

# SOLID COPY™



## Mid-Summer 2003

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



## *Announcement to the Membership*

*Guy Carlsen, K4CNF, President*

This is a reminder to attend the August 2003 meeting of RATS. This is an important meeting for all members to attend. It was actually supposed to be the election night for officers but as of this writing the nominating committee is not able to identify a candidate for President or one of the Directors. If you are interested in being a candidate please contact anyone on the board or Jerry Williams, KJ4IT, the chairman of the nominating committee.

The August meeting is important for another reason. The board would like to hear your thoughts about the one thing that is the very essence of this club, its repeater. For a while now we have been aware that Channel 23 may be taking down the tower where our repeater antennas are located. We don't know, at this point, what their plans are. We are about to find out. The technical committee is researching a number of options regarding the repeater. One thing is to determine for sure whether or not we need to relocate. Another thing, which the board has been discussing for a long time is what do we need to do to modernize the repeater and take a step into the new millennium, at least the new century? What about the 440 repeater? What do we need to do to be ready to support Homeland Security? At the August meeting the

### *Field Day 2003 – Laurel Recreation Area*



**Mac, KE4AUG, logs while Sam, KC4QKT, makes another Field Day QSO**

proposals and recommendations will be explained to the membership and we will ask for your comments so the board can make informed decisions about where to go from here. The board feels that it is important for the members to be there.

The format of this meeting will be similar to the discussion at the County Council. The proposal and

details will be explained to the membership. Anyone wishing to offer suggestions or opinions will be able to do so within appropriate time limits. That way we can get through this meeting in a more efficient manner. This will be the program for the evening as well. After the meeting, a closed session of the board will meet to make the necessary decisions. The membership will be informed of the

decisions by a special newsletter. We hope that there will be a good participation.

I am still hoping that there will be some action regarding the election of new officers.

### **DAYTON 2003**

*Mike Gabbert, K4AUR*

What's the biggest drawback to Hamvention? 600 miles! The one saving grace to the trip is the drive through western Virginia and West Virginia. What a beautiful drive, especially when you get west of Charlottesville. Turning your head from one side to another is like looking from one post card to another. Thursday morning's drive to Dayton was accompanied by some sunshine during my drive through the mountains and one oooo-and-ahhh after another. The return home on Saturday, however, was more mundane as the trip was accompanied by rain, then dark as day turned into night.

I left Richmond a day early so I could hit the Hara Arena first thing Friday morning. This was my first trip to Dayton. My plan was to stay all day Friday, go again Saturday morning and get back on the road for home by early Saturday afternoon.

My arrival at Salem Mall where the shuttle buses would whisk us over to the arena was at 8:00 a.m. sharp. Then we waited. And waited. We weren't getting whisked. Only about two or three small shuttles were running, and literally hundreds of radio aficionados were already in an ever lengthening line snaking its way through the parking lot. Finally, at 8:30 a.m. the troops arrived. A dozen or so buses—more small shuttles and some real buses—showed up.

As it turned out, the original bus service contracted to serve Hamvention went bankrupt a couple of months before. The Hamvention organizers had only reached an

agreement with alternate bus service companies at 11:00 p.m. the night before Hamvention opened. They were from out of state, Illinois and Indiana. They were told to begin running at 7:30 Friday morning. Unfortunately they were in the Central Time zone and not told that Dayton was Eastern Time. So, as mentioned, the buses didn't really start running until 8:30 Friday morning.

I came with a plan and pretty much stuck to it. I had two purchases in mind and wanted to attend some of the forums. The main thing I wanted to buy was a commercial Buddipole and a used safety belt for climbing towers. I got both.

While at the Buddipole booth I got to meet Budd Drummond, W3FF, Mr. Buddipole. He was very friendly and interesting to talk to. For those of you not into portable operations, a Buddipole is a portable dipole that is configurable for two meters through 40 meters depending on how many sections of the whips are extended and where the coils are tapped. This can be carried on a painter's pole or mounted on a tripod.

