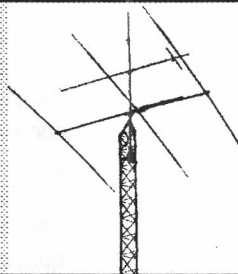# The AARC Beacon

Amateur Radio News For Charlottesville and Albemarle County, Virginia

Volume 2001, No. 12 ~~~~~~~~~~~~~ December 2001

Inside this Issue

Meeting Notice

The next regular AARC meeting will be held on December 11 at 7:30 PM at the NRAO building at UVA.

There will be no guest speaker at this meeting. Instead, the program will consist of technical questions (by anyone) and answers (by experts). For example, I have questions with baluns. Please have 3 x 5 cards, or small-size notes to give to the President before the beginning of the meeting. He will read a question and someone from the membership will, hopefully, answer. We can deal with as many Q&A's as time or expertise permits. See you there!!

AARC Dues are Due for 2002

AARC Dues are due January 1, 2002.

The dues are the same as this year. $20 per individual adult and $25 for family (2 or more adult Hams who are Members.). Additional donations are welcomed.

Dues are payable to AARC and should be mailed to:

Ralph Traylor, K4CFE, 4535 Woods Edge Road, Troy, VA 22974 or hand delivered to him at the December Club meeting.

Dinner Meeting In January

Most likely, the Winter Dinner will be held as the January meeting once again. Chances are it will be held in the same location, now that the Wood Grill Buffet is located in the previous Old Country Buffet building.

Watch for further specific details in the January newsletter, listen to the nets and check for announcements at the December meeting.

The President Speaks

Stan, K2SSB

The end of the year has almost arrived. A new group will take over responsibility for running the Club. Several of the new officers and Board members will, I believe, be serving for the first time.

I extend my thanks to those who helped me through the year. Special thanks must go to several people who will be stepping down. Vic, N3DFS, did a good job in producing interesting programs. He also was available each month to take over when I had to be out of town.

Joe, KD4RWX, leaves the post of Secretary after at least four years' service that I know of. He also edited the *Beacon* and maintained the membership database. Both of these duties require largely invisible devotion. He has set a high standard.

My best wishes go to Bob, K4DU, and his new team.

73, Stan

Veep Peeps

Vic, N3DFS

Hams Participate in Damage Assessment Course

The Damage Assessment course was conducted by the Executive Director of the Central Virginia Chapter of the American Red Cross, Keila Rader, on Tuesday evening, November 20. Four Amateurs were among those attending: Tom, WB5BNT, Elmer KF4UCI, Jimmy, K4JMY and Vic, N3DFS.

We learned that the damage assessment program really needs amateur radio. A Ham can move through an affected area, with another person as driver (trained or untrained, Ham or not). The Ham can make the general area survey as well as the individual building assessments. When the assessment is completed, it can be called in. There may then be a need to assess another area; those instructions can come by radio, thus saving critical time.

The course consisted of an overview, Red Cross and civil requirements, a series of damaged buildings with different damage to each, certain forms and how to complete them, and how to report the findings.

When Keila was Executive Director of a chapter in southern Alabama, they based their communications on cell phones. When a hurricane hit, cell towers were among the first things to fall, then the landlines. They had no plan for amateur radio, but local Hams came to the rescue. From that day forward, amateur radio was a part of their plan.

I believe all who took the course, especially the Amateurs, gained additional appreciation for the work involved in disasters, from those adversely affected to the communications requirements.

Dick, K4EBL

Glad to note that Dick/K4EBL is hale and hearty after his quadruple bypass at UVA. By the time this reaches you, he will have returned home and gone for long walks.

GET WELL SOON, Dick!

