

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



Volume 19

MARCH 2006

Number 03

Ye Olde RF Output

MEETING NOTICE

MARCH 9, 2006

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

March 9 - 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!

March 7,14,21,28 - MVARC ARES NET- 146.055/146.655 **7:00 PM local time**. Come and join in!

March 25 - 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 MARCH 11, 2006 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 FEBRUARY 9 MEETING

By George, N1BV
MVARC Secretary

The meeting was held at the IN-OVA Mount Vernon Hospital and was called to order at 7:30 p.m. by the Vice President, Frank, AA4ZS. He then led the Pledge of Allegiance. Next, everyone introduced themselves. The November minutes, as posted on the reflector, were approved with two corrections. Change the Treasurer's report date to 31 December, vice 30 October and change Steve's call sign from KI3O to K3IZ. John, K2VPR, gave the Treasurer's Report. As of 31 January 2006

Checking:	\$1363.92
Savings:	3,354.19
Cash on hand:	121.50
Doc Hyde fund:	1,719.80
Income:	
Interest	1.42
Dues	135.00
Expenses:	
Hamfest table	25.00
Speaker's meal	20.98
TOTAL ASSETS:	\$4,839.61

The ARES report was given by Steve, K3IZ. He stated that

Alexandria George Washington Day Parade was on the 20th and volunteers should contact Ric Bunn. There were no Coast Guard Station, MARS, Educational Committee, or Repeater Committee reports. It was announced that there would be a VE test session this coming Saturday. Bob, KT4KS, gave the Community Outreach Report. The Secretary asked Bob to change the announcement sent to QST to ensure it covered all bands and both phone and CW. People were encouraged to visit the MVARC Special Event Station and operate. Bob, KI3O, presented the Program Committee report by introducing Tim O'Neill, KT4MV. His topic for the evening would be on general aviation electronics.

Old Business George, N1BV, said the draft By-Laws had been reviewed by the President and was undergoing review by John, WZ4A. A question was raised as to whether a nominating committee for club officers for the coming year had been appointed. The Secretary said he would contact the President to find out.

New Business It was announced that the monthly breakfast would take place on Saturday the 25th at the Old Country Buffet starting at 8:30. There would also be a QRP Field Day at Lee District Park on 8 April. There would be a \$25 park usage fee. A motion was made, seconded, and unanimously approved to reimburse Frank for this fee. For Show & Tell, Howell, KG4CKJ, bought in an early Zenith Transoceanic portable receiver. This was an early model with "fat" tubes, vice the later acorn/peanut tube models. John, WQ4L, brought in some charts showing our repeater coverage based on topographical land elevations. Steve, K3IZ, brought in some historical material from the past. John. Bob, KT4KS, was the Cookie Monster. George, N1BV, volunteered to be the Cookie Monster in March.

MT VERNON SPECIAL EVENTS

By George, N1BV

On February 18th and 19th, thirteen MVARC members set up and operated our annual MVARC George Washington's Birthday Special Event station in the greenhouse at Mt. Vernon. Early on Saturday, Steve, K3IZ, with his trusty slingshot, and George, N1BV, with his William Tell bow and arrow, shot up antenna support lines for the 40 and 20 through 10 meter stations.

While things were flying through the air, Frankie, AA4ZS, was quietly taking off the wheel of his truck so he could use the rim to support his homebrew 10m vertical. Keith, N6JWN, and Venture Crew members Ian, KGT4SCG, and John, KG4YED, provided much needed help during the antenna setup. Then Ian and John put up a 2m station. Leila, WN4PP, Amy, KI4AIL, and Nicholas, KI4BDY, arrived with several antennas in case we needed them. (There was also a bag with three long hanks of green RG-58 with BNCs that were left over from last year. The person that owns these should contact me.)

