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September 2004

The Bulletin of the
Richmond Amateur Telecommunications Society
P. O. Box 14828 - Richmond, Virginia 23221



From the Top

By Jerry Williams, KJ4IT, President

I'd like to begin by thanking everyone who attended the last meeting, and voted in the election. I am happy to see an upsurge in new membership and a sincere interest in getting members involved in all aspects of the amateur radio hobby no matter what their class of license—be it Technician, General or Extra. If you would like to learn about Amateur Radio, then we have many in the RATS who are firmly committed to help you in a positive, helpful and friendly way to get more from your hobby.

That reminds me, in this hobby you learn by doing and elsewhere in the newsletter RATS member Greg Curti, KG4KWW, and others are planning another trip to the mountains to get experience setting up a ham stations. They are looking for volunteers so if you would like to have a good time and do a little hamming, contact Greg and he'll fill you in on the details.

For those left behind, we will be at the September 17th meeting of RATS and will be having another 'Club Station' event where members will trained to set up one of the Club HF stations and make contacts with other HF stations and Greg says he hopes to hear you on the air.

I would like to thank Robert Orndorff, W4BNO, for his efforts and report on Field Day and about the antenna construction that went on during all hours of the night and day it seemed, our visitors and the fun and fellowship had by all.

(continued on page 5)

RATS Field Day 2004

By Robert Orndorff, W4BNO, Field Day Director

Field Day 2004 was a lot of fun. We had new members show up and participate. We had a few visitors—some from the other side of the world (would that be local DX?). We built a few antennas and we made close to 800 QSOs. Not everything went smoothly, though. We experienced some power related trouble.

We started gathering at the site around 9:00 AM and did a little socializing—set-up for Field Day cannot begin before 10:00 AM local time. We began by putting up the two 80 meter Carolina Windoms.

The light poles at the Laurel Park Recreation area make ideal antenna supports. We did encounter a slight problem with the line in one of the antenna launchers, WD8CHP quickly resolved that "entanglement," and we were able to continue shooting the lines. In just a short time we had both Windoms in the air and two HF stations set up. N4LSP brought along a radio (as did several others) and we used his as the third HF station. However the club only has two HF antennas.

I brought along the *FrostFest* worker prize I won last year – a Butternut HF 6V vertical antenna. It was still in the box, after a year I still had not assembled it. I figured that Field Day would be an excellent opportunity for me to put it together. It turns out that it was. I started working on it and before too long several others became involved, and then some other activities needed my attention and before I knew it my vertical was complete and ready to be installed! We found a convenient spot on one of the aluminum bleachers and attached it to that.



Late Saturday night of Field Day weekend finds Michael Baker, N4LSP, & Roy Davis, WK4Y, home brewing a 160m horizontal loop antenna. The antenna was supported by the light towers of the football field at the Laurel Park Recreation Center, this year's QTH for the RATS FD activities.

It worked well enough the first time that we didn't need to tune it. We were now ready to operate W4RAT "Three Alpha Victor Alpha".

We were powering the radios with the two club generators; they are Yamaha 1 KW models that run for 4-6 hours on a gallon of gas. The generators did produce some RF noise at first, but we moved them away from the radios and that helped immensely. Later in the evening, however, the RF noise from the generators was just too much on the lower bands (S9+ on 80 and 160). Not running on emergency power meant that we would not be able to submit a score, but it was decided that we would forgo the contest portion of Field Day and concentrate on operating and learning. So we turned off the generators and plugged into the wall.

As evening approached and the low bands were becoming available, Mike, N4LSP, suggested we put up a 160 meter loop. We conducted a short site survey to make sure it would fit, and once we determined that it would and where we would hang it, Mike headed off to Lowe's to get a 500' roll of wire. While he was gone I started getting support ropes in the air. It was dark when we finished, but it worked great. We filled up several log sheets on 160! It also worked well on 80.

Sunday morning, "Mr. Loop" (N4LSP) wanted to make another antenna. So we built a 20 delta loop that replaced one of the Windoms. We learned a lot about antennas over the weekend. The loop was much quieter than the Windom, and the signals were just as strong, sometimes even a little better (on 20M, obviously). Of course a single band antenna will outperform a multi band antenna almost every time.

It also seemed that the Windoms do have some directionality, at least on receive. We did a side by side comparison—one Windom was oriented east-west and the other north-south. We connected both antennas to one radio and then switched back and forth between the two. There was a noticeable difference in received signal strength between the two. Both antennas were at the same height and both were clear of obstructions. So it seems that the Windom may have an omnidirectional transmit pattern, but the receive pattern is not. That makes sense since there is such a large portion of wire oriented horizontally and the "end fire" is not the optimum receive direction.

We also had several visitors come by. Puck Motley, W4PM, stopped by and filled up quite a few log sheets on CW for us. We also had a visitor from Thailand, Joe Chiaranai, HS3BBN, who was with Bruce Strong, AH2AK/HS0ZBO, who has also spent some time in Thailand. He was used to being the DX, instead of working it. HS3BBN had never operated HF before, so he got some experience on the radio. We also had a visit from a VDEM official, Terry Hebert, KG4GLS and a Red Cross representative, Jason Hawes, AA4AS.

