



The Beacon

A monthly newsletter of the Albemarle Amateur Radio Club serving Central Virginia
Celebrating our 52nd Year

August

2015

Our August meeting is set for August 11 at 7 p.m. at NRAO.

President's Corner

By Ed Berkowitz – N3US



On August 8, 2015, the Board of the AARC will meet to conduct our Board Retreat. The purpose of this off-site meeting is for the leadership team to brainstorm and discuss possible future activities for our Club. However, I want such future activities to reflect the preferences of the general membership. So please email me directly at eberkowitz@sbcglobal.net with your comments and suggestions. I am looking for new ideas, such as a Fall demonstration of ham radio in a public setting, sponsoring a regional hamfest, suggestions for meeting presentations, activating some Virginia Summits on the Air, etc.

Also, the Board and Field Day Committee would love to hear your views of this year's Field Day site at the Emergency Operations Center versus recent previous years' operation at the Earlysville Volunteer Fire Station. Please send your comments on Field Day to Larry K4JZQ at tuzlu@comcast.net. Larry will share the comments with the Board and Field Day Committee members.

Since we are more than halfway through the year, we must start planning in detail our December dinner. AJ Miller has reserved a room at the Elks Club on December 8. However, we still need a volunteer to assemble and lead a team to plan the program, door prizes, etc. This would also be a good time to work toward those AARC operating awards.

Even more critical is a volunteer to manage our September 20 picnic at Darden Towe Park.

Elmer KF4UCI has installed two new repeaters on Flattop Mountain: 145.470 (-), tone/tone squelch 151.4 and 444.775 (+), tone/tone squelch 151.4.

The Boys and Girls Club of Central Virginia Cycling Challenge takes place on Sunday, September 13. Please contact Dave Damon, K4DND, at dnd@virginia.edu to volunteer for this important upcoming public service event that will need lots of club volunteers.

Lastly, I want to acknowledge the recent generosity of Ed Hinline AG4N, who donated all his equipment, accessories, components, etc to AARC. Many items will be sold, with the proceeds going to the club treasury, and some items will be used for our raffle prizes. We raised \$93 at the July meeting!

Our VP's Report

by Larry - K4JZQ



Broadband over radio wireless mesh networks and the future of Amateur Radio will be discussed by Keith Elkin, KB3TCB, our speaker for our August 11 meeting at 7PM.

Keith will cover the basic technology, operating concepts, relevant frequencies, and FCC laws that hinder Amateur Radio's ability to fully realize the full potential of

wireless mesh networks. Coming just after our own successful Field Day 2015 event, we are fortunate to have Keith's timely presentation on how Mesh networks could play a critical role during disasters when normal internet or cell phone service might be destroyed or impaired.

MESH is a high speed, self discovering, self configuring, fault tolerant, wireless computer network. Its primary focus is on small ad-hoc network communications. Equipment to build the network is off-the-shelf, low-cost, commodity wireless routers which have been re-flashed with new firmware. When a number of these boxes are turned on, they automatically form a network much like (but separate from) the larger internet. When this happens, any internet data can be passed between the nodes, such as web cameras, VoIP and text messaging. However, for a MESH to really become effective the small MESH networks need to be interconnected with a more traditional wireless backbone.

Wireless mesh networks can be used by urban and rural areas alike to form a local intranet service capable of running voice, data and video on a local basis. Using RF signals to transmit data in a mesh network configuration, an alternative intranet can be created so that vital data can still get through even in the most austere and challenging environments.

Other ham clubs in our region, especially in Northern Virginia and Maryland are becoming very involved in these Mesh projects. Examples include the following:

Active Mesh project pages

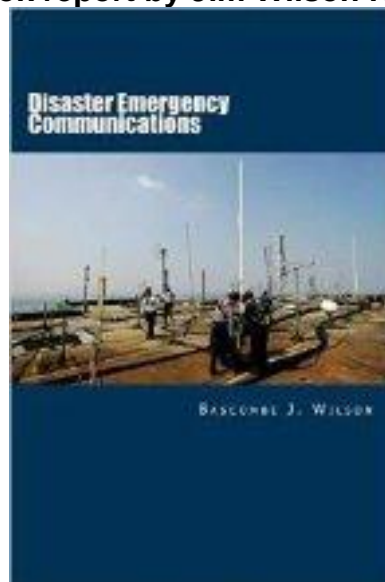
Anne Arundel Amateur Radio Club (AARC)
[Anne Arundel Amateur Radio Club \(AARC\)](#)
 Ole Virginia Hams (OVH)
[HSM-MESH N4TS Powerpoint slides 2013.02.18](#)
 Calvert Amateur Radio Association (CARA)
[Calvert Amateur Radio Association](#)
 Baltimore Radio Amateur Television Society (BRATS)
[5 GHz and Directional Antennas](#)
 HacDC
[HacDC Joins the Mt Pleasant Mesh Network](#)
 Loudoun Amateur Radio Group (K4LRG,LARG)
[Loudoun Amateur Radio Group](#)
 Vienna Wireless Society (VWS)
[Vienna Wireless Society](#)
 Ole Virginia Hams (OVH)
[Ole Virginia Hams](#)
 Central Pa Repeater Assoc. (CPRA), Central Pa IP Network (CPIN)
[Central Pa Repeater Assoc., Central Pa IP Network](#)
 Cambria Radio Club (WA3WGN,CRC)
[Cambria Radio Club](#)

