



# THE AARC BEACON

A monthly publication of the Albemarle Amateur Radio Club

VOLUME 2011, No. 10

OCTOBER 2011

Selected as 2011 Dayton Hamvention "Ham Club of the Year"

## 4 SQUARE ANTENNA SYSTEM



Allen, K9MBQ, did an outstanding job presenting the technical and construction details of his new 40 Meter 4-Square antenna system. Allen is very well known for his knowledge of antennas, DX'ing, band propagation, and how to "work and log elusive DX contacts". Thank you Allen !!

## NEWEST ARRC LIFETIME MEMBER



Dave, K4DND, is being congratulated by Joe W2PVY after being honored for his many years of quality leadership and service to AARC by being presented with a "Life Time Membership". Also present were previously honored lifetime members (L-R) Joe Giovanelli, W2PVY; Harry Dannals, W2HD; and Bob Pattison, K4DU. Jim, K4JEC, also in the photo, presented the award to Dave.

## AARC Meeting

September 13, 2011

### Board Meeting

Jim, K4JEC, called the BOD to order at 7:00 PM. Members present were K4JEC, N4PGS, K4PMC, K4DND, N4UVA, KI5LLB, KA4JJD, K4BAV, AD6JV, and K4CGY.

### MEMBERSHIP MEETING

Call to Order -- The meeting was called to order by President, K4JEC at 7:35 p.m. K4JEC welcomed everyone and asked that all of the newly licensed Hams from this weekend's test session please rise and be recognized.

Secretary's Report - Patsy, K4PMC, reported the minutes of the July and August meetings were published in the Beacon. K4PMC called for corrections or amendments and since none were heard the minutes stand as printed.

Treasurer's Report- Don, N4UVA reported current opening and closing balances.

President's Report - Jim, K4JEC, announced that he had appointed Marty W4MBW as the new AARC newsletter editor and that his first edition has been posted on our website.

### Committee Reports:

VP Report; Greg N4PGS  
Technical; Jim K4CGY  
Fund Raising; Michael KE4JJD  
Public Service; Dave K4DND  
Education; Bill AD6JV  
Estate; Linda KI5LLB

Old Business - Jim Crosby stated: "At this time I would like to ask Joe to place a motion on the floor to approve naming Dave Damon a Life Member of the club and in so doing make any statement he deems appropriate to support his motion. Motion was approved and Life Members were called to the front to assist in the presentation of the certificate.



Stan K2SSB in his "shack"

### Editors Request:

As you may already know, this is only my "second edition" as your new editor. To help me to provide you with interesting articles and news, I welcome your comments and suggestions. And, of course always welcomed are articles and inclusions you would like to share with the Membership.

Please forward emails to [w4mbw@arrl.net](mailto:w4mbw@arrl.net).

73 and "thank you"  
Marty W4MBW

## DX NOTES - SEPTEMBER 2011

September 15, 2011

### DX NOTES

Latest info on propagation indicates rising sunspot numbers – a good thing for working DX. This is a good time to install new antennas and do maintenance on the ones you have before the cold weather sets in. Recent stormy weather and Lightning hits and resultant damage to equipment some club members have experienced should be a vivid reminder of the importance of a good ground system and the value of bypassing all coax and control cables with appropriate shunts (e.g. Poly Phaser, Alfa Delta – available from all Ham Radio stores). Also,

if you have only a single ground rod as your station and/or tower/mast ground, I encourage you to do some homework and add rods and copper ground wire!! This is a lot less expensive than replacing “smoked” equipment, notwithstanding insurance reimbursement.

So, on to some upcoming DX of interest:

**P29FR** – Papua New Guinea is active until Mar 2012 on 40, 20, 15M SSB. QSL to I2RFJ. See QRZ.com for details.

**PJ5** – St. Eustatius and Saba Islands will be on from Saba Oct 19 to Nov 4. Operators – Wlodek (SP6EQZ) and Janisz (SP6IXF) will operate on all HF bands on CW/SSB/

RTTY with 2 hi-power stations. QSL to home calls.

**T6** – Afghanistan: several stations either are or soon will be on the air

**T6MO** (K9GY) is operating on 40, 17, 15, and 12M CW.

T6LB (WB8LES) is expected in Oct on 40 & 20M. See QRZ for details.

**T6BP** (9A3PM) is on now until Apr 2012. Branko is in the Croation Army so has limited time; operation is CW and digital. QSL to 9A6AA.

**TL0CW** – Central African Republic. Rudi, DK7PE, will be on from Oct 26 to Nov 3. He will focus on 160 & 80M but will likely operate on the higher bands. QSL to home call. Web site is [www.roody.de](http://www.roody.de).

