1999 AARC DUES are DUE

Single Regular Membership...............$20
Family Membership (2 or more adults).$25
Youth (under 18 on Jan 1, 1999)..........$0
Make checks payable to: **AARC**
Payments accepted at Dinner Meeting.
Please send your 1999 dues to:

**Sharon Duvall
1775 Tinkers Cove Road
Charlottesville, VA   22911**

DECEMBER CLUB MEETING
Tuesday December 8, 1998 7:30 PM

Topic: Radio Astronomy and Amateur Radio
Location: NRAO Auditorium
on the UVA Grounds off Edgemont Road

Winter Dinner information: See Cover page.

CONGRATULATIONS
DAVE DAMON, K4DND

ALBEMARLE AMATEUR RADIO CLUB'S

HAM OF THE YEAR

FRITZ ON...
We Need A Few Good Hams.

Admit it. You do have at least one hour each month or two which you could devote to some function related to the AARC. That could be enough time for you to add your experience and expertise to one of the various Committees which will be planning and carrying out several important activities for the members of the AARC.

The Club has six committees defined in the Bylaws. *Current Chairs are shown in italics.* The committees are:

Activities: (This committee shall be responsible for organizing volunteers for Public Service events, acting as a liaison with ARES and RACES organizations and performing any other duties as rected by the Club.) *Greg Faust, N4PGS.*

Education: (This committee shall be responsible for organizing Amateur Radio classes, fostering the further education of Club members and performing any other educational duties as directed by the Club.) *Ann Condrey, W0ANN*

Fund Raising: (It shall be the duty of this committee to organize fund-raising events and perform any other fund-raising activities as directed by the Club.) *E. J. Bearden, KD4IGX*

Publication: (It shall be the duty of this committee to publish a Club newsletter, a Club directory and assist any other Club officer or committee in the preparation and publishing of Club publications. Additionally, this committee is responsible for Public Relations and releases pertaining thereto. [The Web Page is now one of the responsibilities of the committee.) *Joe Fritz, KD4RWX*

Technical: (It shall be the duty of this committee to oversee and maintain all Club equipment, including any radio stations licensed in the Club's name) *Mike Duvall, AC4ZQ*

Nomination: ([Named] at the regular meeting held on the second Tuesday in September, a Nominating Committee of **five members** shall be appointed by the President. It shall be the duty of this committee to nominate candidates for the offices to be filled at the Annual Meeting in October.) *Named by the President*

Special Committees
These Committees were established by the President or the Board and are subject to renewal each year.

- **Contesting:** Intended to stimulate contesting activity in the club. Some comments related to the committees.
- **Discovery Museum:** The purpose is to assist in Amateur Radio activities associated with the Discovery Museum.
- **Field Day:** This committee is formed each year to organize and carry out the activities associated with the Field Day that the AARC participates in each year.
- **Dogwood Festival Events:** The last two years we have participated in the Dogwood Festival Parade and also conducted a Special Event station.
- **Building & Grounds:** This committee really did not function. With the repeater site uncertain, it may be unnecessary.
- **Picnic:** The summer picnic is always a nice treat, but it does require some planning. The shelter needs to be scheduled and the meal plans completed.
- **Presidents' Day:** This committee did not function as planned. It was announced too late. It is related to a Special Event program associated with the Culpeper ARC. We were to contribute our part by focusing on Thomas Jefferson's Monticello and perhaps James Monroe's estate, Ashlawn-Highland. The plans are unknown for 1999.
- **Repeater Oversight Committee:** This year a sub-committee of the Technical Committee was formed to pay special attention to the specific problems related to the repeaters. It is intended to be renewed by the 1999 AARC Board.
- **SAREX:** This is an activity associated with Space Shuttle activity. Plans are already defined.
- **Youth:** This committee was established to encourage the younger Hams to become more active. The primary activity tried was a Youth Net. Currently there is no activity.

- **T-Hunts:** This year's committee did not plan any hunts. Probably, a committee is not needed since T-Hunts seem to function best, in our club, as an *ad hoc* activity. T-Hunts have been an on and off activity dependent upon the participants enthusiasm. This is a great activity and the training can be helpful in special circumstances. Following the success of the November 22nd T-Hunt (See Page 2), more hunts will be scheduled during 1999. Watch for announcements.

A special invitation to do a Thomas Jefferson Special Event for 1999 had only ONE (1) responder. **It is no longer planned.**

Don (KE4DDR) will begin to name Chairs of the Bylaw Committees at the January Board meeting. He will likely decide which Special Committees to continue or establish. Chairs for these committees will probably be named, also.