When we thought that we might encounter interference between two of the antennas, Keith came up with a long antenna support line, and Amy, KI4IAL, came up with a ladder and climbed it to tie off the end of Keith's line on a light pole. Soon, we were all on the air. The sun was not cooperating, and the 10 and 15m bands were dead, but 20 and 40 were open. We concentrated on making phone contacts on these two, plus Frankie working CW on 10. About noon, Doug, WA3WEP, and his daughter Emily showed up with arm fulls of food on which we all feasted. In fact, we got two days worth of meals out of this horn of plenty. Like the fishes

and loves, Doug was able to take a lot of the remains back home.

During the two days we were there, additional members showed up and operated. These included, Howell, KG4CKJ, and Mike, KE4ER. There was one sad note. Tom, the big white greenhouse "guard" cat passed away last summer. Our appreciation to Dean Norton, and Matt Peterschmidt, the Horticulturists for allowing us to use their facility and to Cynthia Trice, who was a very hospitable hostess who was inundated with questions on plants.

Next year we need to plan to make a big party of this event, just like the old days.

IN MY OPINION: THE NEW FT 7000

(Ed. Note: In keeping with my desire to include occasional reviews of new products by local users, I asked a few MVARC members if they knew anyone who had tried the new Yeasu FT 7000. Mike, AA4MC, put me in contact with Dave Jarrell, a Woodbridge ham with a vast background in the hobby. Check out his shack at www.qrz.com. We are grateful to Dave for his thoughtful review. If you have gear you would like to review, please let me know. -dw)

By Dave Jerrell
W4CLJ

When rumors began to circulate about a new "replacement" for the ICOM IC-706Mk2g, I began to follow the newsgroup threads to find what information I could on this new radio. The IC-706Mk2g is by all indications, the best selling amateur radio available, so this new radio would have to me the cat's meow.

By the time the IC-7000 became

available, I had compiled quite a bit of information.....enough to tell me I had to take the plunge. A trip to the local HRO revealed they had just received their first shipment so I pulled the plastic from my wallet to make the purchase. OUCH! \$1500 for a new mobile rig was a little painful but the features and performance of the IC-7000 soon healed my wounds.

The IC-7000 packs an incredible amount of technology into a package of virtually the same size as its predecessor, the IC-706Mk2g. There are no filters to buy. The dual IF DSP processors allow the user to either select the factory default filters or design your own and the IF passband selectivity skirts are very sharp. Dial any bandwidth you wish from the front panel in 50 Hz steps. The AGC is controlled by the DSP processor so AGC pumping is a thing of the past. The NB-noise blanker, NR-noise reduction, MNF-manual notch filter and ANF-automatic notch filter functions are all digital. They are the most effective I have seen in any radio. One of the unique features you will notice is the dual manual notch filter. The user can simultaneously enable not one, but two notch filters independently. Each notch filter's frequency and width can be controlled from the front panel. The 7000 boasts a digital voice recorder for both transmit and receive (great for contesting) allowing the user to record up to 25 minutes of audio.

For the RTTY enthusiast, this little gem has a built-in RTTY demodulator that displays the incoming text as well as a waterfall display to simplify tuning. The screen is a 2.5 inch TFT color display that is surprisingly easy to read. It has three selectable background color schemes to suit your viewing preference. If you prefer a larger screen, the 7000 has an external composite video output. Though I have not used the external video,

reports indicate the quality is not as sharp on the larger screen.

The IC-7000 is a joy to operate. Don't let the gazillion functions scare you away. The switches on the front panel are clearly labeled. Each switch performs one function when depressed momentarily and another function when held down for a two seconds. The HM-151 microphone has 25 buttons on it which mirror almost every function you can accomplish from the front panel but it does not generate DTMF (touch tone) tones.

No need for multiple radios. The IC-7000 operates all modes on all bands from 160 meters through 70cm. The transmitter develops 100 watts on 160 through 6 meters, 50 watts on 2 meters and 35 watts on 70cm. The PA utilizes high power MOS-FET technology for extremely good linearity and low distortion. The PA is cooled by a fairly large (albeit quiet) temperature controlled fan.