Other DX info can be found in the ARRL weekly DX bulletins, QST’s DX column and CQ Magazines DX section.

Also, since there was a question about “Penetrox” during my 40M 4 Square pitch at the last club meeting – it is available in all Ham Radio store catalogs, and also at Loews and electrical stores locally under the name of “NOALOX”. This liquid compound is an anti-oxidant for use with Aluminum-Aluminum and Copper-Aluminum connections.

Good luck and see you in the pileups.

73, Alan K9MBQ

## PRESIDENTS LETTER

President’s Comments for October Issue

This will go down as the AARC’s public service year to remember with an even dozen events in one year. The club support has been very good and now with the Ultra Race of Champions of well over 16 hours alone is behind us, we wrap up an unbelievable year for public service. The Ultra Race at Wintergreen is a new version of the Great Eastern Endurance Race which we have served for several years. The ramp up to the Ultra drew internationally ranked runners and a whopping field of well over 300 total competitors. With the international attention and the new location, it became a bit difficult

for our crews with new challenges in a totally new environment. However, we came through.

It will probably come as good news to our loyal members that we will not be begging for help with events until next year at the Cruise-In. Looking ahead, the next big event will be our Annual Awards Banquet at the Elks Lodge on December 13. That is a date you will want to put on your calendar now so you can keep it clear for the really big fun event of the year.

It is not too early for us all to start thinking about officers and directors for 2011. The Nominating Committee will be named at the November meeting and present a full slate at the Annual Meeting

on January 10. Clubs live or die by the quality of their leadership and we have had some really good leadership in the immediate past dictating that we need to work at keeping the quality of our leadership very high.

This year has rolled along so fast, I can’t believe we have spent our summer and are heading into fall so soon. My calendar seems to shed its pages so fast, I am a bit overwhelmed at times. I wish we could put a variable resistor on the clock motors to slow them down so I could view my life in a little slower motion. It seems I am living the truism “the older you get, the faster time flies.”

Our Extra Class has gotten off to a great beginning with

eight eager students showing up to soak up the knowledge being shared by our instructors. Kudos’ go to Bill Phillips (AD6JV) and his committee for a really big effort as our Education Director. Our Technician Class was a great success with all but one showing up to successfully pass the FCC Exam to get their license. The one missing student had to fly off to Boston to get married but promised that she had lined up an exam there and fully intended getting her license.

I would really like to duplicate that effort early next year to keep a flow of new techs coming into the hobby and hopefully

**PRESIDENTS COMMENTS; CONT.**

our club. We are over 120 members now and climbing toward our 130 goal. Along this thought, I hope we can produce a fast paced, hard hitting presentation on "What Is Ham Radio?" that we can take to our community clubs and organizations to raise the club's identity with our public. We really need to sell our hobby and its public service to the communities we seek to serve to create a fa-

vorable public image and hopefully recruit a few new amateurs along the way.

Our Technical Committee have had their challenges this year with creepy crawlers, vegetation and lightning inspired voltage surges finding their way into our repeaters coupled with the move of the Martha Jefferson Hospital to their new facilities on Pan-tops Mountain. Our new 146.895 repeater on Bucks

Elbow is working like a charm and proving to be a great upgrade from the old machine that it replaced. So much to do and so little time to get it done seems to be the cry of this hard working committee.

That's what I love about this hobby. There is always something else to challenge you and keep you young

Jim K4JEC

**NEXT AARC  
GENERAL  
MEMBERSHIP  
MEETING WILL BE  
HELD ON TUESDAY,  
OCTOBER 11, 2011  
STARTING AT 7:30  
PM AT THE NRAO  
( NATIONAL RADIO  
ASTRONOMY  
OBSERVATORY )  
520 EDMONT  
ROAD,  
CHARLOTTESVILLE,  
VIRGINIA**

**BOD MEETING @  
7:00 PM**

**WELCOME NEWLY LICENSED OPERATORS:**

JIM ARTHUR	KK4EDR
TRAVIS KOSKO	KK4EDW
IGNAC JAKOVAC	KK4EDX
ROLAND BEARD	KK4EDU
SUSANNE ZIMMERMANN	KK4EDV
JAMES LAWRENCE	KK4EDT

LISTEN FOR THEM ON OUR CLUB REPEATERS AND PLEASE GIVE THEM A HEARTY WELCOME AND CONGRATULATIONS.



**AMATEUR EXTRA LICENSE CLASS**



AARC is conducting a six-session course to prepare general class licensees to take the Extra Class VE exam November 12, 2011.

