

The Beacon

A monthly newsletter of the Albemarle Amateur Radio Club serving Central Virginia Celebrating our 51st Year

June 2014

Our next AARC meeting is set for June 10 at 7:30 pm. The meeting will convene at the NRAO and feature a full discussion of Field Day activities.

> President's Corner By Jim Owen – K4CGY



(photo by Jim K4BAV)

Dayton: Stardate 2014.5.15 Definition: Largest gathering of Amateur Radio Operators and Vendors in the World. Have you ever been there? If not, plan on going in May 2015.

There were many in the club that made the trip this year. In my car it was Jim Wilson K4BAV, Sid Anderson WA4MBS and I Jim Owen K4CGY. We met John Green KX4P at the motel and the three of us made up one group. Friday morning after breakfast we drove the 11 miles or so to the Hara Arena and arrived about 8:30AM. Note to future attendees: If you arrive by this time you can get a parking space near the front of the lot and not have to walk as far. Since the Arena opens at 9:00AM the first thing is to take a look at the flea market that opens at 8:00AM.

First impression is, where does it end? There are row upon row of venders selling almost anything you could ever think of and then some. The weather was cold and almost raining but that is Dayton so dress for all four seasons. Later in the afternoon we even had a little hale and sleet! After looking over just a few of the spaces for about an hour it's into the buildings to look at what the commercial vendors have to offer. It doesn't disappoint as almost each one has something you haven't seen before and new equipment that they are coming out with and of course equipment they have been selling. I won't go into what each vendor had to offer as that would take pages and pages, but a few observations. There were many more SDR offerings than when I went last time in 2011. Each of the major manufactures (Kenwood, Icom, Yaesu etc) had new announcements that you will see in future QST's and other publications. For you Ten-Tec enthusiasts, I have been assured that there will be an Orion III in about a year or so.

Friday evening we attended the DX dinner, a first for me. The attendees were asked to stand as to how many countries they had in their DXCC list. Several had 391 countries; I didn't know that there had been that many! Several awards were given out and one of them told the story as to how as a young amateur he went on a DXpedition to Navassa Island. Mentioned that he borrowed a Vibroplex from some guy named Harry Dannels W2HD!

Saturday was a repeat of Friday with the flea market vendors beginning to reduce prices. I picked up a few small parts and had a vendor drive a hard bargain on a Heathkit HW12A transceiver. I saw it across the aisle and asked what he wanted for it. He replied "\$100.00" I said, "no I don't need it that bad". "I sold one a few years ago for \$50.00". He replied, "You can have it for \$50.00". I thought about if for a minute and said "good price but I have an HW-100 I need to get working first" and started to walk away. He said "I don't want to take it home; you can have it for \$40.00". I now have an HW-12A to get working!

I hope that many more of you go to Dayton next year and experience the pleasure of the best hamfest in the USA.

The next thing coming up is Field Day. This is an emergency exercise, not really a contest though it's rolled

The Beacon

into a contest format. The purpose is to see if we can operate away from our usual location using non commercial power for twenty four hours. Some make it an excuse to get away from the XYL and drink beer, some make it more of a camping/picnic event, but while it may be some of these it's an opportunity to show what we can do in an emergency. So please support your FD committee, sign up to operate, make up a go kit of antenna's etc and of course help in the food category but leave the beer at home. See you there and let's see if we can beat last year's score.

73 Jim K4CGY



Club members and friends gathered for this picture during the Dayton Hamvention 2014. (Photo by Jim K4BAV)



Historian, Dr. Tom Perera, W1TP, presented "Disappearing Ham Radio History & Hope for the Future." He presented his lecture to a full house. Tom concluded, "The ARRL alone is keeping ham radio alive." (Photo by Jim K4BAV)

<u>Ham radio</u>: Old technology gets new respect

By Jonathan Serrie

As contributed by Ed Berkowitz – N3US

ATLANTA – Seeking reliable backup communication in a crisis, emergency managers are finding new solutions in an old technology: ham radio.

"It's just another avenue, another opportunity for us to

be able to communicate," said Herb Schraufnagel, public safety captain with Emory University Hospital Midtown. Emory HealthCare is among a growing number of hospital systems to adopt ham radio. Hospital administrators and government officials took a lesson from Hurricane Katrina, which left some Gulf Coast medical centers isolated from the outside world, as landlines and cell towers failed.

When power, phone and Internet services go down, a battery-powered amateur radio and portable antenna can provide that crucial link to the outside world. "Ham radio will never die," said Barry Thomas, Sr., a ham radio enthusiast and employee at Emory University Hospital Midtown.

"The quickest means of communication is Morse Code. It'll get out when none of this will," Thomas said, referring to a room filled with computers and smartphones.'

"It is interesting that some of the technology that has been around for 80, 90, 100 years is still relevant," said John Davis, a ham radio enthusiast.

In addition to major hurricanes, Davis says the terrorist attacks of September 11, 2001 rekindled interest in ham radio as a public safety tool. The Georgia Emergency Management Agency (GEMA) has set up a permanent ham radio station in its command center.

"We look at ham radio operators just like GEMA staff, just like DOT staff and Georgia State Patrol staff," said GEMA Director Charlie English. "They are a critical partner with us."

The number of ham radio licenses is at an all-time high in the U.S. (723,182, as of April, according to Federal Communications Commission (FCC) data compiled by Joe Speroni of the Amateur Radio Education Web Site,

"I really hope that it stays relevant and that we can be a resource to emergency management agencies," enthusiast Davis said. "Because I think that is where ham radio shines."

Fox News producer David Lewkowict contributed to this article.

