

**Mount Vernon
Amateur Radio Club
K4US**
*"PUBLIC SERVICE WITH
FUN AND FRIENDSHIP"*



Volume 18

OCTOBER 2005

Number 10

Ye Olde RF Output

MEETING NOTICE OCTOBER 13, 2005

7:30 PM

INOVA MOUNT VERNON HOSPITAL

2501 PARKERS LANE
ALEXANDRIA, VA 22306

Second Floor Conference Room
MVARC MEETS ON THE SECOND
THURSDAY OF EACH MONTH EXCEPT
IN DECEMBER

HAPPENINGS

October 13 - MOUNT VERNON AMATEUR RADIO CLUB monthly meeting. Held at INOVA MOUNT VERNON HOSPITAL (2nd Floor Conference Rm), 2501 Parker's Lane, 22306. 7:30 p.m. See you there!

October 4,11,18,25 - MVARC ARES NET- 146.055/146.655-8:30 PM local time. The Ten Meter portion meets immediately following the Two Meter Net on 28.415 MHz. Come and join in!

October 22 - MVARC Breakfast will be held at The Old Country Buffet on Route 1 at 8:30 a.m. Everyone's invited to join MVARC members for breakfast. They meet the 4th Saturday of every month.

MVARC REPEATER: K4US/R
146.055 MHz INPUT/146.655 MHz
OUTPUT
PL TONE: 141.3 Hz

AUTOPATCH AVAILABLE TO
MEMBERS

MVARC HOME PAGE:
WWW.MVARC.ORG
WWW.MVARC.COM

**NOTICE--VE EXAM LOCATION
THE OCTOBER 8, 2005 VE EXAM
WILL BE HELD AT**

**The FIRST CHRISTIAN CHURCH
2723 KING STREET
ALEXANDRIA, VA**

9:30 A.M.

**CALL JOHN, WZ4A AT 703-971-3905
FOR MORE INFO.**

Ye Olde RF Output is published monthly by the Mount Vernon Amateur Radio Club. Voluntary articles and comments are solicited.

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MINUTES SEPTEMBER 8, 2005 MEETING

By George, N1BV
Club Secretary

The meeting was held at the IN-OVA Mount Vernon Hospital and was called to order at 7:30 p.m. by the President, Carol, WA4GFW. He then led the Pledge of Allegiance. Next, everyone introduced themselves. The August minutes, as posted on the reflector, were approved. John, K2VPR, gave the Treasurer's Report. As of 31 May 2005:

Checking:	\$1,757.41
Savings:	3,345.75
Cash on hand:	121.50
Doc Hyde fund:	<u>1438.27</u>
TOTAL ASSETS:	\$5,524.66

Income for the month was \$776.42 and expenses were \$408.18. The Repeater Committee report was given by Dick, WA4USB, who addressed the new repeater antenna and, who also described the need for volunteers to support the Red Cross in its hurricane Katrina efforts. The ARES report was given by Steve, K3IO. He mentioned that all ARES support was being handled by the ARRL, and for volunteers to contact them before trying to drive south. John, WZ4A, provided the Education/ Volunteer Examiner Report and noted that there would be a regular test session this Saturday.

Mary, N4TCI gave the FAR Report and noted that the FARFest was this coming Saturday and Sunday. Keith, N6JWN, gave the Coast Guard Station report. The Henry amplifier was in for repairs. He said that the USCG needed volunteers to man the SHARES packet on weekends. There was no MARS report. Bob, K13O, presented the Program Committee report.

Old Business George, N1BV, reported that he had drafted a new set of By-Laws. He requested that these be reviewed by the officers and W4ZA for comment.

New Business Steve, K3IZ said he was going to have a pot luck gathering on the 17th of September on the Waynewood Recreation Center grounds to test out antennas, etc. Bob, KT4KS was the Cookie Monster, and George, N1BV, volunteered for the next meeting.

There were three guest presenters. The first was Dr. Dennis Bodson, W4PWF, ARRL Director, who described what was taking place at the ARRL Board of Directors. Brian Bayus, N1KC, Asst. Section Manager, and Mark Johnson, W3ZI, OOC, followed with descriptions of ongoing section activities.

HAMS FIND KATRINA HELL

By DAVE, AI4FC
YORFO editor

David Hyatt, K1DAV, lives in Torrington, Ct., where at this time of the year the leaves are turning and the nights are crisp and heavenly. Just a few weeks ago, he discovered the look, smell and sound of hell.

Hyatt is the district emergency coordinator for ARES Area 5 in Connecticut, and when the call went out for ham operators to help in Mississippi where Hurricane

Katrina had blown whole towns off the map, David took vacation from his job teaching electronics and laser technology to head south with pal David Wilcox, K1DJW.

It took them little time to pack up since most of the equipment was already ready to go. The rigs included: Icom 2100 for VHF, a Yeasu FT 100D for HF/UHF/VHF, an Icom 730 for HF, and an Icom 50R handheld. Antennas included a five-element beam for VHF, a fold dipole and a Comet vertical for HF, along with other assorted equipment.

