

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



Volume 16

OCTOBER 2003

Number 10

Ye Olde RF Output

MEETING NOTICE OCTOBER 9, 2003

7:30 PM

INOVA MOUNT VERNON HOSPITAL

2501 PARKERS LANE
ALEXANDRIA, VA

SECOND FLOOR CONFERENCE ROOM
MVARC MEETS ON THE SECOND
THURSDAY OF EACH MONTH EXCEPT
IN DECEMBER

HAPPENINGS

October 9 - MOUNT VERNON AMATEUR RADIO CLUB monthly meeting. Held at INOVA Mount Vernon Hospital Second Floor Conference Room on Parker's Lane. See you there!

October 7,14,21,28 - 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 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

AUTOPATCH AVAILABLE TO
MEMBERS

MVARC HOME PAGE:
IN PROGRESS

NOTICE--VE EXAM LOCATION
**THE October 11, 2003 VE EXAM WILL
BE HELD AT**

The FIRST CHRISTIAN CHURCH
2723 KING STREET
ALEXANDRIA, VA

**CALL JOHN, WZ4A AT 703-971-3905
FOR MORE INFO OR TO CONFIRM THE
LOCATION OF THE TEST SESSION.**

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

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MVARC/ CG TISCOM LIAISON



MINUTES SEPTEMBER 11, 2003 MEETING

The meeting was held at the INOVA Mount Vernon Hospital and was called to order at 7:30 p.m. by the President. He then led the Pledge of Allegiance to the Flag. Name badge signup was provided to all members. A special price of \$5 for new name badges the Mount Vernon Amateur Radio Club logo was available. Eight members took advantage of this offer.

Everyone introduced themselves. We welcomed new members and guests. Approval of the August minutes, as posted on the reflector, were delayed until the October meeting to allow the members chance to review them. John K2VPR gave the Treasurers' Report. He reported a net worth of \$7,116.64. His cash flow report showed an inflow of \$830 from annual dues and outflow of \$751.89 through 8/31/03.

Steve K3IZ reported on the ARES activities which included the: October 4 Simulated Emergency Test - multi air crashes in Fairfax County
October 26 Marine Corp Marathon - Starts at 6 a.m. for more info check the Alexandria Radio Club web site N4ASX is point of contact

John WZ4A reported on education that included:

The Alexandria Radio Club will be holding a Tech - General class in fall

VE Test session on September 13 at the First Christian Church, 2723 King Street Alexandria, VA

Mary N4TCI reported on the Foundation for Amateur Radio. The Howard County Ham Fest had less attendance than previous years. And FAR needs money to support Autocall. Autocall may go quarterly or post on web to save money.

Repeater committee members were not present. Members using the repeater reported that it is operating but having some interference that is causing the multiple beeps.

Carol WA4GFW reported on the USCG station. During the month of August the members operated on three Saturdays. The members held a special event operation on August 2 and 3 to commemorate the Coast Guards 212 anniversary. Operations on Tuesday evenings included checking into the Northern Virginia Traffic Net at 7:30 p.m. and the MVARC ARES net at 8:30 p.m. Brad N3BF is holding the Collegiate QSO party, a special event 9:00 a.m. to 9:00 p.m. 20 September, operating from the Coast Guard Station. Need list of operators for Mr. Young our USCG liaison. Need to notify Coast Guard to replace light outside door for MARS Building.

Mike KE4ER reported on MARS operations. MARS is still alive and well.

Bob KI3O reported on programs for:
October 9 will be our own ICOM days
November 13 will be Chris Imlay from ARRL
December is the Holiday Party at Old Country Buffet

Unfinished business addressed the Web Host problem. John Riser recommended we contact the QCWA to determine what host they use. Carol WA4GFW will investigate this hosting. A motion was approved to allow expenditures of \$20 per month for the hosting. Brad Farrell N3BF volunteered to

be the web master. The status of the URL MVARC.ORG needed to be determined. Did it belong to the club or Dick Cramer? Also did the club reimburse Dick for 2003 cost of URL? Recommended that the minutes be reviewed for a motion to pay Dick. A motion was passed to obtain the URL of MVARC.CLUB with a cost of \$44 per year.

Brad N3BF provided additional details on the Collegiate QSO party. The call will be W4C and the Coast Guard Station will be the main station for contacting. Each collage that contacts W4C will receive 20 additional points. Each QSO counts 1 point and operators can contact any station anywhere for that point. This special event is to encourage college stations to get on the air again with school starting.

Bob KT4KS will coordinate Holiday party reservation at Old Country Buffet.

Thanks to Leila WN4PP Cookie monster. Bob KI3O will be next cookie monster.

