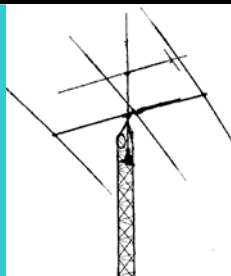


# The AARC Beacon



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

Volume 2010, No. 2



February 2010

## Inside this Issue

1	Meeting Notice
1	Dues are Due!!
1	The President's Letter
2	Veep Peeps
3	Club Business
3	AARC Winter Awards Dinner
3	W2HD Honored as QCWA President Emeritus
3	Building a High Quality, Low Cost Sound System
5	A Bit of AARC History
6	For Sale and Wanted...
7	ARRL Propagation de K7RA
8	Contest Highlights - Upcoming
9	AARC Public Service Schedule
9	Area Hamfests
9	FCC Database Updates
9	VE Session Schedule - 2009
9	For Sale Items
9	AARC Club Officers
9	Contest Calendars

## Meeting Notice

The next AARC meeting will be held on **February 9 at 7:30 PM at the NRAO Building on the UVA grounds. The program will be a workshop and round table on handheld radios presided over by Dennis Mennerich – K4THE.**

Sounds interesting – see you there!

## Dues are Due!!

Dues are now due for 2010!! **Rates have not changed since last year.** You may pay your dues at a club meeting or forward a new application form, which is available on the club website --- follow instructions on the form.

## The President's Letter

*Dave, K4DND*

One can only hope that our bad winter weather is mostly behind us as we get ready for the end of winter and the first signs that there will be a spring. I have recently seen gangs of robins working the wet ground; maybe they are now starting their way back north. I wonder if we will have some sunspots and better propagation in the coming months.

What fun we had at the Winter Dinner. I am sure that everyone who attended had a great time and if you didn't make the dinner this year, you really missed out on a fun evening. For those who didn't make it, just let me repeat a **brief synopsis of AARC accomplishments of 2009**, and in no particular order.

In 2009, we finally completed the AARC 501(c)3 process and now will be able to benefit from recognized tax-exempt status. As part of this process, there were changes made in our Articles of Incorporation, as well as changes made to the AARC Bylaws, which not only brought the Bylaws into registration with the ways that we actually conduct AARC business, these changes also added another Director

position. Thanks to Don N4UVA and Jim K4JEC for the heavy lifting on these accomplishments.

2009 brought significant changes to the AARC website, with Jim K4JEC providing much updated content, and the photo gallery capability thanks to Kenneth KJ4KIH. Incidentally, as K4JEC might well mention in his remarks this month, Kenneth is putting the finishing touches to an online registration form for the May 1 Cruise-In event. Dennis K4THE continues to maintain a comprehensive and extremely useful Education web page that if you haven't looked at, you are really missing valuable content.

After having no leadership for **Field Day** in 2008, this past year gave us two great Co-Chairmen for this important event. Jim K4CGY and Bill N0WP brought our FD back to Earlysville Fire Station (a more accessible site) and did a FB job in all aspects of this 2 day event, with thanks to all AARC members for their various contributions. Last year also gave us the AARC logo, club patches (still for sale), the AARC brochure and club directory. I carry a directory in each of my vehicles as well as in my carry around bag and often make use of it for phone numbers and email addresses. Many thanks go out to Jim K4JEC and Patsy K4PMC for all the hard work that made this possible.

**AARC membership in 2009 reached 117**, the highest number of members the club has had since the late 1980s and I have every expectation that we will meet or exceed that number of members in 2010. More members participating in more activities is how I define success and that was certainly true last year, with great turnouts for meetings and the August picnic and first picnic auction. The auction not only provided lots of entertainment thanks to Gordon WW4GW and Jim K4JEC, there were some real bargains taken home.

A noteworthy achievement of the past year was the **AARC support of the Charlottesville High School Physics class balloon project**. What a great presentation the kids gave at our club meeting. Of course, last year the AARC once again supported the Science Fair through the efforts of Bill AD6JV and Dennis K4THE who participated as judges and chose the awardees of the AARC Junior and Senior project prizes.

We had a good showing of AARC members at FrostFest last year and the sales from the AARC tables were quite successful. Something that we hope to repeat again this year as **FrostFest is coming up soon, Saturday February 6 at the Richmond Raceway**. Again the AARC has two tables and again, if you have items that you would like sold, bring them and put them on the table. If you are able to work the table for a while then you get to keep your entire earnings, if you can't participate, then the club would appreciate a 10% donation from your sales.

Linda KI5LLB and Carter WD4AYS did a superb job with the new AARC Estate Committee, and provided a valuable service to the families of several area hams who have gone silent in the past years.