73, Vic

C'Mon Now...Let's Beat 'Em To It

Harry, W2HD

Turkey Day is over, the big holiday season is around the corner and year 2002 is on the calendar ready to be recognized. I'm sitting here in front of the keyboard and 'scope trying to figure out what might be a good ending for the old year, or better yet, a better beginning of the New Year! In past year-end columns, the subject has usually been New Year's resolutions and their relation to Ham Radio. This might not be too different, but a little twist seemed in order.

First of all, you are probably wondering what in the world is meant by the title of this column or is it just one of Harry's ways of attracting attention. Yes, the secret is out! It's really an attempt to tell you what's coming without telling you what's coming! There he goes again (I can hear the screams as you read the words.)... playing games with us.

Well, not so fast now! You could be wrong you know and I may be planning to collect for the W2HD Foundation! That's not such a bad idea as the words are re-read.

Well, folks, let's get down to the facts! The title could have been "Volunteering," "Did I hear someone calling my name?" or something like those titles. Actually, our new Prez-elect, K4DU, who becomes our official President on 1-1-02, is probably burning a few midnight candles investigating our AARC Club Directory looking for talented persons among our members to handle the various tasks of running the Club during the new year. After all, it is much more than one person could ever handle... even a multi-talented Prez such as K4DU!

So, now the secret is out. This column is asking you to consider your own talents and make them available to the Club for the New Year. Indeed it is called **VOLUNTEERING** and it's really not too painful because you get to do what **YOU** want to do. Without going into a list of potential positions requiring assistance, let's just consider an item or two without lots of details. The AARC did not have an entry in Field Day 2001 and it is the first time in recent history that

such has been the case.   How about considering the position of FD Chairman (No, I'm not being sexist... make it Chairperson if you wish or just plain old Chair.) What are the requirements? Simply put, they are getting others to do the work while someone keeps a hand on who's doing what so that all equipment, personnel and other details are covered.

Another item is publicity and media contact. Our club does a lot of good work in the surrounding communities, but not much is printed in newspapers or covered on the TV or Radio. News people will tell you that in selling newspapers it is important for them to have the who, what, where, when and how questions with answers provided to them. Folks then buy papers to see their stories in print. TV/Radio is somewhat similar. We have had club members highlighted on camera and in the studios discussing Ham Radio and what we are all about. This can be a really fun job. You may have to fight off "El Presidente" for exposure, but the club will benefit either way.

There you are, members. Just two items out of a list of many which require attention. Can you do either of them or something else you may think of... teaching, on-the-air demonstrations at public service meetings, scout troops or local schools?

OK, so what about you (W2HD). What are you going to do? Well, folks, I've done a little bit of all of the jobs and lots of some of them. It is hoped that assistance can be given to those of you with questions. Questions?

73... /s/ Harry, W2HD

License Renewal Info

From ARRL HQ, via Joe, KD4RWX

The following information applies to renewing your Amateur Service FCC license, changing your license address, call sign or name, or requesting a duplicate license. Amateurs have several options for renewals or filing changes. They include:

* As a free service to ARRL Members, ARRL Members may complete and sign an NCVEC Form 605 (http://www.arrl.org/arrlvec/ncvec605-3.pdf) and return it to ARRL HQ. ARRL HQ staff will in turn file the application data electronically with the FCC. The processing time will take only a few days or less once the application reaches ARRL HQ. Send such applications to: ARRL VEC, 225 Main St, Newington CT 06111 USA.

Non members are welcome to first sign up for membership and then use this service. For membership info, including an on-line membership application, see http://www.arrl.org/join.html. For NCVEC Form 605 see http://www.arrl.org/fcc/forms.html. If preferred, non members can mail a check (or the credit card charge info) for the applicable current membership rate for themselves in the same envelope with a completed NCVEC Form 605 and

ARRL HQ will immediately process the membership request and shortly thereafter the NCVEC Form 605 FCC license renewal/update request. Vanity requests must still be handled separately by mail or on line directly with the FCC (or via someone serving as a filing agent, such as the W5YI Group).

