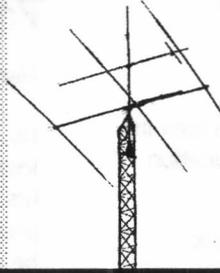


The AARC Beacon



*Amateur Radio News For
Charlottesville and
Albemarle County,
Virginia*

Volume 2000, No. 12



December 2000

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Meeting Notice

The next regular AARC meeting will be held on December 12 at the NRAO Building at UVA at 7:30 PM. Our guest speaker will be Barbara Watson from the National Weather Service in Sterling, Virginia. She will present us with an overview of the **Skywarn** Program. See you there!!



The President Speaks

Bob, K4DU

I find it hard to believe that we have arrived in December. What a year 2000 has been! As the holidays approach and the days grow colder, it is a good time to pause and be thankful for our blessings. How fortunate we are to live in this beautiful place and enjoy the blessing and the responsibilities that come with our freedoms.

In the course of these past few years I have had the opportunity to travel internationally as part of my work. I always return with a renewed sense of the economic and political blessings that we enjoy as Americans. These blessings have come at a cost and with responsibilities.

The same can be said of our great hobby and the AARC. We stand where we are today thanks to the devotion, commitment and sacrifices of those who came before us. However there is much work left to be done. We did not accomplish everything that I had hoped we would in 2000 and I take responsibility for that.

The new team led by Stan K2SSB has its' work cut out and I am certain that the club will do well under his leadership.

From where I sit the club has several very important objectives that it must address:

1. Recruit new hams into the hobby.
2. Provide assistance and guidance to all hams in the area in their "amateur" development through aggressive education programs.
3. Promote the hobby to the community through Public Service and the media.
4. Bring "young" people into the hobby.
5. Restore the AARC to Special Service Club status with the ARRL.
6. Update the clubs legal filings by obtaining a current tax ID number.

I want to thank all of you for your help and support this past year. I also want to say that I am grateful for the friendship, help and encouragement that so many of you have provided over the years. May God bless each of you in the days and years to come.

Best regards & 73, Bob, K4DU

Peep From The Veep

Dick, W4BZW

I am sure that all have heard that the Phase 3D Satellite, now called OSCAR 40, is in a geosynchronous transfer orbit and will be nudged into a Molnyia Orbit with an inclination of about 60 degrees over the next several months. The beacon can be heard on 145.898 MHz and, with appropriate software and either a sound card or a PSK modem, can easily be decoded. I have been using the sound card method with good results. If all goes as planned there will be some exciting times over the next several years using the OSCAR 40 satellite for DX communications as the present solar cycle wanes and communication via the ionosphere becomes less reliable.

We have a very interesting program for the December meeting of the AARC. Barbara Watson from the National Weather Service in Sterling, Virginia will be here and will present an overview of the Skywarn Program. It is possible that a Skywarn course will be offered in the area sometime in the near future if there is sufficient local interest. I am sure that you will find this presentation informative and interesting.

Best wishes for a very Happy Holiday Season and I hope to see you at the club dinner meeting at OCB in January 2001.

73s, Dick

Past, Present and Future

Harry, W2HD

No, AARC members, this is not going to be a Grammar 101 lesson. If it were, yours truly should be taking the exam first! This month's contribution to the "Beacon" is being prepared on Thanksgiving Day and in a way started out to be a thank you for the many events of the new millennium for which we can give heartfelt thanks.

Think back to the days just before 2000 began. The ominous news about tragic events that would overtake us in "Y2K" rang from every doomsday prophet. Since my very nature is to think positively and have faith in what is to come, those words meant very little to me. The new year would be better than the last... right?

Well folks, 2000 was better than 1999 for many of us... perhaps most of us. There are no complaints here and it is hoped there are no complaints there. Let's do a quick review of the positives for which Thanksgiving is in order:

First, if you're reading these words, you are alive and kicking. That's a plus!

Second, the AARC repeater systems are just about all back on line thanks to the hard work of several of our members who believe in action. Even 224.760 is at a new site from which the signal does very well. Dust off any 220 gear and give it a try.

