

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



Volume 18

NOVEMBER 2005

Number 11

Ye Olde RF Output

MEETING NOTICE
NOVEMBER 10, 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

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

HAPPENINGS

November 10 - 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!

November 1,8,15,22,29 - MVARC ARES NET-146.055/ 146.655 **7:00 PM local time**. Come and join in!

November 26 - 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.

NOTICE--VE EXAM LOCATION
THE NOVEMBER 12, 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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CAN YOU HEAR ME NOW? ANTENNA UPDATE

The topic of the club's November meeting will be the new antenna installation for the k4US repeater, said Dick, WA4USB, the voice of the repeater.

The installation of the new repeater antenna is pending completion of checkout and adjustment of the new City Radio System. As of early October, coverage measurements and Radio System adjustments were still underway. A date for removal of the old antennas and installation of the new repeater antenna has not been set. Best guesses are November or December.

OCTOBER 13, 2005 MEETING MINUTES

By Glenn, W4OCC

The meeting was held at the INOVA Mount Vernon Hospital and was called to order at 7:31 p.m. by the President, Carol, WA4GFW. He then led the Pledge of Allegiance. Next, everyone introduced themselves. Jay, WB5OOD, a new Extra Class and guest thanked the Club for their efforts.

The Treasurer's Report as of 30 September 2005:

Cash on Hand:	\$ 121.50
Checking:	\$2,192.41
Savings:	<u>\$3,345.75</u>
Total:	\$5,659.66

Of that total, \$1,438.50 belongs to the Doc Hyde fund. There were no expenses last month.

The September Minutes, as posted on the reflector, were approved with correcting Steve's call from K3IO to K3IZ.

The ARES report was given by Steve, K3IZ. You can still sign up for the NCAC Institute on 22 October from 8:30 to 5:00p.m. Check the NCACDC.com website. The Marine Corps Marathon will be held on Sunday, 30 October. There was a consensus to operate MVARC's George Washington Special Event Station the weekend of February 18-19, 2006.

The annual Holiday Party will be held on December 8, 2005 at the Old Country Buffet on Route 1. There will be a gift exchange (\$10 per gift). The motion to approve \$100 for door prizes carried. Joan, KI4FYN will obtain the door prizes.

Bob, K3IO presented the report on Programs. Tonight's program will be a VCR tape on Amateur Satellites. He needs programs for January and February of 2006. Bob passed around handouts concerning the Medical Benefit Concert and Crab Feast for Frank Scott (HD) K3HDM who has serious medical issues and is confined to a rehabilitation center, and has no health insurance.

Old Business: We're waiting for the review of new set of By-Laws to be completed.

New Business: After a discussion concerning the lack of participation on the Tuesday night ARES Two Meter Net, the motion to change the time of the Net to 7:00 p.m. local time starting next Tuesday, to drop the 10 Meter portion of the Net, and to rotate the responsibilities of Net Control was approved.

Jay, WB5OOD was recognized to show MVARC's appreciation for his

monetary donation to the Club.

Jeannie, N4GZI says the Red Cross still needs volunteers. The Red Cross uses SHARES for communications and Satellite Low Band Radios. They are located at Red Cross Building, 8111 Gate House Road. For more info, contact Dick, WA4USB.

Steve, K3IZ showed us plugs (not used) for the Yuengling Beer kegs he got when he was recently in Pottsville, PA.

Thanks went to Bob, KT4KS this month's Cookie Monster.

The meeting adjourned.

IN SEARCH OF THE BEST ANTENNA: PART II

By TOM, W9TZ

My quest to assess a variety of small, stealthy, commercial antennas led to last month's article focusing on the Bilal Isotron. This month I'll focus on the performance of the other candidates: the MFJ-1621, the Buddipole, the SGC Stealth Kit, and the Miracle Whip.

For the sake of brevity, I will forego listing all of my testing criteria. You should know that "transportable" and "portable" were factors: transportable means an item you can pack, take with you on an airplane without drawing undue attention, and quickly and easily assemble; whereas, "portable" means an item (usually larger by comparison) you can throw in the car and take with you for setup elsewhere. All tests were conducted under the same conditions at the same date using the same transmitting rigs.

The antennas:

1) The MFJ-1621: a 10-40 meter

transportable with a 54" telescopic whip antenna mounted in a 6"x3"x6" cabinet, with built-in tuner, field strength meter, and 50 feet of RG-58 coax cable. Cost: \$90.00.

2) The Buddipole is a 2-40 meter portable that disassembles into about a 24" long 6" around tripod-type carrying bag. It includes two telescoping whips, coils, tripod with telescoping mast, a "versa tee" that facilitates a variety of deployment positions of the antenna, and 25 feet of RG-59 coax cable. Cost: \$450.00.

