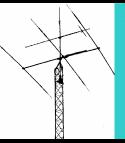
# The AARC Beacon



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

Volume 2010, No. 4

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**April 2010** 

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# Meeting Notice

The next AARC meeting will be held on April 13 at 7:30 PM at the NRAO Building on the UVA Grounds. The program will be a "Getting Ready for the Cruise-In"!

Be sure to attend and bring an HT!

### The President's Letter

Dave, K4DND

Greetings all AARC members. We just finished the first two public service events of 2010 and how fun was that? Thanks to all for the great turnout, and the FB job done by everyone. The public service participation sheet for 2010 has been updated and you can check that out anytime to see how your standing compares with the rest of the AARC. Special thanks to Jon KJ4RPW for the great job on both days. Jon performed like a real veteran, surprising since he has only been licensed a short time, not surprising since he has been participating as KF4UCI's sidekick at public service events for many years.

Saturday, March 27 was the Bel Monte Endurance Mountain Run, and several hundred crazy runners competed on 50 mile, 50 km, 25 km and a special 4 km course. Everyone except the 4 km'ers left at 0630 running in the dark with headlights. It is guite a sight! The WX was chilly to say the least, and Patsy K4PMC, Jim K4JEC, Elmer KF4UCI, Jon KJ4RPW and Claude N3RXO did a great job communicating despite high frequency teeth chatter. That isn't exactly QRM or QRN, I guess we will need a new designation! By the way, Claude N3RXO drove all the way from Pittsburg to work with us. He helped out last fall on the GEER as his wife was a participant, but this spring drove down to help out just because he had a good time last fall. I hope we will see Claude again this year for the Great Eastern Endurance Run. If you want more information about these two extreme running events go to: http://www.badtothebone.biz/ and pull down the RACES tab at the top of the page. All communications for these events is on the Waynesboro Repeater Association 147.075 W4PNT repeater, and many thanks to the Association for their generosity in letting us use their repeater.

Sunday, March 28 was the 20<sup>th</sup> year of the Jefferson Cup Bike Races, and the AARC has participated every year. We had a great turnout of volunteers this year including Jim K4BAV, Kenneth KJ4KIH, Jon KJ4RPW, Dayton KG4FOM, Linda KI5LLB, Don KE4DDR, Wes K4WLE, Elmer KF4UCI, Greg N4PGS, Patsy K4PMC and Jim K4JEC. It was another cold outing for our crew and again there was a bit of QRC? (chatter) noticed. Everyone did a bang-up job supporting the safety of several hundred bike racers. This event is organized into 3 sets of races, with 3 race groups on the

course at a time, staggered by approximately 10 minute start times. Each race group is accompanied by a ham, county police motorcycles, and US Cycling Federation motorcycle officals. The race officials are using business band VHF radios, the police are using 800 MHz radios, and the hams were using the 146.760 WA4TFZ repeater as well as Elmer's 442.075 KF4UCI repeater. Needless to say, there is a lot of radio traffic during the day. This year for the first time we used hams at each of the three corners of the triangular course, to good effect. Thanks everyone for the time, effort and help you provided.

The strong focus on public service that has always been a hallmark of the AARC continues with a mix of old timers, and newer members who are getting good experience to continue this tradition into the future. The AARC is able to maintain our Special Service Club designation through the ARRL because of this level of service and participation. As well, members who participate in public service learn new skills and gain new tools to add to their capabilities as emergency communicators. Linda KI5LLB got a valuable introduction to using a mobile rig in cross band repeat operations. I just figured out why we were not able to put the 146.760 into the Mackey mode during the event. We don't have that mode programmed into the controller, a task for the TC to look into. For those of you not familiar with this mode, it is a special mode advocated by Frank Mackey K4EC many years ago. In this mode, there is no repeater tail, and no courtesy tone. The repeater drops immediately as the carrier of the transmitting station drops. It was suggested by Frank that every repeater should have this capability so that during an emergency, no time would be lost in the repeater tail, courtesy tone and following tail. We found that this greatly facilitates use of cross band repeat and had we been able to put the 146.760 repeater in this mode during the public service event, Linda would have been able to talk immediately rather than having to wait for the repeater to drop before she hit the PTT and then have to wait to talk.