He has had plans for building a homebrew Buddipole on his website using PVC pipe and Radio Shack parts for a few years now. About a year ago he came out with the commercial version. It's been fun to watch the development of this antenna project, and see it succeed as a commercial venture. It was good to finally meet him, too.

I thought a day and a half would be adequate. If you go, plan on staying all three days. That way you have plenty of time to browse the booths, look at all the flea markets sales in the parking lot and see the presentations and talks that interest you most.

At the Yaesu booth was the AH3D team—at least two of them. Yaesu sponsored the Johnston Atoll DXpedition. Martii Laine, OH2BH, and Bernie McClenny, W3UR, were there. Martii was at the booth when I

dropped by. They were distributing their QSL cards there so I got mine; it was the last QSO I made as KB5HSA. Since Martii was there, I got him to sign my card. Later I saw Bernie when he was presenting at the DX forum. If you're waiting on QSLs from AH3D, now that Hamvention is over, you should be getting them soon.

The DX Forum began with a presentation by the ARRL about their "Logbook of the World," or LoTW. This is their answer to electronic QSLing and contact confirmation for contesting and achievements like DXCC. The system is just beginning beta testing now. The presentation focused basically on how the system will work. Everyone will be encouraged to submit their logs into the system at no cost. A fee will be required when you get a contact confirmation from LoTW. The system's integrity depends on secure electronic signatures of the participants. Once the logs are submitted, any alterations can be detected by the system to assure reliability.

The presenter did not elaborate on how this system will be promoted abroad. It will likely not be an issue for major DXpeditions, but how well the rest of the world is "wired" to the internet was not discussed.

Even though a fee will be assessed to get confirmation of a QSO, the ARRL says it will be cheaper than postage and card-exchange through the mails.

I attended another forum entitled "Antenna Technology." I thought this would be a general presentation on antenna building. Instead it was, as one speaker put it, "an infomercial about a commercial antennas." But it was interesting. One was about the Fluidmotion SteppIR beam antenna by Michael Mertel, K7IR. This antenna is tunable by lengthening or shortening the element lengths remotely. This is accomplished by stepper motors and a copper-beryllium alloy formed much

like a tape measure—flat with a crown and a series of holes in the center for the gears of the stepper motor to be able to extend it through a tube or retract it.

The nonconductive tubes give the antenna elements rigidity and protect the metal alloy from the weather. In seconds the beam can be tuned to different frequencies in a band or to another band entirely from six to 20 meters. The antenna can be reoriented 180 degrees in seconds at the touch of a button without rotating the beam. This is accomplished by shortening the reflector so it becomes the director and lengthening the director to serve as the reflector.

Another antenna presentation was about AM broadcast towers and a project to reduce height and produce a low profile antenna by Jim Breakall, WA3FET. The disadvantages of a short monopole vertical radiator were, for the most part, overcome by using multiple radiators to divide the current and increase resistivity, and top-loading to reduce reactive impedance. The multiple radiators were close enough together to act as a single element, i.e., four radiators on a circle of five-foot radius.

This cage-monopole antenna system uses the standard 120 ground radials and horizontal elements at the top. However, it is only one-third the height of a standard, quarter-wave radio tower, yet for the mid to high frequency end of the AM band the

systems has shown 96% to 98% efficiency of the current, much taller system in use today.

Though this work was done for commercial radio, its application was suggested for amateur use—particularly for long wavelength applications.

I also bought several books about DX'ing and antennas. One of the books was by Bob Locher, W9KNI, who was kind enough to sign the copy of *The Complete DX'er* I got. I picked up a couple of videos on DXpeditions to Thule of the South Sandwich Islands and to South Georgia Island—both in 2002 by the same team in succession. These were called MicroLite DXpeditions in that they had no beam antennas, no amplifiers and only six Kenwood TS-50's—essentially mobile radios with 100 watts max.

Most of my shopping was done on Friday. I came back Saturday mainly to see the forum on DX'ing. It rained all day Saturday so I limited my flea market browsing. By 1:00 p.m. I was back on the road. 10 hours later I pulled into the drive at the home QTH.