Jonathan Serrie joined Fox News Channel (FNC) in April 1999 and currently serves as a correspondent based in the Atlanta bureau.



John Green, KX4P, our old friend met with his old friend, Fred Duran, W4NKI, at Dayton. (Photo by Jim K4BAV)



Dave Damon, K4DND, treated the members who attended last month's meeting with a discussion of VoIP (voice over internet protocol) programs used by amateurs and how they worked. Below, he showed off an interface that you can use to set up an IRLP node. (Photo by Jim K4BAV)



The Beacon

The Beacon is the official newsletter of the Albemarle Amateur Radio Club, Inc. It will strive to communicate with, enlighten, and entertain the members of the club in strict compliance with the official word of the club as set forth in the Articles of Incorporation and Bylaws. The newsletter shall be published monthly on or before the 1st day of the month of issue. The deadline for submissions shall be the 25th of the month preceding the month of publication. The primary role of the publication shall be to promote upcoming activities, report past activities and accomplishments of the club and its members, carry the minutes of the preceding month's meetings, as well as, become a recorded history of the club by the archival of all past issues.

Copyright 2014 AARC Inc.

Articles appearing in The Beacon may be quoted with attribution. Being a publication of an IRS 501 (C) (3) educational organization, The Beacon may occasionally use copyrighted material under the Fair Use Provisions of Copyright Law. Copyright notices must be respected.

Jim Crosby K4JEC – Editor Albemarle Amateur Radio Club, Inc. Post Office Box 6833 Charlottesville, VA 22906 www.albemarleradio.org

Final report on KickSat

The following is the final message I sent to the AARC KickSat cohort regarding the KickSat/Sprite program. Zac Manchester, a graduate student in Aerospace Engineering at Cornell, was the co-principal investigator. Bottom line was that the mission was semi-successful.

"During the night of May 13-14, 2014, KickSat reentered the Earth's atmosphere somewhere over Africa,

without having deployed any Sprites. "On April 30, several days after deployment of KickSat from the 2nd stage of SpaceX, the mission was complicated by a total system reset, perhaps from a cosmic ray that hit kickSat's on-board computer. This reset prevented the planned Sprite launches, which should have been commanded by KickSat on the 16th day after its deployment.

"Command deployment of the Sprites from the ground was impossible, because KickSat's battery voltage dropped to less than 8 volts - the minimum needed to receive uplinks. Unfortunately, the satellite re-entered less than 16 days after the reset, so deployment of Sprites was not initiated by onboard command.

"Although many people attempted to copy transmissions from KickSat, only about 15 across the world were able to do so. The majority of those were in Japan, the United Kingdom, and the United States. Other countries included Argentina, Germany, Italy, the Netherlands, Russia and Spain. All of these operators were using advanced equipment.

"Several successful operators remarked that KickSat had been difficult to copy. I think I may have copied one weak packet shortly after KickSat was deployed, but I couldn't decode it. Initial suggestions noted that its signals should be easy to copy with basic amateur radio equipment. This later proved to be incorrect.

"Although this mission did not achieve its intended goal, it has stimulated significant interest in the ham radio and satellite-monitoring communities. Zac Manchester is already making plans for KickSat2 and to date, has received many useful suggestions from members of the google group "kicksat-gs."

"This is my last report to the AARC KickSat group. I will continue to monitor kicksat-gs. If significant developments occur, perhaps we could reform our group."

Thanks for your interest.

- 73.
- J,
- Bill K4IB

Our Swap/Sell/Buy Listings

By Ron Richey – K4RKA

=== NEW ITEMS & MOST RECENT

albemarleradio.org/swapfest

FOR Sale:

posted

5/22/2014 New never used OCFdipole.com model OCF1 off center fed dipole covers 80-6 meters, is similar to the Array

Solutions antenna, antenna is

rated for 3 KW. New price is \$275 but will sell for \$150.

Tnx

Ed, N3US

WANTED:

posted 5/16/14

Stranded copper antenna wire 12-14G preferred;need app 135 feet for multiband doublet. Carter, WD4AYS, 434 566 8767.

FOR SALE - posted 3/31/2014

Hammarlund SP-600 receiver

- National NC 109 receiver
- Hickok 800A tube tester
- Knight R-100A receiver
- Old QST magazines- free

Carter, WD4AYS, 434 566-8767

FOR SALE revised 5/3/2014

Sell: New 200 feet solid braided polyester rope,3/16 diameter800 pound strength, perfect for wire antennas. \$30.

Maco 10 meter Ground Plane antenna. Works quite well on ten meters and also on 17 and 15 meters with a tuner. Assembles in five minutes. \$65. Ed, N3US, Earlysville. new club member email is tel 434 975 9001

FOR SALE - AARC benefit

updated 5/16/2014 contact Jim Owen, K4CGY at k4cgy@yahoo.com HP 5326B counter, good to 93Mhz. works ok. \$50 HP 5245L w/5253 50-500 MHz freq converter. prescaller may be bad. basic unit works ok to 55MHz \$25 KLM 70CM satellite transceiver that works but needs some TLC \$20 Fluke DMM 8600A (doesn't work - make offer. may just be a shorted battery)

FOR SALE - AARC benefit updated 5/16/2014 contact Ron Richey, K4RKA at wb4rbw@embarqmail.com Clough-Brengle 282A sweep audio generator works \$30.00 Heathkit HD-1416B Code Oscillator \$10 AuteK Research MK-1 Keyer \$40 Yaesu FT-227 "Memorizer" 2m FM transceiver w/mike \$20 RCA transistorized TVM model WV-500A \$20

The End