Well as you can see, we have been busy, and it is in large part due not to the efforts of a small number of people, but rather is the sum of participation of many AARC members. That is the best comment that one can make about the strength and health of the Albemarle Amateur Radio Club.

See you at the February meeting.

*73 de K4DND*

## Veep Peeps

*Jim, K4JEC*

We kicked-off 2010 with a fantastic night out with the club – the Annual Awards Dinner was a great beginning for our new year. The attendance was up last year over the previous one and this year was up over last year – a growing attendance.

Many certificates were passed out attesting to the individual activity participation. Those present were acknowledged with a round of applause and those not present had their certificates mailed to them.

The special presentation of the evening went to Bob Dorsey for his long service as editor of *The Beacon*. That award drew a robust round of applause as the entire group shared their appreciation for his service to the club. As many of you already know, **Dave presented me with the club's "Ham-of-the-Year award**. That caught me so off guard that I fumbled for words and was totally astounded. I think I did manage to get out a "Thank You!" **A picture album from the dinner is on the website for your amusement.**

Last month I emphasized the need for maximum participation from the membership in support of the club's activities and you have really come through. We had a strategic planning session for the Cruise-In on Tuesday, January 19, at the McDonald's Restaurant on Stony Point Road and you filled their conference room. The turnout exceeded my expectations and I ran out of handouts. As an aside, their conference room is first class and a really nice facility for a group of twenty or so.

**May 1 is the Saturday we will stage the very first Virginia Ham Cruise-In**. Hams all across the country will be watching this event to determine if it should be replicated across the country as a primetime way to promote Amateur Radio. This is a pacesetter and an opportunity for our club to initiate the cadence. Member participation will be the key to the success or failure of this event to reach its full potential. Well, I can tell you we are off to a great beginning. We are getting attention around the state and our first pre-registration came in at 8 a.m. on January 21 from Fredericksburg.

We are off to the Richmond Frost Fest on Saturday, February 6, to set up a booth to sell some of our club and donated equipment and distribute hundreds of flyers promoting the Cruise-In. Come join us and help spread the word.

The club meeting in February will feature a workshop and round table on handheld radios presided over by Dennis Mennerich – K4THE. Plan to bring yours and show it off so others can see what is being used and why you favor one over the other. The details will be sent out later in an email note.

Grab a friend, associate or spouse and bring them along – visitors and guests are always welcome and encouraged.

73 de K4JEC

## Club Business

### AARC Board Minutes – January 12, 2010

No formal meeting --- AARC Winter Awards Dinner.

*Patsy Crosby – K4PMC, Secretary*

### Regular Meeting – January 12, 2010

No formal meeting --- AARC Winter Awards Dinner.

*Patsy Crosby – K4PMC, Secretary*

## AARC Winter Awards Dinner

The 2010 AARC Awards dinner is now history. A great time was had by all who attended. As usual, the food was TERRIFIC! Especially the chocolate cake for dessert --- absolutely decadent!! And many club members received awards for various reasons.

The occasion was photographed for posterity. You may view the photo album for this event at the Photo Gallery on the AARC website at <http://www.albemarleradio.org/gallery2/v/AARC+Banquet/>.

## W2HD Honored as QCWA President Emeritus

As of 0001Z, January 22, 2010, Harry Dannals, **W2HD is President Emeritus of the Quarter Century Wireless Association (QCWA)**.

Harry was President of ARRL from 1972 - 1982 and President of QCWA from 1989 - 1994 and the only person to have ever held both offices. While talking with Harry earlier today I could tell he was truly touched. It's one of the few times, I've heard a smile!

Others to hold the position include: Leland W. Smith, W5KL (SK) and Lewis G. 'Mac' McCoy W1ICP (SK).

73, Bob Roske, NOUF. President, QCWA

## Building a High Quality, Low Cost Sound System

*Tnx Joe Giovanelli, W2PVY*

When I was in the seventh grade, I knew that table radios sounded rather bad, lacking in low-frequency response. One day a teacher brought her personal radio to the class so we could hear a special, educational radio show. I couldn't believe the sound, and the radio looked like many other Emersons of the day.

Somehow I had the chance to examine the inside of that radio. I checked the loudspeaker. I lightly depressed its cone, and it was surprisingly easy to move. Other loudspeakers had cones which were harder to move in response to slight pressure. It was an epiphany moment! Could it be that if a cone is free to move more easily, that it can produce more bass than a cone which was more restricted in its motion?