Review the listed committees and await the call to serve. Better still, call Don and suggest to him the committees you would like to serve on so that he can begin to make assignments.

One thing is for sure, our Club functions best with a broad representation of participants. In times past, only a few individuals seemed to carry the load. Let's change the pattern.

We could make significant improvements in education activities. It is one of the basic tenants in our Charter. While we do great in conducting classes for new Hams, we could do so much more in all areas associated with pursuing the hobby. Many fundamental skills such as cable building, antenna construction and principals of configuring a shack to be battery powered, grounded, and effective in RF output. In other words - getting strong signals into the repeater under any condition. A series of one hour seminars could work wonders. Our Club is rich with technical resource people.
Joe - KD4RWX

THE PRESIDENT SPEAKS

This is my final installment of "The President Speaks" as I wind up two years serving as your President. There are some things that I cannot express directly so I'll try to express them here. First and foremost I want to say Thank You to each member of this Club for allowing me the honor of serving you and serving the Club. This has, without a doubt, been the most rewarding two years I have had as an Amateur. We have tried some new things over the past couple of years and some of them worked out well. Some did not, but that's the nature of things. Even Ted Williams never batted 1.000. I've had a lot of fun over the past two years and I hope you have too and I hope that some of the things we've started will continue. We only have one project that has not yet reached completion and that is our SAREX project with Western Albemarle HS. All the necessary paperwork has been done and sent in to NASA thanks to Chuck - W4SM. Now we're just waiting for a mission. Otherwise, our calendar has been pretty much completed.

Over the past two years I have had opportunity to work with a couple of great Boards and to everyone who has served with me on the Board, my sincere appreciation for you hard work, your ideas, and your advice. You made the job easier. During that same time period, I have gotten to know many more Club members on a more personal basis and that is probably the best part of the job. To those folks and to the rest of the membership, I want to Thank You for making the job fun. Remember, also, that the best form of support you can give the Club is to participate ..... even a little goes a long long way.

Again, my thanks for allowing me the opportunity to serve you and, on this holiday season, I wish you all a very Merry Christmas and all my wishes for a wonderful New Year. God Bless...
Bill - KC4TQF

CONTESTING, ANYONE?

As I sat staring into space... daydreaming, my wife says... thinking about a topic for this month's AARC publication, the HF radio was blasting away with "CQ Sweepstakes" over and over again. It suddenly became apparent that this was the Phone "SS" and last week when the radio was bombing away with "CQ SS" in dots 'n dash format, that was the CW weekend of that Grandaddy of all contests called the ARRL Sweepstakes. It has attracted many thousands of contesters and non-contesters over the decades.

So... there was the topic for some comment this month. You may belong to that group of hams who say that there are too many of these band-clogging, fits of frenzy called contests. However, if you take a hard look at the statistics you will find that most of us have taken part in a ham radio contest at one time or another. Why, you say, do people waste their valuable on-the-air time with such crazy antics?

It's really a rather simple explanation because you will find that many of us enjoy competition in our lives. The concept of pitting our skills against another person's capabilities has long been with us. Win, lose or draw, we have a measure of our own abilities and our station's readiness to perform feats of magic on the airwaves. Some folks enter these contests because it is indeed a way to measure performance of their equipment... all the way from the person at the mike or key to the very tip of the sky wires used to contact the world (or even around the corner!)

There are a number of advantages to contesting, too. If you are trying to "Work All States" or obtain one of those special AARC awards, the "SS" is the place to be. You will find all States on the bands just waiting to exchange contest info with you. Maybe you are looking for countries for the DX Century Club (DXCC.) The "SS" may not provide those contacts, but there are many contests during the year devoted to the DX-chasers and contesters who like to work DX. The ARRL has the famed DX Phone and CW contests and CQ Magazine has the CQ World-Wide DX contest. There are many opportunities available to you for increasing those DX numbers.

And the world of HF is not the only home for contesting. You can find lots of activity in the VHF/UHF spectrum during the January ARRL VHF contest and another opportunity in the Summer, too. And the contests aren't just Phone and CW, but there are special RTTY activities, too. There's something for almost everyone.

