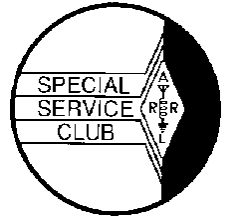


The Repeater

Monthly Newsletter of the Arkansas River Valley Amateur Radio Foundation



March 2007

PRESIDENT'S COLUMN

Here we are in the third month of the year! It's hard to believe how fast things are moving. On my daily trips into town I've started to notice all the flowers blooming. Seems they're eager to please.

Ham Fest went rather well. I've received many good comments on how things went. The testing was incredible. 37 folks tested. 28 were successful! Congratulations to you! I suppose HF will be getting rather crowded. I counted at least 7 folks trying for the Technician ticket!

In our February meeting we covered many topics. I saw many of you getting restless in your seats. This next meeting shouldn't be too long. We have just a few topics up for discussion. One of which will be Field Day (FD). It's generally the last weekend in June. I hope we have many volunteers for this event as it's a big one to put together.

I just rx'ed word from Butch (KC5AHO) and Steve (KE5EBC) that the next Fox Hunt will be Saturday the 24th of March. We will meet at the Hughes Center at 9:00am. The band will be 2 meter. That's all the information I was allowed to have. The group from Clarksville has been invited to attend as well! Good luck to all.

In April W5ATU, the Arkansas Tech ham club, will be having a Fox Hunt. Most of these people don't have a license yet, so I'll be looking for anyone that would like to help with this project. The date for this will be April 10th. Time yet to be announced. This is a good opportunity to show some folks what we can do.

Thank you! This goes to everyone that helped in one way or another with the Ham Fest. This is one of the two incomes for the Club, and this year went off well! Good job everyone! Thanks again.

**73 to all,
Andy KD5QJQ**

Check out our website at www.arvarf.com

HAMFEST A SUCCESS



Photos by Sergio Picado,
KE5CUY

ARES / RACES

At our February ARES/RACES meeting, we talked about the Winlink 2000 system. Like D-Star, which K5CS discussed last month, Winlink 2000 is a system to tie ham radio traffic into the internet. There are some differences, though. Winlink 2000 does not have the speed of D-Star, but can be accessed with common equipment. All that is needed is a packet TNC (or computer sound card program for packet), and a 2 meter FM rig. Any kind of computer, even one running DOS, is sufficient. Internet e-mail can be sent to any e-mail address worldwide, and delivery is close to immediate.

Here is an example of how Winlink can work. W5RZ connects on packet to the KC5LVW-11 Telpac node in Clarksville on 145.01. W5RZ can use the NEBO node as a relay if unable to connect directly to KC5LVW-11. W5RZ sends the command SP SMTP:redcross@email.org (simulated e-mail address), and then sends the subject line and text of the message. The Red Cross receives the message with a return address of W5RZ@WINLINK.ORG. As soon as W5RZ sends the message, he is registered with the Winlink system and assigned this e-mail address. If the Red Cross wants to send a message back to W5RZ, he simply addresses it to W5RZ@WINLINK.ORG. Winlink knows where W5RZ last connected from and routes the messages back to the KC5LVW-11 node, where W5RZ can pick it up.

This is the simplest way to use Winlink, but you can also use a program called Airmail. Airmail has the look and feel of Microsoft Outlook so anyone, including non-hams (with an appropriate control operator) can send and receive e-mail with a familiar program even though it is being sent via ham radio. File attachments are possible with Airmail, so Word documents or Excel spreadsheets can be sent, even on HF.

What if the internet link is broken at KC5LVW-11 but the 2 meter side is still on the air? The traffic is then relayed by radio to ADEM HQ in Conway, W5AUU. W5AUU can put traffic into the internet but can also send it via HF if the internet isn't available. Traffic can flow end-to-end via ham radio with no internet involvement, but when the internet is available for part or all of the path, delivery is faster. If W5RZ had an HF rig with Pactor digital mode capability, he could connect direct to W5AUU or other gateway stations on HF with no 2 meter involvement.