The frequency is controlled by direct digital synthesis. This means negligible phase noise and low cross modulation. ICOM also included as a stock feature, a precision master oscillator with less than .5 parts per million stability.

The receiver covers 30 KHz to 200 MHz and 400 to 470 MHz with good sensitivity and image rejection. Since I use the rig exclusively in my SUV, the first thing I noticed was the lack of intermod compared to my 706Mk2g. The 7000 has a large memory capacity. The user can store up to 99 frequencies in each of 5 memory banks.

In my opinion, this is the most technically advanced and versatile radio to hit the market. I have frequently referred to it as an IC-756ProIII on steroids in a small box. It has all of the features of its big brother and several all of its own. With the ability to remove the control panel and locate it separate from the main

unit (like the 706Mk2g), you can find room for it in any vehicle. The dual notch filters can not only eliminate QRM but, when placed on either side of a weak signal, can pull it right out of the noise. In almost every QSO, someone makes a comment about the high quality of the transmitted audio. Depending on the user's preference and voice characteristics, the transmit bandwidth is selectable for either 100 to 2900 Hz, 300 to 2700 Hz or 500 to 2500 Hz.

Since I am involved in MARS and SHARES operation, a simple modification (one diode) enables transmission across the rig's full frequency range. And since I was already inside the radio, I just decided to lift one more diode to enable the TV reception mode. Now when I-95 turns into a parking lot, I can catch up on the news.

There are a couple things ICOM did with the 7000 that has really frustrated some of the users.

Omitting the Microphone's DTMF function in a radio of this class was not well thought out. Obviously many users would still like to maintain their ability to use the repeater's auto patch and a select few need the capability to exercise repeater and remote base control functions.

Many of us that use the rig mobile, use some form of screwdriver antenna. These were easy to tune with the old 706Mk2g. Simply press the tune button and run the antenna up or down for minimum SWR. But now I own the fancy IC-7000. What was ICOM thinking? They disabled the SWR meter in the tune mode so now tuning a screwdriver antenna is not only clumsy but very dangerous while driving. The user would have to stop the car, set the mode to FM or AM, throttle back the power to 10 watts or so, key the mic, tune the antenna, turn the power back up, change back to your original mode

and hope the guy your wanted to talk with had not become tired of waiting and fell asleep. The only way around this was to use the rig with an AH-4 auto tuner. Let's see who makes that.....oh yeah, ICOM. So, I removed the screwdriver from my vehicle and replaced it with an eight foot whip and AH-4 auto tuner. It works well, is quick and safe but I still prefer the efficiency of the screwdriver. Still there is light at the end of the tunnel. MY friend Bill, N2VZ manufactures a device called the "TurboTuner" that automates the entire process of tuning a screwdriver antenna.

In summary, you can't go wrong with the new IC-7000. I cannot begin to completely describe all of the features of the 7000 without turning the newsletter into a document the size of your dictionary. However, I can give it an enthusiastic thumbs-up for anyone wanting virtually every conceivable function in a small package. Hams with limited space or those wanting a high performance mobile rig will find the 7000 ideal.

WINTERFEST DRAWS MVARCers

By Bob, KT4KS

On February 26, many MVARCers successfully combated both cold and windy conditions to make for a fun day at Vienna's WINTERFEST, located at Northern Virginia Community College.

At first light, John K2VPR and Steve K3IZ were some of the first MVARCers to arrive, and they immediately set up the club table in the indoor exhibit area. Steve placed out items that were generously donated to the club by relatives of our former comrade, Bruce KB4EBK. John and Steve then set out their own items for sale, and then both Bob KT4KS and George

N1BV subsequently arrived to set out their own items. The club's space both above and below the table was then filled, and all were ready by the 8:00AM start time.