Meeting was adjourned.

Bob KI3O showed a very interesting DX expedition video. Thanks.

Thanks to Carol, WA4GFW and Leila WN4PP for taking and preparing the Minutes. Glenn, W4OCC.

ICOM DAY

by Bob, KI3O

Kindly be advised that Ron Rateno, ICOM District Sales Manager, has agreed to provide the Mount Vernon ARC with an ICOM Days presentation for our October 9th, 2003 meeting. I have invited the Alexandria Radio Club, Woodbridge Wireless and Old Virginia

Hams to attend the presentation.

This should be a great opportunity to find out about all the new pieces of gear that Icom has. Have you heard rumors about this Icom rig or that? Here's your chance to find out the truth. Do you have a question about a piece of Icom gear? Want to know about how a modern communications company works? Where does ham radio fit into the overall picture at Icom? Now's the time to ask.

Show up and ask these pertinent questions. You will never know these and other nagging inquiries that you have. Ease your mind and attend the October meeting of the MVARC. C U there!

A COMMENTARY

by Frank, AA4ZS

Dear Fellow Amateur Radio Operators, here are some of my thoughts on the proposed changes to the current licensing structure by the NCVEC.

1. Should Morse code be eliminated as a test requirement for an amateur radio license below 30 MHz?

I will be sad to see Morse code go as a licensing requirement, but let's face it Morse is no longer used by the military or commercially. It's time to promote the newer digital modes.

2. If Morse code dropped, should the coded Tech and Novice class license holders be given General privileges?

No, they must pass element 3 before they receive General class privileges.

3. If Morse code is dropped, what happens to the CW sub-bands?

Leave the General, Advanced and Extra class CW sub-bands as they are; this will provide band space for

the digital modes as use of them increases. Delete the novice CW sub-bands and incorporate their band space in the phone bands. Allow coded Techs and Novice class licensees to operate in the general class CW sub-bands on 80, 40, 15, and 10 meters with a maximum output of 200 watts PEP.

4. What about a new class of mail entry class of license?

Sounds like the Novice may be revived in some way! Sounds OK to me, but the test should be procured by a General class or higher license holder if administered at a non-VE test site. Of course, the test would also be given at regular VE exam sessions.

5. What's the rush to change the current system?

It wouldn't hurt much to wait a bit, think about what we want to happen, and see how things shake out elsewhere before we act.

EDITORIAL ON HAM'S WAYS

by Steve, K3IZ

I have noticed that the testing sessions are paying off these days. There are a lot of new calls on the repeater. This is really fantastic. For many years there were a large number of tests given, elements passed and licenses issued. Where did these folks go? Who knows. Well, the new crop of recent successful test takers are actually getting on the air. Again, that is great and the point of it all.

In another article in this publication we have a description of getting on the air and how in the past we had Elmers who schooled us in the whys and ways of Ham Radio. Seems now days that is not quite the case. We tried an Elmer program a few years ago. Needless to say the Elmers were eager, qualified and ready to guide the

newbies on the right path. The response was quite underwhelming. There were many new hams but no one asked for any help or info about how to be a Ham. There may be fine license manuals out there to help you pass the test, but how to operate, what to say, how to do this or that, the Ham's jargon. It neither on the test nor in the FCC rules.

There seems to be an attitude of "don't tell me what to do" in society today. Is this little article going to change that? Obviously not. In this and future editorials, I hope to point to some of the things that define us as Hams, what we do, why we do them, and to make a little sense of these things. There really are reasons why we do what we do.

Let's find a clear frequency. Every time we get on the air we need a spot to do so. As we learned in kindergarten is not nice to cut in line or interrupt when someone else is speaking. It's no different here. When getting on the air, listen and then listen again. Listening is a big part of getting on the air. If you think that it's clear on CW send out a "QRL de callsign". Listen. Send again. Then listen again. If no one comes back, go for it. Really the same goes for phone. Just say "Is the frequency in use?" Listen. Say that again. If you want to be really sure, do these things 3 times. If someone comes back, send "sri" on CW or "sorry" on phone and move to another spot. Start this same routine over again. If this is a repeater, ask "is the repeater in use. This is callsign". Don't forget to listen first.

Why all this? Just because you can't hear the other station doesn't mean there isn't one. You could be hearing one side of the conversation. The signal could be fading in and out: the ubiquitous QSB. The other station could be very weak and not making the repeater and station that you are hearing is copying on the input frequency. OK, we found a clear frequency!!