Third, the 15th of April (that dreaded day and my birthday, too) introduced the new restructuring in Amateur Radio that permitted many to upgrade with presentation of the proper paper confirmations. Our Volunteer Examiners certified 31 new Generals and 21 new Extras on that date. Many more will be able to upgrade more readily because that old Morse Code requirement is now 5 words per minute across the line. We will see many more upgrades in the days to come.

Fourth and finally, the Phase 3D Amateur Radio satellite was launched successfully and is sending word that it is alive and well. Two-way communications via Oscar 40 (the new designation is AO-40) may well begin in the near future as AMSAT determines the readiness of the equipment. There will be plenty of time to gear up at your station.

Guys and gals, those are my recollections of "Y2K" and they are 100% positive. It is sincerely hoped that your year has been as gratifying. Those items above cover the Past and Present, but what about the Future.

The club elected an entirely new slate of officers to the four top offices. Some of these folks are relatively new to the club and all are new in their positions. Since the future usually involves resolutions, let's make one big one that will not be broken during the early days of 2001. (My primary resolution: Lose weight... busted!) However, this new resolution won't be hard to keep. Simply said, support the

new slate of officers as they strive to make 2001 a banner year for "OUR" club.

Volunteer your time and expertise to programs in which you have knowledge. Increase AARC membership. That's our plan for the Future. Any ideas? Express them to the new officers.

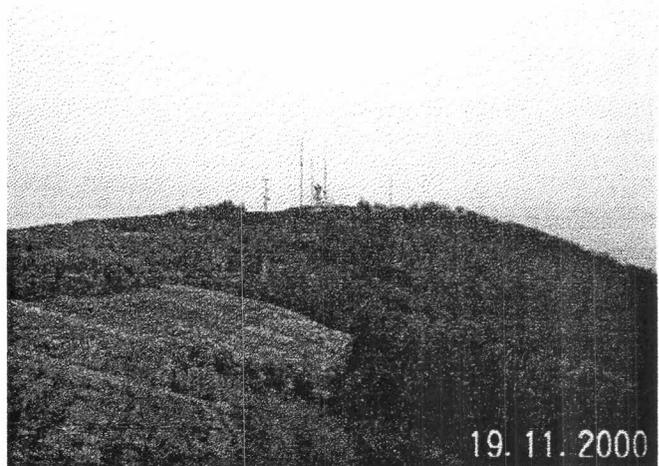
73, /s/ Harry, W2HD

220 Repeater Up & Running!

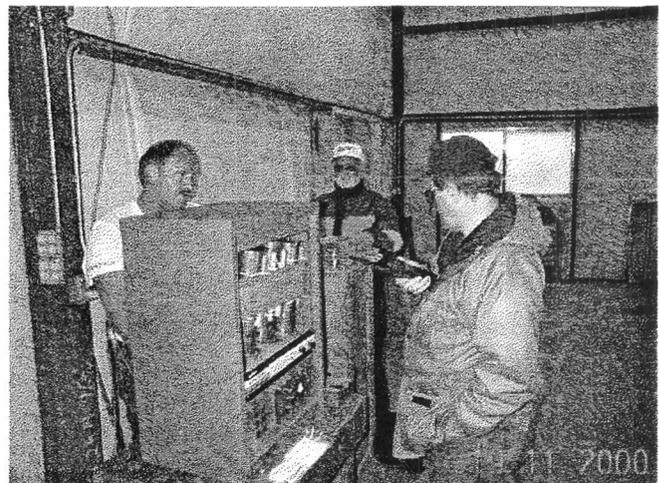
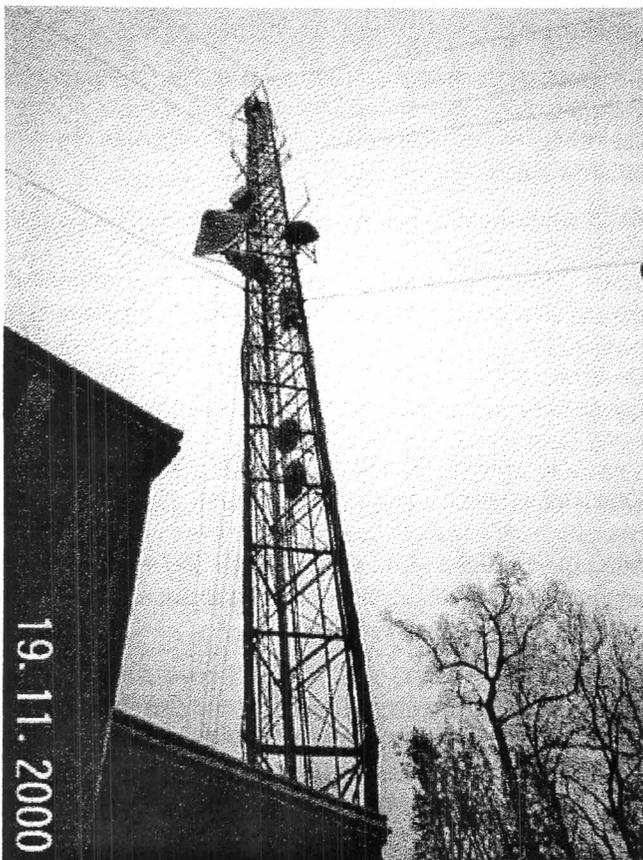
Pix by Mike, N4HRO