* All Amateurs can apply by mail with FCC. To place your request by mail obtain an "FCC" Form 605, complete it and then mail it to: FCC, 1270 Fairfield Rd, Gettysburg PA 17325. This is a free FCC service. FCC Form 605 can be obtained via http://www.arrl.org/fcc/forms.html or ftp://ftp.fcc.gov/pub/Forms/ or via fax to FCC's Fax-On-Demand system at 202-418-0177 (request form number 000605).

* All Amateurs can apply via the internet. The FCC accepts submissions electronically via their Universal Licensing Service (ULS) system. You may file requests via: http://wireless.fcc.gov/uls/. To use the on-line ULS system, you must first be sure you are using a web browser which FCC indicates is fully functional for ULS use (FCC indicates that at present only recent versions of Netscape {vers. 4.7x work well} are fully tested and functional); you must then registered in ULS, which involves supplying your Taxpayer ID Number (TIN) which is your Social Security Number to FCC. To do so choose the "REGISTER, TIN/Call Sign" link and then complete your registration information (ignore the contact person, and SGIN references). On the next page enter your call sign and lastly print out the final page for your records (that last page shows your TIN/SSN, Licensee ID Number, Password and Personal Identifier for any necessary future reference). Once registered, you must then choose the "FILE, ULS Filing" link to perform your on-line transaction with FCC. During the filing process the FCC system will download to your PC special software to automatically run a JAVA security applet (this will take a few minutes depending on your connection speed) which will update files within Netscape to cause a smoother flow of data between your computer and the FCC ULS server. Any on-line filing technical problems can be directed to FCC Tech Support weekdays at 202-414-1250. If you are unable to complete a successful on-line filing session in ULS, consider mailing a hardcopy "FCC" Form 605 to FCC (or apply through the ARRL per above). Be sure to print a copy of your on-line renewal request for your records.

Processing time can vary depending on the FCC's workload. If you file your request electronically, the FCC may take only a day or two to modify your license or process your request. If you file by mail, the FCC might take a few weeks to process your request. If you have not received your updated or duplicate license within 12 weeks, you may contact the FCC for guidance on how to proceed. The FCC may be reached by telephone 1-888-225-5322 or by fax to 717-338-2696, or by writing to: FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245. Be sure to keep a copy of your as filed "FCC" Form 605 request for your records.

FCC Form 605 Step-by-Step Guidance (these are the usual responses to the items requested on FCC Form 605):

Item 1 - Enter the code "HA" if you do not have a Vanity call sign. If you now have a Vanity call (a call sign you obtained in 1996 or after for which you paid a Vanity fee) sign enter "HV".

Item 2 - For Renewals Only enter "RO", for Renewal with Address/Call/Name change enter "RM", for Administrative Updates of Address and/or Name change enter "AU", for Modifications/Changes including a Call Sign Change enter "MD", for Duplicate license requests enter "DU".

Item 3 - N/A

Item 4 - Ignore

Item 5 - Enter your present call sign

Item 6 - Ignore

Item 7 - No

Item 8 - No

Item 9a - Enter your Social Security Number.

Item 9b - Ignore

Item 9c - Enter your CORES FRN number if you have one - else ignore

Item 10 - Enter - I - Individual

Item 11-18 complete as appropriate (ignoring 12 and 13)

Item 19 - Ignore

Items 20-22 are optional

Item 23 - No (we are not exempt, it's just that our fee is presently set to zero)

Item 24 - No (we are not exempt, it's just that our fee is presently set to zero)

Item 25 Print your name. Ignore title

Item 26 - sign your name

Item 27 - enter the date

Unless you are applying with this application to receive a Vanity call sign, ignore Schedule D.