In another item of interest to the AARC, I mentioned last month that I was disgruntled by the weathers effect on our participation in FrostFest. Of course that was a relatively small matter compared to the effect the weather had on RATS. In a routine email from RATS, I learned that attendance at FF this year was approximately 600 as opposed to the 2400 attendees expected. RATS managed to make \$200 above their expenses of \$23,000! Every time someone thinks we should have a hamfest, keep that in mind. Big events require big risk.

We have a special event coming up, the May 1<sup>st</sup> Cruise-In. This is a first for the AARC and a first for Virginia as well as pretty much being a first anywhere. If you haven't registered to participate yet, please do so at the AARC website. We need to know how many club members will be there to help out, as well as how many are interested in participating by showing your mobile stations. It should be a lot of fun and a great opportunity to pick up some valuable tips and tricks.

Our next AARC meeting is coming up on April 13 and I hope to see you all there.

## Veep Peeps

Jim. K4JEC

We expect to have our club safety vests at the April meeting, as well as club patches, so come on out and pick yours up. We will be in our usual meeting place at the NRAO with the board meeting at 7 p.m. and the club meeting at 7:30 p.m.

Plans for the Cruise-In are developing nicely and the word is getting out to the ham community in Virginia and beyond. The Cruise-In has been featured on the home page of the Virginia ARES/RACES website for several months now and the hits keep coming in. At last check 150 people had read the announcement. We have it featured on our website with an online registration form thanks to Kenneth – KJ4KIH. Flyers were emailed to all the clubs in Virginia that have email addresses and snail mailed to those that don't. I have announced it twice during the Virginia Fone Nets. Just recently, I had an opportunity to list it on the eHam. net Calendar of Events. If you have an opportunity to do so on any nets in which you participate, it would be appreciated. Every little bit helps.

If you plan to be at the Cruise-In in any capacity – worker or just as a participant – please go to the club website and register so we will have a head count for planning purposes. You don't need a mobile radio station in your vehicle to register. We just need a body and vehicle count.

The April Club Meeting will be pretty much devoted to last minute planning for the Cruise-In Each committee will have an opportunity to meet and discuss their individual roles during the event and than report back to the assembled group. You are needed to help guarantee the success of this event so please come to the meeting and join with one of the operating committees. The goal is to have enough help so that individuals can be relieved from their posts from time-to-time to enjoy participation.

One last thought is to remind everyone to check our club website from time-to-time – new pictures are added to reflect club activities, events are announced and the resources are really helpful. Check it out at: albemarlereadio.org.

## Club Business

#### **Board Minutes of 3/9/2010**

President Dave – K4DND -- called the Board Meeting to order at 7 p.m.

Dave gave Don's – N4UVA - treasurer's report in his absence:

Balance December 31st. 2009: \$4,978.77 Credits: \$1,722.00 Debits: \$1,099.55 Balance February 28, 2010: \$5,601.22

The deposits were mostly dues and payments for the Annual Awards Banquet. The major expense was \$834.82 to the Elks Lodge for the dinner.

Bill - AD6JV – Education Committee reported a training session for the newly licensed CERTS Members was completed and asked several club members to be on the look out for candidates for the AARC club award while wondering around the Science Fair.

Linda – KI5LLB -- gave her Estate Committee meeting report stating that some items have been sold and that some equipment still remains to be sold.

Jim – K4CGY -- no Technical Committee actions to report. All club repeaters seem to be working, as they should.

