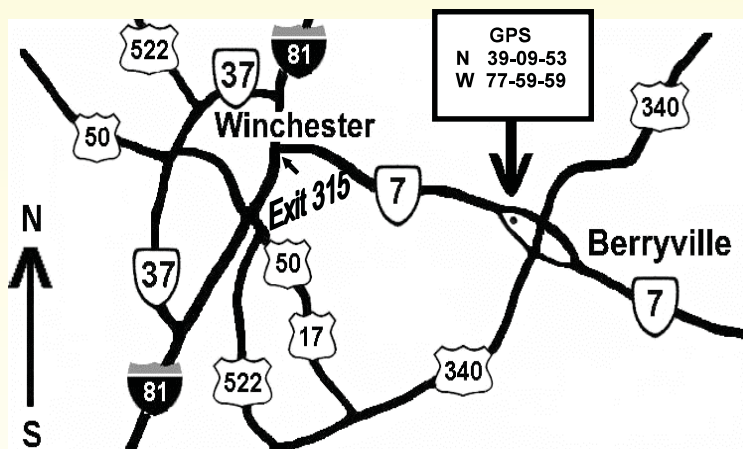


- DONATION \$8.00, children under 16 free
- ADDITIONAL \$10.00 FOR A TAIL-GATE SPACE (First come, first served)
- INDOOR VENDOR TABLES BY RESERVATION (see below)
- SPECIAL HOTEL PRICE: HAMPTON INN (1204 Berryville Ave, Winchester 540-678-4000)
- ADDITIONAL \$15.00 FOR A CAMPER SPACE • **NO Pets, Pornography, or Weapons**

Country Ham & Eggs
Breakfast at 7:00
AM.

Ruritan's famous
chicken & beef
barbecue from
11:00 AM.

Grand Prizes:
HF Rig; VHF Rig;
Power Supply;
and hourly drawings.



VE Exams will be
given by the **Laurel
Amateur Radio Club
VE Team of the LARC
VEC** at the Clarke
County High School.
Walk-ins are welcome.
Testing begins at 12:00
noon. A photo ID is
required.
For more information,
contact John Creel,
WB3GXW@arrl.net;
301-572-5124.

Download this flyer and vendor table forms from: <http://www.shenvalarc.org/hamfest>

For more vendor information, contact: John (WD4GEK) or Elizabeth (W4EHC) Cottrell
BerryvilleHamfest@gmail.com • Phone: 540-436-3818 • If no answer: 540-333-0837