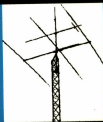


The AARC Beacon



*Serving radio enthusiasts
and communities in
Central Virginia –
The Radio Club for
Central Virginia*

Volume 2004, No. 8

August 2004

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Meeting Notice - Club Picnic !!

The next regular AARC meeting will be held on **Tuesday, August 10 at 5:30 PM at Shelter #1 at McIntire Park. It will also include our 3rd Annual Hamfest!** It should be a great time! See you there!!

VEC Exam Session - August 7

The AARC VEC Team will conduct an FCC amateur license exam session for all license classes on **August 7**. Testing will take place at the **Astronomy Building on the UVA campus** (our regular meeting place). **The session will begin at 9:00 AM.**

Candidates must present a photo ID to be admitted. If you are upgrading, be sure to bring a photocopy of your license and any CSCE's you may have earned at a previous exam session.

The President Speaks

Pete, W4PRT

Greetings!

Usually I try and start off this column with something interesting that has happened in the last month or so. This month I have been consumed with trying to fix a problem in the shack. The problem is RF. I've never dealt with such a thing before. It was probably here all the time and I just never noticed it before. A few months ago I had a problem with the coax feeding my Carolina Windom 160. That was enough of a problem on its own but a few folks out there made it less painful than I thought it was and I had that problem taken care of pretty quickly.

Thinking that all my problems had been solved, I noticed a few more that I hadn't noticed before. Describing the symptoms to just about everyone I came into contact with, they all said the same thing. "Sounds like an RF problem".

Okay, how do I fix it? "Oh, it could be just about anything." I tried everything from using a dummy load to tracing cables to re-engineering my ground system. The problem still persisted. I thought that I had it fixed yesterday but that wasn't the case. I had figured out that the problem was with my LDG antenna tuner. With it in the loop I had the problems that I had seen before. With the tuner out of the loop, no problems. A few months before that I had done an upgrade to the tuner and I hadn't done such a good job soldering as I should have. That too was taken care of quickly. But I still had the problem. So, I decided to go up to HRO yesterday and get a new tuner. This has to fix it! Well it did and it didn't.

With the new auto tuner in place, the problems that I had seen earlier were not there. However, I had new ones creep up. More and more troubleshooting. I finally figure out that the problem was with the DC power to the auto tuner. I added chokes to that cable and the rest of the cables coming in and out of the rig, SWR bridge and tuner and Voila! The problem has gone away.

It's not actually gone; I've just stopped it from occurring for now. I hope I don't find any other weird things that might creep up but I guess that it's inevitable. I had a bunch of folks in the Club help me out with this over the last month. I want to say "Thank You" to everyone that offered ideas and encouragement.

On the issue of BPL, I'd like folks to know that we have formed a standing BPL committee. Currently this committee consists of Jay (K4AZY), Bob (K4DU), Harry (W2HD) and Charles (K4TY). This committee will be meeting with the Electrical Co-op in Nelson County and addressing our concerns to them about BPL issues. If anyone else is interested in being a part of this committee please feel free to contact me or any of the other members of the committee.

Also, on **August 7th at 9:00am at the Astronomy Building, Room 201 we are having a VE session.** Walk-ins are welcome but if you know that you would like to upgrade please let Harry (W2HD) know so that we can better prepare for all the folks that might attend. Harry's phone number is (434) 974-7388. If you have been thinking of upgrading, come on out and give it a try. Also, if anyone is interested, I have the current Gordon West Extra Class book that they can use. Let me know if you are interested.

This months Club meeting is the 3rd Annual Albemarle Amateur Radio Club Hamfest and Picnic on August 10. As always, it is at McIntire Park Shelter #1 and the festivities kick off at 5:30pm. The Club will be providing hamburgers, hot Dogs and soft drinks. We ask that folks bring a covered dish, salad or dessert.

Typically we have a great turn out for this event. Please try and make it and if you have anything that you'd like to sell,

bring it along. There just might be someone there that is looking for that very item that you have.

Anyway, that's all I have for now. Hope to see you all at the Hamfest/Picnic. And as always, if you know someone that might be interested in Amateur Radio, bring them along and introduce them to everyone. I'm sure that they'll have a great time.