Now we call CQ. There are ways to call CQ. This should be done as such: CQ CQ CQ de/this is callsign callsign callsign CQ CQ CQ de/this is callsign callsign callsign CQ CQ CQ de/this is callsign callsign callsign K or on phone standing by. Some hams might say "k someone please" Then listen and listen again. Listen at least 15 or 20 seconds between calls. Don't expect another op to jump right in. Oh, it might happen that way but not every time. Give the other station a chance. They may have to adjust something, tune the tuner or grab earphones. If no answer, try again the same way. OK, how many times before trying later or elsewhere. 3 or 4; wait 5 minutes and try again.

If someone is tuning the bands, they might come across you just as you let up on the key or mic. Maybe they missed your callsign. Saying CQ a hundred times then your callsign once, then 2 seconds later another hundred CQs will not net you many QSOs.

Why don't we say CQ on the repeater? This is a tough question. Maybe a bit of a history lesson could help. When repeaters came into use many years ago, the Hams who used them came from HF. Many HF ops had only crystal controlled radios especially Novices who had only crystal controlled rigs. It was normal to send CQ then tune the entire Novice band listening for your callsign.

We are now on 2 meters; what's the difference? We said in those days "this is callsign listening on 146.94 thinking that someone tuning the 2 meter band who heard us would then go from 146.34 to 146.94. As we all got commercially made channelized Ham gear not converted police or business band radios, we knew we didn't have to tune the band. However, it became "listening 34/94" then "listening 94" now, just "listening". The crystal pair of 146.34/94 was the only crystal pair that came with new radios then. The op had to buy other crystals in order to hear anything else.

Some hams use "QRZ this

is callsign." That really is a misuse of that Q signal. It means Are you calling me?

So, CQ was frowned upon. Maybe some one should have pushed using CQ. As things turned out some things are done differently on CW, HF and repeaters. Why? Traditions and operating practices developed differently along these modes of operation. See you next month.

HF RADIOS FOR NEWCOMERS

by Dick, K3DML

If ham radio is as important to you as it is to me and we want to retain all of our frequencies, we all have to do more to populate the airwaves with newcomers. Newcomers come in many shapes and sizes: he/she can be an experienced ham trying out a new mode, or a recently upgraded ham who now wants to try the HF bands, or someone who is completely new to the hobby licensed or not.

When I first started in radio, "elmers" were easy to find. They were nice, helpful and enthusiastic people who readily shared their hobby with others. Of course, life seemed simpler back then. SSB was the "new" mode when CW and AM ruled the day. FM was virtually unheard. Radio sets were full of tubes and large discrete parts. In a word, easy to operate and fix. Because you could read the markings on the parts. Actually the parts were fairly large and my eyes were much younger back then.

While I certainly don't yearn for the good old days mainly because ham radio was a relatively expensive hobby in the 1950's. I do think our hobby has less fascination and wonderment today. Wanna talk to someone far away? Just pick up the telephone (long distance calls are so cheap today), or if you're outside use your cell

phone, blackberry, pager, or FRS radio. Almost forgot, use the Internet to chat, email, send pictures, even webcam. And, one more thing, you can do all this with your battery operated laptop sitting in a Starbucks connected to their WI-FI HotSpot high-speed Internet connection while you drink your \$3.00 coffee beverage.

Fortunately, I think I can solve one part of the problem. I want to make it really easy to transition hams from VHF to HF by helping out with their first "real" radio.

There are several objectives to overcome:

Getting started on HF for little money.

Getting equipment that is easy to operate and works well.

Putting up that first antenna "cheaply".

Not getting stuck if HF is not their thing.

I believe that any experienced ham can do this in his spare time. It's simply an extension of the hobby and it's fun. Here are the steps to get started as an HF elmer. It requires you to tie up a few hundred dollars in a radio until it's bought by the new HF'er.

Step 1. Decide what type of HF transceiver radio you feel is best for a newcomer. It's probably one that you owned at one time, like an IC-735 or a TS-130S or better. I suggest a radio that is 100% solid state as tuning up a PA with tubes is more complex. Also newcomers will probably think a TS-520, TS-820S, or FT-101 is too old because it has tubes.

Step 2. Look for a good transceiver. Hunt it down in QST, eHam.net, eBay, qsl.net, qrz.com, estate of a SK, your local ham club or hamfest. Challenge yourself to buy it as cheaply as you can. Certainly less than \$250.00. I bought two very nice TS-130S transceivers for under \$250 each and found Radio Shack switching power (25 amps) supplies for \$60 new.

Step 3. Build a simple dipole for 40 meters. If you find an antenna tuner for less than \$50.00 attach ladder line to the dipole. Otherwise use coax and a PL-259.

Step 4. Advertise to your local ham clubs that you have a good basic HF radio for sale and if a newcomer buys it, you will sell it for what it cost you with the following money back guarantee: use 30 days, 90% back; use less than 2 years, 50% back.