The pair left for Mississippi on Saturday, Sept. 10, and arrived at the American Red Cross in Montgomery, AL, to check in. That's when the chaos began. Finally they were dispatched with a load of radios to Gulfport, but when they arrived there, the Red Cross command "blew a cork," Dave said. They had been expecting Red Cross radios, not ham radios.

Eventually they made their way to Pas Christian, MS, where they set up at a fire station and operated emergency radio for the next week, taking breaks only to unload trucks of supplies poring into the region and assist wherever else they could.

The following observations are from Dave's notes:

* "If there is a God, then what we saw shows us how powerful He can really be. What David and I saw makes me feel that the End Times are here right now. I am not of the faith but I see the light now. The rage of the sea and the winds caused massive storm surges that traveled for miles. You should know that the land we were standing on is around two feet above sea level....The wave (that hit this area) was 25 feet."

* On the 16th, they packed up and

headed to the Pineville Elementary School in Pas Christian. "We got up and packed. I bagged all my clothes and placed them in the trash. The last thing I want to do is bring any molds or diseases back home."

* At Pineville, "The First Baptist Church of LaGrange, GA, showed up and set up a food center for mass feeding. 1,500 meals were made and distributed into the community." They joined a crew trying to sort what Dave estimated to be an area the size of a football field covered with boxes and boxes of donated clothes in "disarray."

* Fact is, much of the clothing probably will be wasted because there is no support to sort and distribute it. "It is very sad to see the American people come out and send all of this to the people who desperately need this, and yet it will all be burned because the Red Cross will not work on this....We have a real big problem. These people here have only the clothes on their backs and need help....If you were to just to drive anywhere in a 10 mile radius you would see shopping plaza parking lots with piles upon piles ten feet high of cardboard boxes of this stuff."

Back in Connecticut, Dave said in a telephone interview that that experience was life changing.

"Not only were we ham radio operators but we were first responders," he said. "We did mass care support. People had not had fresh vegetables for three weeks. They were vitamin deficient. We managed to get three tractor-trailer loads full of food, pallets of water, medicine and vitamins.

"Ham radio was very helpful. Without it, we never would have gotten the food, water and medicines. We ran the radios five days straight, and this was just one town. There were 45 operators throughout Mississippi, and nine shelters in the

Gulfport area.”

Dave sees a new mission for him. He is compiling a compact disc that will include photographs and descriptions of the experience, together with information ham operators might find useful for preparing for such emergency operations.

“There are a lot of new hams out there who haven’t a clue,” Dave said. “My goal is to get information out so that if they ever have to deploy or, God forbid, there is another emergency like this, they’ll be prepared.”

Dave can be reached at iamadogman@optonline.net or K1DAV@arrl.net

GREAT ANTENNAS DON'T ALWAYS LOOK LIKE IT

By Tom, W9TZ

Ever read the reviews and ads in QST magazine and ARRL sponsored books about small stealth commercial antennas and wonder if they are for you? One of my favorite books in this respect is *Stealth Amateur Radio*, by Kirk A. Kleinschmidt, NT0Z. I found myself researching some of his recommended “packable portables”, including the MFJ-1621, the Buddipole, the SGC Stealth Kit, and the Miracle Whip, and the Bilal Isotron and decided to test them.

The majority of tests were performed using a Yaesu FT-817 QRP rig. In some cases, I used an Icom 756 Pro-II or Icom-706 MKIIG when I needed more than QRP power.

OK, all of you type A personalities, my conclusion: the Bilal Isotron is in a class by itself, and I’ll focus on this antenna this month. It had the most clear, consistent response during testing. It also has the most

unusual configuration. It is easily mistaken for a bird feeder or some similar item ... great cover for a stealth operator.

There are different configurations of this antenna for different bands. Each antenna comes packaged in its own box. Each antenna is constructed individually and with the completion of this process, it is possible to operate up to three antennas off of one feed line on a common mast.

Ralph Bilal, the manufacturer, includes a detailed instruction booklet. I found it helpful to carefully study the overall picture of the Isotron to make sure I understood how to put the antennas together correctly. Ralph goes to great lengths to include tips about everything that can go wrong with the assembly and troubleshooting process and is very thorough. Other than the confusion over the tuning process as cited below, the instructional booklet is thorough.

Perhaps the most confusing thing about the Isotron is the tuning. The biggest lesson to learn about tuning is DON'T BOTHER. As soon as your Isotron is built, plug it into your radio and try it out. Built correctly out of the box, all Isotron's are resonant at the high end of the frequency they are designed for. Once you find that resonant point, then, you plug in your trusty automatic antenna tuner and let it flatten out the frequency interface for you. If it is completely out of band, then install the exciter bars (tuning bars) and follow Ralph's instructions to tune it.

I didn't do any the above, and I went through endless grief and frustration assembling the 20 meter antenna until I called Ralph to get some help. For some reason I disregarded the instructions and tried to tune the Isotron with my MFJ-269. I wasted hours of time over several days. The exciter bar is NOT easily adjusted to a precise

setting. And as I learned the hard way, even if one is lucky enough to get the exciter bar at just the right point, it is nearly impossible for all practical purposes, to hold the bar in that position while tightening the nut to the bolt that holds the exciter bar in place.