TJ, N4UYQ, set up and demonstrated APRS. He invited someone passing through town to stop by for a hamburger – the invitation was declined because the fellow had to work.

Mac, KE4AUG, and Bill, KE4CIO, showed up and stayed for the duration, as did Mike, N4LSP, and our President, Jerry Williams, KJ4IT.

I made a CW contact with the backing of my code practice partner, K4AUR. It didn't occur to me until too late to check the Novice CW bands. When I did, I found a lot of "CQ CQ CQ FD". Next year I plan to do more than one CW QSO!

Even though we didn't get to enter a score, we accomplished a lot. The club gained two new antennas, (courtesy of N4LSP), we had more that double the amount of QSOs we had last year, we had a cookout, we learned about antennas and generators, and we got some people that had never been of HF before to operate. Everyone had a good time. We hope to see you next year! Mark your calendars now, Field Day is always the fourth full weekend in June (that's June 25th and 26th 2005).

If you would like to be involved in planning for next year's Field Day, contact Robert Orndorff, W4BNO. He can be reached at w4bno@rats.net.

Election Results; Board Changes

Two directors will be returned to their seats on the Board and two new faces will join them. Jerry Long, K4JKL, and Warren Winner, W4UIE, have been reelected for another term as directors. Joining them will be Michael Baker, N4LSP, and Ed Land, K3KE.

Two directors resigned their positions on the Board. The resignations of Guy Carlsen, K4CNF, and Parke Slater, N4KFT, were announced during the September meeting. Also resigning was longtime *FrostFest* Director, Jim Clark, N3JF. RATS would like to thank these members for their long service to the club. It will be the responsibility of the Board of Directors to appoint successors to fill the vacancies until those terms come up for election again.

Membership Renewals

All memberships must be renewed by the end of this month (September 30th). The membership fee for those renewing is \$20. Students 17 or under and Seniors 65 and older renew for \$10.

There is an additional one-time (as long as membership is kept current) application fee for new members in the amount of \$5 in addition to the annual dues. Anyone renewing late (on or after October 1st) will be required to pay the \$5 application fee in addition to the dues. Enclose a check or money order for the appropriate amount and return in the SASE provided. Review the information on the label on the renewal form. If there is anything incorrect, or if your address, telephone number or email address has changed in the past year, cross out the incorrect information and write the correction in the appropriate blank.

Departments

VE EXAMS

Information for exams for licensing or upgrading are as follows. Bring \$12.00 cash (exact change) and two forms of ID, one of which must be a photo ID. If you are upgrading, you must bring the original of your current license *and* a photocopy of it. The location for testing is J. Sargeant Reynolds Community College, 1651 E. Parham Road, Richmond, Building B. For more info contact Patrick Wilson, W4PW, (804) 932-9424 or go to: <http://www.w4pw.org/hamtests.htm>.

If you have credit for previously passed element(s) bring your original CSCE *and* a photocopy of it unless your current license reflects these endorsements. Arrive 15 minutes early. Preregistration is preferred, but not required. Walk-ins are welcome if seating and materials are available.

The first exam is October 9th at 9:00 AM. The second testing will be on December 11th.

The Tony Amato <http://www.kr4uq.org> site no longer publishes information about W5YI testing.

CQ, CQ, SEEK YOU . . . AT THE NEXT RATS MEETING!

The Richmond Amateur Telecommunications Society meets the third Friday of the month at 7:30 PM at the West End Volunteer Rescue Squad building at 1802 Chantilly Street, Richmond. From Broad Street, Chantilly is the first block east of Staples Mill Road. The WEVRS building is ½ block south of Broad on Chantilly.

IN AND AROUND THE COMMONWEALTH . . .

The Virginia Beach Ham Fest is this month. The September 18th-19th event will be at the Virginia Wesleyan College at the corner of Wesleyan Drive and Baker Road. The hamfest will be all day Saturday and 10 AM until 3 PM on Sunday. For more information contact Lynn Lilla, W9DJQ, at (757) 478-1597 or email at hamfest@exis.net.

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RATS 2004-2005 Membership Renewal Form

Name _____ Call Sign _____ Phone Residence _____

Address _____ Phone Business _____

City _____ State _____ Zip _____

Email Address _____

Please examine the label to the right. The information on it should match the format above. If anything is incorrect or needs updating, please do so in the blanks provided. Include this form with your check for the appropriate amount described above.

Mini Expedition to the Blue Ridge Mountains

by Greg Curti, Sr., KG4KWW

Need an excuse to get out of those Honey-Do's? Well here it is, and it's a good one, too. On September 17-19 let's get together in the beautiful Shenandoah National Park's Big Meadows Camp Ground for a few days of fellowship, fun, skill-enhancement and demonstration to the public and to Park Rangers the many uses of Amateur Radio.