Moving on, after my college days were over, I planned to open a recording service. I needed a good loudspeaker system so I could know whether what I heard when playing back a recording sounded close to what I heard when I made the recording. I couldn't afford to buy a good system, so decided to design my own, using what I recall from my seventh grade experience.

It was a crude affair. Any loudspeakers I could find were either very expensive or had very "tight" cones. All I could think to do was to cut a few slits out of the rim of the cone. When one of those modified loudspeakers was put into a cabinet, I was amazed at how much bass was produced. The bass would have been enhanced had I known how to prevent air leaks caused by the slits in the rim. I heard my first "tweeter" in a radio store. I bought it. It came with a 5 uF capacitor. When I added this to my crude system, the high frequencies were remarkably enhanced. Around this same time a new company called KLH built a rather small loudspeaker which sounded great. It turned out that, with lots of refinements, it was made more or less along the lines of my first loudspeaker system design.

So much for history. Today many loudspeakers are available with cones which can move rather freely. We say they are "high compliance" loudspeakers. The sound systems here in my retirement residents are universally terrible. I'm fortunate to have perhaps the best system I ever heard, but it was much too complicated and too bulky to be moved.

I decided to construct one which would be somewhat like a boom box but hopefully better than most of this breed. This design is light enough so that if I need to take it to our recreation room, I can do it and people will hear what I want them to.

It is this design which I want to share with you so you can have a quality system without breaking the budget. The cost will depend on what you have on hand. If you have three

quarter inch plywood, you already save some money. The unit requires two tweeters. You might have them on hand because what I used for those are the little speakers found mounted on the motherboards of PC's. Do not use those found in net books. I can't say for certain but I think they will be too small to provide the amount of acoustical output as those In PC's.

The main speakers are made by Pioneer Electronics. They are 8 Ohm, 4.5 inches in diameter and can be obtained from MCM Electronics (phone 800-543-4330). They can also be purchased from the company's website. The price is about \$12 each. You'll need 4 of them.

Mount them in an enclosure whose outside dimensions are 17 inches W, 8 inches D and 8 inches H.

Before mounting them, they should be "mass loaded." This simply means that an ounce of material should be placed on each speaker cone near its apex. Leave the apex free of whatever you use for loading. I used Moretight but something like bathtub calking would probably work well. I found that Moretight did not stick to the cones well, so I used a bit of Elmer's glue and it worked well. Mass loading lowers the resonant frequency of the loudspeaker.

Mount two loudspeakers across the front and one on each side as shown in Fig. 1. The tweeters are mounted one on each side near the front of the cabinet as shown in Fig. 1.



Figure 1

Wire the speakers as in Fig. 2. Be sure that the two main loudspeakers of each pair are in proper phase and the phase of one channel agrees with that of the other stereo channel. If you connect a 6-volt battery to the plus side of one pair of speakers and the minus battery terminal quickly tap to the common lead of that pair of loudspeakers. The cones will jump outward if the phase is correct. Check this for both pairs of speakers.

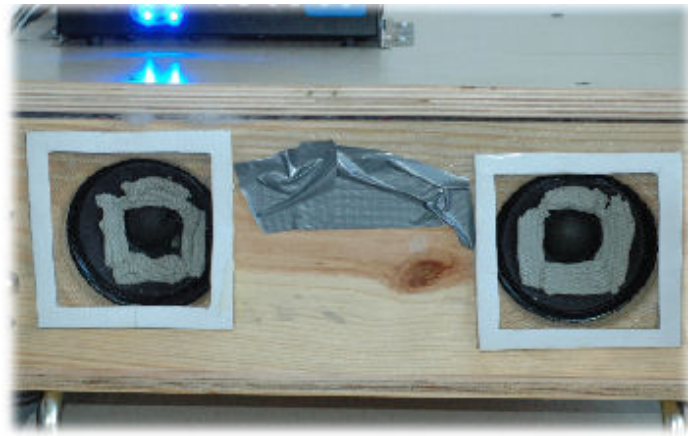


Figure 2

Note that the capacitors wired in series with the high side of tweeter and the high side of the main loudspeakers are either 1 or 2 uF. Because the circuits are AC, these capacitors should be non-polarized. Such caps are not always found.

A 1 uF cap will yield treble which is flat at 10 kHz with a rolloff of 6 dB per octave below 10 kHz A 2 uF cap will be flat at 5 kHz and will roll off at a rate of 6 dB per octave below 5 kHz. Experiment to determine which produces the best sound. Using the coding on the tweeters, make certain that their electrical phase agrees with that of the rest of the speakers. If this is not done, some of the tweeters' acoustical output will be cancelled by the output of the main loudspeakers.