If completing Schedule D:

Item 1 - No

Item 2 - Check the application category

Item 3 - If you checked category E or F in Item 2, enter from one up to 25 choices in your order of preference in this section. *Note:* Vanity requests take 18 days from the date FCC receives the application. Don't forget to include the appropriate Vanity fee and FCC Form 159 when filing a request for a Vanity call sign. For more Vanity information see http://www.arrl.org/arrlvec/vanity.html

Margie Bourgoin, KB1DCO

ARRL Club & Educational Correspondent

Phone: 860-594-0267   FAX: 860-594-0259

E-mail: mbourgoin@arrl.org

FCC Clarifies CORES Amateur Implementation

From ARRL HQ, QST ARLB046, October 24, 2001

The FCC's Wireless Telecommunications Bureau has clarified several issues regarding Amateur Service implementation of the Commission Registration System--or CORES. Starting December 3, everyone doing business with the FCC--including amateur licensees -- must obtain and use a 10-digit FCC Registration Number (FRN) when filing.

Amateur licensees now registered in the Universal Licensing System (ULS) already have been cross-registered in CORES and issued an FRN by mail. The FCC said it planned another cross-registration by November 28. Amateurs can check to see if they have an FRN via a ULS license search. Many Internet call sign servers, including ARRL's, also can provide this information.

Once CORES becomes mandatory, the FCC will "auto register" all amateurs who seek to register in ULS and will issue them an FRN. Amateurs then should use their FRN in place of their Taxpayer Identification Number (TIN--typically an individual's Social Security Number) when filing applications with the FCC. New or upgrade license applicants not previously registered in ULS will be registered automatically in both CORES and ULS when they provide a TIN on a license application filed through a Volunteer Examiner Coordinator.

Although both ULS and CORES will contain a licensee's FRN, updating information in one system will not update the other. For amateurs, CORES registration will replace ULS "TIN/Call Sign" registration, but the ULS will remain the Amateur Service licensing database within WTB, and only ULS will associate an individual with a particular call sign and FRN. Once CORES/FRN becomes mandatory, those registering in ULS will be redirected to CORES registration.

Going away December 3 will be the so-called Assigned Taxpayer Identification Number, or ATIN, which the FCC has been issuing to applicants ineligible to obtain a Social Security Number, such as foreign applicants and club station licensees. An FCC Public Notice this week said applicants that have been using ATINs "must now register in CORES." The FCC said it will accept ATINs only "during a short transitional period" after December 3.

CORES will offer exemptions to amateur clubs and to foreign entities not holding a TIN/SSN. Club station applicants also may use a trustee's TIN/SSN or a tax-exempt club's IRS-assigned EIN.

The WTB says that starting December 3, "all passwords will be maintained in the CORES database." Amateurs also may use FCC Form 160 to register in CORES, and those doing so will be mailed a CORES password for on-line access.

The FCC continues to work out the details of how amateurs, CORES and ULS will coexist. Amateur Service testing with CORES is planned for early November.

Crossband Repeat - Part 3

Gary Pearce KN4AQ - reprinted from the SERA Repeater Journal, August, 2001(Tnx to Dave, K4DND)

Other Considerations in Crossband Repeating

Now, a laundry list of additional considerations that a responsible ham will give due regard when crossbanding (did I say this was easy?):

1. Permission. Before you crossband repeat into another repeater, you should find out if that kind of thing is accepted or prohibited by the repeater owners. I don't think there's a legal question here, just an ethical one. A crossbander gone awry can render a repeater unusable. I've been net control for SKYWARN with tornados in the area when someone's crossbander began spewing open squelch noise into the main repeater. I was not pleased. While I'm normally a big crossband repeat advocate, I wasn't that night. And not every repeater owner likes the idea. You might be surprised at the negative feelings out there toward crossbanding.

2. Control. Most dual-band mobiles have no provisions for remote control, yet you are required to be able to shut down the transmitter if something goes wrong (like that SKYWARN net). If you are just a few steps away from the radio (down in the mall while it's in the parking lot), you're probably covered. Leave it unattended, and you're definitely not.