73 -- Pete

Veep Peeps

Howard, W4UF

The VP column is unavailable this month.

73 de W4UF (Howard)

Letter on BPL to The Hook

Submitted to "The Hook" by Bob Pattison K4DU

I was pleased to see The Hook's coverage of Central Virginia Cooperative's Broadband over Power Lines (BPL) experiment (*Electric Charge: Nelson Makes Net History by Lisa Provence*). The purpose of my letter is to provide additional information about BPL and correct some impressions that may have been left by the article.

BPL is in an experimental stage. While the technology offers very exciting possibilities of affordable high-speed Internet connectivity in rural areas, most of the BPL projects started in other localities have been placed on hold or terminated. The essential problem is that power lines were not designed to handle signals in the range of frequencies selected for use in the US by the firms experimenting with BPL. Because power lines are not shielded they tend to act as antennas. This means that the signals transmitted across these lines can be received outside the system and interfere with other communication services.

The article may have left the reader with the impression that potential interference will only be to ham radio operators. Nothing could be further from the truth. The National Telecommunications and Information Agency (NTIA) found that interference from Broadband over Power Lines (BPL) extends more than a quarter of a mile on the ground and up to 25 miles in the air. Since most fire and rescue communications occur with vehicles on the road and power lines generally run along roads, it is likely that BPL could interfere with fire and rescue squad communications. A BPL experiment in one location created interference with air traffic control communications forty miles away from the site. Aircraft manufacturer Boeing has warned of potentially disastrous interference to aeronautical communications at

high frequencies (HF). A number of countries including Japan who have experimented with BPL have discontinued the experiments and banned the technology.

To date companies working to sell BPL systems to utilities have attempted to dismiss potential interference by attempting to block interference using filters. Given the wide range of services and frequencies that can be impacted this approach has proven cost prohibitive. The National Academy of Sciences has expressed serious concerns over the potential impact of BPL on radio astronomy. Even the National Rural Electric Cooperative Association has expressed concerns over the economic viability of BPL.

The Bush Administration has stated a campaign goal to provide affordable Broadband to residents in rural areas of America by the year 2007. The amateur radio community applauds that goal. The Federal Communications Commission currently sees Broadband over Power Line as a way of achieving that goal and the commissioners seem determined to promote BPL as the answer ignoring the technical advice of the FCC's engineering staff.

Central Virginia is blessed with a large number of technically talented individuals. The Albemarle Amateur Radio Club has a number of current and retired engineers with experience in electronics, radar, radio astronomy and radio communications. The local ham radio community has stepped forward to work with the Central Virginia Cooperative. Our goal is to create a harmonious working relationship. Hopefully the BPL experiment in Nelson County will succeed without a negative impact to any users of the radio frequency spectrum.

Sincerely,

Bob Pattison

Director and Past President

The Albemarle Amateur Radio Club

FCC Says New Vanity Fee Really Goes Into Effect August 10

ARRL Bulletin ARLB023

FCC personnel have clarified that the new Amateur Radio vanity call sign regulatory fee of \$20.80 for the 10-year license term actually becomes effective Tuesday, August 10, not Friday, August 6 as ARRL and others had announced based on information in The Federal Register.

A staff member at the FCC's Gettysburg office told ARRL that the Commission's computer system has been programmed to accept the new fee starting August 10. A management-level staffer in the FCC's Office of Managing Director explained that the Commission was not necessarily bound by the

August 6 effective date. The Federal Register indicates, which was 30 days after publication of the order containing the new fee schedule.

Applicants for amateur vanity call signs will continue to pay the \$16.30 fee per vanity call sign application until the new fee goes into effect. All applications received at the FCC on or after Tuesday, August 10 must be accompanied by the new, higher fee.

John D. Kraus, W8JK, Antenna Pioneer - SK

From the ARRL Letter for Friday, July 23, 2004

Radio astronomer, antenna designer, cosmic explorer and author John D. Kraus, W8JK, of Delaware, Ohio, died July 18. He was 94. While he enjoyed a worldwide reputation, Kraus is perhaps best known in Amateur Radio circles for his bi-directional wire beam antenna — often dubbed the '8JK array. Other important Kraus designs include the corner reflector and helix antennas.