Bring out the two pairs of wires through a hole near or on the back of the cabinet. Drill a hole of sufficient size that they can pass through with virtually no clearance.

Get a large bag of Dacron, which can be found in stores which carry sewing material. Dacron is often used to stuff pillows. Loudspeakers of the kind we're talking about depend on the air acting as a pneumatic spring. Unless something is done, however, the cones will hit the air in the cabinet and the air will reflect from the walls and return to the cones and add unwanted coloration to what you hear. when Dacron fills the cabinet, air can no longer reflect from the inside walls. Even so, the air will still act as a controlling force. Once the wiring is complete, fill the cabinet to overflowing. Be careful because you may not see all the wires and it's possible to break a lead while stuffing the cabinet.

The top and bottom covers must fit so the box is airtight. You might want to glue and screw the sides and bottom to provide a good seal. Obviously you can't glue the top cover. My enclosure is sealed by putting weather stripping all around the surfaces which press against the lid. Use reasonably long screws and at least 6 of them so you'll have at least one screw on all sides. Long screws permit you to torque down on them to obtain a tight seal. Tighten them evenly, going around the cabinet a little at a time so the lid seats well.

You should protect the loudspeakers from accidental damage by covering them with acoustically transparent material. Some grille cloth is made to protect them, but some grille cloth causes a slight loss of high frequencies. I used a material called tule (probably spelled wrong) which I bought in the same store where I got the Dacron. It's pretty strong and it's sufficiently transparent that you can see the mass-loaded cones.

Small frames of cardboard were cut and the fabric was glued onto the frames. They, in turn, were glued to the cabinet. If you have a power amplifier capable of about 50 to 70 watts per channel, you're done. Connect the leads and enjoy!

If you don't have one or want a small amplifier such that it can be integrated with the "sound box," I suggest that you use a Pyle Audio PCA3. The price is around \$60, and I got it from MCM Electronics.



This unit weighs about 5 lbs. and is small enough that it can be laid on the top of the cabinet. It has a rated power of 75 watts per channel. (I'm not convinced that it meets specs, but does a great job. It has a bass and treble control so you can tailor the sound. This system needs a slight bit of boost for more less flat sound. I'm told that if the power graph is unplugged from the amplifier's PC board, that sound is improved. I have to try it.

The fundamental resonance of the system is approximately 50 Hz. This should mean that you can expect the bass to extend one octave below 50 Hz. A lot depends on the exact amount of mass loading and how much Dacron you used.

I needed the amplifier to be permanently mounted. I used the screws which are just above the bottom edge of the amplifier to anchor L brackets which screwed into the top cover. If you want to get a bit fancy, you might consider placing rubber feet under the four corners of the enclosure. You'll see in the photo that I added handles to the front of the box so I can transport more easily.

My thanks go to one of my church friends, Chris, for making the cabinet. Thanks to my friend, Vail, who helped me with the frames and glued them in place. Without Dave Damon, K4DND, we wouldn't have the circuit diagram and photos which are so necessary for a paper of this kind.

Last, but by no means least, my deep appreciation goes to Ron Richey, K4RKA. He did most of the wiring and many other things which made this project what it is.

I sincerely hope that you found this paper to be of interest. If you build it, let me know how you like it. If you have questions, feel free to call me at: 434-973-9502 or e-mail me at: joegio1@earthlink.net

## A Bit of AARC History

*Tnx Dave, K4DND and photos tnx Greg N4PGS*

The WA4TFZ repeater system operated for many years from the Forest Service fire tower on Carter's Mountain. If you look along the skyline just to the south of the commercial towers on the Carter's Mountain ridge line, you can see the fire tower silhouette against the sky. You might also see the outline of a large house to the SW of the fire tower, a relatively recent addition to the ridge line.

There was a small building (see Figure 1) located near the fire tower that belonged to Albemarle County. With the permission of the County and the Forest Service, that building was the location of the WA4TFZ equipment. Housed in this one facility were the 146.760, 224.760 and 444.250 repeaters, as well as the packet node and APRS digipeater. Digital communications operated by antennas mounted outside the building, you can see the 2M discone antenna mounted on the front of the building. The repeaters on the other hand were connected by 75 Ohm feedline to antennas mounted on the fire tower.



**Figure 1**

Power for the site was provided by Albemarle County, who also had services operating at this site from other buildings. While the Forest Service continued to have a long duration lease on the site, they no longer manned the fire tower; instead it was used solely as a radio site for the Forest Service, Albemarle County Police, Rivanna Sewer and Water Authority, Fire Department and the County School bus communications.