Step 5. Help a newcomer get on the air and do it again if you had fun and made new friends.

I have 4 radios ready to go!
From eham.net Submitted by Frank, K4EC

WE NEED MORE POWER! OR GETTING CONNECTED IN THE MOBILE

From the FT100 Reflector
by Ron, W8RJL

A vehicle battery with engine off is about 12 volts. A number 12 wire has 1.62 ohms per 1000 feet at 77 degrees F and if the wire length from battery to FT100 is 20 feet round trip the resistance would be $(1.62/1000) = 0.00162$ ohms X 20 feet = 0.0324 ohms. The voltage loss would be 20 amps (key down CW) x 0.0324 = 0.648 volts. That means that if your battery was fully charged and you had NO resistance in connections or fuses the voltage at the FT100 would be 11.352 so you would be below the 13.8 - 10% figure of 12.4 VDC. If the fuses and holders added another say 0.01 ohms X 20 amps that would cause an additional loss of 0.2 volts and the voltage to the FT100 would be down to 11.152 VDC. Yes, I know the wire harness that comes with the FT100 is bigger than number 12 but I am just trying to show how the losses, often referred to as I R losses, can quickly add up resulting in low RF output,

chirp, FMing and erratic operation. Yes, some rigs do a better job of operating at 12.0 volts and below but if you want your radio to operate properly you must keep the voltage within the specification as provided by the manufacturer. Here are my rules for successful mobile performance with respect to DC power:

1) Make sure you have a good high capacity battery (just because it starts your car does not mean it is great battery).

2) Using a good meter, make sure you have 13.8 - 14.2 VDC at the battery (engine at idle with headlights & A/C on).

3) Use wire as large as practical and keep the run to your FT100 as short as possible.

4) Keep the number of connections as few as possible, and as tight as possible.

5) A good soldered connection is better than a good crimped connection (some may argue this point)

6) Use fuse holders rated for the current (cheap fuse holders have weak contacts).

7) Run the black wire all the way to the battery; don't tie it to car chassis at the radio.

8) Any connection that gets warm has resistance and is dropping some voltage.

9) Use meter to read voltage at the radio with key down (20 amps) to see how much you are losing.

10) Starting the engine will generate voltage fluctuations which could hurt your FT100, turn off rig first.

I know a lot of you old timers know this stuff like the back of your hand but we are getting a lot of new hams who want to enjoy mobile operations and may need to think about the losses that take place in low voltage high current applications. When the wife,

W4JJY, is shopping I often set in the parking lot and operate with the engine off with no problems and get great reports. I am running a FT100D in a 1999 Mercury Mountaineer mostly CW. I have successfully operated HF mobile on and off since 1957 and I work in a Land Mobile Radio facility so I see lots of mobile installations.

PROCRASTINATION

Bennie, AE4TR

AN ODE TO HAM RADIO

While sitting in my shack one night,
Looking out the window, what a beautiful sight,
The sun had set, the moon was shining bright,
Every thing was fine, much to my delight.

Listening to my radio, the hams were complaining,
There's a storm brewing, static was increasing,
As I watched the moon, much to my dismay,
A cloud passed over, more was on the way.

Soon there were many, the moon began to dim,
The temperature was falling, winter was setting in,
Rain was falling, and snow began mixing,
I just remembered, my antenna needs a fixing.

It had served me faithfully for so many years,
I should be ashamed, it almost moved me to tears,
Work while the sun shines, my father told me,
But I was lazy, and time passed,

Soon there were many, the moon began to dim,
The temperature was falling, winter was setting in,
Rain was falling, and snow began mixing,
I just remembered, my antenna needs a fixing.

It had served me faithfully for so many years,
I should be ashamed, it almost moved me to tears,
Work while the sun shines, my father told me,
But I was lazy, and time passed, as you can see.

Fear not, it's still up there, I said,
as I gladly, went to bed,
It's battered and torn, and hanging by a thread,
It's winter outside, and dark as can be,
It will make it through the night, just wait and see.

Morning came, I was up early, waiting for daylight,
I went to my shack, in snow up to my back, It had snowed all night,
Now Ice was forming,
I slowly drank my coffee, while waiting for morning.

I turned on my Rig, a-hah! I said in my head,
It's still working, or else all would be dead,
The hams were still complaining and going strong,
There's snow and ice, and it will be there long.

I rushed outside to have a look see,
But damage to my antenna was not to be,
It's still up there, I said, while the feelings were mixing,
There's one thing for sure, "my antenna still needs a fixing".

Submitted by Frank, K4EC