3. Duty cycle. Your mobile radio is not rated for full-time transmitting. But if you have it crossbanding the busy local repeater to you, it can be transmitting for hours. Definitely run your UHF side on low power, and don't expect it to be a link for you 10 miles away.

4. Identification. You are supposed to ID your transmitter every 10 minutes. Both the VHF and UHF sides of your crossbander are your transmitters, and you should ID both of them. Your verbal ID on UHF, repeated on VHF, covers that transmitter. But the UHF transmitter is busy linking the main repeater back to you - it never hears you, and never ID's with your callsign. Manufacturers have not added any ID circuitry to most dual-band radios, and adapting an external ID is very difficult. This makes long-term crossband repeating a questionable activity.

5. Autopatch. If you don't do it yourself, you'll hear someone do it - bring up an autopatch while using a crossband repeater. If you're doing one-way crossband, this will work. But if you're doing it while depending on the crossbander to hear the repeater, you'll be stuck once you've dialed the patch and let go of the button. Guess what - the main repeater stays on the air, and your crossbander is not listening for you! Hello? Hello? Click! Maybe another user will kill the patch for you.

6. Band Plan. Where do you stick your crossband repeater's UHF link? SERA makes this easy by band planning several channels for crossband repeaters, either at home or mobile. The fixed station crossband repeat channels are:

440.7375	440.7625	440.7750	440.7875	440.8125
440.8250	440.8375	440.8500	440.8625	440.8750
440.8875	440.9000			

and the mobile channels are:

445.7375	445.7625	445.7750	445.7875	445.8125
445.8250	445.8375	445.8500	445.8625	445.8750
445.8875	445.9000			

SERA does not coordinate crossband repeater frequencies - you're on your own. But if a bunch of you will be using several crossband repeaters for a public service event, you might coordinate among yourselves to avoid interference (hey, the birth of frequency coordination all over again).

7. CTCSS. As I said earlier, a crossband repeater gone awry can really mess up the big repeater by jamming the input with junk picked up by the crossbander. You can reduce the problem by using CTCSS encode and decode on your UHF link side. That will keep most junk from opening your squelch on UHF and spilling out your VHF transmitter into the main repeater.

8. Crossbanding to UHF Repeaters? All my examples so far involved using UHF as your link, while crossbanding to a VHF simplex or repeater frequency. Can't it be done the other way, crossbanding from a VHF simplex channel to a UHF repeater? My opinion is that this isn't a good idea. The two-meter band is smaller, more crowded, and has a limited number of simplex channels. No channels are band-planned for crossband links. So you've got a greater chance of causing interference to existing activity. Suppose you use 146.55 for your link, and guard it with CTCSS. The UHF repeater you're linking to is quiet. A couple of local hams begin talking on 55, and after a few minutes the UHF repeater gets busy. Your crossband link will interfere with the contact on 55 unless you take action to stop it.

There's another issue to interpret. Is your crossbander an auxiliary link, or is it a repeater? The rules aren't all that specific. You can declare it to be a full repeater, I suppose, but tell it to Riley. Most people would consider the radio link between you and your mobile to be an auxiliary link, and as such it is not permitted below the 220 band.

If you do decide to declare it a full repeater, you must stay inside the segments of the two-meter band authorized by the FCC for repeaters:

144.5 - 145.5 and 146.0 - 148.0.

9. Crossbanding two repeaters together? No, no, no! Well, maybe. The no! part is the general rule. If the repeaters have hang time, you will create an endless loop of one repeater kerchunking the other. The "well, maybe" is possible if you are in charge of both repeaters (one UHF and one VHF) and have decided to link them this way temporarily. If the repeaters have zero hang time (or CTCSS as I described earlier), it might work. But SERA Frequency Coordinators will be very unhappy with this linking arrangement unless it's for a special, temporary use.

