



# The Beacon

A monthly newsletter of the Albemarle Amateur Radio Club serving Central Virginia

**Celebrating our 52<sup>nd</sup> Year**

December

2015



Saturday a.m. at Panera Bread and what you might find there.

**The AARC Annual Awards Dinner will be held at the Doubletree Hotel, 990 Hilton Heights Rd, Charlottesville, VA, at 6 p.m. on December 8.**

There may, however, be some instances in which a few team members are capable and willing to do minor tower work, such as hanging a dipole center insulator or changing out a rotor. Safety will be our number-one priority.

Initial team members include: Ed Berkowitz, N3US; Bill Phillips AD6JV; Darryl Youngblood, KE4HTS; Joshua Youngblood, KM4ICH; Bob Pattison, K4DU; Mike Gilmore, K8RVR; Larry Eicher, K4JZQ; AJ Miller, KE4AJM.

If you require any assistance with your antenna projects, please contact either N3US or K4JZQ.

My last topic for this month is one of my pet peeves: the lack of eyeball QSOs among local ham radio operators. Several years ago, I made a business trip to Okinawa, and one of the DXers, whom I visited one evening, took me to the stations of five other DXers on the island. The last operator asked me about ham radio back in Norman OK and specifically wanted to know how many hams were members of my local club. After I replied that we had 80 members, he asked me how many of their stations I had visited. I quickly realized that despite living in Norman OK for 20 years, I had only visited the stations of two other club members; yet in a three-day period, I had visited five Okinawa hams!

I realize we are all busy with work, school, home projects, etc but we really should take the time to visit our fellow AARC ham friends. Everyone's station has its own personality. So consider setting a goal for 2016 of visiting the stations of at least five AARC members. We may want to consider establishing a series of awards based upon working at least five AARC members and visiting them at their stations.

I wish each of you and your families a Happy and Healthy 2016.

## President's Corner

By Ed Berkowitz – N3US



We are approaching the deadline for signing up for the AARC Annual Awards Dinner to be held at the Doubletree Hotel, 990 Hilton Heights Rd, Charlottesville, VA 22901, at 6 PM on December 8, 2015. You can sign up online using PayPal at <https://www.albemarleadio.org/2015/10/27/aarc-holiday-party-tuesday-december-8/>.

Our newly established AARC Antenna Team will assist club members with antenna installations, antenna repairs, changing coax cable, or other issues. We will not replace professional tower installers. Most of our efforts will be related to vertical antennas or wire antennas, such as dipoles.

## Our VP's Report

by Larry - K4JZQ



As we come to the close of the year 2015, I want to personally thank all the hams who have contributed to our education and knowledge about ham radio this year by presenting talks to the AARC membership. We have tried a variety of formats and topics and I hope at least a few of them have inspired you to delve more deeply into that topic at your own ham shack. Feedback is also important in helping to choose future topics so don't hesitate to let me know what topics you liked most and those of lesser importance.

Already we have talks lined up for the first few months of 2016. I'm most grateful for those who have already volunteered to start the year off right, but as usual we need a speaker for every month. Therefore I again appeal to all members to see if they would like to speak on any topic related to ham radio. Please come forth and let me know your topic and when it would be convenient for you to give your talk. Normally presentations run about 30 minutes with a 15 minute question/answer period, BUT if your topic is shorter, do not worry, we can also accommodate you by combining a series of shorter topics in one night if necessary. One individual has already indicated he has an interesting topic but felt it would only take 10 minutes. No problem because we can pair that person with another ham's shorter topic and we all get the benefit from each other's wisdom.

So over the holidays please give some thought to what you might be able to share with your fellow hams by giving a presentation to the group in 2016. We look forward to hearing from each one of you! Even if you don't feel up to making a presentation yourself, I'd very much like to hear from you if you have topics or suggestions for possible future presentations. Also if you know of any hams or even non-hams outside our central Virginia area who I could contact for a speaking engagement, please let me know. The mid-Atlantic region is a rich resource of amateur radio operators with many many years of experience in ham radio. Let's attract them to AARC in 2016 to hear what they have to say about the future of ham radio! We all benefit.

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## AARC Meeting Minutes General AARC Meeting November 10, 2015

Board Meeting temporarily convened within

1. Call to Order at 7:03 p.m. with 34 members present with President Ed Berkowitz presiding.
2. The president asked members to rise and state their name and call to introduce themselves.