3) The SGC Stealth Kit: a 1.8-60 Mhz transportable with 80' of copper wire enclosed in rubber with connectors for a tuner; an SGC-237 Smartuner; and clothesline-like ties with plastic clips useful for hanging the antenna in a closed Delta or Loop configuration that begins and terminates at the tuner. Cost: \$400.00

4) The Miracle Whip: a 3.5 to 460 Mhz transportable 57" telescoping antenna with integrated tuner. Cost: \$130.00

Even though all of these antennas are excellent in their own way, my tests caused me to conclude the following:

* Winner of the transportable class: the MFJ-1621

* Winner of the portable class: The MFJ-1621 with the BuddiPole a close second

* Winner ranking (first to last): MFJ-1621, Buddipole, the Miracle Whip, the SGC Stealth Kit

The MFJ-1621 first garnered my attention in Stealth Amateur Radio by Kirk Kleinschmidt wherein the author cited Chuck Joseph, N5JED, using the 1621 mounted indoors on the second floor of a wood frame house in Mount Clemens, MI to work WAC, WAS, and DXCC while running 100 watts! Enthused, but skeptical, I just had to try it.

MFJ advertises the 1621 as an antenna that has been used by operators winning a variety of contests that can be used from almost any electrically free site --- and I believe it. This antenna never fails to amaze me. I have used it on 10m inside my former QTH in Falls Church to talk with operators in Europe via SSB. I have used it in cities, on top of cars, up in the mountains and out at the beach and it always works. I am always able to communicate with someone by some means. And the 1621 has usually delivered more contacts, and a better quality of contacts in comparison to the other antennas cited in this review. So, why did I rate it the winner of both classes? First, it performed better than all of the other antennas. Second, it has a very small footprint. It can quickly and easily be disassembled into a small winding of cable accompanied by an attached small box with a removable whip that can be packed in a suitcase. Third, price. One just cannot go wrong with this antenna in terms of price/performance.

So, why did I rate the Buddipole a close second? For two reasons. First, the Buddipole has more parts requiring assembly/disassembly. Second, while an excellent performer, I didn't notice any superior performance characteristics by the Buddipole over the MFJ-1621. In fact, I noticed fewer contacts and more noise with the Buddipole vs. the 1621 in the same testing scenarios. This is strange, given the much larger footprint (in the air) the Buddipole enjoys over the 1621 and the variety of configurations the Buddipole can deploy. Third, the Buddipole requires lowering the mast and manually adjusting the antenna length or coils for each frequency change. In this respect, the 1621 simply requires setting a dial to the desired frequency area and fining tuning. Fourth, if I had to go backpacking, the 1621 would be lighter and easier to carry. And that is saying a lot, because, the Buddi-

pole is a very well designed piece of equipment. To be sure, the Buddipole is a great antenna system and I am glad I bought it. But, findings are findings, and if I had to spend the dollars again for just one of these antennas it would be the 1621.

So, why is the Miracle Whip third? Well, it is a very nice antenna that sometimes demonstrated a remarkable dynamic response. But there were times during testing, that it did not detect the same signals that the 1621 or Buddipole detected. In some cases, signals detected featured more noise than the other antennas. I've come to conclude that the Miracle Whip is worth having to pack into a QRP fly away kit because of its' very small footprint and wide performance design range in situations where space/size limitations drive deployment decisions. Given the number of hams that live in apartment buildings and other travel to places with elevation, this antenna could serve many well. My resolve is that I need to give this antenna more testing to determine if I have overlooked the silver lining in performance.

The SGC Stealth Kit occupies last place out of the five commercial antennas tested during this review. And I must say, that I am both disappointed and constantly second-guessing myself with musings wondering if I did anything wrong in setting up and using this antenna system. As advertised and constructed, it makes sense that this system should have placed at the top of my reviews in terms of performance --- but it didn't --- and I am continually befuddled about its' performance. So, I have relegated it to the same area of resolve reserved for the Miracle Whip: I need to test it some more before I write it off altogether.

For example, my most frustrating experience thus far as a ham has

been trying to get anything to work at a QTH in a covenant restricted neighborhood on a golf course in Maryland, not far from Annapolis. I figured I would solve this with some size and height in the air via the SGC Stealth Kit. I grabbed the EZ-Hang, shot a weight over a 60 ft tree limb nearest the house, and pulled 80 ft of rubber coated copper line over a limb to form the apex of a delta shaped loop. Both ends were secured at the SGC-237 tuner. I attached the tuner to a battery to fire it up, powered up the 756 Pro II and SSSSH -- nothing there, anywhere. Am I going crazy? I rechecked my connections to the tuner again, made sure it was running and getting juice from the battery, double checked all of my connections again and carefully dialed through the bands, 80 meters through 10 meters. Nothing but silence. Not even band background noise. No blips on the scope screen. Have the bands gone dead? I know that propagation is not the best right now. Frustrated, I ripped down the SGC setup and put it back in its' clever looking box, convinced, that it must be me doing something wrong.