Possibly Keith's remarks can further interest AARC members to get more involved in this Mesh network.

Larry K4JZQ
 VP

Disaster Emergency Communications

A book report by Jim Wilson K4BAV



Last month during a national conference on space communications at the National Radio Astronomy Observatory in Green Bank, West Virginia, a friend of mine, Jay Wilson, amateur radio call sign W0AIR, gave me a copy of his new 2015 book titled DISASTER EMERGENCY COMMUNICATIONS. The prologue states that this book provides “communications planning tools, emergency communications strategies, and practical solutions” to problems encountered during typical emergencies.

As an Amateur Radio Emergency Service member, I recommend that you buy or borrow from the new library a copy of this little book, which is an easy read at only 159 pages long. I believe that Jay's advice is well worth reading. Issues of crisis leadership, decision processes, and communications reliability are examined in detail.

With real world experience from 130 international disasters, Air Force Colonel Jay Wilson, a former university instructor, continues to be an emergency preparedness consultant and trainer to major corporations.

While our club ARES members will likely deal only with local emergency situations in the Charlottesville area, I urge you to think big, to absorb Jay's practical and universal advice. We can learn a great deal from him.

The bottom line from Jay's book emphasizes that emergency communications planning is one of the most important areas for community leaders and emergency managers. To find out what he recommends, read this book. [The book [Disaster Emergency Communications](#), by Bascombe J. Wilson has the ISBN #978-0-615-58702-8.]



This photo was taken in 2002 at Field Day. The location was the Earlysville Volunteer Fire Department. For years it was a tradition that John Gray and Harry Dannals would make the first contacts, normally CW QRP (Of Course).

Picnic and Silent Auction Set

The Annual Club Picnic/Silent Auction has been set for Sunday, September 20, at Darden Towe Park. The large pavilion has been reserved for Sunday afternoon for this club event.

Now is the time to set aside all of the ham gear surplus to your use to place in the silent auction. Each item will have a bid sheet on which you place your bid for the item and at the announced cut-off time, the item will go to the highest bidder. Some items may have a minimum bid set by the seller as the minimum for which the item will be sold. In the end, that minimum may become negotiable.

The club usually provides the main course and each member is asked to bring a dish to share. Times and menu are yet to be announced but we should all place the date on our calendars so not to miss this exciting and rewarding event.

A visit to Berryville

By Jim K4JEC

The hamfest in Berryville was a great success this year with good attendance and great weather.

A good number of our members were seen roaming around the fair grounds – at least a dozen. Anita Webb KM4CWN was seen showing off her door prize of a great looking flashlight. Bob's SUV bearing license plate K4DU was spotted parked along shopper's row with an abundance of items for sale. Elmer Scott KF4UCI was spotted with Gordon Winn WW4GW who had some items for sale. JJ Miller KE4AJM and Michael Gilmore

K8RVR were spotted strolling the grounds along with Bill Woodson K4BLL and Jim Owen K4CGY. Mark Whitis AK4OL was always moving too fast to catch him in a picture.



Gawking, shopping and



. . . and eating were the order of the day. The covered pavilion made a great rest stop as well. Generally, the shady tailgating area made for a pleasant stroll among the vendors.



AJ, Michael and Tim Miller KG4HOT and his friend, Rodney Rockwell N8RAT from Martinsburg, West Virginia, met up for a little rag chewing. Rag chewing, bartering and a little gossip seemed to fill

the air as old friends and new friends met to talk and gawk.



Bob K4DU and his friend, Stuart Gilman W4PR of Manassas and a former Charlottesville resident, staffed a sales table mostly offering W2HD's amateur equipment. It was reported that they had a great day and gave away a whole lot of flashlights which were offered one each to any passing shopper. It seems that Harry Dannals had a thing for flashlights that were abundantly available from his former ham shack.

AARC Meeting Minutes for July 14, 2015

Board Meeting – The Board Meeting was called to order by President Ed Berkowitz at 7:04 p.m. The following directors were present: N3US, K4JZQ, K4PMC, N0WP, K4JEC, and K4BAV.