Another point, scores from individual club members can go toward an aggregate score for AARC and our club will obtain recognition for a club activity. You don't have to score millions of points because lots of little scores will add up. See you in the 1999 "SS" or some other contest?
Harry, W2HD

NOVEMBER T-HUNT RESULTS

A T-Hunt was conducted on November 22 at 1:00 p.m. Bill (KC4TQF), Greg (N4PGS) and Noah (KF4JHB), Ed (KF4UTD) were the hunters, while Nancy (KF4MEF) and Joe (KD4RWX) served as the hidden transmitter control operators.

Bill was the first to arrive after one hour and eleven minutes of checking out road kill. Unfortunately, Greg and Noah had to disengage from the hunt at about 3:10 p.m. Greg had regrettably chosen not to use his deadly accurate Doppler DF device. One is lead to suspect that it will be used during the next T-Hunt, now that he has visited the new Monticello High School. Ed continued to search, but the transmitter proved too elusive. He did locate a good place to play golf.

The T-Hunt was ended between 3:30 and 3:45 p.m. (Nancy had a 4:30 appointment.) The remaining hunters were called in to share in the picnic Nancy had set up for the hunters. It consisted of Sparkling Cider, cheese and crackers, nuts and fruit for the group to enjoy while they shared their "hunt" stories.

The hidden transmitter was positioned in Darden Towe Park, which is next to the Elk's Club, off Route 20 North. The specific location was between the house on the hill and the river. A chat-covered road goes around the hill obscuring a parked car from most other locations in the park.

A number of people enjoy walking in this area near the river. Some bring their dogs out for some fresh air.

FEBRUARY T-HUNT NOTICE

Plans were made to arrange for another T-Hunt in January. However, if I am to do it, it will have to be reset to February. My schedule on Sundays (the Frostfest in Richmond, the day of the AARC Winter Dinner, Basketball games) prevent me from doing it. **Others are welcome to conduct a January T-Hunt.**

In February, I will conduct a search and rescue T-Hunt. It will focus on locating a working Ham who became stranded in a serious snow storm and needs medical treatment. All Hams in the area will be permitted to participate and share information. Base stations with good directional antennas would be especially welcomed to contribute to the data.

Mobile participants will gather at a single starting point and teams are to be formed. A command structure will be quickly organized and a base Net control will be established.

More details will be in the next newsletter. Consider joining this search in February.
Joe (KD4RWX)

Adding DSP to the ICOM 706MKII

Several months ago I happened to read a review of the add-on DSP (Digital Signal ocessing) unit for the ICOM 706MKII. While the unit seemed a bit simple, the reviewer said the noise reduction function of this particular DSP was one of the best he had heard. That was enough to sell the unit to me, which comes in at about $150. However, the DSP was back-ordered due to popularity, so it was several months before it showed up at the door.

Perhaps the only unsettling thing about the description of the DSP was ICOM's recommendation to have it installed by the factory. After some careful reading of info on their web site, I decided I'd give it a try. The installation didn't even require soldering and no surface mount components were involved. So, what could possibly be the problem?

The kit, when it finally arrived, consisted of a small, completely encased circuit board, somewhat smaller in length then a credit card but distinctly thicker than one. Instructions are included for both radios the DSP is designed for, it will also fit in ICOM's computer-only short-wave receiver. In the case of the 706, the board interrupts two circuits in the radio, but simply disconnecting and rerouting two push connectors and one ibbon cable does this. The board mounts on .e top of the main circuit board, but the two cables with the push connectors attach to the other side of the main circuit board or the bottom of the radio. This is why ICOM probably encouraged a factory installation, because routing these wires is not an easy task. The path suggested in the instructions is crammed with connectors and two ribbon cables. After about 20 minutes of trying to push one connector through with tweezers, I decided to try another approach. Using the flat end of a screwdriver I carefully compressed both ribbon cables gently against the case. I had clamped the tweezers down around one of the connectors by twisting some wire around it, which I then fed past the ribbon cable with the other hand. It worked. I then repeated the procedure with the other wire and cable. Voila, it was a pain, but it was finally done.

But there was a further problem with the included velcro pads. With them in place the case was difficult to close because the DSP was too thick. I pulled the included velcro off and bought a replacement set of thinner pads at Radio Shack.

If somebody at ICOM America would do these :tallations themselves and then write the ustructions, things would go more smoothly.

As far as the simplicity of this particular DSP, it does fit in well with the purpose of the radio itself, which is mobile or transportable operation. There is only one adjustable parameter, which is changed by the channel-changing knob when in the DSP mode. This adjusts the level of noise reduction in the NIR mode. The Automatic Notch Filter is either on or off. They can be operated independently or together, in any of the modulation modes of the radio.