**Board Meeting called to order:** Following the introductions, the president called for the board to convene temporarily to approve the minutes of the October meeting. With all members present, the board approved the minutes unanimously. The Board Meeting was adjourned to move on with the General Meeting.

3. Secretary's Report – Asked for a motion to approve the minutes of the General Meeting from October. She presented the application of Robert K Fung, KC2PRE, a transplant from New York who resides at 2065 Commonwealth Drive in Charlottesville and submitted his application online from our website. The membership was approved by a unanimous vote.

4. Treasurer's Report – Don Eason
 

Opening Balance	\$6,199.37
Credits	\$0,199.98
Debits	\$0,392.76
Balance at end of October	\$6,392.15

5. Repeaters Report – Bill Pond reported that he wanted to swap frequencies between Marshall Manor site (146.760) and Herd Mountain site (146.925) as a way to reduce interference with the repeater in Williamsburg on the 146.760 frequency. He has cleared this with SARA, the repeater frequency coordinating association. He said that if this works it could become a permanent solution to that problem. He also explained that the receiver in the new Yaesu Fusion repeater at Bucks Elbow (146.895) is so sensitive that it has the squelch turned all the way down to overcome interference making the repeater almost useless. He is working on a solution that could preclude having to spend \$400 on a filter.

6. President Ed reminded everyone that the Annual Awards Dinner reservations are coming in but not as rapid as he would like. He stated, "We need more people to sign up." The dinner will be at the Double Tree Hilton on Tuesday, December 8, to start at 6 p.m. This celebration will take the place of our December meeting.

7. Appointment of Nominating Committee: Ed announced that Dave Damon will chair the committee with Mike McPherson and Michael Rein serving on committee. He urged any member who is

interested in serving in an elected office to contact:  
[dnd@virginia.edu](mailto:dnd@virginia.edu)

8 Antenna Committee – Ed stated that he has not had any volunteers for the antenna committee yet and is still looking for members who are willing to help other members with their antenna work.

9. The Awards Committee and Maker Faire Report – Michael Rein stated that the Maker Faire display at Barnes and Nobel was a great success and that we should do more of this type public activity. He reported on the Awards to be made at the Annual Awards Dinner and ask for nominations of Special Service Awards and submissions for Operating Awards to be made to him via email:  
[mfr61@cms.mail.virginia.edu](mailto:mfr61@cms.mail.virginia.edu)

10 Pre-Estate and Estate Sales: draft policies – Bob Pattison reported they are working on a policy concerning estate sales and will have a draft copy to present at the next meeting.

11 Future Programs: Larry Eicher reported Mike McPherson will have a program on Mesh Networks in February and Col. Steve Sellers, ACPD Chief of Police will present a report at the March meeting. He urged any member who is interested in making a presentation before the group to contact him: [tuzlu@comcast.net](mailto:tuzlu@comcast.net)

12. Door Prizes: AJ staged the drawing and reported tonight's raffle earned \$60 for the club.

Following a call for any old or new business, the meeting adjourned at 9:50 p.m.

Respectfully submitted,

/s/ Patsy Crosby, Secretary

## Field Day 2015 Results

By Larry Eicher, K4JZQ, FD Chair

This year prior to the 2015 Field Day weekend, discussion centered on whether we should repeat our FD location at the Earlysville Volunteer Fire Department, or relocate somewhere closer to downtown in order to attract more of the public. Mike KQ9P sent me an email giving some past data from the ARRL website on AARC's participation at past Field Days. The data clearly showed that we would probably do better if we were a 3F station associated with the Emergency Communication Center in Charlottesville instead of always being 3A and located in Earlysville. The rationale was based on a larger number of stations in the U.S. involved in the 3A category compared to the smaller sample that worked with emergency organizations; thus their 3F designation. And to increase our membership, we also wanted to expand public awareness of ham radio by locating closer to downtown.

Based on Mike's analysis, we agreed to locate our Field Day at the ECC along Ivy Road this year so we could operate as a 3F station. Many hams have indicated they indeed liked the change in venue but did the location change effect our overall score? The simple answer is "yes".