Items at the club table ranged from a couple of extravagant HF radios to a ragged, patched-up duffle bag, with items in-between including: paddles, tuner, VHS tapes, answering machine, dipole, smaller power supplies, HTs, connectors, wire, QRP rig, voltmeter, carriers, fan, etc. One of the first buyers to approach the table filled up a box with a tuner, 2 hand-helds, 150 foot of shiny copper wire, and a few other items, and then offered a \$100 bill for all. Steve immediately accepted the \$100.

One item that was purchased from the club table included a set of chrome Bencher paddles by Howell KG4CKJ, Howell expressing a desire to learn how to send CW on paddles. Bob KT4KS was able to sell a ham radio shack 1500-watt foot-warmer and VHS tape for a whopping \$3, Steve sold his 20/40M trap dipole for \$5, and George sold a beast of an item (VARIAC?) which had accompanied George to many passed hamfests, but finally no more.

Tables throughout the exhibit area included radios, slingshot antenna launchers, the well known magnetic paddles sold by Mike March K4QU, connectors, flashing lights, computers, pens, computer components, screen savers, some very old looking items that seemed to belong to an era long passed, software that permitted an operator to insert anyone's call sign into his computer to learn exactly how many miles away that other operator was located, tools, and several buckets having signs "Buried treasure prices as marked."

There was tailgating outside for those tough enough to withstand the cold, the low temperature compounded by a strong wind that

caused a serious wind chill. One tailgater had 3 boxes of Dunkin-Doughnuts "Cup of Joes" to fight the cold, while others had the items that are commonly affiliated with tailgaters. The American Red Cross emergency truck was parked out with the tailgaters, the truck having its 60-foot tall tower extending into the air. The same truck also had a satellite dish and at least 12 two-meter size antennas mounted on its roof.

Other MVARCers who attended the hamfest included Frank AA4ZS, who generally sat at the club table, but roamed around long enough to purchase \$25 in connectors; John WQ4L, who generally sat at the adjacent Quarter Century Wireless table, and who purchased an emergency battery driven flasher light for his XYL, Pat; and Ruth KU4WH, who purchased \$4 worth of tiny zip-lock bags to aide her in organizing tiny parts in her ham shack. While speaking with Bob KT4KS, Ruth said, "I am certainly glad to be at this hamfest, and hope to spend alot of money."

Jim AF4QG, who recently purchased a house in Toano, VA, about 15 miles from Williamsburg, expressed that he put a G5RV up about 75 feet high, in his trees. Remaining MVARCers present included at least: Demi K4BSA, Terry K7MPP, Dave W3WKP, Dave WA3GIN, and Bob KI30. It was Bob KI30 who likely made the first MVARC purchase at the hamfest, as he was heard speaking on his HT from the fest while the rest of the MVARCers were still driving up at 6:15AM.

Bob KT4KS spoke with a vendor who lives out in the Shenandoah Valley, and listened to him speak about a relatively new club located in Winchester VA which is a pay-dues-and-you're-in type of club (like MVARC), in contrast with the Shenandoah Valley Radio Club which requires sponsors. Alexandria Radio Club's Deanna K7DID,

who was responsible for putting together the Special Event for 9/11 a few years back, stated that she is actively studying for her Extra Class ticket. It was observed that while festers were predominantly older males, there were some YLs in the crowd. There were even a few little girls about, and most seemed to be busy helping their Dads at tables. Of course, a few were helping themselves at the Girl Scout Cookie table by the entrance.

At about 11:30AM the attendance started to drop, so everyone at the club table packed away all of the items that they wished to drag home. When finished, Steve shouted, "Free stuff, get your FREE STUFF HERE!" At that time hams at adjacent tables immediately stopped in mid-sentence, and made their ways to MVARCs table to get their "fair share" of MVARC's good will.

After the club table was cleared, John, Steve, George and Bob KT4KS carried items to their cars. While in the lot, Steve said, "I thought it was excellent, especially the company, it was very good." John expressed, "Well, we had fun, sold a few things, threw away a few things. All in all, it was not too bad".



From Amateur Radio
Clipart by Zed Zed

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