I have a JPS NIR 10 external DSP unit, which I use on my JRC short-wave receiver for radioteletype monitoring, and I have also used the Timewave unit (which, I must say, is a bit more versatile than the JPS). The noise reduction circuit in the ICOM DSP removed noise but left the original signal sounding far more natural than either of the above DSP's. The Auto Notch filter worked as well as others I've heard. Oddly enough, I have a Datong analog auto notch filter that is far more effective than any of the digital ones. Digital auto notches remove the fundamental tone but usually don't get the harmonics, which means you still hear some of the tone, albeit at a much lower level. The analog auto notch takes longer to find the tone but then removes it so nothing at all can be heard.

The noise reduction filter works beautifully on SSB signals. Turning up the reduction level strips away the hiss and leaves a cleaner audio signal. There is a reduction of overall volume though, which can lead to having to set the volume level higher when in a vehicle. I found listening to very weak signal 6 meter SSB much easier to do for longer periods with the DSP available. This is typically done with headphones and with the volume really cranked, so the ears can take a beating.

"You don't get something for nothing" seems to be one of those rules written in stone, just like E=IR. On a very weak signal, one that is barely intelligible, the current DSP noise reduction systems won't really help you. All the DSP's (and I haven't heard DSP used on the IF stage yet) I've heard take enough of the dynamic range and high end from a very weak voice signal to compromise the intelligence of that signal. The DSP is competing against the ear and the mind, and they've had lots of experience through the years with picking out voices from background noise. This is true for the average person, but a radio listener has spent even more years training the ear/mind to pick out voices in noise. DSP will have a hard time beating this combo until it includes elements of pattern recognition in its software palette, which it currently doesn't. However, on signals that are better than very weak, the

DSP allows comfortable noise-free copy that lets you operate longer with less fatigue. For tough copy, just use that thing between the ears for signal processing. In fact, make sure you put that at the end of your signal path in every case.

The auto notch went a long way toward improving reception of standard shortwave broadcast stations on the ICOM, which is something that it generally does very poorly. Unfortunately, I love to drive around listening to the BBC or Radio Botswana, so I needed something to remedy the fact that the radio can only use the IF filters for other modes than AM and has no real IF filter appropriate for world broadcast. The narrow filter is far too narrow, so you're stuck with heterodynes (squeaking and squawking tones) when listening to AM broadcast. Hit the auto notch and it all goes away.

You can use these DSP filters on FM also. The reduction in dynamic range and highs is more noticeable then with SSB voice. The noise reduction will certainly take the edge off the gremlin bursts, the auto notch will tame the deafening Morse tones of the 147.12 repeater also. I've found I tend to leave it on when scanning FM while mobile, with the noise filter turned down to 1. In general though, if you just operated FM you wouldn't bother buying the DSP add-on.

So, I feel I got my $150 worth from the ICOM DSP add-on. The installation was a little uncomfortable, but I hope others may find these notes a useful addition to the included instructions.
Ed Deasy (KF4UTD)

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FUND RAISING REPORT ADDITION

The following addition has been made to the Fund Raising Report.

Thanks to others who helped Ron (K4RKA) in the fund raising/recycling efforts

The recycling effort would not have been as successful as it has been without the assistance and support of, Bud (KB4JNI), Grayson (KF4FYI), Mike (AC4ZQ), Jerry (N0CAL) (little pun there), Harry (W2HD), and Carter (WD4AYS).

Sam (N4WJQ), Buddy (AD4CG), and Jessie (KE4OID) also helped in acquiring or donating materials. Thanks to all these and any others whom I have forgotten. Also, we thank those who have purchased materials for which the money received went for the Club's benefit.
73, Ron, K4RKA

BIRTHDAYS: DECEMBER

Call	Name	Date
KE4AEK	John	Dec 1
K4IRL	Roy	Dec 3
KD4LSU	Nancy	Dec 6
KE4ULA	Ruth	Dec 7
N2XUN	Arthur	Dec 10
KC4ZZP	John	Dec 12
W2JIM	James	Dec 13
AE4OW	Frank	Dec 14
W4PW	Patrick	Dec 15
K4DU	Robert	Dec 19
WG4BZ	Gary	Dec 21
W3KDR	John	Dec 23
WG4T	David	Dec 31

FROSTFEST INFORMATION

Just an early note to remind everyone that the AARC has two flea market tables reserved at the Richmond Frostfest. The date is Sunday January 17, 1999. The location is the Showplace on Rte 360 east off of I-64. The time 8:30 - 3:30.