Vice President Jim – K4JEC -- gave his report on the Cruise-In. We now have multiple cruise in applications from as far away as Yorktown, Richmond, Roanoke, Churchville and Fredericksburg. He also showed the members a sample of the vest he recommends the club purchase for club member identification at public service events. Vests would be available for purchase by club members. They meet the new standard for Amateur Radio Communications identification set by the ARRL.

Jim asked the board in a motion to approve \$200 for Cruise-In raffle prize expenses. Linda -- KI4LLB -- seconded the motion. Unanimously approved.

Jim asked the board to approve the purchase of 36 vests for \$270.00. Greg – N4PGS made the motion and it was seconded by Jim - K4CGY. Unanimously passed.

Jim distributed copies of the 2010 club directory. Due to a printing error we received 250 copies for distribution for the cost of 100 copies. Jim advised members present to help them selves.

#### General Membership Meeting 3/9/2010

Dave called the General Membership meeting to order at 7:30 p.m.

Secretary Patsy – K4PMC -- made a motion that we approve the following applications for membership:
John Ball, David Booth, Tommy L Moore, Mike Richardson, Whitney Richardson and Mike Watkins. Harry – W2HD -- made the motion to accept the new applicants. Joe – W2PVY -- seconded. Passed unanimously.

Secretary Patsy – K4PMC -- advised the past minutes were printed in *The Beacon*. Greg – N4PGS, made a motion to accept the minutes as printed in *The Beacon*. Motion seconded by Joe – W2PVY. All supported the motion.

President Dave – K4DND -- read Treasurer Don's – N4UVA -- financial report, The month of March began with a balance on hand of \$5601.22.

Greg gave his report on special events.

Bill - AD6JV – Education Committee reported a training session for the newly licensed CERTS Members was completed and asked several club members to be on the look out for candidates for the AARC club award while wondering around the Science Fair.

Linda – KI5LLB -- gave her Estate Committee meeting report stating that some items have been sold and that some equipment still remains to be sold.

Linda advised that she was waiting for some items to be picked up.

Jim – K4CGY -- no Technical Committee actions to report. All club repeaters seem to be working, as they should.

Vice President Jim – K4JEC -- gave his report on the cruise in. We now have multiple cruise in applications from as far away as Yorktown, Richmond, Roanoke, Churchville and Fredericksburg. He also showed the members a sample of the vest the board approved for purchase for club member identification at public service events. Vests would be available for purchase by club members. They meet the new standard for Amateur Radio Communications identification set by the ARRL.

Jim also advised that the 2010 Club Directory and Handbooks are available. He explained that we have 250 due to a printer error and suggested we help ourselves. He advised we also have lots of cruise in flyers. Please help us distribute them. He urged that if any member is going to a ham fest or other ham gathering that they take some with them. Registrations are coming in from all over the state. He was asked if a camera crew would be welcome. He advised yes.

Ron -- K4RKA advised he has an excel spreadsheet with numerous area hams that can be sorted in many different ways. He offered to send anyone a copy by e-mail if they wanted it.

Vice President Jim recommended that the club purchase more club patches. It was suggested a second order be placed for an additional 100 at around \$2 each. Motion made by Jim – K4JEC -- and seconded by Joe -- W4BXG. The motion carried.

Joe – W4BXG -- announced that during the last snow storm everything (communications systems) failed in Fluvanna County. Ham radio came to the rescue and was all that they had for communications.

President Dave read some remarks sent to him regarding Bob Dorsey, our recently passed silent key by Roger Barron – W4EI.

Dave then adjourned the business meeting and gave a brief program on hand held radios entitled Communication Basics.

Dennis – K4THE -- then offered a program on Handheld Transceivers followed by a general discussion by members. Almost every member had at least one handheld radio. Many were discussed until we ran out of time.

President Dave declared the meeting adjourned at 9:17 p.m.

Respectfully submitted,

Patsy Crosby, Secretary

## AARC Club Committees

If you are not yet affiliated with one of the six standing committees of the AARC, take a look at the following and see which one best matches your personal interests.