The Michigan native was a pioneer of radio telescope design and the father of the "Big Ear" radio telescope. Following an early fascination with radio, Kraus first became licensed as 8AFJ. He later was granted the now-famous W8JK call sign. A graduate of the University of Michigan, he joined the faculty of the Ohio State University in 1946, serving as a professor of electrical engineering and astronomy and founding and directing the OSU Radio Observatory. In that capacity, Kraus designed and oversaw construction of the Big Ear on land owned by Ohio Wesleyan University.

In 1978, after the "Big Ear" detected the still-unidentified "Wow!" signal that suggested the possibility of intelligent life elsewhere in the universe, Kraus launched Cosmic Search, a magazine devoted to the search for extraterrestrial intelligence. The Big Ear fell victim to development pressures and was torn down in 1998.

Kraus's classic textbook *Antennas*, now in its third edition, has been an engineering school staple for decades. Among his other titles are *Electromagnetics*, *Radio Astronomy*, *Big Ear*, *Big Ear Two* and *Our Cosmic Universe*. Kraus also wrote several articles for QST. He did a "recap and update" of his W8JK antenna in the June 1982 issue. An article in the July 1970 edition describes a "W8JK 5-Band Rotary Beam Antenna." A 1934 QST article by Kraus highlights "Amateur Radio in the Soviet Union."

Kraus was a fellow of the IEEE and a member of the National Academy of Engineering. In 1996, Dayton Hamvention honored Kraus as the recipient of its Special Achievement Award. In 2001, CQ named Kraus to the inaugural class of its Amateur Radio Hall of Fame.

Club Business

AARC Board Minutes June 8, 2004

Members Present: Pete W4PRT, Pres.; Steve KD4HBX; Jill KG4TFS; Bill AD4JV; Howard W4UF, VEEP. Members Absent: Marty AG4DN, Secy.; Ralph K4CFE, Treas.; Bob K4DU; Ben KG4QVP.

Pete called the Board to order at 6:36 PM

The Board discussed the problems with the 146.76 repeater. This will be covered more fully by Dave K4DND.

Steve KF4ZGD covered the financial report for Ralph. He indicated no changes. The question of increased dues for next year was noted.

The programs for the future centered on a possible "APRS" night for September's meeting.

Batteries and rigs necessary for Field Day were discussed.

Dave reported that the intermittent difficulty with the 76 repeater was from an unknown cause. Access to the site presents problems caused by the weather. Elmer's availability also is an issue. Dave further reported recent tests at the site yielded no significant findings. On another issue Dave reported that the Buck's Elbow repeaters would be off the air due to changes by local law enforcement.

The being no further matters before the Board, Pete closed the Board meeting at about 7:00 PM.

Submitted by Marty Mait AG4DN, Secy.

Regular Meeting June 8, 2004

Pete called the meeting to order at 7:30 PM. He then called for introduction of members and guests.

The discussion during the meeting centered on Field Day.

Dave K4DND made a motion that the club purchase a "carport cover" for use at Field Day. The motion was second by Joe W2PVY and approved by the membership without comment.

Dick W4BZW indicated he would provide APRS. Other members of the club volunteered V/UHF rigs and loops to work higher bands. Joe W2PVY, K4DND and Howard W4UF volunteered rigs. Food preparation was covered. Elmer W2EIU indicated that he had the Governor's signed proclamation for Field Day.

Two stations will operate, one full time and one dual purpose (regular and GOTA). Operations start time will be 2:00 PM on Saturday and run for 24 hours. Set up time will be 7:00 PM Friday and 10:00 AM on Saturday. Steve KF4ZGD will operate a talk-in station.

Reports from Club Committees: Programs & Finance Committee reports as noted in Board Minutes.

Dave K4DND covered the 76 repeater. He indicated that Tim KG4HOT brought bush-hog equipment to the site and did a great job of clean up. The testing over the weekend brought no significant results with the repeater problems (see Board notes for additional information.)