A mountaintop packet node can often cover a radius of 60 miles or more, so Winlink 2000 provides an exceptional "last mile" capability in a disaster. If the Telpac node loses internet connectivity, it can use D-Star to reach even further to an area where the internet is available. There's a lot more to it - for more information, see www.winlink.org.

Although these digital systems are complex, most of their operation is transparent to the end user. Winlink 2000 is extremely simple to set up and use on 2 meters.

We will not have an ARES/RACES meeting in March. This is a busy month and we hope you will support the various activities. We had a very successful Russellville hamfest and my congratulations go to everyone who took part. I hope to see everybody at the Weather Spotter's Course on March 13th and then the Fort Smith hamfest on March 31.

73, Dennis W5RZ

Our club has done a good job of holding classes and getting people licensed. I'm sure new licensees have received help from different people, but several people have remarked about how difficult it can be to actually set up a station and get on the air. We tend to forget that those things that are so simple to us "old timers" can be intimidating to a new ham.

Melissa and I are going to try having some "Elmer" sessions at our house. These will be very informal meetings and anyone who wants to participate is welcome. It will be a time when new hams can use my station to get on the air, learn how to build an antenna, solder a coax connector, etc. Also, if you want to bring a piece of equipment and test it out, we can do that. There will be coffee and homemade cookies and good fellowship. Meeting dates & times will be discussed at the next meeting. It will probably start sometime in April.

Some good news is that Aulton, N4OWB, is enthusiastic about this idea and has agreed to help. Aulton is a great teacher and mentor and antenna experimenter as well. I hope other experienced hams will come and be available to answer your questions. We will just have to try it and see how it works. It may become a continuing thing, or something to do for a few times after we get a batch of new hams. What it becomes is up to you!

73, Dennis W5RZ

The Human Mind!

****This is weird, but interesting! ****

fi yuo cna raed tihs, yuo hvae a sgtrane mnid, too.

Cna yuo raed tihs? Olny 55 plepoe out of 100 can. i cdnuolt blveiee taht I cluod aulacly uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it dseno't mtaetr in waht oerdr the ltteres in a word are, the olny iproamtnt tihng is taht the frsit and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it whotuit a pboerlm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Azaanmig huh?

yaeh and I awlyas tghuhot slpeling was ipmorantt!

**Hey, did you hear Sergio in his radio interviews about the Hamfest on KARV & KCJC ??
Both stations ran it once or twice a day Mon. thru Fri. prior to the Hamfest. Good publicity!!
Sergio also ran ads in the Russellville, Dover and Atkins newspapers.
Way to go, Sergio!!!**

VE TEST SESSION

At the Russellville Ham Fest there were a record number of exams given, with outstanding results. We had 37 people test, of which 28 passed. We have 12 new Technicians, 15 new Generals and 1 new Extra. These were not all from Russellville. There were about 60 who wanted to take the test, but the small facility just could not accommodate such a large crowd in a timely fashion. VEs were still signing and checking paper work past 2:30 that afternoon. Congratulations to all who tested and passed. We could not have done the exam without the VE team from Morrilton A GREAT BIG THANK YOU to them. The next test session will be in

Morrilton on Saturday, April 14th @0900 located at the Farm Bureau building.

Steve WB5KUT

The Hanging Judge Hamfest - March 31

Fort Smith Area Amateur Radio Club---Knights of Columbus Hall---10203 Columbus Lane.

Directions: I-40 to I-540 to exit 12, South U.S.71, 3 lights, right 300' left on Columbus

For more info go to <http://www.hangingjudgehamfest.com>



Dr. Tom Bullock Wilson W5GLB/NNN0TCF, age 86, of Russellville, Arkansas, died Saturday, February 24, 2007, in Roanoke, Virginia. He maintained a lifelong interest and membership in the Navy-Marine Corps Military Affiliate Radio System (MARS). The funeral was held at 2 P.M., Saturday, March 3, 2007, at the Central Presbyterian Church in Russellville. Burial was in Oakland Cemetery in Russellville.