The new 220 repeater is up and running on Carter's Mountain! Here are a few pictures to whet your appetite. First, the tower on which the antenna rests...

And a view of the Carter's Mountain "antenna farm", albeit on a somewhat gloomy day ...



Elmer, KF4UCI, Jimmy, K4JMY and Bob, K4DU make a thorough and critical evaluation of the 220 repeater...



Club Business

AARC Board Minutes November 7, 2000

Dick, W4BZW indicated that he was set in terms of the November and December programs at regular meetings.

Bob, K4DU wants some written Guides for Committees to use in conducting their work. He is also interest in obtaining a Tax ID number. This is especially important for bank accounts.

Mike, AC4ZQ - No comment other than he supports the Committee guides.

Stan, K2SSB, The President Elect, indicated he did not have Internet e-mail at this time. He has a fax (963-9091) that can receive information. He hopes to meet with new Board members for preliminary discussions.

Elmer, KF4UCI has a new e-mail address: kf4uci@aol.com

The 220 repeater will soon be located on Carter's Mountain. There will be a need to add it to insurance list.

Joe, KD4RWX asked Dick if Winter Dinner has been set. Dick replied that it had, but the actual details need to be rechecked before he reports the specifics. The AARC web site has officially been turned over to Ed Deasy, KF4UTD. It can still be accessed the old way. A transition page will direct you to the new pages, at which time you should bookmark the new site.

A nomination for either Ham of the Year or a Special Recognition was reported to Joe. The topic will be revisited at the December Board meeting. Joe indicated that he would send the database file to Greg, N4PGS for his use in Public Service Events mailing requirements.

Notice was given that some meetings at NRAO may need to be moved elsewhere due to anticipated construction.

Regular Meeting September 12, 2000

Bob Pattison, K4DU presiding.

Harry, W2HD gave a presentation on Contesting. The activity can provide training in activities that requires many short and detailed contacts. Mostly, "It is FUN!"

The Minutes For the October meeting were approved.

Greg, N4PGS reported that 2000 was a successful year in terms of Public Service Events. He thanked all who participated. Next year there will be fewer events. These activities often provide training under somewhat adverse conditions and are therefore a good way to improve participant skills. He called for registration with the State ARES. Check with Greg for the details.

The November 18th ARES course near Winchester counts toward the certification required for the ARES ID card.

Vic, N3DFS reported that a small plane might be down in Nelson County. {Note: Several days later the plane was located in southern Virginia.}

Bob, K4DU announced that the December Board meeting would be a joint meeting of the current and incoming Board. It will be at the Main Library downtown Charlottesville.

A video concerning the Franklin, Virginia flood was shown. It showed how RACES functioned in that event.

Submitted by Joseph D. Fritz, Secretary

Review of the LDG Electronics AT-11MP AutoTuner

Ed Deasy, KF4UTD

I started looking over automatic tuners recently, primarily to match the antenna system I use when mobile. The bandwidth of the antenna is fairly tight, especially when used on 40 meters. In fact, I was only getting a good SWR over about 15 KHz of the band. I have been using an MFJ tuner at home to match to a wire antenna, but it would have been suicidal to attempt manual tuning in a moving vehicle.