The club August picnic was covered. Steve KD4HBX will arrange for the shelter at McIntire Park, etc.

The Minutes for the May AARC Meeting were approved by the membership as written with no comment.

Harry W2HD addressed the BPL issues and the recent Monday night recorded segment on the Information Net.

With no further business, a motion was made to adjourn, seconded and approved without comment.

Submitted by Marty Mait AG4DN, Secy.

AARC Board Minutes July 13, 2004

Having a quorum of Board members present, Pete W4PRT opened the meeting at 6:35 PM.

Pete now called for committee reports. Finance and membership had no new items to bring to the attention of the Board.

Programs Committee reminded the Board that the August meeting as in the past a picnic/swap fest will be held at McIntire Park in Charlottesville. The club will provide hot dogs, hamburgers and soft drinks. Attendees are requested to bring a covered dish to supplement the menu. In past years club members have brought personal grills. A motion was made and seconded to rent a grill from Parks and Recreation at a cost of \$75.00. The motion was passed unanimously without adverse comment.

Indications are that the September club meeting on September 14 will have two presentations. Joe W2PVY will update the membership on one of his construction projects and Jay K4AZV will present a program on batteries and solar power.

Education Committee: Ben KG4QVP and Steve KF4ZGD reported that they are holding summer Tech classes at the Red Cross. There is a need for a VE session in early August. Anticipated date August 8, Bob K4DU agreed to contact Bob W4RQ and make the necessary arrangements.

Old business, Pete thanked all who had participated in Field Day. This year's efforts by far were the best in recent memory.

There being no further business, Pete closed the Board Meeting at 7:10 PM.

Submitted by Marty Mait AG4DN, Secy.

Regular Meeting July 13, 2004

Pete opened the meeting at 7:35 PM followed by introduction of members and friends.

The first item on the agenda was the long-standing item of new AARC jackets and caps. Pete displayed a sample of the new club jacket. This jacket is of the same quality as the older ones now in use for \$20.00. A blue micro fiber jacket with a silk-screen logo will cost \$40.00. The jacket price with an embroidered logo cost is \$50.00. Brush twill caps with the club logo and call sign on the rear will be \$13.00.

Next items on the agenda: Programs reported that Steve KF4ZGD would make a presentation on EchoLink and VOIP for the meeting. August will be the annual picnic / hamfest. September's presentation will be Joe and Jay. (See Board Minutes).

The Membership Committee reminded the club that many members had not submitted updated membership forms. The information is vital whether there are changes or not.

The Education Committee reported that a new Tech class was being conducted at the American Red Cross building on Rose Hill Drive, Tuesdays from 5:30 PM to 8:30 PM. A VE session will be held on August 7 at UVA.

Ben noted that the license manuals in the Jefferson Madison Library were worn and out of date. Dave K4DND made a motion that the club makes certain the current versions of license manuals were maintained by the library. In the discussion that followed it was noted that the manuals were part of a set of ARRL publications placed in the Library in memory of Ed WA4UPI, a long time member and past treasurer. The possibility of updating all the publications was raised. Since no one knew the cost of such action the motion was not amended and passed as made.

The membership was reminded that there would be a Tech class at CATEC starting in September. More Information will be provided as it becomes available.

Technical Committee: Dave reported that all equipment was removed from Bucks Elbow. This is part of the preparation for a new site for the communications tower and housing for a new system.

The membership was reminded that the AARC picnic/swap fest will be August 10, Shelter 1, McIntire Park.

Charles K4TY called the clubs attention to an article in The Hook concerning BPL and its installation in Nelson County. Harry W2HD, Jay K4AZV and Bob K4DU have made contact with the electric Co-op and were arranging a meeting with the vendor providing the equipment. Charles suggested that the club also respond by sending a letter to the editor of The Hook. Bob indicated he would draft the letter.

With no further business a motion was made to adjourn the meeting. It was seconded and passed without comment.

Submitted by Marty Mait AG4DN, Secy.

Howard W4UUF and Bob K4DU provided the notes for the June and July meeting minutes with my sincere thanks.