The text is the ARRL Extra Class License Manual Ninth Edition. See me if you don't have a copy or you can order them directly from ARRL.

Thanks,  
Bill Phillips AD6JV

(See page 4 for more details)

**October AARC Meeting special treat:**

The final meeting agenda for the October 11, 2011 AARC meeting has not been finalized at this time. Two very interesting options are presently being discussed so "please join" us and prepare to be entertained and informed by the presenters.

## AMATEUR EXTRA CLASS SCHEDULE

**Session 3** 04Oct11 Chapter 5, pgs 5-18 to end & Chapter 6 Digital Logic, Optoelectronics, Electronic Circuits; Instructor will be Dennis Mennerich

**Session 4** 18Oct11 Chapter 7 and Chapter 8 Radio Signals and Measurements; Radio Modes and Equipment. Instructor will be Alan Swinger

**Session 5** 25Oct11 Chapter 9 Antennas and Feed Lines Instructor will be Will Seay.

**Session 6** 01Nov11 Chapter 10 and Chapter 11 Topics in Radio Propagation; Safety. Instructor will be Bill Phillips

Classes are held at the Charlottesville/Albemarle/UVA ECC

Tuesdays 7:00 PM to 9:00 PM

## AARC Club Nets

### **Monday-Night Information Net:**

The Information net is held every Monday night at 7:00 PM local time on the 146.760 repeater. Your regular net control, W2HD, brings you news from the ARRL Bulletin and W2PVY provides the Amateur Radio newslines in real audio format.

### **Northern-Piedmont Emergency Net:**

The Northern-Piedmont Emergency Net meets every Thursday evening at 8:00 PM on the 146.76 repeater. The NPEN is a directed net with rotating net-control intended to assist local amateurs with building emergency operating capabilities.

### **Northern-Piedmont Emergency Digital Net:**

A net digital format Emergency Net session is being tried on Tuesday evenings at 7:00 PM on the 146.895 repeater. Lots of fun and we are learning as we go.

## Wouxun is my new friend.....By Jim Crosby (K4JEC)

Pat (K4PMC) and I went to the Virginia Beach Ham-fest on September 17, primarily to distribute flyers for our Virginia Ham Radio Cruise-In. The date also coincided with my birth date for a little stroll on the beach of the York River and the Atlantic Ocean.

At a previous public service event, Elmer Scott (KF4UCI) had loaned Pat his 2-Meter/70-Centimeter Wouxun handheld radio to use to coordinate between the two frequency bands for a bike event. She liked it very much because of its ease in use on both bands. I examined it and announced that it would be a great addition to our radio inventory.

Roaming around the exhibits inside the ham-fest, I spotted a large sign offering this dual band, dual frequency, dual display and dual standby handheld unit labeled Wouxun for \$105. I kind of drew Pat toward the sign and when she realized what I was steering our course toward, she announced that if it was what I wanted, it would be my birthday present.

The vendor was very helpful. He stated that in his experience with many users, the supplied antenna was quite adequate to all

use and that an after market one really didn't do much for the performance. While examining all the accessories, we decided on the basic radio and an AA battery pack to supplement the included rechargeable battery pack. The total cash price was \$115.

That was the easy part. The hard part started when I got my new prize home and started to program it. After a couple of hours, I fell asleep and woke up in time to make the pre-event meeting for the Boys & Girls Club Bicycle event early Sunday morning, September 18. Upon arriving at the Old Trail site, I immediately handed my new radio to Elmer. He said he thought he might get a couple of repeater frequencies in it for use at this event. When I got back to him a little later, he confessed that he was going to take it home and program it with the computer cable and software he had for his. This made me feel better because before this I had felt like a complete failure in not being able to get anything programmed into it

myself. I am really glad I have friends like Elmer.

That evening after the bike event, I got on the internet and Googled Wouxun. To my delight, they have a [www.wouxun.us](http://www.wouxun.us) website where you can purchase their products and accessories shipped from within the USA direct to your door. Their price is \$110.95 for the KG-UV2D with free shipping. Their price on the cloning cable, programming cable, extra battery packs, etc. – all were very reasonable. They offer the programming software in a free download – an absolute must to retain some sense of sanity.

I was also delighted to find an audio reproduction of the correct pronunciation of Wouxun. The lady says, “Q cheng” very clearly and distinctly. You just have to hear it a couple of times and you can pick it up for yourself. I now realize that most of us are pronouncing it very wrong. Go to their website: [www.wouxun.us](http://www.wouxun.us) and select the tab at the right “Pronounce Wouxun” and you will hear the correct pronunciation of the Chinese word.