Items brought before the board:

The president announced he needed a chair for the picnic on Sunday, September 20th to be held at Darden Towe Park pavilion. No one immediately volunteered.

The president stated he intended to appoint a Club Custodian – a volunteer to keep track of all of the club equipment. No one immediately volunteered.

The president announced Ed HineLine AG4N has donated all of his amateur radio equipment to the club. Carter Elliot WD4AYS requested the club's assistance in selling some of his excess equipment and he will donate a portion of the proceeds to the club.

The board meeting was adjourned at 7:19 p.m.

General Membership Meeting -- The meeting was called to order by President Ed Berkowitz at 7:20 p.m. with 23 members present. He called for introductions of those present and asked members to tell us of a new piece of equipment or some new activity they had engaged in.

Secretary's report: Requested approval of the June minutes as published in the newsletter. Minutes were approved as printed. The secretary reported she has added three renewing members to the Master Roster for 2015. Jeff Braun KE6PVT, Joseph Burch AK4CX and Edward Taylor KA4VMP. Fortunately, they were found on the roster and added without data change. We now have 23 Family Members, 75 Full Members, 6 Honorary Members, and 8 Life Members for a total of 112.

Treasurer's Report: In his absence, the treasurer filed the following report with the club.

Balance as of 5/31/2015:	\$6,966.94
Debits:	\$176.50
Credits:	\$60.05
Balance as of 6/30/2015:	\$6,850.49

Other Reports: Field Day Chairman, Larry, reported Field Day participation was very good despite the opening day weather. Overall, he reported that the event was very successful and thanked his committee members for their support. He thanked Jim Owen K4CGY and Bill Pond N0WP for their counsel and assistance from past experience. He read off a list of names of those who made contributions to the success of the event and asked that they be given a round of applause.

Bill Pond reported that June was not a good one for the Technical Committee. The 76 and 895 repeaters went down. The 895 was fixed and placed back in service and they were still working on the 76 machine. He estimated the cost of the new repeater antennas at \$200 and \$300 for labor. He stated he wanted to find a professional to climb the tower and replace the antennas. He stated the new Yaesu Fusion Repeater is on its way to us and it will be placed at the Bucks Elbow Site. The 925 site will get the repeater from the 76 site at Marshall Manor.

Michael Rein KA4JJD went over the raffle items and asked for support for the club by buying tickets. He also said he thought the club should show their appreciation for Larry's Field Day efforts. The club offered him a round of applause.

No new or old business was cited.

The meeting adjourned to a program of ARRL Video Collections.

Respectfully submitted,

Patsy S. Crosby, secretary

Buy + Sale + Swap

For the latest list, be sure to check our listing on the club website:

www.albemarleradio.org

NEW ITEMS & MOST RECENT LISTINGS as of 7/26/2015

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For Sale: posted 7/26/15

BENCHER BY-2 KEYER PADDLE, CHROME BASE.
Excellent condxn, \$75, Ed,
N3US, eberkowitz@sbcglobal.net

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The following SWR/Power Watt meters are for sale from the W2HD Collection:

posted 7/9/2015

Swan SWR-3 Meter \$20.00
Autek WM-1 Meter Computing Wattmeter \$100.00
Diawa CN-801 Meter Cross Needle SWR/Watt \$75.00
Lacks Face plate
Heathkit HM-2140A Meter Dual HF Wattmeter \$65.00
AMD 76860 Meter Field Strength \$25.00
Radio Shack 21-527 Meter MTA-20 Digital SWR \$140.00
M.C. Jones Micro-Match Meter Power Meter \$40.00
Heathkit HM-15 Meter Reflective Power Meter \$20.00
Tucker TM-3000 UV Meter SWR & Watt Meter \$200.00
Heathkit AM-2 Meter SWR Meter \$8.00
Tec Tec AC-4 Meter SWR Meter \$45.00
Kenwood SW-100 Meter SWR Power \$65.00
Micronta 19-320 Meter SWR Power \$20.00
Pace P5453 Meter SWR Power \$8.00
Palomar M835 Meter SWR Power \$75.00
Hy-Gain 421 Meter SWR Power Meter \$10.00
Vanco SWR-2 Meter SWR Power Meter \$15.00
Pyramid Phase III Meter SWR Wattmeter \$5.00
Swan SWR-1 Meter SWR-Power Watt \$10.00 In Box
Bird ThruLine Model 1000a Meter Wattmeter \$125.00
Palstar W150M Meter Wattmeter \$60.00

If you wish to purchase one of these contact Bob Pattison, K4DU at rep4@aol.com or 434-960-3344. Please no calls after 9 pm. This is first come first served.
73 de K4DU