The latest data results of the 2015 Field Day event have just been published in the December 2015 QST magazine and I found the data most interesting. From the ARRL results for 2015 it appears that by being a 3F station this year, AARC beat 82% of those stations in the 3F category. Had we stayed as a 3A station and come in with the same score, we would have ended up beating 73% of the 3A stations in that category. That percentage is about average for what we achieved in the past as a 3A station although slightly less than we did in 2014. Both percentages, either as a 3A or 3F, are good but it's nice to see that we did better as a 3F station. And that is also remarkable considering that Mike KQ9P, our Digital captain was seriously ill on FD weekend and unable to operate digital mode. So despite that handicap, we achieved a greatly increased position in the competition using only Phone and CW. Obviously we could have done even better if we had had more volunteers working all modes, but then who is complaining! Next year let's try to have more volunteers for all modes, especially CW and Digital so we can really sweep the competition at future FD weekends.

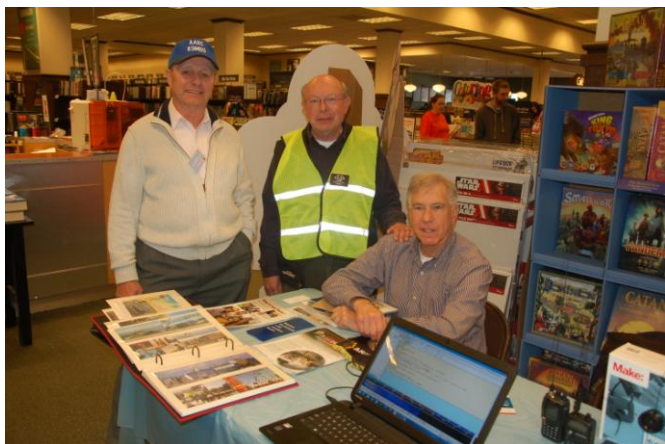
Overall this analysis proves that being 3F does have its distinct advantages -- fewer competitors in that class does increase our positioning compared to other 3F Field Day stations. Also we did get most if not all the bonus points offered this year. And we know we could have done even better if our Digital station had been active. Let's hope that next year we do even better!! Already ECC has invited us to return to their location and we look forward to working closely with them in 2016.

Mike KQ9P has suggested in order to go further up in the rankings, we might want to consider keeping our stations on the air for the full 24 hours and consider trying all-QRP, and/or all battery/solar to get the 5x power multiplier instead of our current 2x multiplier. Certainly these are things that the Field Day committee (to be assembled for 2016) might wish to consider for next year. What is your view? If you are interested in joining the FD Committee for 2016, please contact Larry Eicher, K4JZQ. We are assembling a team now to start planning and preparations for June 2016.

Also on p. 51 of the December 2015 QST there's an article by our own KQ9P who devised an attractive map display for the public with markers appearing on a map representing the approximate locations of stations throughout the US as each W4DO contact was made on Field Day. This is another way to demonstrate the scope of ham radio. Mike is sharing the source code technology of this technology through QST in hopes that other ham clubs will also use it to demonstrate ham radio to the public next year during Field Day. Thanks Mike for all you do for ham radio!

There are many components to Field Day. It's not just a contest but a great time to socialize and have fun as a club. Join the FD Committee and help us not only improve our score but also have fun while improving our emergency communication skills. 73, Larry K4JZQ





## AARC Presents at the Barnes and Noble Mini Maker Faire

By Michael KA4JJD

Although Barnes and Noble at the Barracks Road Shopping Center has previously hosted some smaller events for makers (primarily young people playing with robots), they held their first, store-wide Mini Maker Faire on November 6-8. Jim K4BAV, Director for Public Relations, engineered an invitation for the AARC. We staffed a table on Sunday from 1500 to 1700 hours. Our table was just off the main aisle, in the cookbook and video game sections. This was a good location, as we had more than 50 visitors, and we did not feel overly tempted to make book purchases.



Alan K9MBQ explained the marvels of DX and displayed lots of exotic QSL cards. He also discussed the advanced ham station and the fun of restoring old equipment.



Michael KA4JJD demonstrated entry-level maker projects including an MFJ 8100 World Band Shortwave Receiver assembled from a kit and an Arduino single-board computer with an elementary program that flashed his call sign. Interestingly, B and N had a beginners' soldering set on sale.



Ed N3US described the activities of the AARC, including public service, Elmering, introductory and upgrade courses, and support of "making." He handed out lots of AARC and ARRL material.