A SUPER ELABORATE SYSTEM - Two Crossbanders Make a full Repeater

If you're on of those hams with more equipment than you know what to do with, and you happen to have an extra dual-band mobile or HT, you can set up two crossband repeaters and make what is essentially a full UHF repeater. That solves ALL the problems of hang time and being able to hear the main repeater on your HT. You can even make a phone call using the autopatch. You might have a local desense problem to solve, and you'll need a bunch of antennas to get it all done. But it works - Mark Freese, WD4KSE, has been doing that for the past several big bike tours we've handled here.

If you try that, SERA had two UHF "itinerant" repeater frequencies to pick from:

445.750 - 440.750, and 445.800 - 440.800.

These are reserved for itinerant and short-term use during a special event or emergency with no formal coordination required. Trustees/Owners are encouraged to notify their local coordinator to inform them of system parameters and expected duration of use. Note that they are surrounded by the other crossband repeater band-plan channels.

OK, that's it. Another attempt at explaining crossband repeat. Clear, or clear as mud? I can't tell, but I'm open to feedback at: kn4aq@sera.org.

[This concludes the crossband repeater series... Ed].

Club Business

AARC Board Minutes November 6, 2001
Present: Stan Hazen, K2SSB, President; Joe Fritz, KD4RWX, Secretary; Ralph Traylor, K4CFE, Treasurer; Steven Traylor, KF4ZGD, Director; Elmer Scott, KF4UCI, Director.

Joe indicated the newsletter would go out with the notice of meeting place change and those getting email newsletters were notified, as well.

Stan reviewed the meeting place at Martha Jefferson Conference room.

Stan indicated that the new Board should consider that the January Board Meeting date is Jan 1st. He will discuss that with the incoming president, Bob, K4DU.

Joe will see that the December newsletter has a notice concerning Dues for 2002 being due on Jan 1, 2001. He will at some point put that information on the AARC news group at aarc@virginia.edu.

Summary of Treasurer's Report:

Revenues:	1,829.00	
Expenses:	1,237.63	
Excess Revenues:	591.37	
Balances:	AARC Fund	1,393.25
	Repeater Fund	1,093.73
	Packet Radio	78.51

		$2,565.49

Regular Meeting November 13, 2001
Presiding: Stan Hazen, K2SSB, President.

The meeting was held at the Martha Jefferson Hospital Educational Conference Room.

The previous Minutes were approved.

Then Ralph presented the Treasurer's report (See Board Minutes). Stan introduced the 2001 Officers and Directors who were present. They were invited to attend the December Board meeting. Also, the January Board meeting

will be held on Wednesday, Jan 2nd.

Reminder that a dues notice will be placed in the December AARC Beacon.

Dave, K4DND distributed a notification Phone Tree and discussed it use. Suggested it will be tested soon.

Program:

1. A police officer from the Albemarle County Police Department presented a program related to Neighborhood Watch, with some questions related to Mobile Watch. He was substituting for the planned speaker, Sgt. Richard Martin.

2. Harry-W2HD discussed some of the recent changes in the FCC's CORES registration system and associated identification systems.

Meeting was adjourned.

Submitted by Joseph D. Fritz, Secretary

AARC Classified Ads

All items must be related to amateur radio and must be surplus to the owners operation (i.e. no dealers or for profit). Price may be listed if desired. *Note*: Check also the WA4TFZ/AARC web page at **http://www.people.virginia.edu/~ejd4e/aarc/**. Please note that all small letters must be used for this address. New Ads may be placed directly to the Editor: 804 990-2659 or via E-mail to the Editor at k4uvt@yahoo.com Please *let K4RKA know when items can be deleted from this file. Updated 9/20/01.*