10 METER NET

There will be a ten meter net held on Thursday evenings at 7:00 p.m. on 28.380 MHz. This will provide an opportunity for Technicians as well as new Generals to get on HF with a local net. The Net Control Station will be N5IBP, Charles of Greenbrier, assisted by N4OWB, Aulton of Russellville. All Hams welcome.

MINUTES OF THE MEETING

**Arkansas River Valley Amateur Radio Foundation
Monthly Club Meeting
Western Sizzlin' Restaurant
February 20th, 2007**

Sonia read the minutes of the January meeting. Keith made a motion to accept the minutes of the January meeting. Seconded by Nick, motion passed.

Nick told us that not many vendors will be at the Ham Fest this year. Tables are going for \$10 each.

Ben is selling the tickets for the Ham Fest. It's \$5 for a ticket. Children 16 years old and younger get to enter free.

There was some discussion on whether the people wanting to take their tests for their licenses should be charged the five dollars for the Hamfest.

Charles announced that there will be a setup for the Ham Fest on Friday at 3:00 p.m.

Steve Green said that there will be a VE testing and he needs all available VEs because there will be a lot of people who are going to want their general licenses since the Morse code requirement has been removed.

Aulton said that there will be a Storm Spotter class on March 13th at 6:00 p.m. at the Pendergraft Library. It will be held in Room 300 south, which is on the 3rd floor.

Glenn showed us our financial quarterly report. He has calculated that in 5 years we have lost about five thousand dollars. Cleaning this year for after the Fest has gone up a bit. There was much discussion on where we would like to have the Fest perhaps next year.

Sergio will be contacting the radio and newspaper to tell them about the Fest.

Butch and Steve both said that there will be a fox hunt after the Ham Fest stress is out of our systems.

Mike McAllister has told us that the 440 repeater information is going ok.

Andy announced that the Constitution of our club needs to be reviewed. He also said that the ATU Ham club is going great.

Sonia announced that we need new net controllers in a few months. Andy is the net control for March and Roger is for April.

Dennis Schaefer announced there will be an ARES/RACES meeting Tuesday, February 27th at 7:00 PM.

Steve made a motion to adjourn the meeting. Seconded by Ben, the meeting was adjourned.

Sonia Picado - KE5EIW Secretary

FOX HUNT!!

Don't forget the 2-meter Fox Hunt on Saturday, March 24th. Meet at the Hughes Center big parking lot at 9:00 a.m.

Hosted by KC5AHO, Butch Tatum and KE5EBC, Steve Felkner.