Mounting the Isotron falls clearly into the strangest things I've ever seen category.

After I built the 40 meter antenna, I attached it to the wooden railing of a deck at the rear of a house using bungee cords, about 10 ft off of the ground, in an area featuring a lot of RF blockage, noise, and interference. BAM! A strong harmonic response jumped out of my FT-817 as I slowly dialed up and down through the frequency band. SSB strong. CW strong. I thought this was odd, so I disconnected the 817 and tried it with the Icom 756 Pro II. BAM! Not only was there a strong response, but the frequency scope showed very strong and distinct blips up and down the scope indicating sources of RF transmission. Very impressive. Crisp, clear, and little of the background noise we usually hear on the bands.

I switched to AM, listened to several distinct transmissions, and then cut back on power, attached the automatic antenna tuner, transmitted across the band and located the resonant point of the antenna. Thereafter, I switched to CW, zero beating several signals, exchanged calls signs in brief QSOs and all seemed fine. The next step involved testing the Isotron on an outdoor metal mast and then indoors on a metal mast mounted the Isotron outside on a deck on a 10 ft radio shack mast. Immediately I noticed background noise typically heard on the bands. I removed the antenna from the mast and mounted it on an aluminum radio shack attic antenna mount. I had trouble hanging this mount from the rafters in the attic, so I suspended it from the rafters with bungee cords.

The dynamic response was reduced and there was background noise because of the aluminum mast. Once I removed the mast, background noise from the antenna quieted down. My enthusiasm for the Isotron was fading as it was advertised to be a great solution for an indoors antenna.

My most frustrating experience thus far as a ham has been trying to get anything to work at my XYL's (S.O.) QTH in a covenant restricted neighborhood on a golf course in Maryland, not far from Annapolis. The house is large (about 5,000 sq ft), tall (about 50 ft), with a steep down sloping backyard into a gully populated by 150 ft Oak trees, in an area featuring a lot of RF blockage, noise and interference. The houses are located on postage stamp size lots with neighbors easily seeing all that one does outside.

No matter what I did, I could not get a signal out that garnered a response from another party while any antenna was used indoors. And while outdoors, CW was the only method I could use with the Isotron. I heard a lot of crystal clear SSB QSOs but had trouble joining any sessions or get a response to any station calls. And this included using QRP and 100 watt radios.

Perhaps most frustrating of all, I tried to reach the MVARC Cherry Tree Net on 80 meters (3.920 on Sunday morning) to no avail using the 80 meter Isotron. The signal was rough with lots of background noise and I could barely hear Frank, AA4ZS, the only speaker I could recognize. Frustrated, I tore the antenna down and went inside for a cup of coffee swearing that I would forego the Isotron.

I then hung the 40-meter Isotron off the wooden deck at about 10 feet in the air. BAM! Strong signals cascading in up and down the scope on SSB, CW, and AM. I still had no luck transmitting out on SSB. My suspicions about the severity of this

operating environment (in Maryland) were growing: this is just a bad, bad area to try to transmit out of for a variety of reasons. But, the reception with the Isotron was crystal clear with little background noise.

Next I hung the 20 meter Isotron out over a wooden deck. BAM! I am listening to VA1ISAR, a special event search and rescue station in Halifax Nova Scotia, talking to a DX operator in California. Crystal clear as a bell. I am also listening to K7MX (Florida) talking to West Coast operators and one in Hawaii. The latter was a weak signal, but then again, the antenna was 2 ft away from the house, tied down with a bungee cord to a wooden privacy fence about 10 feet off of the ground with a good 40 ft of house blocking off directivity to the west.

For the sake of brevity I will forego describing the circumstances of the other tests I conducted with each of the antennas. But in every case, the Isotron was the superior performer in terms of clarity of signal, lack of noise and overall dynamic performance. It is in a class by itself in my opinion.

If you buy an Isotron, be creative about how you mount it. My personal opinion is to not attach it to anything metal. PVC pipe will do, and, tape down all coax cable runs very neatly along the mounting shaft to ensure you do not suffer from interference. Placed outside on a mast, the Isotron has to be grounded. Mounted inside, grounding is not necessary.

Next month, I will report on the performance of the other antennas. Until then, I hope to hear you on 40 meters and whatever other frequencies the "band gods" allow us to use this year!

(Ed. Note: Tom Talleur, W9TZ, describes himself as a "forensic consultant and futurist." After a 31-year

career as a criminal investigator and head of NASA's computer crimes division, Talleur held partner-level positions in KPMG Forensic, KPMG LLP, and Marsh Risk Consulting. He divides his time between his QTHs in Georgia and Crofton, MD.)

GOT ANYTHING YOU WANT TO SAY?

I am always looking for material for the YORFO newsletter. Being relatively new to the hobby, I don't have the technical background that most of you have, and so I am especially interested in finding club members or others who have new products to review or old problems to solve better. Don't be shy. If you doubt your writing skills, on that I can help. And if you have suggestions on people you'd like to see profiled or topics you'd like to see covered, please shoot me an e-mail. YORFO can only be as interesting as the material I have to work with.

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