The building wasn't in great shape, but certainly served our purposes well, the AARC had open access to the site by Forest Service permission in exchange for keeping the grass and weeds whacked down during the summer. The mountain top was heavily wooded with about an acre cleared around the tower and closely associated other structures. The site was reached by driving through the Carter's Mountain orchard, opening a locked gate and continuing on up the ridgeline to the fire tower. Because of the increase in elevation as you approached the fire tower, the WA4TFZ antennas were located almost directly in line with commercial antennas located on several of the towers located immediately to the north. Over the years, this caused quite a few problems with intermodulation and rectification of RF in the many rusting tower pieces that were bolted together. It always provided many interesting challenges to the Technical Committee. In addition to the conventional repeater and digipeater operations, the AARC (thanks to Hein N4FWA) had a door alarm that would sound on the 146.760 repeater whenever the door was opened, as well as the CW character "B" that would indicate the repeater was operating on battery if the power was out. This feature is still enabled on the current 146.760 repeater.

In the late 1990's the owner of the property, whose house is now seen on the mountain top, had the whole mountain top clear cut. We believed at the time that this was prompted by the need to be grandfathered under new legislation that restricted mountain top development. While there were very few trees left on the site, one large hardwood was left in place immediately to the west of the WA4TFZ building. You can see some of this large tree in the upper right of Figure 1. In all fairness to the property owner, this tree was heavily weighted in the direction of our building and was probably left in place since removal would have been problematic at best. Also, note the date of the photograph in Figure 1 is January 16, 1999.

In the spring of 1999, the Charlottesville area had one of its famous spring ice storms and as a result, the WA4TFZ repeater system was off the air. Greg N4PGS and Hein N4FWA were able to make their way up to the repeater site and what they found is shown in Figure 2. The date is hard to make out, but is March 15.



**Figure 2.**

Amazing!! Members of the AARC went the site over the next few days to retrieve the equipment. Despite the total destruction of the building, the only damage to the club repeater system was that one duplexer can of the 224.76 repeater was badly dented.

That ended the AARC WA4TFZ operation on Carter's Mountain, and started a long process of relocation that continues to this day. I just thought you would like to know the story.

## For Sale and Wanted...

*Tnx Ron, K4RKA*

**Please notify K4RKA and your Beacon editor when an item has been sold or pulled from availability and can be deleted from this list.**

**WANTED:** Heath HP23A or HP23B power supply. Contact Ron, K4RKA@JUNO.COM or 434-973-3640

### **ESTATE OF CASIMIR (CASEY) NORRISEY, K4MTX**

Contact Mary Ellen Norrisey Hodges at ME.Hodges@cox.net. In addition to the items below, there are several lots of vintage capacitors, resistors, vacuum tubes, etc. available for purchase.

I will try to answer any questions you might have about any of the items for sale, and I can forward photos of each item, including interior views of most. Additionally, I am in Charlottesville about every other weekend and can arrange for you to view any items you might be interested in. I am willing to entertain reasonable offers on the items below that are listed with a specific price.

Heathkit HW-101 SSB Transceiver with Shure Microphone

(\$110) --- (I have the dial from the transceiver that is missing in this photo)

Heathkit Visual-Aural Signal Tracer (\$25)

Halicrafters Sky Buddy Receiver Model S-19R (plus 6-page manual, "Operating Alignment & Servicing Instructions," manual in poor condition) (\$75)

Standard Electrical Product Co., Adjust-a-Volt (best offer)

RCA Senior VoltOhmyst (best offer)

VANCO CB SWR (SWR-6) Watt Meter (best offer)

Homemade antenna tuner

#### **FOR SALE: Hygain TH6-DX TriBand 10-15-20 meter**

**Beam:** Good Condition, but needs clean-up, new trap end caps (new kit included), new SS element clamps, and new bolts for element to boom mounts. Will need to purchase new boom to mast clamp for about \$40.00 from Hygain. \$155.00. Call Jim K4CGY at 434-296-3044.

**FOR SALE: Rohn 45G 60 foot Tower:** Two sections never used, four sections will need painting or hot dip galvanized (about \$250.00). One section has slight bent at one mounting sleeve, can be straightened or used as the concrete base section. Includes flat top plate with thrust bearing, two thrust brackets, rotor plate, 600 feet of 1/4" EHS guy wire (new), mounting bolts, three concrete anchors with three hole equalizer plates (new), sixteen 1/4" thimbles, six 1/2"x12" turnbuckles, 1/4" cable clamps and serving tool, six 1/4" big grips (used in place of the cable clamps). All new. \$1400.00. Call Jim K4CGY at 434-206-3044.