JACKETS AND HATS

To all club members: I have received a number of requests for club jackets and also inquiries on hats.

If there is a sufficient number of orders, we will order another batch. Jackets will cost between $25 and $30 and hats will be approximately $8 to $10.

Orders will be accepted by phone (985-4180) or in person until the December 8th club meeting . I will need your name as you wish it to appear on the jacket (or hat), your size and your call sign. The money will also be required on December 8th.

Ernie - W2EIU

LICENSE INFORMATION

NEW LICENSE
Michael Wyatt   (KG4AZN) Technician
Katrina Wright   (KG4AZO) Technician
Jonathan Kennison (KG4AZP) Technician

NEW CALLSIGN
Gary Beasley (KF4WWN) now is: **WG4BZ**

Tandem Friends School Amateur Radio Club issued new Vanity call: **K4TFS**.

Sutherland Middle School Amateur Radio Club issued call sign: **KG4ASF**

NEW UPGRADES
Matt Bisgaier (KF4TKJ) Novice to **Tech Plus**
Ed Deasy (KF4UTD) Technician to **Tech Plus**

ADDITIONS TO AARC DIRECTORY
Check out the cover of the newsletter for a list of additions to the AARC Database. The list includes addresses.

DEADLINE FOR EACH ISSUE
The 23rd of each month

Contact Information
On The Fritz Publications
Joseph D. Fritz, KD4RWX
2306 Williamsville Road
Charlottesville, VA 22901
804 973-1738
kd4rwx@aol.com

BASICS
CALCULATING RESISTORS IN SERIES AND RESISTORS IN PARALLEL
Joe Giovanelli, W2PVY

We've come a long way towards a good understanding of Ohm's Law; we have seen a practical application of this law.

We learned about resistors wired in series and wired in parallel. (See figs. 1 and 2 in last month's newsletter.) Now we'll learn how to calculate the combined value of resistors in these circuits.

Series Circuits.--I'm starting with series circuits because they are easily understood, and the calculations are easily done. To determine the combined value of all the resistors in a series string, just add the values of the individual resistors.

What is the combined value of resistance in a series circuit where we have four resistors. The first is 10 ohms, the second is 35 ohms, the third is 115 ohms, and the fourth is 1025 ohms?

If you did your arithmetic correctly, you came up with a value of 1,185 ohms.

Resistors are available in standard resistance values, and 1,185 ohms is not such a standard. The only way it can be constructed is to wire up standard values in series. In this example, however, I didn't choose standard resistance values. I will not explore that area with you, but it is worth noting that you cannot order an exact resistance in most instances. It is fortunate that we usually do not need absolute precision.

Let us now calculate the value of a series string consisting of five, separate resistors. The first resistor has a value of 1002.3 ohms; the next has a value of 3.9 ohms; the next has an ohmic value of 38 ohms; next we have a resistor of 100,000.4 ohms; and the last has a value of 0.8 ohms?

101,045.4 ohms. Notice that the resistors do not have to be wired in any special order to make this formula work. It does not matter that a given resistor may have a few decimal places in its value. We could go on with this, but we really do not have to. I think we need to spend more time with parallel-wired resistors and so we will.

The formula for determining the combined value of a group of resistors is: The resistance equals the invert of the sum of the inverts.

"What did he say," you asked? I heard ya!

Allow me to translate. To find the value of a group of resistors in parallel requires that we work with each resistor by turning it into a fraction. A 4 ohm resistor could be written as 4/1 for example. Next, we turn that fraction upside down, or INVERT it. Now we have 1/4. Let's now do the same thing for a resistor whose value is 9 ohms. That's 9/1 or, when inverted, 1/9. What is the combined ohmic value of these two resistors?

We add these fractions and come up with 13/36. Remember, however, that our final result must be the "invert" of the sum of the "inverts." So we turn the fraction over and it becomes 36/13 ohms. To put it in a better way, we find that the the actual value of this parallel circuit is 2.77 ohms.

"That's a pretty small resistance. Can you have a resistor of less than an ohm?"

Yes, you definitely can. We use such fractional resistors in solid- state circuits many, many times. We find them in audio output circuits; we find them in equalizing resistors in our 12-volt regulated power supplies; we find them in other places as well.