#### **Section 1: Technical Committee**

A Technical Committee composed of a Chairperson, a Director, the Trustee and at least two other members shall be appointed by the Board at the January Board meeting. 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. This committee will maintain an up-to-date inventory of all club radios, repeaters, antennas, test equipment and other electronic devices and related items (except Field Day equipment). A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The committee's written report shall be submitted to the Club for its approval at the Annual Meeting in October.

#### **Section 2: Fund Raising Committee**

A Fund Raising Committee composed of a Chairperson, the Treasurer, and at least two other members shall be appointed by the Board at the January Board meeting. 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. This committee will maintain an up-to-date inventory of all items held for fund raising. A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The committee's written report shall be submitted to the Club for its approval at its Annual Meeting in October.

#### **Section 3: Education Committee**

An Education Committee composed of a Chairperson, a Director, and at least two other members shall be appointed by the Board at the January Board meeting. 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. This committee will maintain an up-to-date inventory of all items held for education and training. A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The committee's written report

shall be submitted to the Club for its approval at its regular meeting in October.

#### **Section 4: Public Relations Committee**

A Public Relations Committee composed of a Chairperson, a Director, and at least two other members shall be appointed by the Board at the January Board meeting. This committee is responsible for Public Relations and releases pertaining hereto. 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. This committee will maintain an up-to-date inventory of all items held for public relations. A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The committee's written report shall be submitted to the Club for its approval at its Annual Meeting in October.

#### Section 5: Public Service Committee

A Public Service Committee composed of a Chairperson, a Director, and at least two other members shall be appointed by the Board at the January Board meeting. 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 directed by the Club. This committee will maintain an up-to-date inventory of all items held for activities, including such things as Field Day antennas and supplies, banners, tents, shelters, etc. A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The committee's written report shall be submitted to the Club for its approval at its Annual Meeting in October.

#### Section 6: Estate Committee

An Estate Committee composed of a Chairperson, a Director, the AARC Treasurer and at least two other members shall be appointed by the Board at the January meeting. This Committee shall act upon notification that an AARC member or local area non-member amateur becomes deceased (Silent Key). The charge to the committee is to assist the family of the Silent Key (with permission of the family or estate executor) in disposing of any amateur radio or related equipment to the best benefit of the family of the Silent Key. If the activity is undertaken by the Estate Committee, a complete inventory of such equipment should be made, with fair current market values assigned, and a subsequent full accounting made to the family or estate, following any action taken with respect to disposal of the inventory. This committee will maintain an up-to-date inventory of all items received and being held for later transfer to the Fund Raising Committee. A copy of this inventory will be provided to the Secretary at the October Annual Meeting each year. The Committee's written report of yearly activity shall be submitted to the Club for its approval at the Annual Meeting in October of each year.

# AARC and Piedmont Regional Science Fair

Jim K4BAV

Wednesday March 10<sup>th</sup> was the BIG DAY for nearly 300 students from 29 schools in the Charlottesville area. These highly motivated and talented high school students came to the John Paul Jones arena representing schools in twelve counties (Albemarle, Nelson, Fluvanna, Louisa, Greene, Orange, Spotsylvania, Madison, Rappahannock, Culpeper, Stafford, and King George Counties).

Club members Bill Phillips AD6JV, and Jim Wilson K4BAV, had done this before. Mike Rein KA4JJD, and Joe Flamini W4BXG, served as first time judges. These four representatives of AARC were assigned to small teams of judges and were then assigned specific exhibits to evaluate.



Bill AD6JV and Joe W4BXG confer

Following his first experience as a judge at the science fair, Joe W4BXG commented, "That definitely was a lot of fun. It was very gratifying. I would absolutely do it again." Joe added that he had doubts about the future of our country, but that these bright and enthusiastic students renewed his hope and confidence in the future of America.