Overall, I was impressed with “the largest gathering of amateur radio operators in the world.” Would I go again? Definitely! I probably wouldn't care to go every year, but every other year might be good. But who knows—if you go next year you might just see me there.

## VE EXAMS

Exams for licensing or upgrading are as follows. There are two locations, the W5YI VEC sessions in Chester and the ARRL VEC testing in Richmond. 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.

If you have credit for previously passed element(s) bring your original CSCE *and* a photocopy of it. Arrive 15 minutes early. Preregistration is preferred, but not required (unless you are taking the CW element in Chester, then required). Walk-ins are welcome if seating and materials are available.

The 1<sup>st</sup> test is on July 7<sup>th</sup> at 7:30 PM at Pietro's Restaurant at the corner of Jeff Davis Highway and Osborne Road in Chester. For more info call (804) 768-2255 or visit:

[http://www.kr4uq.org/V\\_E\\_EXAM/S/v\\_e\\_exams.html](http://www.kr4uq.org/V_E_EXAM/S/v_e_exams.html)

The 2<sup>nd</sup> exam is August 9<sup>th</sup> at 9:00 AM at 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>

The 3<sup>rd</sup> testing will also be at the Pietro location in Chester on September 1<sup>st</sup> at 7:30 PM.

## RATS MEETINGS

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.

### Keeping it Legal—

Bill, KE4CIO, reviews the Band Plan before beginning a sweep through another band early Sunday morning. This was June 29<sup>th</sup> at Laurel Recreation Area on Hungry Springs Road, a part of the Field Day 2003 activities sponsored by RATS.



**Solid Copy**<sup>TM</sup> is published by the Richmond Amateur Telecommunications Society, Inc., PO Box 14828, Richmond, VA 23221.  
Copyright 2002. All Rights Reserved. Circulation 200

Voice Mail System: (804) 790-0077, mailbox 7287

Internet E-mail Address: rats@rats.net

RATS Web Site: <http://www.rats.net>

*Frostfest* Contact: Jim Clark, N3JJF (804) 271-1998 or email to: [volunteers@frostfest.com](mailto:volunteers@frostfest.com)

Editor, *Solid Copy*, Mike Gabbert, K4AUR

The purpose of **Solid Copy**<sup>TM</sup> 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](mailto:editor@rats.net). Opinions expressed in **Solid Copy**<sup>TM</sup> 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.

### **Board of Directors**

Guy Carlsen, K4CNF, President	<a href="mailto:k4cnf@rats.net">k4cnf@rats.net</a>
Parke Slater, N4KFT, Vice President	<a href="mailto:n4kft@rats.net">n4kft@rats.net</a>
Charlie Tribble, WA4ERC, Secretary	<a href="mailto:wa4erc@rats.net">wa4erc@rats.net</a>
Arlo Amstutz, WA4RLO, Treasurer	<a href="mailto:wa4rlo@rats.net">wa4rlo@rats.net</a>
Warren Winner, W4UIE, Director	<a href="mailto:w4uie@rats.net">w4uie@rats.net</a>
Jerry Long, K4KJL, Director	<a href="mailto:k4kjl@rats.net">k4kjl@rats.net</a>
Bill Stewart, KG4IJH, Director	<a href="mailto:kg4ijh@rats.net">kg4ijh@rats.net</a>
Marie Long, K4KML, Director	<a href="mailto:k4kml@rats.net">k4kml@rats.net</a>
Robert Orndorff, W4BNO, Director	<a href="mailto:w4bno@rats.net">w4bno@rats.net</a>

The board may also be contacted, as a whole, at [board@rats.net](mailto:board@rats.net).  
Please feel free to contact any of us regarding RATS business, information, and ideas.

---

**R.A.T.S., Inc.**  
**P. O. Box 14828**  
**Richmond, VA 23221**

Stamp  
Here

**FIRST CLASS MAIL**

Forwarding & Address  
Correction Requested