Then, I pulled out the Miracle Whip. Attached it to the 756 Pro II. 40 meters. OK, some band noise, a couple of clear SSB QSOs, one in the General class and one in the Extra class areas, and a few faint CW transmissions down in the CW area of the 40 meter band. Nothing on 80. Nothing on 30. One faint SSB QSO on 20 meters, with nothing again on 15, 17, 12 or 10. I double checked my findings using the FT-817. Same responses.

Frustrated, I took off the Miracle Whip and went inside and got the MFJ-1621. Something has got to give me some reception and transmission capability I thought. Well, this is quite an improvement over the other antennas. Quite a few QSOs on CW 40 meters ... 13 to be exact, and a half dozen or more SSB QSOs spanning the SSB

range .150 - 300. 20 meters shows us a few more QSOs too. I am impressed with MFJ's tuning function. It easily tunes out background noise and clarifies signals it is able to pick up. All of this from a 54" whip attached to a manual tuning box. It really works. Some of my attempted SSB contacts heard my transmission, but, not clearly enough to respond and carry on a QSO.

In summary, the least expensive and second smallest commercial antenna, the MFJ-1621, is the 'best buy' of those tested in terms of price-performance. Finally, a closing advisory note: MFJ sells the 1910, a 3 to 33 foot telescoping fiberglass mast to help deploy wire antennas, such as the SGC Stealth Kit. I have two of these poles, and, I used them with the SGC kit and other wire antennas. They work, but, be advised that the last telescopic section at the end is fine in circumference with a fishing pole type eyelet at the end suitable for threading fishing line through the eyelet to hold up a wire. It is not big enough to route plastic ties or clothesline through the eyelet. And, this end of the pole BENDS a lot under pressure. I'm not saying that they are not worth buying: I just want to alert you to this factor if you are considering the 1910.

I hope to see you at our next QRP field day, where I will bring and deploy each of these antennas with me. You are welcome to come and try them out! Until then, 73's.

LOOKING FOR COLLEGE CASH?

By DIANE, AA3OF
Chair, Foundation For
Amateur Radio Scholarship
Committee

The Foundation for Amateur Radio, Inc., a non-profit organization with headquarters in Washington, D.C.,

plans to administer 54 scholarships for the academic year 2006 - 2007 to assist licensed Radio Amateurs. The Foundation is composed of over seventy-five local area Amateur Radio Clubs.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2500 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Additional information and an application form may be requested by letter or QSL card, postmarked prior to April 30, 2006 from:

Diane Zimmerman, AA3OF
Chairman Scholarship
Committee
FAR Scholarships
Post Office Box 831
Riverdale, MD 20738

The Foundation for Amateur Radio, incorporated in the District of Columbia, is an exempt organization under Section 501(C)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service.

The Foundation encourages all qualified amateurs to apply for these awards.

LOOKING FOR A FEW GOOD HAMS: Arlington County RACES

Arlington County is looking for new volunteers for its Radio Amateur

Civil Emergency Service (RACES).

"As Hurricane Katrina proved all too well, natural or manmade disasters can knock out phone lines, and leave even cellular networks inoperable at worst, jammed at best," said David Jordan, WA3GIN, Arlington's RACES officer and the County's chief information security and privacy officer. "If Arlington County's emergency communications systems were damaged in a disaster, that's when RACES volunteers would spring into action."

Typical RACES communications involve sending and receiving emergency messages on Amateur Radio Service frequencies between critical government offices, Emergency Operations Centers (state, county, local) and other locations such as hospitals, emergency services, emergency shelters and other locations where communication is needed.

FCC-licensed amateur radio operators, who are interested in learning more about volunteering, please contact Dave at (703) 228-3185, or wa3gin@erols.com

Volunteers will be required to pass the standard County background check including finger printing.

TECHNICIAN CLASS TO BEGIN

The Scouting Venture Crew 80 and the Mount Vernon Amateur Radio Club will offer class leading to a test for those interested in earning their Technician Class license.

The classes will be held successively on over four Saturdays. The schedule is as follows:

Jan. 14 - 10:00 AM - Noon
(Orientation and Study Materials Distribution)

Jan. 21 - 9:00 AM - 3:00 PM
(Instruction)

Jan. 28 - 9:00 AM - 3:00 PM
(Instruction)

Feb. 4 - 9:00 AM - 4:30 PM
(Instruction, Review and Exam)

All classes will be at the First Christian Church at 2723 King Street in Alexandria, near the intersection with Janey's Lane. The cost is \$25 to cover materials. There is no age limit, although parent accompaniment is recommended for students under 14. The classes will include everything needed to earn a Technician license.

Pre-register anytime but no later than Jan. 4 by email to vcrow80@yahoo.com, or by phone at 703-960-9301 between 7-9 PM.

Questions? Call Demi Pulas, K4BSA, 703-820-2534; Bill Stewart, W2BSA, 703-642-8942; Dick Harman, WA4USB, 703-971-5477; or Bill Schmitt, KD4CNS, 703-960-9301.

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