## JIM CROSBY—CONT;

Scouting around the internet, I also found the website: [www.kingsqueak.org/about/amateur-radio/programming-the-wouxun-kg-uvdlp/](http://www.kingsqueak.org/about/amateur-radio/programming-the-wouxun-kg-uvdlp/). What a boon that turned out to be. Some smart Alec put the programming information in an American version of English as straight forward as a swift kick in the posterior. I downloaded it and printed it out for convenient reference. It should be pasted in the back of every Wouxun

owner's manual.

After all is said and tried, the radio is an unbelievable bargain when compared to the best features of all the models currently available – a dual band, dual frequency, dual display and dual standby radio covering two very popular ham bands of 144-148 & 222-225 MHz or 144-148 & 400-480 MHz. It is supplied

with a drop-in charger, rechargeable battery pack, high-gain antenna, belt clip and hand strap. Although unadvertised, it can transmit and receive on the Civil Air Patrol frequencies, marine frequencies and others too numerous to mention. Once programmed, it is a pleasure to use. For entertainment, it also offers the FM broadcast band. Jim K4JEC

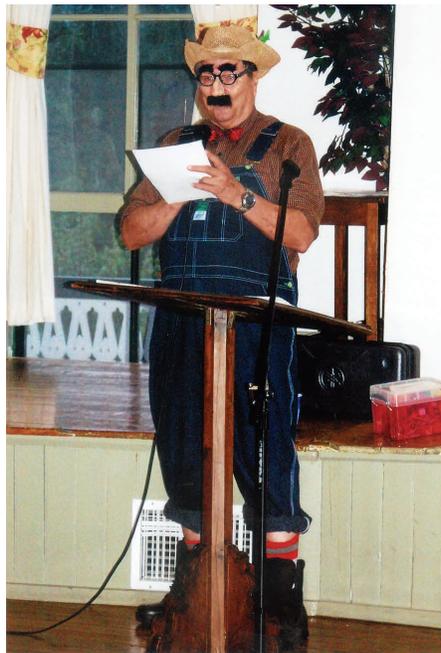
## THE PROFESSOR SAYS, "LET 'S COMMUNICATE"

### Communicating Formal Traffic

Having just completed a record number of public service events, it is time to reflect. Did we fulfill the missions to the best of our ability? Do we need more public service committed members? Could we find ways to do things better?

According to reports from the agencies served, we exceeded their expectations. The compliments, thanks and expressions of appreciation were abundant. But, our expectations are always higher than the agencies served because we know how well it can be done and must always work to improve our performance. After all, our performance during public service events always serves as a prelude and training for the real situations of a man-made or natural disaster where our communications become critical. That is not to say that at various times during our public service activities, accidents happen and the nature of our communications can suddenly become critical without warning.

While never failing to fulfill our obligations to the agencies served, we have been critically short on numbers of members committed to the activity. Recognizing that among our membership, one finds many different interests such as DXing, rag chewing, brass pounders along side those interested in



public service communications. Our public service committed members at times can be very thin when compared to club commitments to served agencies. Our Public Service Director has really had to dig and beg for help during some of our activities this year. One must understand that club activities are just one area of commitment competing for time with employment, home life, family and other personal interests; and there are times when a specific member must be excused to meet those other obligations. The an-

swer to a man-power shortage due to these factors is to increase the talent pool. We can do that in two ways: 1.) Recruit, recruit and recruit to increase the talent pool, and 2.) Train, train and train to build the confidence of those hesitantly standing back for fear of embarrassment.

Speaking of training, it is through training that we can answer the last question posed above – as good as you can be, you can always polish the apple with improved performance. In this last public service event, we were required to pass a great deal of traffic involving critical data in the form of numbers. While the end result was acceptable, problems with the form of transmissions added to a lot of extra air time that slowed the flow. The specific form of transmission was left to the individual's choice with no clear definition or consideration of the end use of the transmitted data. Much of my radio career has been involved in critical data transmissions with the Coast Guard and much less rag chewing on the ham bands making me very sensitive to the problems of lack of use of prowords, form and sounds of numerals and the phonetic alphabet. In critical transmissions of data, these internationally accepted practices really make a great difference in accuracy and efficient use of air time.

## LET 'S COMMUNICATE; CONT.

Quoting the ARRL's Operating Manual, "Amateur Radio has a unique responsibility to render emergency communications in time of disaster when normal communications are not available. Progressive experience can be gained by helping with public service events such as message centers, parades and sports events. Besides serving the community, participation teaches skills that can be applied during an emergency. Public service events are ideal training grounds for amateurs interested in providing emergency communications because they can realistically practice tactical communications.