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FOR SALE posted 7/6/2015

I am going to sell my Yaesu FT-7800R dual band 70cm/2m mobile radio in like new condition. Reason for selling is that I want to buy a second Kenwood dual bander so I don't have to deal with two sets of programming procedures, it's a pain. This way I will have the same radio in my truck as in the house. The radio, mike, mounting bracket, original box, operator's manual and separation kit (never used & in the box) all for \$280. Email me if you are interested.
Bill K4FZE William Steo

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The following power supplies are FOR SALE from the collection of W2HD: posted 7/3/15

1 MFJ MFJ-1116 Power Strip \$35.00
2 Alinco DM-112MVT Power Supply \$100.00
3 Jetstream JTPS28M Power Supply \$55.00
4 Ten Tec Model 210 Power Supply \$20.00
5 Diawa PS50-TM Power Supply \$30.00
6 Astron RS-12A Power Supply \$38.00
7 Astron RS-7A Power Supply \$15.00
8 Astron RS-7a Power Supply - 7 amps \$15.00
9 Micronta Power Supply 12 Volts \$15.00
10 Radio Shack 22-508 Pwr Sup 13.8 Volts, 15 amps \$30.00

If you would like to purchase one of these please contact Bob Pattison, K4DU either
By email at rep4@aol.com or call 434-960-3344, please no calls after 9 pm.

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The following Equipment is for sale by Carter WD4AYS: posted 6/28/2015

Knight R-100A General Coverage Receiver & Speaker - \$150
Icom R-71A General Coverage Receiver - \$200
Hallicrafters SX101-A Mark III - \$125
Dentron MT-3000A Antenna Tuner - \$175
RadioShack 10 Meter Mobile Transceiver - \$100
URM-25F Military Signal Generator - \$40
Sencore TR-139 Transistor Tester - \$30
Philco "1940's Console Radio - \$40
The ham gear and the test instruments worked the last time they were used.
The Philco needs some work.
Contact Carter at 434-979-7383 or by email at elliott14@aol.com

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FOR SALE posted 1/27/2015 updated 6/28/2015 Below you will find a list of equipment for sale that belongs to Ernie, W2EIU. Contact Bob, K4DU, 434-960-3344, rep4@aol.com

Manufacturer Model Type Est Value
Alinco DJ-S41 440 Handheld \$40.00
Kenwood PC-1A Phone Patch Controller \$40.00

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HF RIG FOR LOAN posted 4/8/2015 revised 7/19/2015
ICOM IC-730 FOR A LOANER

Ms. Alice Bond, XYL of SK Socky Bond (K4GWL) has asked that a nice Icom IC-730 be used as a "loaner" to a local Ham who wishes to try HF and perhaps doesn't wish, or is unable, to make an investment in a HF rig at this time.
It is Socky's wish that the radio be used to benefit ham radio and is not to be sold or modified but kept under control of the Albemarle Amateur Radio Club so that it doesn't get lost or end up on a basement shelf somewhere and not used.
A name tag with Socky's call sign will be put on the radio in his memory..

If you wish to borrow this nice 80-10 tranceiver (100W output on SSB & CW) for a 6 month period, please contact Ed Berkowitz, N3US, by email with the application form found under the Club Documents section of this website.

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Photo by Jim Wilson, K4BAV

Elected Leadership 2015

Ed Berkowitz – N3US	President	eberkowitz@sbcglobal.net
Larry Eicher – K4JZQ	Vice President	tuzlu@comcast.net
Pat Crosby – K4PMC	Secretary	patcrosby73@gmail.com
Don Eason, Jr. – N4UVA	Treasurer	deason@comcast.net
Dave Damon – K4DND	Director Public Services	2-YR dnd@virginia.edu
Jim Owen – K4CGY	Dir Estate Services	2-YR k4cgy@yahoo.com
Bill Pond – N0WP	Director Technical	2-YR n0wp@arrl.net
Jim Crosby – K4JEC	Director Education	1-YR K4JEC@arrl.net
A.J. Miller– KE4AJM	Director Fundraising	1-YR aj@ke4ajm.us
Jim Wilson – K4BAV	Dir Public Relations	1-YR elegraphjim@gmail.com

Appointed Leadership 2015

Larry Eicher – K4JZQ	Field Day Chairman	tuzlu@comcast.net
Mark Gorlinsky – WA1A	Vol Exam Liaison	mgch@mac.com
Michael McPherson – KQ9P	ARES/RACES	mcperson@acm.org
Jim Owen – K4CGY	Club Stations Trustee	k4cgy@yahoo.com
Ron Richey – K4RKA	Swap Fest Coordinator	k4rka@juno.com
Jim Crosby – K4JEC	Beacon Editor	jamescrosby073@gmail.com
Michael Rein – KA4JJD	Awards Committee	mfr6t@cms.mail.virginia.edu
Mark Whitis– AK4OL	Webmaster	markwhitis@gmail.com

-The End -