ARRL Board Okays Volunteer Grassroots Lobbying Effort

From the ARRL Letter for Friday, July 23, 2004

The ARRL Board of Directors has formalized a grassroots congressional lobbying program with an initial focus on BPL. Acting July 16 during its second meeting of 2004 in Windsor, Connecticut, the Board acknowledged the need to "immediately begin a BPL grassroots lobbying campaign." Hudson Division Director Frank Fallon, N2FF, who headed the Ad Hoc Committee on Grassroots Lobbying, sees the creation of a national "political machine" as a practical way to protect Amateur Radio spectrum.

"We're really, in essence, changing the culture of how we operate," Fallon said after the meeting. "We're going to use our members as constituents to talk to key legislators." While the campaign will zero in on BPL in the near term, it eventually could expand to support bills dealing with spectrum protection and with and deed covenants, conditions and restrictions (CC&Rs) and their impact on amateur antennas.

"It can be more effective for two or three constituents to walk into a lawmaker's office to pitch their cause," Fallon said. Such contacts, he pointed out, also can pave the way for subsequent meetings between League officials and members of Congress or their staff members.

To establish a coordinating structure, the Board created the positions of Division Congressional Action Chair, Congressional Action Coordinator and Congressional Action Assistant. The Board authorized the League's 15 division directors to appoint qualified volunteers to these positions.

Under the plan the Board adopted, the Division Congressional Action Chair, one in each ARRL division, would be a cabinet-level volunteer with some experience in lobbying activities. There would be at least one Congressional Action Coordinator in each state, ideally selected in consultation with section managers. These volunteers also would be members of the director's cabinet. Working with the director, the Congressional Action Coordinator will designate and develop a number of Congressional Action Assistants to "accomplish the mission of getting the ARRL message to legislators," the ad hoc committee's report explained.

Fallon said the grassroots lobbying effort will fold into a comprehensive broadband over power line strategy, which the Board discussed at length but did not make public. The

August 2004

Board expressed the hope that the lobbying effort could be up and running by fall.

In other business, the Board:

- * approved a system to automatically recognize long-term League membership and to express appreciation of that support through a system of awards.
- * designated the next Dayton Hamvention as ARRL National Convention 2005. Hamvention will take place May 20-22 at Hara Arena near Dayton, Ohio.
- * directed the filing of an application with the FCC for an experimental license authorizing low-frequency operation for specified Amateur Radio stations.
- * directed the filing of a petition with the FCC to permit security of data for computer-to-computer communications on domestic transmissions above 50 MHz.
- * established as policy that ARES groups and any group using the ARES logo shall formally acknowledge ARES as an ARRL program, including in their bylaws or other organizational documents, and agree to abide by all rules and guidelines the League establishes. Since both ARES and Amateur Radio Emergency Service are registered ARRL service marks, ARES groups are to utilize the R symbol in any printed or electronic media and note that the logo is used by permission. All ARES records, membership rosters and other data pertaining to the ARES program, wherever located, are the property of the ARRL.
- * resolved to have President Haynie appoint a study committee to recommend effective means of promoting "constructive relations and open lines of communication" between the League and the Amateur Radio industry. The committee will solicit input from the Industry Advisory Council and report to the Board at its January 2005 meeting.
- * recognized and thanked ARRL Chief Operating Officer Mark Wilson, K1RO, for his longstanding service and dedication to the League and wished him well in his future endeavors. Wilson has announced that he'll be leaving ARRL in September to move to New Hampshire. He's been a member of the ARRL Headquarters staff for 24 years.

The official minutes of the July 2004 meeting of the ARRL Board of Directors are available on the ARRL Web site <<http://www.arrl.org/announce/board-0407/>>.

Contest Highlights - Upcoming

Bob, W4RQ

ARRL-Sponsored Contests

Aug 7-8 **ARRL UHF Contest**

Complete info, rules and log forms for these events can be found online at the [ARRL Contest Calendar 2004](#) webpage.

Other Contests of Interest

Aug 7 **European HF Championship**

Aug 28-29 **Hawaii QSO Party**

The [SM3CER Contest Service - Contest Calendars](#) has info and rules for these contests and just about every contest that exists.