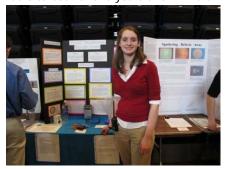
#### Mike KA4JJD confers with other judges

Following his first time as a judge, Mike KA4JJD commented, "Although not directly related to amateur radio, the Microbiology Division provided some interesting submissions. I was pleased to see that a student exhibitor in

our group received a Grand Award Best of Show. Sarah Hoopers project on The *Effect of Different Inocula and media on the Power Output of Microbial Biobatteries* was very well done and quite interesting. Maybe someday we will power our rigs with yogurt. It was great fun, and I will certainly try to do it again."

Jim K4BAV commented that during the previous year, his first time as a judge, he was teamed up with two very helpful men who were well experienced as science fair judges. This year, Jim was paired up with a team that included three PhD ladies, people who were highly intelligent and successful in their fields yet modest and thoughtful in dealing with each student. One member of Jim's team currently serves as the top leader at the nearby National Ground Intelligence Center (NGIC). Jim was puzzled by his inclusion in such a marvelous team of intelligent and outstanding people!

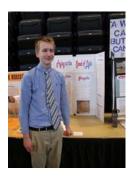
This exciting all day intellectual competition occurs every year. This year, the 257 student projects included subjects in a wide range of fields. AARC presented two special awards to students who showed promise in electronic fields. Bill Phillips presented a check for \$100 plus a book on ham radio to both of this years two winners. 1) **Andrea Oliver**,



a high school
junior and
member of AARC
(call sign
KG4ZWE), won for
her exhibit
showing how radio
information can be
transmitted by
modulated laser
beams. 2) Scott

**Loudin**, a King George Middle School student, won for his project using a microwave oven to determine the speed of light.

Two of the winners from this science fair were selected to be candidates in the upcoming national science fair in San Jose, California. Last year, one of the winners at the Charlottesville fair won a prize of \$50,000.



In March 2011, the Piedmont Regional Science Fair will hold its 30<sup>th</sup> competition at the John Paul Jones arena. YOU may want to keep this date reserved to serve as an AARC representative. Think about it.

## New MOU - ARRL and ARC

From www.arrl.org

On Thursday, March 25, ARRL President Kay Craigie, N3KN, signed a new *Memorandum of Understanding* (*MoU*) with the American Red Cross (ARC) at ARC National Headquarters in Washington, DC. The *MoU*, which replaces an earlier *Statement of Understanding* that expired in 2007, provides a "broad framework for cooperation" between the ARRL and the ARC "in preparing for and responding to disaster relief situations at all levels in rendering assistance and service to victims of disaster, as well as other services for which cooperation may be mutually beneficial."

The ARRL Board of Directors approved the signing of the *MoU* at its January 2010 meeting following the completion of negotiations. The Red Cross requires the completion of a criminal background check to participate in Red Cross activities and provides a process by which a volunteer may have a criminal background check performed at no cost to the volunteer. In the case of ARRL volunteers, the Red Cross has agreed to accept an alternative process: ARRL volunteers may arrange, at their own initiative and expense, to have the criminal background check performed by a state or local law enforcement agency.

The Red Cross also has agreed that ARRL volunteers shall not be asked or required to consent to credit checks, mode of living investigations or investigative consumer reports in order to provide a communications function.

The ARRL and the Red Cross encourage interested volunteers in their respective organizations to become members and to participate in the activities of the other organization. ARRL volunteers should be aware that if they wish to become Red Cross volunteers, they may be required to consent to additional background checks in accordance with Red Cross policy that may include credit checks, mode of living investigations or investigative consumer reports.

Per the *MoU*, "both ARRL volunteers and ARC workers will work cooperatively at the scene of a disaster and in the disaster recovery, within the scope of their respective roles and duties as recommended." During a Red Cross Disaster Relief Operation (DRO) and depending on their training and qualifications, ARRL volunteers may perform in one or more of several roles, including Amateur Radio Liaison, Communication Equipment Operator, Communication Equipment Installation/Repair and Disaster Assessment.