It doesn't matter how many resistors we put in parallel. The means of calculation their combined value is the same. Let's try this example: Resistor 1 is 7 ohms; resistor 2 is 13 ohms; resistor 3 is 24 ohms; resistor 4 is 3 ohms. After adding the four fractions, you should have come up with 3897/6552. We then turn this over and convert it to decimals. Your answer should be 1.68 ohms, if my calculator didn't let me down. Easy, wasn't it?? My calculator struggled with this for nearly 10 minutes.

Fortunately, we usually don't need to work with such complex values. Most of the time we might put two resistors of equal value in parallel. If we put two 8-ohm resistors in parallel, we can tell intuitively that this will result in a combined resistance of 4 ohms. Congratulate me; I didn't use a calculator for that one!

Try your own examples of both series and parallel resistance calculations until these formulas become a part of your knowledge. Once you do some bench work, you'll be glad you learned them.

Next month I will bring the matter of resistance to a close. We will learn how to treat resistances whose value is 1,000,000 ohms so it's an easy number to handle. While we're about it, we'll learn how to handle small current values, such as 0.03 ampere. See you then.

Joe, W2PVY

CLUB BUSINESS

AARC Board Minutes   November 3, 1998

Curt Nellis (KD4JLY) of the Virginia Department of Emergency Services attended the meeting to present an idea the Club might wish to participate in soon. He stated that there was a lack of NOAA weather reports reception in this area. He desires to place a set of transmitting equipment in the area which will fill the gap and wishes to provide the Club the opportunity to participate. We would be responsible for the seeing after the equipment, but we would not bear any costs other than time. We would be able to gain considerable publicity via the project. He will attend the December meeting to present the ideas to the Club.

- Ham of the Year nomination of Dave Damon was approved by the Board. Membership vote at the regular meeting.
- The 440 repeater will be taken down for maintenance.
- The old repeater antenna has been refurbished and will be placed at the Scottsville Rescue Squad building.
- Inventory: Joe (KD4RWX) will set up a database for the Club's inventory of equipment.

ARC Regular Meeting Minutes-- November 10, 1998

- The October Minutes were approved.
- No change in dues was made by the Board. Dues are due on January 1st.
- Greg (N4PGS) thanked everyone who participated in the 1998 Public Service Events.
- Rick (KO4WQ) mentioned the good job done by Noah (KF4JHB) as Net Control at the Montpelier event.
- An ARES small emergency exercise on Nov. 11th was announced.
- Dave Damon (K4DND) nominated as Ham of the Year was approved by a unanimous vote.
- Ron (K4RKA) read additional names associated with fund raising. (See notice elsewhere in this bulletin. The list has been included in the regular report for Minutes records.)
- Ernie (W2EIU) announced a new order for hats and jackets will be attempted.(See notice elsewhere in this Bulletin.)
- Mike (AC4ZQ) announced that he and a CFW technician will meet soon to check the Carters Mountain site for issues concerning the "Gremlin."
Steven (KF4ZGD) received an ARRL Handbook for being the youngest Ham present at the meeting. The handbook was a gift from the Estate of a recent Silent Key.
- Curt Nellis (KD4JLY) presented the possibility of the Club becoming a part of a regional NOAA emergency weather radio transmitter to be established in this area.
- Chuck Mills (W4SM) presented the program. It was related to an Amateur Radio satellite being readied for launch.

The meeting adjourned at 9:00 p.m.
Submitted by Joseph D. Fritz, Secretary AARC

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EXAMINATION SITES

05-Dec-1998 09:00AM (Walk-ins allowed)
Contact: JOHN T BERRY (540) 543-2580
CULPEPER, VA 22701

06-Dec-1998 01:30PM (Walk-ins allowed)
Contact: CHARLES L BEARD (804) 832-7651
LYNCHBURG, VA 24502

07-Dec-1998 7:30 PM (Walk-ins allowed)
Contact: ANTHONY AMATO (804) 717-5237
CHESTER, VA 23831

12-Dec-1998 9:00 AM (Walk-ins allowed)
Contact: PAT WILSON (804) 932-9424
RICHMOND, VA 23228

13-Dec-1998 02:00PM (Walk-ins allowed)
Contact: JUDY S FRIEL (804) 525-6142
BEDFORD, VA 24523

19-Dec-1998 9:00 AM (Walk-ins allowed)
Contact: BUCK MOWBRAY (540) 289-5580
HARRISONBURG, VA 22801

HAMFESTS OF SOME NOTE

January 17 Frostfest
Richmond, VA
E-mail: frostfest@rats.net
http://frostfest.rats.net

February 28 Vienna Wireless Society
Vienna, VA
E-mail: k3mt@erols.com
http://www.erols.com/k3mt/vws