Unfortunately rag chewing on the air and participating in informal nets teaches us bad habits for emergency communications. It requires a complete mental transition and that requires much practice. Athletic trainers know that poor practice makes for poor performance. The more you practice poor technique, the harder it is to learn good technique, because it takes more time to unlearn the bad to replace it with the good and that is exactly what we all face in making that transition to more formal emergency traffic communications. If we are really serious about preparing ourselves to be competent emergency traffic handlers, we must seriously address this transition.

What were we lacking during our last public service event? A standard form for the log is absolutely necessary. The form of the log must be exact between the sender and the receiver so that data transmitted flows in the exact manner the receiver has to enter it into his/her log. In our case some sent the runner numbers followed by the time. In others the time was stated first followed by the runner numbers contained in that time group. The latter is the way it should always be done. In a log, the time entry comes first

followed the identifier for the transmitter, followed by the data applicable to that time entry. Each initiator of data should have a clipboard with blank log sheets in the agreed upon form. Each receiver must have exactly the same log format so the data flows in the same pattern. This offers a complete and recoverable record at all points in the chain of communications – an absolute requirement when handling emergency traffic.

The log can simply be a ruled sheet of paper like a note pad with time entries at the extreme left edge of the paper followed by the sender ID followed by the data entry pertaining to the time period.

Each new entry is preceded by the time entry and followed by the data. A note pad with bound sheets is best because the continuity is maintained in order with the flow of time making recovery of previous entries easy to locate. For example:

The receiver's log should always include the sender's ID. The sender's log need not show the send ID because it is always the same however when receiving a transmission knowing who and where it came from is critical to recovery of data. For Example:

<u>Time</u>	<u>Sender ID</u>	<u>Message/Date Sent</u>
0902	RS-1	Runner 12 recorded here
0902	RS-2	Runner 5 recorded here
0906	RS-4	Lost drivers license
0908	RS-3	Need water here ASAP

The transmitter should state: "Start/Finish, this is Rest Stop 1 with traffic." When acknowledged by Start Finish with "Rest Stop 1 send your traffic" Rest Stop 1 simply reads his log entry in the form it is recorded such as:

At 0902, we had runner one two at this location."

When Start/Finish acknowledges your

transmission, you have the frequency until you conclude your transmission with the PROWORD "Clear." The PROWORD "Over" means you have concluded that specific transmission and require a response. The PROWORD "Out" is only used when you are shutting down your station and will not be receiving any further transmissions. Clear, over and out are very important prowords and should be committed to memory and used because they are clear, concise and save air time when traffic is flowing at a steady pace.

Numbers are always transmitted as individual digits because the receiver has to record them in that manner. There is no twenty-two, or five hundred twenty-one because it slows down the entry by the receiver and contributes to inaccuracy. If you say five zero zero that is recorded as a 5 0 0 making it faster to write than sent as tenths, hundreds or thousands. The letter O is a letter. The number 0 is zero to distinguish the two and should never be transmitted as O.

Memorizing the Phonetic Alphabet is very important to emergency communications because how else can you transmit the last name of Smythe and distinguish it from the last name Smith because they are spoken the same. Most of us suffer from the Kilowatt Zed syndrome and while it sounds cute and old timerish, it is not the best way to convey information accurately and is frowned upon in emergency communications.

I am far from perfect and stray as often as any other ham in proper procedure and technique. Please help me become a better emergency communicator by pointing out my straying off the path from time-to-time because without your help, I cannot polish my own apple.



## The Beacon Mission

The official newsletter of the Albemarle Amateur Radio Club, Inc. will strive to communicate with, enlighten, and entertain the members of the club in strict compliance with the official word of the club as set forth in the Articles of Incorporation and Bylaws as administered by the officers and directors who constitute the Board of Directors. The newsletter shall be published monthly on or before the 1st day of the month of issue. The deadline for submissions shall be the 25th of the month preceding the month of publication. The primary role of the publication shall be to promote upcoming activities, report past activities and accomplishments of the club and its members, carry the minutes of the preceding month's Board Meeting and General Membership Meeting, include an official club calendar of the month, as well as, become a recorded history of the club by the archival of all past issues as paper copies contained within a single notebook for each year of publication.

### AARC Club Repeaters

146.760 (-) 151.4 Hz Tone

146.925 (-) 151.4 Hz Tone

146.895 (-) 151.4 Hz Tone

224.760 (-) No Tone

444.000 (+) 151.4 Hz Tone

444.250 (+) 151.4 Hz Tone

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**Marty Wangberg W4MBW.....Newsletter Editor**

**Bob Dorsey.....Newsletter Editor Emeritus**



**AARC 2011 Elected Leadership**