Richmond area hams with the help of RATS will be setting up a station from the Big Meadows Camp Ground in the Blue Ridge Mountains of Virginia. The object of this event is to have fun and fellowship but, it's also to help build skills in setting up field stations and running off of generators and batteries. The Park Service enjoyed us being there so much last year that they invited us back for an encore.

As, you may know amateur radio operators may be called upon in the event of a national emergency to provide communications. We Amateurs must practice and prepare to be able to set up communications where needed, to find out how well our equipment works, and what improvements might be needed in our equipment. We stage small scale set ups in various locations at different times of the year. The Shenandoah National Park provides just the place to give us a good test of our equipment and abilities to transmit from the mountains of Virginia to the rest of the country and possibly overseas as well. Not only is it a great place to visit, but we would be away from the city buildings and obstructions.

We have been assigned by the ARRL the Special Event Call Sign K4R. The following frequencies for the Fall Expedition Event are: 14.245, 7.245, 3.845, 144.190, 50.190.

Licenses of all classes are invited to participate. What we need is for folks to bring the following for use during the event:

- Power Generators (preferably the quite kind so, we can use them at night)
- Deep Cycle Batteries for night use and backup to the generators.
- Radio Gear: HF, 6 Meter SSB and 2 Meter SSB rigs, antennas, coax and some extra connectors.
- Camping Gear such as: Tents, camping stoves, sleeping bags, and lanterns for night time lighting.

We would be leaving from the RATS meeting location on Friday evening around 5pm. All members of the club will be allowed free entry to the park. Upon our arrival, we will setup a HF station and make contact with a group of RATS members at the RATS meeting location that will have a HF rig set up and ready to receive our signal. This event can be of great benefit to all who participate and to the club as a whole.

The Park Authority has given us permission to set up again this year, and the ARRL and *QST* have asked for pictures of this year's event to once again publish on the ARRL / *QST* web site.

Please contact Greg Curti (KG4KWW) at 559-7930 Or email at kg4kww@arrl.net for more information.

RATS ONLINE

<http://www.rats.net/>

<http://www.rats.net/forums/>



<http://www.frostfest.net/>

<http://membership.rats.net/>

(continued from page 1 "The Top")

You may have noticed an SASE (self addressed stamped envelope) with this newsletter. It is time to renew your membership and the club has provided this as a means to encourage you to do so. This year the renewal notice is back on track/on time according to the by-laws so we will not be having any 'dues amnesty' this year. You should include one copy of a membership application and up date any personal information, otherwise your information will be presumed to be correct. Please send in your check or money order now.

At the last Board meeting, Meade Daffron, K4CMD, was appointed Public Events Chairman. His first task was to coordinate the RATS table at the Science Museum of Virginia for the Virginia Home Education Association Convention. One of the club stations was set up on both VHF/UHF and HF. Although there was no transmitting success on HF with the dipole that was lofted inside the rotunda, the megawatt short wave broadcasters and amateur activity were heard. Many involved in this event are already formulating a plan to get the HF 'heard' next year.

That is about all for now. Come out and support your club and when you do bring a friend or newcomer. I will look forward to seeing you there.

73, Jerry
KJ4IT

"Jack Binns, *Bravest of all of the Crew . . .*"

*"The Captain was brave, but braver was he
Who sat in his room with his hand on the key
And steadily sounded his CQD"*

On January 23, 1909, the White Star Liner, *Republic*, collides with the Lloyd Italiano Liner, *Florida*, 26 miles southwest of the Nantucket Shoals Lightship. A wireless message reaches the *Baltic* which quickly steams toward the scene. This disaster at sea is chronicled in a film called *Rescue at Sea*, a PBS documentary and part of their *American Experience* series. You can visit their website to read about the incident and the young technology that played an integral part in the fact that only four lives were lost on the *Republic* and over 1500 saved altogether!

<http://www.pbs.org/wgbh/amex/rescue/index.html>

The verse at the beginning is from a song called *Jack Binns* by Mrs. W. B. Bull. The words to the song, the sheet music and a RealAudio file are available on the website. Read all about the "boys of wireless" and how the incident made them "pop-culture heroes."



Above: The Edwards—Field Day regulars Mac, KE4AUG, and Bill, KE4CIO, working side band.

Right: Putting up the HF 6V Butternut vertical are (l-r) FD director Robert Orndorff, W4BNO, Mac Edwards, KE4AUG, and Jason Hawes, AA4AS.



Above: Roy Davis, WK4Y, tunes up for another QSO while Dave Kiefer, N4DWK, looks on.

Field Day 2004 Remembered

Solid Copy™ is published by the Richmond Amateur Telecommunications Society, Inc., PO Box 14828, Richmond, VA 23221.
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The purpose of **Solid Copy™** is to provide club information and amateur radio news to members of the Richmond Amateur Telecommunications Society. Information or articles for inclusion must be received no later than the first of the publication month. Submit via the Internet at editor@rats.net. Opinions expressed in **Solid Copy™** do not necessarily represent the views of the officers, directors, or members of RATS, Inc. Material in this data file may not be reproduced or distributed **IN ANY FORM** without express written permission from RATS, Inc.

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