ARRL volunteers who are assigned roles by the Red Cross during a DRO will be provided with Red Cross credentials as required by the role, consistent with Red Cross policy. "Because of the importance of emergency communications, we are happy to be able to continue the League's long-standing relationship with the American Red Cross," said ARRL President Kay Craigie, N3KN. "The ARC and other served agencies give Amateur Radio operators the worthwhile missions in our communities that allow us to thank America for the privilege of being hams."

## For Sale and Wanted...

Ron, K4RKA

WANTED: 2m beam. KB4JNK, ron at ron@ronmauer.net

FOR SALE: Heathkit model IP-27 TV post- marker/sweep generator with manual,\$25
Heathkit model IP-27 regulated LV power supply .5V to 50V @ 1.5A max. \$35
Contact Tom Rae, W4RAE at 434-978-2003 or

Contact Tom Rae, W4RAE at 434-978-2003 or ctrae38@embarqmail.com

**WANTED:** 11/25/09 Heath HP23A or HP23B power supply. Contact Ron, K4RKA@JUNO.COM or 434-973-3640

FOR SALE: 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. Carter, WD4AYS, 434-566-8767, celliott14@aol.com

FOR SALE: 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. \$199.00 Jim K4CGY 434-296-3044

FOR SALE: 4/30/09 Old tube console radios. Philco 620F (1937)- \$ 50. Zenith 7S682 (1940's)-\$100, Carter Elliott, WD4AYS, 434 566 8767 celliott14@aol.com

FOR SALE: Yaesu FT-950 w/ voice contest chip, stock mike and matching desk mike, Astron 35 Amp power supply, MFJ keyboard keyer, and MFJ 949C manual tuner, manual and box it was shipped in. I'm the original owner. Make an offer. Icom 751-A with CW narrow filter, external frequency entry keypad, matching Icom auto-tuner. Manuals included. I'm the original owner. Make an offer. Matthew Brill/KR4BG ex: KA4ONH, WD4JCC, WB2LAR matthew.brill@psysolutions.com 540-471-9789 (cell phone – leave a message). 5/1/09

# ARRL Propagation de K7RA

ARRL Propagation Bulletin ARLP012

Average daily sunspot numbers were down nearly five points this week to 24.6. New sunspot group 1057 appeared on March 23, and by March 24 was thirty-eight times its original size. It covered ten one-millionths of the solar hemisphere on Tuesday, and on Wednesday it grew to 380 one millionths.

On Thursday new sunspot group 1058 appeared, and the total area for both groups expanded to 401 millionths of the solar hemisphere. Total sunspot area has not been this large since February 8, when the total was 460 one-millionths. (The numbers given for Wednesday are a revision of the numbers for the same day given in yesterday's ARRL Letter.

The largest area covered during all of 2009 was 380 on October 29, followed by 310 on December 18. March 23 through April 3 2008 was a period of very strong sunspot activity, and on March 26-28 the area covered by three sunspots was 520, 510 and 410 one-millionths of the solar surface.

Our reporting week for data at the end of this bulletin is always Thursday through Wednesday, and we haven't reported a weekly average solar flux above 89 since Propagation Forecast Bulletin ARLP007, which had 90.6 on February 11-17.

Harry Gross, KC2FYJ of Mineola, New York wrote in with questions about the numbering of sunspot groups, which is different than the sunspot number.

Harry asked, "First, what's the scheme (e.g. why is a particular group referred to as 1055, for example)? Is it the 55th group seen in 2010 perhaps? Or is it something more esoteric?"