The reason for considering the LDG electronics automatic tuner is immediately obvious in the price. It is, by a good margin, the cheapest of the automatic tuners. After reading several reviews on the Internet, I decided to order one (the AT-11MP, which includes a standard cross-meter). I also bought the cable required to link to the Icom 706, although it can be used with any HF rig. With a rig without a tuner button, you would need to push the tune button on the panel.

A remote panel, including meter, is available for automotive and other applications. Unlike some other autotuners, the cabinet is not designed to be mounted outdoors at the antenna feed point.

As far as evaluating the tuner (or "antenna matcher" if you prefer), I compared it on my home station with the MFJ tuner. I would say that the automatic technique often beat out my own tuning attempts. Since there are usually several combinations of inductance and capacitance that get close to the lowest SWR, I'd often stop before actually reaching the lowest SWR on the MFJ. On the other hand, there were a few circumstances with difficult to match antennas that the auto tuner took several tries to get a low SWR, and the MFJ, after a lot of adjustments, came out ahead. The bottom line, however, was that I got so used to the ease of auto tuning that I didn't even want to twist the controls on the MFJ anymore. So, the AT-11MP travels in and out of the house with the 706, which is my only HF rig.

The tuner improved the mobile setup. I could cover all the of the 40 meter band without having to tune the whip part of the coil. I also was able to tune the 10-meter SSB coil for 10 meter FM, at 29.660 MHz. Furthermore, it was possible to tune to the 12 meter WARC band on the same coil.

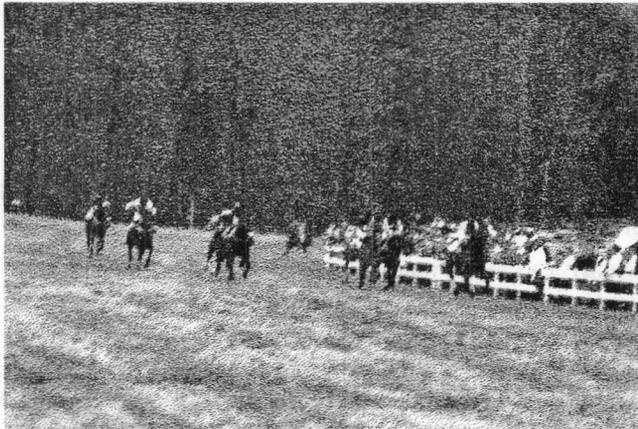
An odd feature of the auto tuner, which takes some getting used to, is the relay clatter at tune-up. While microprocessor controlled, it is conventional relays that are controlled. So, for the 10 or so seconds it takes to arrive at the lowest SWR, the tuner fires off a staccato burst of relay clicks.

Montpelier Horse Races

Bob, K4UVT

Several AARCer's attended the Montpelier Horse Races on November 4 and provided communications support for the races. The photos below are provided courtesy of Rick, KO4WQ and give the flavor of what you missed if you were not there that day ...

Coming into the home stretch!!!



And who could forget the world famous Clydesdales! ...



A view of the trophies presented to the lucky winners ...



W4ML - Silent Key

James T. Green, W4ML, formerly K4ITQ and a long time area ham radio operator, became a silent key on Saturday morning October 28, 2000.

Jim was 55, had been a ham for 40 years and lived in the Mechanicsville area with his wife Prudence. Jim was a member of the prestigious international group known as the First-class Operators Club (FOC), the Central Virginia Contest Club (CVCC) and the Richmond Amateur Volunteer Examiners (RAVE).

Jim and his wife Prudy had just returned from a trip to England to attend a yearly FOC function.

Not only was Jim a long time ham radio operator, but he also owned and operated repeaters for use by the surrounding amateur community. The 146.715 repeater located in Walkerton was the envy of many repeater operators and was known for its clean signal and wide coverage area.

Needless to say, the entire ham community has lost a valued member and we will all miss his expertise and friendship.