**Scanners for Sale** -- 2 Uniden 760 \$50.00 Each. 1 Radio Shack 95 Portable \$100.00. 1 Bearcat 240xt 40 channel \$25.00. 1 UHF-VHF Radio Shack 16 channel \$25.00. 1 Bearcat 240XL 20 channel 20.00. 1 Bearcat 200 16 channel \$15.00. 1 Uniden 100xt 100 channel 50.00. 1 Pro 2051 Radio Shack Desktop 1000 channel \$150.00. Thanks, Jerome, KI4DLA

**Old tube radios and other goodies.** Philco 620F (1937) - \$ 50. NC-300 - \$200, Scott RCH - \$250, Midwest 18 console - \$100, KLH 27 stereo receiver - \$60, HP-302A wave analyzer - \$100, HP- 606A signal gen - \$100, Feiler signal tracers - \$20 each, AK-20 - \$100, RCA WR-99a marker generator - \$40, RCA sig gen - \$15, small antique Weston ohmmeter - \$30, Airline 62-256 - \$10, BF Goodrich Mantola R661 - \$ 25, Philco- 40-140 - \$15, Philco-37-620 Console. Call Carter Elliott, WD4AYS at 434 566 8767 or via email at celliot14@aol.com

**Items for Sale.** Listing for a friend. **Drake MN-2000** matching network. **Swan 1200-X** tube linear amplifier.

**Heathkit SB-634** Station Console. **Ham-Key** straight key with black base. Call Bob W4RQ at (434) 990-2659 (home) or via email at [w4rq@yahoo.com](mailto:w4rq@yahoo.com).

**Coleman Series 54 Generator;** 4KW 120V/240V. Briggs & Stratton 8HP engine model 190432. Very clean and mounted on cart. Purchased about 1985 and used very little. Has new carburetor, plug, air filter, fuel lines, fuel filter & fuel cutoff

valve. However I can't get it started. Has compression, fuel and I believe good spark. Maybe new carburetor just needs adjustment. I'm tired of pulling the rope! And anyway it won't run my heat pump. \$199.00 Jim K4CGY 434-296-3044

**ITEMS FOR SALE:** Please follow the below link for the sale page on QRZ:

<http://forums.qrz.com/showthread.php?p=1716639> .

No worries, I still have the handheld unit for local communications. Jeffrey, N4LFJ, 76 Holly Ridge Court #3 Evington, VA 24550, (434) 382-9527 or [n4lfj@yahoo.com](mailto:n4lfj@yahoo.com).

## ARRL Propagation de K7RA

*ARRL Propagation Bulletin ARLP0-3*

A steady stream of sunspot activity continues to dot the Sun. We had just one day with a daily sunspot number of zero this week, January 19 (Tuesday) when sunspot group 1040 moved over the horizon. But the next day old sunspot group 1039 re-emerged as 1041, and it now graces the Sun's southeast (lower left, relative to our view from Earth) quadrant. In fact, now that we have a view of most of the Sun (87.35% as of 2359z today, because of advanced orbiting instruments) it appears that the sunspot group that just left is nearly antipodal to the current visible spot, just exiting the Sun's northwest quadrant. If they stay strong, when the current one leaves, the other should return.

The current prediction from USAF/NOAA has the solar flux rising from Friday, January 22 through Tuesday, January 26, at 84, 85, 85, 86 and 87. Barring any unforeseen flares, planetary A index is seen as steady and quiet at five. Geophysical Institute Prague predicts quiet geomagnetic conditions January 22-23, quite to unsettled January 24, and quiet again January 25-28.

A Sudden Ionospheric Disturbance (SID) occurred on Wednesday after a solar flare. The IMF (Interplanetary Magnetic Field) between Earth and the Sun was pointing south. When it points north, the Earth is less vulnerable. You can see a detailed graph of the latest orientation of the IMF at <http://www.spaceweatherlive.com>. See the graph labeled "Direction of the IMF." It took me a while to figure out what the Y axis was for. I expected it to represent time, but it seemed to show "meters." Then I realized it was minutes, and this record covers the previous two hours. When that graph goes above zero, the Earth is protected from the effects of solar flares. Thanks to Beth Katz of the Space Weather Discussion Forum at <http://www.spacew.com> for that resource.

A SID will often cause a complete HF radio blackout, the duration varying with the intensity of the energy from the flare as it (the energy, not the flare!) reaches Earth.

You can monitor SID events yourself with homemade equipment shown on a Stanford University web site at, <http://solar-center.stanford.edu/SID/sidmonitor/>. Note the useful links provided, which lead to other pages and links,

many quite useful. Check out <http://sidmonitors.blogspot.com/> and <http://solar-center.stanford.edu/SID/map/>. Thanks to <http://www.spaceweather.com> for this tip.