"Second, how do you decide that a particular group is 'returning?' I presume it's because it's circled the Sun and is returning on the other side again. However, how can you be certain it's the same group, since there is a wide (but now narrowing, thanks to STEREO) area were we can't observe on the far side of the Sun? Couldn't the group have disappeared, and a new one formed in its place?"

The sunspot groups are numbered consecutively, starting with 0, and when group 9999 emerges, the next new group will be 0 again. I have also seen them expressed as five digits, so the current sunspot 1057 this week would be 11057.

If you go to <a href="http://spaceweather.com/">http://spaceweather.com/</a> and look at the Archives section in the upper right, change the date to June 15, 2002 and click View.

Note the numbers on the solar image on the left side are up in the 9990+ range. Now click "Forward" on the upper right

to advance the date to June 16. Note the piece about "Sunspot Zero." I don't know why the image doesn't show sunspot 2. Perhaps it emerged, was numbered, then faded in less than a day. Perhaps that is also why paging backward does not produce sunspot 9999.

It looks like we went from group 321 to 1057 over the past seven years. If sunspot groups were to continue emerging at the same rate, which has been slow recently, it could take us until April 14, 2095 to reach group 0 again, a pretty rough guess. That will be less than a month and a half short of my birthday at age 143, perhaps around Solar Cycle 32. I get my information second hand regarding which groups are returning, and do no direct observation myself.

I think they can be recognized possibly from magnetic signatures, and also the timing. It takes about 27.5 days for a complete solar rotation, but it varies with latitude, because the Sun is a big ball of (very hot) gas. At the equator the period is less than 26 days, and toward the poles it is about 36 days. A few references on this can be found on the web at, <a href="http://tinyurl.com/yhxjr5g">http://tinyurl.com/yhxjr5g</a>, <a href="http://tinyurl.com/ykguzeo">http://tinyurl.com/ykguzeo</a>.

John Buttolph, N1JB of Lake Elmore, Vermont wrote in with information on a Navy map (see <a href="http://tinyurl.com/yhpfcwd">http://tinyurl.com/yhpfcwd</a>) showing letter designations for each time zone. Z or Zulu time as we all know is for the prime meridian, or Greenwich Mean Time. But when it is 1200Z, it is 0400U on the West Coast, and 0700R in Newington, Connecticut.

Click on the map for greater detail. John wrote, "The world is divided into 24 time zones, and each is assigned a letter. The U.S. Navy, as well as civil aviation, uses the letter 'Z' (phonetically 'Zulu') to refer to the time at the prime meridian. Proceeding eastward from Greenwich, the zones are designated with the Latin alphabet letters beginning with 'A' or 'Alpha' time. [I do not know why the prime meridian time zone was given the last letter of the alphabet rather than the first!] Not all letters of the alphabet are used. For various reasons having to do with population centers and other cultural reasons, the time zones do not strictly follow the meridian lines, and some time zones vary by the half-hour."

# Contest Highlights - Upcoming

#### **ARRL-Sponsored Contests**

| April 18   | ARRL Rookie Roundup |  |
|------------|---------------------|--|
| June 26-27 | ARRL Field Day      |  |

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

#### **Other Contests of Interest**

| April 5  | Missouri QSO Party |
|----------|--------------------|
| April 11 | Montana QSO Party  |

| April 11 | QCWA Spring QSO Party |  |
|----------|-----------------------|--|
| April 11 | Georgia QSO Party     |  |
| April 17 | Michigan QSO Party    |  |
| April 17 | Ontario QSO Party     |  |
| April 24 | Florida QSO Party     |  |
| April 24 | Nebraska QSO Party    |  |

The <u>SM3CER Contest Service - Contest Calendars</u> has info and rules for these contests and just about every contest that exists.