73 old friend --- Pat, W4PW

Phase 3D is in Orbit!

This is bulletin ARLS021 from the ARRL. Reprinted courtesy of the ARRL Web site

In what was described as a "spectacular nighttime launch," the next-generation AMSAT Phase 3D Amateur Radio satellite blasted off from Earth on schedule November 16 at 0107z. Hitching a ride aboard an Ariane 5 vehicle, Phase 3D was among four satellite payloads heading off into orbit from the European Spaceport in Kourou, French Guiana--just five degrees north of the equator.

"It was a textbook launch," said Phase 3D Mission Director and AMSAT-DL Executive Vice President Peter Guelzow, DB2OS. Guelzow, who's filling in for Phase 3D Project Leader Karl Meinzer, DJ4ZC, said that from launch through separation about 45 minutes later, "all received telemetry indicates the launch went perfectly, and our satellite appears to be in very good health."

When Phase 3D was successfully deployed by the Ariane 5 launcher at 0153z, cheers erupted from the AMSAT team monitoring the flight's progress from the Arianespace control room.

Newly elected AMSAT-NA President Robin Haighton, VE3FRH, hailed the news of the launch. "You know, this really is the start of a new era in ham radio," Haighton said. He called the design, building and financing of P3D by international volunteers "a great achievement."

A "general beacon" was said to be transmitting on approximately 435.450 MHz. Earlier today, the Phase 3D PSK beacon turned up on 145.898 MHz--slightly different from the expected frequency. It was monitored by Norbert Nothoff, DF5DP, transmitting telemetry--including text blocks. "We had some concern earlier this morning because the satellite didn't show up on the expected frequencies and hence missed any sign of life from the bird," Nothoff said.

The Ariane 5 placed Phase 3D into geostationary transfer orbit, from where it will be nudged into its final elliptical orbit. It was the last of the four payloads to be ejected into orbit by the launch vehicle. The satellite is not expected to be ready for general use for about nine months. Initial housekeeping tasks were under way in the hours following the launch and separation. To move P3D from the geostationary transfer orbit, the satellite's onboard arcjet motor will burn intermittently at perigee over a 270-day period, with final inclination and apogee adjustments made by the spacecraft's 400 Newton motor. Once these maneuvers are completed and three-axis stabilization is achieved, the solar panels will be deployed. At that point, Haighton said, it's anticipated the satellite will be fully operational for use by Amateur Radio operators around the world.

The satellite's initial orbit puts it some 585 miles above Earth at the closest point. Phase 3D's final elliptical orbital configuration will put the satellite some 2500 miles away from Earth at its nearest point, and some 29,500 miles at its farthest.

At 630 pounds and some 20 feet across when the solar panels are deployed, Phase 3D is the largest Amateur Radio satellite ever put into space. The launch culminates years of planning, design and construction as well as an ambitious fundraising campaign. The ARRL was among the major contributors to the Phase 3D project. Three other satellites--the giant PanAmSat PAS-1R communications satellite and the smaller STRV-1C and 1D satellites--joined AMSAT Phase 3D for the ride.

Haighton's immediate predecessor as AMSAT-NA president, Keith Baker, KB1SF, told AMSAT News Service that he was "delighted" by the news of the Phase 3D launch. "I have no doubt that today will be regarded as one of the greatest days in the history of Amateur Radio," he said.

AMSAT-NA Board Chairman and past AMSAT-NA President Bill Tynan, W3XO, was among those keeping a close ear on the launch activities and participating in the AMSAT Launch Information Service. "I can't begin to tell you how happy I am to see P3D in orbit," said Tynan. "It's been a long time, a long road--a bit rough at times," Tynan observed.

For more information, visit the AMSAT-NA Web site, <http://www.amsat.org>.