Kermit Lehman, AB1J of Waltham, Massachusetts commented on last week's Propagation Forecast Bulletin ARLP002: "I have stayed on the air, refusing to let the good be the enemy of the bad, but it hasn't been easy. Since every cloud is reputed to have a silver lining, even this valley of the shadow of the dearth of Sun spots has been good for me in some ways. I was forced to figure out how to get on 40 and 80 on a postage stamp-sized piece of real estate and as a result worked 5BDXCC, something I would never have tried if there had been any propagation at all on 15, 12 and 10." Thanks, Kermit!

Check out K9LA's Propagation column in the current issue of WorldRadio, available free online at, <http://www.cq-amateur-radio.com/>. Click on the WorldRadio Online logo on the left side, and see the Propagation column on pages 25-26. To find the obscure unnamed article he refers to under "Is there DXing on 4 MHz?" just enter a part of any phrase he quotes into your favorite web search engine. When I did it, I got a couple of hits, but when I clicked the link for "repeat the search with omitted results included" I saw many more. Apparently that article was circulated widely, starting around ten years ago.

In the current February issue of QST in the Up Front section is a piece about ham radio in the Linux Journal. What the short item doesn't mention and isn't in the Linux Journal is the fact that the founder and publisher is a ham, Phil Hughes, WA6SWR. Phil generously gave me my first internet access via his company back in the 1980s, years before the worldwide web.

There is a letter in the same issue of QST from KD4SKB telling about finding some QSL cards from his Novice days back in 1971. He checked on various callsign sites on the internet, and found that three were from hams who are still licensed, and had email addresses. He attempted contact, and got a response from one who agreed to meet him on 40 meters for a reunion QSO. He mentioned that the other fellow was 14 years old when they made contact 38 years earlier.

That reminded me of 1966, when I was 14, and brought my receiver and DX-20 CW transmitter with me on a Summer visit to my grandparents in Topeka, Kansas. I strung up a wire antenna and did a little operating, and ended up exchanging cards with a fellow in Illinois, about 300 miles away after a QSO on the 40 meter Novice band.

When I returned to Seattle, after the QSL cards we began exchanging letters. He was two years older than me, and for a couple of years as we passed through those fast-changing stages of adolescence, we exchanged many letters, sharing the good and the bad, the terrors and the triumphs of boyhood in the late 1960s. As I recall, we shared many things that we likely might not even tell our closest friends in

our home communities. We talked about radio, girls, popular music, girls, school and, did I mention girls?

I had a great memory for events, people and minutia for many years, but now in my fifties it is fading. For a number of years I have tried to recall his name or callsign so I could look him up and see if he were still a ham. But I couldn't find the logbook from that summer, and had misplaced his QSL long ago. But I waited, knowing that at some time in the future I would recall or see something that jogged my memory.

Finally last spring it happened. I was looking through the June 2009 QST, and there he was, Ed Clink, still WA9PFB, still in New Berlin, Illinois, in the Silent Keys listing. I finally remembered, but a little late. According to FCC records he had renewed his license just three years earlier, and still had his General Class ticket.

Sunspot numbers for January 14 through 20 were 34, 26, 24, 16, 14, 0, and 16 with a mean of 18.6. 10.7 cm flux was 89.9, 85.3, 84.2, 82.6, 81.5, 84.2, and 81.7 with a mean of 84.2. Estimated planetary A indices were 4, 3, 1, 1, 3, 1 and 14 with a mean of 3.9. Estimated mid-latitude A indices were 3, 2, 1, 1, 2, 2 and 6 with a mean of 2.4.

## Contest Highlights - Upcoming

Bob, W4RQ

### ARRL-Sponsored Contests

Feb 8-12	<b>ARRL School Club Roundup</b>
Feb 20-21	<b>ARRL DX Contest - CW</b>

Complete info, rules and log forms for these events can be found online at the ARRL Contest Calendar webpage.