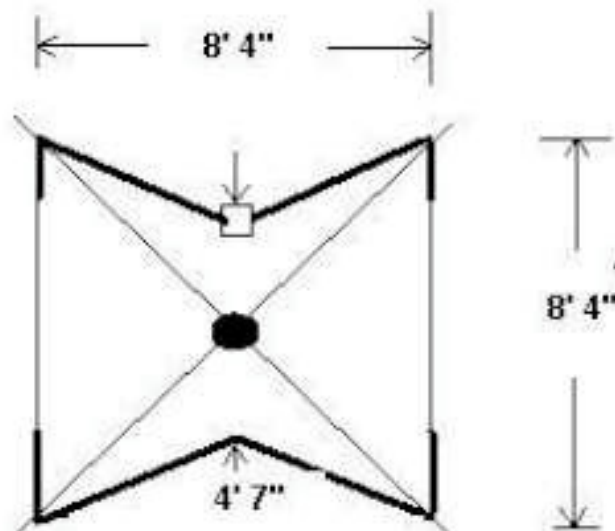
THE COAXIAL "MOXON" ANTENNA

The coaxial "Moxon" takes advantage of the light weight and velocity factor of RG-58U PE vf .66 coaxial cable to reduce the size of a high gain, low noise antenna by 34%. Any co-ax that has a velocity factor of .66 will work fine. RG-58 Foam insulated has a velocity factor of .85. Dimensions given below were calculated using .66 velocity factor. The driven element center conductor only is connected to the transmission line; one side is connected to the center conductor of the feedline, and the other side is connected to the shield of the feedline. The folded-back ends have the center conductor and the shield soldered together. Both folded-back ends of the reflector have their center conductor soldered to the shield. The four supports can be cane fishing pole, fiberglass rods, or PVC pipe. Seal all co-ax ends against the weather. The centers of the elements should be 4' 7" apart. Corner-to-corner distance of an 8'4" square is 11' 8 1/2", so the 4 spreaders can be 6' and drilled to pass the co-ax through. A square of marine plywood can be cut for a center support and holes drilled in it to accept 2 U-bolts to attach each spreader, and make provision for mounting to a mast. The tails and the centers can be tied together using any sunlight-resistant non-conductor, such as black nylon cord. Adjustment of the center spacing + or - 2" can be made to reduce the swr. The front of the antenna, of course, is the driven element. The antenna should be mounted horizontally and should be at least 16' above the ground (25' to 30' would work better). Provision should be made for a rotator.

The antenna is actually a cross between the Hex-Beam, the X-Beam and the Moxon rectangle. It has more forward gain than the Moxon, and better front-to-back ratio than the X-Beam and the Hex-Beam. The gain is about 5.6 dBi, with a f-t-b ratio of about 24 dB, and the 3 dB beamwidth is approximately 80 degrees.

This antenna design is copyrighted by N0KHHQ, John Cummings, and may not be manufactured for sale except by written permission from John Cummings, N0KHHQ.

10 Meter Coax Moxon square



Driven element: Each side = 5' 5"

Reflector: = 11' 4"

For more information about this antenna, see www.hamuniverse.com and www.cebik.com/moxon/n0khq.html

CALENDAR OF EVENTS

ARVARF meeting at Western Sizzlin'

Tuesday, March 20th

Regular meeting at 7:00.

Come at 6:00, if you want to eat.

ARVARF Net:

Every Tuesday at 8:00 p.m. on 146.82
(except club meeting night)

Net Control Stations:

Mar -- Andy Ward, KD5QJQ

Apr -- Roger Sayer, AC5YG

ARVARF Board Meeting:

ARES/RACES Meeting:

None this month.

ARVARF web page:

www.arvarf.com

Arkansas Section Web Domain:

www.arkansashams.org

ARRL web page:

www.arrl.org

THE NUMBERS

March 8, 2007

Our current Roster shows 151 individuals, of which 145 are licensed amateurs. These represent 115 households.

61 members, representing 47 households have paid their dues thru Dec. '07. 40% have paid, whether you figure it by members or households.

90 members, representing 68 households, have not paid their dues for this year.

60% have not paid their dues.

I send out 95 newsletters by e-mail each month, 78 to members and 17 to Friends of ARVARF.

I mail out 40 hard-copies of the newsletter each month, 39 to members and 1 to a Friend of ARVARF.(Bob Ralston of Dardanelle).



**Check your records.
Have you paid your dues?**

I am trying to maintain an accurate current membership roster. Please inform me of any changes in your address, phone number and/or e-mail address at n4owb@arrl.net or call me at 479-890-4504.

73, Aulton N4OWB (editor)

ARVARF Officers

President	Andy Ward	KD5QJQ
Vice President	Sergio Picado	KE5CUY
Treasurer	Glenn Holmes	N5KLE
Secretary	Sonia Picado	KE5EIW
Board Members	Michael McAllister	KE5EIIY
	John Evans	WB5BHS
	Steve Green	WB5KUT
	Clarence Hesselrode	KE5EJA
	Butch Tatum	KC5AHO
Newsletter	Andy Ward	KD5QJQ
	Sergio Picado	KE5CUY
	Sonia Picado	KE5EIW
	Aulton White	N4OWB

THE REPEATER

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