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 members.aol.com/wa4tfz/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 at k4uvt@yahoo.com Please **let K4RKA know when items can be deleted from this file.**

Updated 5/26/00

11/29/00 KF4FYI Estate	Thomas Dowell indicates that unspecified Ham equipment, owned by Grayson, KF4FYI, (SK), is available for sale. The equipment can be seen at 1411 Monticello Road, Charlottesville. Phone 804-293-4885.
11/01/00 FOR SALE: National NC-126 Receiver	With manual and speaker, \$50. Call Jack Sacre at 804 977-055
11/01/00 FOR SALE: Yaesu FT-208R 2M HT	Includes rmt mike, tt pad, 12-volt battery pack. No charger or manual. Call Bud, KB4JNI, at 804 295-9531.
11/01/00 FREE PARTS	Bud, KB4JNI, offers many free parts for anyone who is interested in building things. Call him at 804 295-9531 for an interesting tour of many and varied parts FOR FREE.
11/30/00 FOR SALE: DENTRON HF AMP	Dentron Clipperton QRO 1 KW amp. Covers 10-160 meters. Uses 4 572B tubes. Call Bob, K4UVT, at 804 990 2659 or Email at K4UVT@yahoo.com .
11/30/00 FOR SALE: ICOM IC-228H 2M Mobile Xcvr	45 watts of power. Includes DTMF mike, mobile mounting bracket and manual. Call Bob, K4UVT, at 804 990 2659 or Email at K4UVT@yahoo.com .

Area Hamfests

None this month

FCC Database Updates

New Calls!

None Received

Upgrades

None Received

VE Session Schedule - 2000

December 2 Fredericksburg (W5YI VEC) VDEN ARC	Edward A. Forman (540) 439-0568 EFORMAN@EROLS.COM 9:30 AM (Walk-ins allowed) PRE-REGISTRATION REQUESTED - No Calls after 8:00 PM Salem Church Library - MTG Rm B 2607 Salem Church Rd Fredericksburg, VA 22407
December 9 Richmond (ARRL VEC) RICHMOND ARC RAVE	Pat Wilson W4PW@ARRL.NET or WWW.W4PW.ORG 9:00 AM (No walk-ins) PRE-REGISTRATION REQUIRED J Sargeant Reynolds Comm. College 1651 E. Parham Rd Bldg B, Room 201 Richmond, VA 23228
December 9 Madison (ARRL/VEC) Madison County VE Team	John T. Berry (540) 543-2580 9:00 AM (Walk-ins allowed) Location: War Memorial Bldg, Upstairs Auditorium Main Street Madison, VA 22727
December 16 Manassas (ARRL/VEC) Ole Virginia Hams ARC	Keith R. Bennington (703) 9:00 AM (Walk-ins allowed) Location: Northern Virginia Comm. College Room MC-246 6901 Sudley Rd Manassas, VA 20109

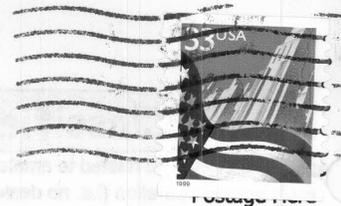
Birthdays This Month

Dec. 3	K1IL	Roy
Dec. 6	KD4LSU	Nancy
Dec. 7	KE4ULA	Ruth
Dec. 13	K4JMY	Jimmy
Dec. 14	AE4OW	Frank
Dec. 15	W4PW	Pat
Dec. 19	K4DU	Bob
Dec. 23	W3KDR	Rick



Merry
Christmas!

Albemarle Amateur Radio Club
P.O. Box 6833
Charlottesville, VA 22906
<http://members.aol.com/wa4tfz/aarc/default2.html>



THE AARC BEACON
Vol 2000 No. 12
December 2000

ISSUE DEADLINE - 23rd of each month

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K4uvt@yahoo.com or k4uvt@earthlink.net

KA4JJD G 2000 **CURRENT MEMBER**
Michael F. Rein
109 Sturbridge Rd.
Charlottesville VA 22901

***** Next Club Meeting *** December 12 - 7:30 PM NRAO Bldg - UVA**
22901-2113 43

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 **Old Country Buffet (OCB)** next to TOYS R US 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

<u>INPUT/OUTPUT</u>	<u>Tone Access (If needed)</u>
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

<u>DATE</u>	<u>EVENT</u>
December 12	Regular Club Meeting

AARC - PUBLIC SERVICE SCHEDULE

<u>DATE</u>	<u>EVENT</u>
In 2001	TBD

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.