March 27-28 Maryland State Convention
Timonium, MD
E-mail: n3qqc@amsat.org
http://www.gbhc.org

June 6 Ole Virginia Hams ARC
Manassas, VA

August 1 Shenandoah Valley ARC
Berryville, VA
E-mail: wkke4pms@vvalley.com
http://www.vvalley.com/svarc/hamfest/default.htm

AARC CLASSIFIED ADS
New ADS may be placed directly to the Editor: 804 973-1738 or kd4rwx@aol.com

----------- LISTINGS -------------
* UPDATED 11/19/1998 *
Wanted: 572B tubes,preferably Cetron or US made. Carter WD4AYS, 804 979 7383. CElliott14@aol.com

FOR SALE: MANY ITEMS   10/15/98
Kenwood TS830S HF XCVR
HI-GAIN TH-3 triband beam
Alliance HD73 rotor & control
Heath SB200 HF amplifier
Kenwood TR2500 2M handheld
Rohn 25G 50 foot tower
Other misc items - All items in good condition w/manuals
Dan Harrer 804-982-2322 (voice mail)
540-543-2434 home evenings (Madison)

FOR SALE: 2 METER AND 450 MHZ HANDHELDS   10/22/98
Joe, W2PVY, would like to sell or trade two handheld transceivers.
One Kenwood TR2500 2 meter and one TR3500 450 MHz, each with speaker mike.
Call him at 804-589-1495 if you are interested.

FOR SALE: YASEU FT767GX   10/22/98
Bob, KB4YQC, Yaseu FT767GX HF transceiver plus 2m 6m & 70cm modules, extra 2m & 70 cm modules, desk and hand mike, RS232 CAT interface, matching SP767 external speaker with switchable filters. All cables, owners & repair manuals 293-9720

FOR SALE: 10 METER BEAM ANTENNA
10/29/98
Dave, K4DND, has for sale a Cushcraft Model 10-3, 10 meter 3 element beam.
Call him at 804-973-5866.

FOR SALE: TENTEC SCOUT HF 10/29/98
Dave, K4DND, has for sale a Tentec Scout hf rig w/modules for 10,20,40,80 meters, including paddle, tuner, desk & hand mike. Call him at 804-973-5866.

FOR SALE: 220Mhz antennas   11/5/98
Ron, K4RKA, has available two 220MHz antennas. Call 973-3640 if interested.

FOR SALE: HEATH HR10B   11/19/98
For club benefit, Heath HR10B 80-10 meter ham band receiver. If interested contact Bud, KB4JNI, at 804 295-9531.

FOR SMALL DONATION TO AARC: HAM RADIO ARTICLES 11/19/98
For a small donation to the AARC, a collection of Ham Radio articles 1976-1998 in three loose leaf binders. Contact Bud, KB4JNI, at 804 295-9531.

TUBE BANK
I am starting tube bank for those Hams who still have tube model radios of any type who may need tubes in the future. Any tubes you may have lying around please donate to the tube bank. (receiving or transmitter tubes) Contact Grayson (KF4FYI) or bring tubes to monthly meetings.

This is a benefit to all Hams as tubes will be free or swapped for other tubes. Contact me (Grayson) for further information.....

FROM THE STATE ARES MAIL-LIST
(The following information was provided by Don Maziarz, WY2V, EC Fauquier County.)
A Virginia law on earphone use in vehicles.
§ 46.2-1078
Unlawful to operate motor vehicle, moped, or bicycle while using earphones

It shall be unlawful for any person to operate a motor vehicle, moped, or bicycle on the highways in the Commonwealth while using earphones on or in both ears.

For the purpose of this section, "earphones" shall mean any device worn on or in both ears which converts electrical energy to sound waves or which impairs or hinders the person's ability to hear, but shall not include (i) any prosthetic device which aids the hard of hearing, (ii) earphones installed in helmets worn by motorcycle operators and riders and used as part of a communications system, or (iii) nonprosthetic, closed-ear, open-back, electronic noise-cancellation devices designed and used to enhance the hearing ability of persons who operate vehicles in high-noise environments, provided any such device is being worn by the operator of a vehicle with a gross vehicle weight rating of 26,000 pounds or more. The provisions of this section shall not apply to the driver of any emergency vehicle as defined in §46.2-920.
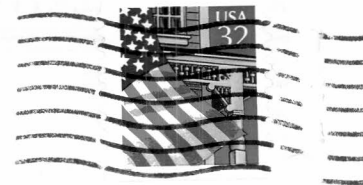
AARC BULLETIN
Vol 1998 No. 12
DECEMBER 1998