Jim K4BAV was dressed in a traditional, 19<sup>th</sup> century telegrapher outfit and attracted many young people (and one senior, former ham) to send code on his straight key. The sound of code drew people to the table.

Larry K4JZQ circulated, talked to many people about all aspects of ham radio, and vigorously invited people to stop by.

Visitors of note included many young folks with an interest in STEM (Science, Technology, Engineering, and Mathematics), who were looking for ways to apply and enjoy these programs outside of their schools. Visitors were impressed by our ability to communicate all over the world (and for free). One fellow's hobby was restoring old tube receivers, and we (especially K9MBQ) assured him of the delight of restoring tube transmitters and receivers. A local Federal judge, a former ham, demonstrated with K4BAV that he could still send CW despite his not having touched a key since 1954!

One of the Barnes and Noble staff kindly informed us that we had many more visitors than did other displays.

AARC should participate in future Maker Faires.



## AARC Members Wow Potential Hams at the Boy Scout Jamboree

by Jim Wilson, K4BAV

On Halloween morning, Saturday October 31<sup>st</sup>, four Albemarle Amateur Radio Club members drove about 30 miles down Route 20 to entertain and inform many young men, potential ham operators, at the 37<sup>th</sup> Apple Harvest

Camporee held at Pleasant Grove Park next to Fluvanna High School. About 400 scouts were camped there in various colorful tents. The weather was brusque but not frigid.



Dennis Terrible WR4I was the leader of this event. Dennis brought along a table and four chairs and two transceivers plus a long wire end fed antenna and a solar panel with battery. His chief transceiver was his Ten Tec Argosy. His back up rig was an Elecraft K1 transceiver.

Club President Ed Berkowitz N3US, and Club Vice President Larry Eicher K4JZQ, and Club PR Chairman Jim Wilson K4BAV each participated in unique ways. Larry demonstrated his two meter transceiver with its simple magnetic mobile antenna. As a demonstration to the boys, Larry chatted with Dave Damon K4DND.

As small groups of boy scouts and cub scouts gathered around the ham radio table, Dennis explained the simplicity and effectiveness of ham radio. Dennis demonstrated that with a small transceiver connected to a solar panel charged battery and a simple wire antenna he could talk to people around the world. Using only 5 watts of power, Dennis made contact with other hams using both voice and Morse code. Two of his contacts on 20 meter CW were with Russian and Belgium. And on 40 meters, Dennis worked a fellow in Georgia then a Special Events Station in New Jersey using SSB. The CW contacts especially excited the scouts.

Jim Wilson was dressed in the attire of an 1860's civilian telegraph operator, which grabbed the attention of the boys. Jim worked with each boy as the scout beeped out his name in Morse code using a code practice oscillator. This "secret language" especially appealed to these eleven year olds, making it a fascinating experience and introduction to ham radio. Most of the boys were eager to tap out additional messages. Some said they had never before seen a telegraph key and had never before heard of ham radio.

We thanked Andy and Randy Smith for inviting the Albemarle Amateur radio Club to be a part of this event. We invited them to invite us back again for the October 2016 Boy Scout Jamboree.

# A Good Five Years

By Jim Wilson /K4BAV

Thank you, members of the Albemarle Amateur Radio Club, for electing me to represent you for the past five years. Serving as your Chairman of the Public Relations Committee during 2011-2012-2013-2014 & 2015 has been a privilege and work of love. I especially enjoyed photographing our many club activities for publication in the Beacon newsletter.

Annual Field Day during the fourth weekend each June has always been the largest event for publicizing and informing the public. But, the most important accomplishment during my five years was preparation of the application that won us the title Ham Club of the Year for 2011. I recall that son Matt and I spent an entire weekend working on that application. Before submitting the application, I asked 2011 Club President Jim Crosby, K4JEC, and knowledgeable long time member, Harry Dannals W2HD to check the application for accuracy and completeness.

Then, with a college degree in Communications, son Matt refined our application and added professional touches to improve the appearance of this very important application.

Finally, there came word from the Dayton Hamvention jury that we had won this valuable title; 2011 was our year to shine! Since then, our club members have continued to both enjoy our hobby and provide the service of amateur radio traditions.