11/29/01 FOR SALE: Beam, Rotor & Tower	Ben, W4SXH, offers a Rohn Tower, 3 x 10 foot sections plus top section w/rotor plate. (will throw in beam if wanted). 10-15-20 Meter beam (probably a TA33Jr), needs work ($25). Also HAM II control box with water damage rotor thrown in ($75). Call 804 973-3703 or see at 110 Kerry Lane
9/20/01 FOR SALE: Icom 228H 2M Mobile	Bob, K4UVT, has an Icom 228H 2M Mobile rig with mobile mounting bracket and DTMF microphone. Also still have the manual! This rig still works FB – it just doesn't fit anywhere in the new automobile! Call 804 990-2659.
9/28/01 WANTED: 2M/440 Transceiver	Marty, AG4DN is looking for a dual band 2M/440MHz handheld. Should be fairly new (within 5 years) and must have a manual. Call 589-2825 or email to mandlm8@aol.com
10/25/01 ***FREE***: QST Back Issues	Ernie, W2EIU, has 9 years worth of QST to give away. Call 985-4180.

Area Hamfests

None Reported	

Birthdays This Month

Dec 1	KE4AEK	John
Dec 3	K1IL	Roy
Dec 6	KD4LSU	Nancy
Dec 13	K4JMY	Jimmy
Dec 14	AE4OW	Frank
Dec 15	W4PW	Pat
Dec 19	K4DU	Bob
Dec 23	W3KDR	Rick
Dec 31	WB3DZC	Rich
Dec 31	WG4T	Dave

FCC Database Updates

New Calls	
KG4QHZ	Kenneth Smith, Jr. – Charlottesville - **Technician**
KG4QIA	Walter Parsons – Palmyra - **Technician**
Upgrades	
KG4NGV	Josh Malone – Charlottesville - **General**

VE Session Schedule - 2001

December 8 Madison	John Berry (540) 543-2580
	Email: af4cy@arrl.net
	9:00 PM (Walk-ins allowed)
(ARRL VEC)	War Memorial Building
Madison VE Team	Main St.
	Madison, VA 22727

Albemarle Amateur Radio Club
P.O. Box 6833
Charlottesville, VA   22906
http://www.people.virginia.edu/~ejd4e/aarc/index.htm

THE AARC BEACON
Vol 2001   No. 12
December 2001

KA4JJD G 2001   **CURRENT MEMBER: 2001**
Michael F. Rein
109 Sturbridge Rd.
Charlottesville VA   22901

*** Next Club Meeting ***	December 11 - 7:30 PM	UVA - NRAO

CLUB MEETINGS and NETS

REGULAR Meeting: Second Tuesday of each month at 7:30 PM

BOARD & TECHNICAL Meetings: First Tuesday of each month at 7:30 PM

Meetings are held at the National Radio Astronomy Observatory (NRAO) building on Edgemont Road (UVA)

LUNCHEON: Wednesdays -- Area hams gather at the **Wood Grill Buffet** on Rte 29 North from 11 AM – 1 PM

Monday Night Information Net – Each Monday at 7:00 PM

YL Net: First Monday of each month at 8:30 PM

Northern Piedmont Emergency Net / Swap Net / Technical Session: Each Thursday at 8:00 PM

All Nets are held on the 146.760 repeater

AREA REPEATERS

WA4TFZ

INPUT/OUTPUT	Tone Access (If needed)
146.160/146.760	88.5 Hz
146.325/146.925	88.5 Hz (if enabled)
223.160/224.760	No Tone
449.250/444.250	151.4 Hz (If enabled)
145.030	MACHO Node
145.030	CHO Packet Bulletin Board

Other Area Repeaters

145.410 (-) 100 Hz Tone (if enabled) -- **AF4CY (Madison)**

442.075 (+) 151.4 Hz Tone -- **KF4UCI**

AARC CALENDAR OF EVENTS

DATE	EVENT
December 11	Regular Club Meeting
January 8	Winter Meeting
February 12	Regular Club Meeting
March 12	Regular Club Meeting
April 9	Regular Club Meeting

AARC – PUBLIC SERVICE SCHEDULE

DATE	EVENT

Please sign up at meetings when the SIGN UP CLIPBOARD is passed around. You can also send an email to Greg (N4PGS) indicating your interest in working particular events.