| AARC Public | : Service Schedule |
|-------------|--------------------|
| April       | none               |
| May 29      | Tour de Greene     |
| June 12-13  | MS-150 Bike Tour   |

| Area Hamfests        |                          |  |  |
|----------------------|--------------------------|--|--|
|                      |                          |  |  |
| Date April 4, 2010   | RARSFest                 |  |  |
| Location Raleigh, NC | http://rars.org/hamfest/ |  |  |

| FCC Database Updates |  |  |
|----------------------|--|--|
| New Calls            |  |  |
| Upgrades             |  |  |
| KF4UCI General       |  |  |
| Vanity Calls         |  |  |
|                      |  |  |

| VE Session Schedule - 2010     |                                                                                                   |  |  |
|--------------------------------|---------------------------------------------------------------------------------------------------|--|--|
| Date<br>Location<br>(ARRL VEC) | For exam sessions in Virginia outside the AARC area, check the ARRL Exam Session Search web page. |  |  |
| (AITTE VEO)                    |                                                                                                   |  |  |

| AARC Club Officers |                  |        |                                                  |
|--------------------|------------------|--------|--------------------------------------------------|
| President          | Dave Damon       | K4DND  | k4dnd@arrl.net<br>(434) 973-5866                 |
| Vice<br>President  | Jim Crosby       | K4JEC  | jecrosby@comcast.net<br>(434) 987-2006           |
| Secretary          | Patsy Crosby     | K4PMC  | patsycrosby@comcast.net<br>(434) 989-2362        |
| Treasurer          | Don Eason<br>Jr. | N4UVA  | deason@comcast.net<br>(434) 973-9119             |
| Director           | Jim Wilson       | K4BAV  | jwilsonphoto@earthlink.net<br>(434) 245-7041     |
| Director           | Linda Beard      | KI5LLB | lindaskyone@embarqmail.c<br>om<br>(434) 823-2107 |
| Director           | Greg Faust       | N4PGS  | <u>n4pgs@arrl.net</u><br>(434) 978-1962          |
| Director           | Bill Phillips    | AD6JV  | billp1048@earthlink.net<br>(434) 872-0686        |
| Director           | Bob Pattison     | K4DU   | k4du@arrl.net<br>(434) 985-4828                  |
| Director           | Jim Owen         | K4CGY  | <u>k4cgy@yahoo.com</u> 434-<br>296-3044          |

| Contest Calendars                         |                                                                               |  |
|-------------------------------------------|-------------------------------------------------------------------------------|--|
| ARRL Contest Calendar 2010                | ARRL sponsored contests                                                       |  |
| SM3CER Contest Service -<br>Calendar 2010 | 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.albemarleradio.org/



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#### ISSUE DEADLINE - 25th of each month

Contact Information Dave Damon K4DND 4521 Burnley Station Rd Barboursville, VA 22923 434-973-5866 k4dnd@arrl.net

Next Club Meeting:

April 13 - 7:30 PM

NRAO Bldg - UVA Grounds

#### CLUB MEETINGS and NETS

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

BOD Meetings: Prior to regular meeting at 7:00 PM

Meetings are held at the NRAO building on Edgemont Road.

LUNCH BUNCH: 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 |               |        |  |  |

| Other Area Repeaters |               |                     |  |  |
|----------------------|---------------|---------------------|--|--|
| 444.775 (+)          | 151.4 Hz Tone | KF4UCI              |  |  |
| 442.075 (+)          | 151.4 Hz Tone | KF4UCI              |  |  |
| 443.000 (+)          | 151.4 Hz Tone | W4UVA               |  |  |
| 145.17 (-)           | 151.4 Hz Tone | W4FCO (Fluvanna)    |  |  |
| 146.79 (-)           | 110.9 Hz Tone | WW4GW (Buckingham)  |  |  |
| 145.450 (-)          | 151.4 Hz Tone | K4DND (MJ Hospital) |  |  |
|                      |               | IRLP Node # 4703    |  |  |
| 224.600 (-)          | 151.4 Tone    | KG4HOT              |  |  |

Membership application available in PDF format at http://www.albemarleradio.org/members/AARC\_member\_application.pdf