My five years as your Chairman of the PR Committee will end at the end of December and I will pass the torch to a new chairman. Please welcome our new chairman with fresh enthusiasm and your dependable spirit of assistance. Remember that our new 2016 Chairman will especially need your help as Field day 2016 approaches.

Meanwhile, keep on enjoying our unique hobby and supporting its volunteer opportunities for public service. Amateur radio – a rich tradition of fun and public service.

By the way, I spent two days earlier this week at The Beacon Theater in Hopewell near Richmond. This is an upscale, beautiful theater for live performances.

## Buy + Sale + Swap

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

[www.albemarleadio.org](http://www.albemarleadio.org)

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### ==== NEW ITEMS & MOST RECENT LISTINGS as of 11/10/2015

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Posted 11/04/2015 For sale, gently used 1 Terabyte external hard drive, hard drive type with wall wart.. \$25 contact w2pvj Joe at 973-9502

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posted 9/10/2015  
For Sale: Heath HW-101 transceiver with matching HP-23 Power Supply.  
Operational, cosmetically great, and includes original assembly/operations manual. \$200.

Cushcraft 148-20T 2M vertical/horizontal yagi beam; new in box. \$105

From the estate of John Gray, W6UZ and all proceeds go to the club.

Contact Ed Berkowitz, N3US: [eberkowitz@sbcglobal.net](mailto:eberkowitz@sbcglobal.net)

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For Sale or Trade for ??? posted 8/22/2015 8 Element 2 Meter beam - Fair to Good condition - About 12 feet long Marty 434-547-9642

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The following Equipment is for sale by Carter WD4AYS: posted 8/18/2015  
Knight  
R-100A General Coverage Receiver & matching Speaker â€“ \$150  
Radio Shack 10 Meter Mobile Transceiver â€“ \$100  
National NC-109 receiver and matching speaker-  
Sencore TR-139 Transistor Tester â€“ \$30  
Hickok tube tester (needs shorts switch)- \$125  
1940â€™s 37-620 Console Radio â€“ \$30  
Contact Carter at 434-979-7383 or by email at [elliott14@aol.com](mailto:elliott14@aol.com)

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FOR SALE from AG4N, contact person email listed below  
100 MHz Frequency Counter \$25.00 K4DU With power cube and probe, powers up  
VLF Converter \$30.00 K4DU  
Model 444 Microphone \$30.00 K4DU Lacks Screen, 4 Pin female plug  
Vibroplex Original Bug \$75.00 K4DU From New York era, chrome base  
3020 Sweep & Function Generator \$85.00 K4CGY Excellent condition  
Variac \$20.00 K4CGY Excellent  
IO-4550 Oscilloscope \$75.00 K4CGY Works, Needs cleaning including pots, sweep intermittent, alignment  
k4du at [rep4@aol.com](mailto:rep4@aol.com), n3us at [eberkowitz@sbcglobal.net](mailto:eberkowitz@sbcglobal.net), k4cgy at [k4cgy@yahoo.com](mailto:k4cgy@yahoo.com) -- revised list 9/21/2015 --

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The following SWR/Power Watt meters are for sale from the W2HD Collection:  
posted 7/9/2015 revised 11/10/2015  
Swan SWR-3 Meter \$20.00  
AMD 76860 Meter Field Strength \$25.00  
Heathkit HM-15 Meter Reflective Power Meter \$20.00  
Heathkit AM-2 Meter SWR Meter \$8.00  
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  
 If you wish to purchase one of these contact Bob Pattison,  
 K4DU at [rep4@aol.com](mailto: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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The following power supplies are FOR SALE from the  
 collection of W2HD: posted 7/3/15 updated 11/10/2015  
 MFJ MFJ-1116 Power Strip \$35.00  
 Alinco DM-112MVT Power Supply \$100.00  
 Ten Tec Model 210 Power Supply \$20.00  
 Astron RS-12A Power Supply \$38.00  
 Micronta Power Supply 12 Volts \$15.00  
 If you would like to purchase one of these please contact Bob  
 Pattison, K4DU either  
 By email at [rep4@aol.com](mailto:rep4@aol.com) or call 434-960-3344, please no  
 calls after 9 pm.

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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 transceiver  
 (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.

*That's all for now!*

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  
 mcpherson@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  
 Michael McPherson – KQ9P Webmaster  
 mcpherson@acm.org