



THE JUNKBOX



The Official Newsletter of The Albemarle Amateur Radio Society

Post Office Box 1217

September 2007

Elizabeth City, NC 27906-1217

<http://www.taars.us>

WA4VTX Repeaters 146.655/444.300/147.330 PL 131.8 APRS 144.39

Next TAARS Meeting

Our next scheduled TAARS meeting is slated for Thursday, September 20th, at 7:30 at COA building "C" C109. Our dinner location is the Golden Corral at 6pm.

Minutes from the August Meeting

The meeting was called to order at 7:32pm by Al, K4VHV.

Herman, NO4Y, had TAARS hats for sale for \$10.

The Technician class will begin September 22 and run through October 20th with the VE session on October 27th. Zeb will handle the PR. Students will order their own books. Class will be on Saturdays from 9:00am to 12:00pm in building C at COA. The club will be buying new instructor's manuals.

Zeb did send letters to Northeast High School in appreciation for letting us use their facilities for Field Day.

Gene was congratulated for his achievement of working all US counties.

It was suggested that the email list be put on the web site.

The meeting was adjourned at 8:18pm.

D-STAR

On my recent visit to the Shelby hamfest we came across the ICOM display with pamphlets and banners proudly displaying the phrase "D-STAR". When I asked about it, Herman replied it's the newest mode that nobody knows anything about. While it was a correct answer, I felt a need to find out a little more.

What is D-STAR?

It's FM, packet, APRS, wireless LAN, and cell phone.

D-STAR is a digital radio standard designed by the Japan Amateur Radio League (JARL). While the short answer is, it's digital modulation amateur radio, that reason alone would be a far from compelling reason to change from good ole' time tested FM. It's a good thing there is more.

D-STAR has 2 types of digital data streams, one being DV or Digital Voice. This mode which is used on the 2-meter, 70cm, and 23cm bands is only 6khz wide verses 16khz for FM. Not only can that narrow bandwidth be used to carry your voice but can simultaneously carry 1200bps data. This opens a wide array of possibilities for emergency

communications or just the hobbyist that enjoys playing with different modes.

In voice mode, repeaters are very much like current analog machines with some added conveniences. When you're programming a D-STAR radio, your call sign is entered. This data is sent every time you key the microphone and as such anyone listening in can see who is talking. Cross band communication on D-STAR machines with multiple bands is accomplished via the rigs menu. These same methods are used for crossing repeaters.

D-STAR has one nifty feature; the ability to register what repeater your on even if it across the country. Once registered, any ham is able to call them oblivious to the fact they are thousands of miles away.

The second type of digital mode for D-STAR is DD or "Digital Data". This mode is only available on 1.2Ghz radios. This is the "high speed" mode for data communication and offers amateur radio 128kbs speed. Gone are the days of DOS packet programs, homebrew PC/TNC/Radio wiring. Connect a USB and RJ45 connector from radio to PC and your sending information via standard tools such as email, chat or FTP programs to the Internet or your friend across town. How much more effective could emergency communications be with this mode?

How well is this being adopted?

If you're like me you would hate to spend money on something that is "just a fad".

If you believe the propaganda this is one of the fastest growing innovations in amateur radio. While I haven't been a ham long enough to verify or disprove that claim I can tell you in 2005 there were 4 repeaters in the US and now there are 50. It appears Virginia Beach has D-STAR as this map indicates

http://www.arrl-al.org/DSTAR_USMap807.jpg

ICOM has taken the lead, and currently is the only manufacturer to utilize this standard for U.S. sales but one would expect the other manufactures to jump on the bandwagon once popularity increases.

ICOM offers 2 "Digital Ready" radios and 4 "Digital Capable" rigs. The cheapest way at the moment is the 2 meter IC-2200H. By adding the optional UT-118 board you now have a D-STAR rig for around \$330.00. The most expensive rig but really the "meat" of D-STAR capabilities is the ID-1. ICOM's 1.2Ghz analog/digital transceiver for just under \$1000.

Conclusion

This new system does hold great promise and appears it could be used in some very positive ways. I suspect that once more folks start using it then Hams will do what they do best and find even more uses for this emerging technology.

More information can be found here.

<http://icomamerica.com/amateur/dstar/default.asp>

Kevin/N4OB

Shelby Hamfest Report

As always the Shelby Hamfest takes place on Labor Day weekend. It's a little unusual for a Hamfest because it starts on Friday and Runs Through Sunday making it a 3 day event.

This year Al K4VHV, Mike KB4TOH, Kevin N4OB and myself attended. We departed Elizabeth City at 6 AM and arrived in Shelby about 1PM. After a quick lunch we checked into our hotel and headed out to the fairgrounds. When we arrived there was already plenty of activity in the flea market area and a good part of the vendors were there.



We spent a few hours wandering around, a shower gave way to a humid afternoon and ran us inside for a bit. We stumbled across Harry K4UOR who now lives in Shelby. He invited us out to his home to have dinner with him and his wife. Some of you might remember Harry and his love for ATV and cameras. Well Harry hasn't changed. He had cameras mounted every where and remotely controlled with 2 meters. Harry is quite a planner and builder. His skills are really amazing. After a nice visit and tour of the new house we made our way back to the hotel. By this time it was near 10PM and I think we were all ready for bed.



The next morning we were up off to breakfast at 6AM then away to the Hamfest arriving about 7:30 . It was an overcast cool morning and great for wondering around the acres of flea market. We all picked up a few olds and ends treasures but resisted bringing any boat anchors

home. All the major dealers had booths, ICOM, YEASU, KENWOOD, and ALINCO. HRO was there with several Hamfest specials as were several other dealers.

We departed Shelby about 12:30 on Saturday and arrived back about 7PM. It was my first visit to Shelby but I'm already looking forward to next year. Keep it in mind it would really be fun to have a big TAARS turnout next year.

Herman/NO4Y

TAARS Hats Available

If you were at last month meeting you know TAARS hats are available. We had about 20 made and there are still some left. Cost is \$10. Pick yours up at the next club meeting or see me.

Herman/ NO4Y