### Other Contests of Interest

Feb 6-7	<b>Vermont QSO Party</b>
Feb 6-7	<b>Ten-Ten Winter Phone QSO Party</b>
Feb 7-8	<b>New Mexico QSO Party</b>
Feb 26-27	<b>Russian WW PSK Contest</b>

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

<b>End of September</b>	Great Eastern Endurance Run
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## Area Hamfests

Date	
Location	

## FCC Database Updates

New Calls	
AG4J	Chris Bortz – New vanity call
Upgrades	
None Reported	
Vanity Calls	
None Reported	

## VE Session Schedule - 2009

<b>January 9</b> Charlottesville VA	<b>Sponsor:</b> Albemarle ARC <b>Time:</b> 9:00 AM (Walk-ins allowed) <b>Contact:</b> Dave Damon K4DND 434-973-5866 (H), 434-760-1932 (C) <b>Email:</b> k4dnd@arrl.net <b>VEC:</b> <a href="#">ARRL/VEC</a> <b>Location:</b> National Radio Astronomy Observatory, 520 Edgemont Road, Charlottesville, VA 22903
<b>Date</b> <b>Location</b>  (ARRL VEC)	For exam sessions in Virginia outside the AARC area, check the <a href="#">ARRL Exam                  Session Search</a> web page.

## For Sale Items

<b>For Sale</b>	
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## AARC Club Officers

President	Dave Damon	K4DND	<a href="mailto:k4dnd@arrl.net">k4dnd@arrl.net</a> (434) 973-5866
Vice President	Jim Crosby	K4JEC	<a href="mailto:jecrosby@comcast.net">jecrosby@comcast.net</a> (434) 987-2006
Secretary	Patsy Crosby	K4PMC	<a href="mailto:patsycrosby@comcast.net">patsycrosby@comcast.net</a> † (434) 989-2362
Treasurer	Don Eason Jr.	N4UVA	<a href="mailto:deason@comcast.net">deason@comcast.net</a> (434) 973-9119
Director	Jim Wilson	K4BAV	<a href="mailto:jwilsonphoto@earthlink.net">jwilsonphoto@earthlink.net</a> (434) 245-7041
Director	Linda Beard	K15LLB	<a href="mailto:lindaskyone@embarqmail.com">lindaskyone@embarqmail.com</a> (434) 823-2107
Director	Greg Faust	N4PGS	<a href="mailto:n4pgs@arrl.net">n4pgs@arrl.net</a> (434) 978-1962
Director	Bill Phillips	AD6JV	<a href="mailto:billp1048@earthlink.net">billp1048@earthlink.net</a> (434) 872-0686
Director	Bob Pattison	K4DU	<a href="mailto:k4du@arrl.net">k4du@arrl.net</a> (434) 985-4828
Director	Jim Owen	K4CGY	<a href="mailto:k4cgy@yahoo.com">k4cgy@yahoo.com</a> 434-296-3044

## Contest Calendars

<a href="#">ARRL Contest Calendar 2009</a>	ARRL sponsored contests
<a href="#">SM3CER Contest Service - Calendar 2009</a>	Contests all over the world! Also has links to online rules for most contests
<a href="#">Contesting Online</a>	Just about everything contests!

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 Charlottesville, VA 22906  
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**ISSUE DEADLINE - 25th of each month**

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 (434) 990-2659  
[W4RQ@yahoo.com](mailto:W4RQ@yahoo.com)

**Next Club Meeting : February 9 - 7:30 PM NRAO Bldg - UVA Grounds**

**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 NRAO building on Edgemont 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  
**Northern Piedmont Emergency Net:** Each Thursday at 8:00 PM  
**All Nets are held on the 146.760 repeater**

**AREA REPEATERS**

146.760 (-) 151.4 Hz Tone **WA4TFZ**  
 146.925 (-) 151.4 Hz Tone **WA4TFZ**  
 146.895 (-) 151.4 Hz Tone **WA4TFZ**  
 224.760 (-) No Tone **WA4TFZ**  
 444.000(+) 151.4 Hz Tone **WA4TFZ**  
 444.250 (+) 151.4 Hz Tone **WA4TFZ**  
**Other Area Repeaters**  
 444.775 (+) 151.4 Hz Tone **KF4UCI**  
 442.075 (+) 151.4 Hz Tone **KF4UCI**  
 145.17 (-) 151.4 Hz Tone **W4FCO** (Fluvanna)  
 146.79 (-) 110.9 Hz Tone **WW4GW** (Buckingham)  
 145.450 (-) 151.4 Hz Tone **K4DND** (Martha Jefferson Hospital)  
 224.600 (-) 151.4 Hz Tone **KG4HOT**

**AARC CALENDAR OF EVENTS**

DATE	EVENT
February 9	Regular Club Meeting
March 9	Regular Club Meeting
April 13	Regular Club Meeting
May 11	Regular Club Meeting

**AARC - PUBLIC SERVICE SCHEDULE**

DATE	EVENT
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Membership application available in PDF format at [http://www.albemarleradio.org/members/AARC\\_member\\_application.pdf](http://www.albemarleradio.org/members/AARC_member_application.pdf)