73, Bob W4RQ

AARC Public Service Schedule

August 7	Mountain Mama Bike Race – Highland County
November	Montpelier Horse Races

Area Hamfests

September 18-19 Roanoke Division Convention Virginia Beach, VA	Sponsor: Tidewater Radio Conventions http://www.vahamfest.com Contact: Mr. Lynn Lilla, W6DJQ 848 Stacey Place Virginia Beach, VA 23464 Phone: 757-479-1597 Email: hamfest@axis.net
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FCC Database Updates

New Calls	
None Reported	
Upgrades	
None Reported	

VE Session Schedule - 2004

August 7 Charlottesville (ARRL VEC)	Sponsor: Albemarle ARC VE Team Time: 9:00 AM (Walk-ins allowed) Contact: Harry J. Dannels W2HD (434) 874-7388 W2HD@ARRL.NET Location: University Of VA 530 McCormick RD Astronomy Bldg-Room 201 Corner of McCormick & Alderman Charlottesville, VA 22904
September 18 Madison (ARRL VEC)	Sponsor: Madison VE Team Time: 9:00 AM (Walk-ins allowed) Contact: John Berry (540) 543-2580 AF4CY@ARRL.NET Location: Madison War Memorial Bldg. MAIN ST. Madison, VA 22727
Date Location (ARRL VEC)	For other exam sessions in Virginia outside the AARC area, check the ARRL Exam Session Search web page.

For Sale Items

None at this time

AARC Club Officers

President	Pete Thorsen	W4PRT	w4prt@arrl.net 434-642-1014
Vice President	Howard Gay	W4UF	w4uf@arrl.net 540-456-6445
Secretary	Marty Mait	AG4DN	ag4dn@earthlink.net 434-589-2825
Treasurer	Ralph Traylor	K4CFE	rw6@virginia.edu 434-296-7418
Director	Bob Pattison	K4DU	rep4@aol.com 434-985-4828
Director	Ben Mills	KG4QVP	blmills@mindspring.com 434-953-8106
Director	Jill Anderson	KG4TFS	jranderson@yahoo.com 591-1004
Director	Bill Phillips	AD6JV	bill1048@direcway.com 434 872-0686
Director	Steve Clements	KD4HBX	

Contest Calendars

ARRL Contest Calendar 2004	ARRL sponsored contests
SM3CER Contest Service - Calendar 2004	Contests all over the world! Also has links to online rules for most contests
Contesting Online	Just about everything contests!

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



THE AARC BEACON

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ISSUE DEADLINE - 23rd of each month

Contact Information
Daniel R. (Bob) Dorsey, Jr. W4RQ
PO Box 530
Ruckersville, VA 22968-0530
(434) 990-2659
W4RO@yahoo.com

Next Club Meeting :

August 10 - 5:30 PM

Picnic - McIntire Park

CLUB MEETINGS AND NETS

REGULAR Meeting: Second Tuesday of each month at 7:30 PM
BOARD & TECHNICAL Meetings: Prior to regular meeting at 6:30 PM
Meetings are held at the UVA Astronomy building at 530 McCormick Road.
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
Youth Net: Each Wednesday at 7:30 PM on 147.075
Northern Piedmont Emergency Net / Swap Net / Technical Session: Each Thursday at 8:00 PM
All Nets are held on the 146.760 repeater (except for the Youth Net)

AREA REPEATERS

WA4TFZ

INPUT/OUTPUT

146.160/146.760
146.325/146.925

223.160/224.760
449.250/444.250
145.030
145.030

Tone Access (if needed)

151.4 Hz
151.4 Hz

No Tone
151.4 Hz (if enabled)
MACHO Node
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
August 10	AARC Picnic
September 14	Regular Club Meeting
October 12	Regular Club Meeting
November 9	Regular Club Meeting
December 14	Regular Club Meeting

AARC - PUBLIC SERVICE SCHEDULE

DATE	EVENT
2004 - TBA	TBA

Please sign up at meetings as the SIGN UP CLIPBOARD is passed around. Contact Greg N4PGS indicating your interest in working particular events.

Membership application available in PDF format at http://www.people.virginia.edu/~ejd4e/aarc/images/AARC_Application.pdf