A LOOK AHEAD:

January:
- **DUES ARE DUE - January 1st**
- New Board meets and Committees are appointed
- **Winter Dinner - January 10**

February:
- **T-Hunt** TBA

CLUB MEETINGS
Regular Meeting: Second Tuesday of each month at 7:30 p.m.
Board and Technical Meetings: First Tuesday of each month at 7:30 p.m.
Meetings are held at the National Radio Astronomy Observatory (NRAO) building, Edgemont Road (UVA area)

WA4TFZ REPEATERS

INPUT/OUTPUT	TONE ACCESS (if required, etc.)
146.160/146.760	88.5 Hz

(If tone is enabled, you can turn the tone off and back on temporarily by:

Temporary Tone OFF	DTMF 325*
Remove Temporary Tone Off	DTMF 326*
Door alarm off	DTMF 100*
Emergency Autopatch to 911 Center	DTMF 911*
Emergency Autopatch to State Police	DTMF 918*
Autopatch exit	DTMF 0*
Time	DTMF 10*
Tone status of repeater	DTMF 700*
6.325/146.925	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	

LOCAL NETS: (146.760 repeater)
Monday night: Information Net (each Monday) 7 PM
YL Net (1st Monday of month) 8:30 PM

Thursday night: Northern Piedmont Emergency Net & Swap Net & Technical Session (each Thursday) 8 PM

LUNCHEON:

Wednesday: Area Hams gather at the Old Country Buffet (OCB) next to TOYS R US on 29 North 11 AM - 1 PM

WINTER DINNER NOTICE

The latest word that I have regarding the Winter Dinner is that it will be held at the Northern Exposure restaurant on West Main. The primary date is Sunday, January 10th. An alternate date is on the regular meeting night - January 12th. The time will be from 5 - 7 p.m.

No price information has been received. I would suggest that the above information be considered tentative until the next newsletter is published. More details will likely be available following the December Board meeting.

The Winter Dinner meeting provides an opportunity for other family members to share in the activities. Some business is conducted. The new AARC President gets to pick up the gavel and commence his leadership role. Certificates of appreciation for service in various areas are presented. The major portion of these certificates being for Public Service Events. The Club issues certificates bases upon 10, 20, 30 , 40 and so on events accumulated by an individual.

Some like to present a certificate to an Elmer in thanks for their valued assistance. Several other recognitions are done at the dinner. Make your plans soon. Listen for more details.

New additions to AARC Database since last publication. (11-26-1998)

Call	Class	Name	Address	City	State	ZIP
WA3WRV	T+	Forrest Workman	1628 Garden Court	Charlottesville	VA	22901-8981
KD2HR	A	Arthur May	C9 Marina Point	Palmyra	VA	22963-2030
N4VUF	E	William E. Elliott	Route 3 Box 293	Scottesville	VA	24590-9265
N2MUL	T	William L. Steo	862 Crow Mountain Road	Stanardsville	VA	22973
WB4AJQ	G	Thomas M. Porter	26 S Lakeshore Drive	Louisa	VA	23093
KB0RXR	T	Michael A. Barclay	5670 Blue Run Road	Somerset	VA	22972
KC0CZE	T	Tammy M. Harrison	5670 Blue Run Road	Somerset	VA	22972
KB4TBF	T+	Larry G. Martin	44 Azalea Road	Ruckersville	VA	22968
KD4JLY	T	Curtis M. Nellis	51 Malvern	Madison	VA	22729
KF4ZBK	T	James D. Bowers	Route 1 Box 481 D	Afton	VA	22920
KF4ZRY	T	William M. Sallinger	27 Lookout Drive	Stanardsville	VA	22973
KG4AKD	T	Klaus H. Kudielka	3917 Greenville Drive	Charlottesville	VA	22903-7672
KG4ASF		Sutherland MS ARC	2801 Powell Creek Drive	Charlottesville	VA	22911
KG4AVQ	T	Ralph Traylor	4535 Woods Edge Road	Troy	VA	22974
KG4AZN	T	Michael C. Wyatt	1005 Sheridan Avenue	Charlottesville	VA	22901
KG4AZO	T	Katrina Wright	2653 Madison Road	Stanardsville	VA	22973
KG4AZP	T	Jonathan Kennison	1500 Carlton Avenue 17	Charlottesville	VA	22902-5883