Rambler

Newsletter of the Ottawa Valley Mobile Radio Club Inc. (**OVMRC**) *Volume 49, Issue No 5*



Inside...

Meeting Minutes · · · · · · 3

Choosing a Satellite Radio4

Web Resources - ·····5

JW Award Nominations $\cdot 6$

Reminders...

Club Meeting ····· Dec 9 7:30 P.M.

Rambler Deadline · · · Jan 7

Jan Club Meeting · · Jan 20 7:30 P.M.

Club Exec. Meeting · Jan 27 7:00 P.M.

Merry Christmas



and a

Happy New Year

Christmas Net



There will be a special Christmas Day Net on repeater VE3TWO and all radio amateurs are encouraged to join in. This net gives you an opportunity to tell everyone about the new amateur gear that Santa is going to bring you; on the other hand, if you haven't been a good amateur this year, and Santa does not bring you a new rig, you are still welcome to join the net. if you promise to be better

behaved next year. You can also convey Christmas greetings to all your friends.

This is an opportunity as well to introduce any visitors you may have over Christmas in your home to amateur radio, in a fun and informal way.

The net starts at 0930 hours EST on the OVMRC club 2 metre repeater VE3TWO, 147.30 receive, 147.90 transmit. It will be just about as informal as a net can get. See you then. I will be net controller, as I have been for more years than I can remember, but it must be over 20 years.

I would also like to thank the OVMRC for allowing again use of the club repeater for this net. Ho ho ho!

Sydney, VE3GVI

P.S. For amateurs who are not sure, and are afraid to ask, Christmas Day is on 25 December this year!

Rambler, Dec 2004

Zambler

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Amateur Radio Exhibit

Amateur Radio Training

Accredited Examiner

Field Day

Historical

Flea Market

Membership

Newsletter

Technical

Publicity & Programs

Emergency Preparedness

OVMRC Repeater

147.300 MHz(+)

444.200 MHz(+)

53.030/52.030 MHz

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Vacant

OVMRC Life Members

Ralph Cameron	VE3BBM
Doug Carswell	VE3ATY
Doreen Morgan	VE3CGO
Ed Morgan	VE3GX
Bill Wilson	VE3NR

Club Website

The OVMRC **Rambler** is available on-line at the club website:

http://www.ovmrc.on.ca/rambler.htm

Sponsors

The **OVMRC** acknowledges the following organizations for their support of our activities:

Bytown Marine, Ottawa, ON Elkel Ltee, Trois-Riviéres, QC Kenwood Electronics Canada Inc., Mississauga, ON

The Rambler is produced using Corel's Ventura[™] 8 software.

The OVMRC website is hosted by Magma Communications Ltd.





Amateur Radio Exhibit VE3JW Web Site

http://ve3jw.tripod.com

Canada Science & Technology Museum



The Rambler is the official newsletter of the Ottawa Valley Mobile Radio Club Inc. and is published 11 times a year (monthly, except for July). Opinions expressed in the Rambler are those of the authors and not necessarily those of the OVMRC Inc., its officers or its members. Permission is granted to republish the contents in whole or in part, providing the source is acknowledged. Commercial use of the contents is expressly prohibited. Submit articles to the editor or by e-mail to: va3wmh@rac.ca.



Meeting Minutes

October 21, 2004

Secretaries Note: My apologies to the club, I was unable to get the minutes of the October Meeting to The Rambler Editor on time

OVMRC Club Meeting

Paul, VE3CPH opened the meeting at 7:36 pm with the introduction of the new executive officers of the OVMRC they are:

Paul VE3CPH, President Ken VA3NEK Vice President Patrick VA3CMD Secretary Dan VE3XYO Treasurer

Welcome was extended to the following guests:

LU7DW Claudio VE3ZQH George VA3ELQ Nigel VE3EGM Ernie VE3HOB

Also, Several members of the current OVMRC class were present....

Peter Gamble, VE3BQP made a presentation on EMRG

Club Business

A proposal was put forth to increase the membership dues as follows:

25 dollars per year without a mailed rambler ; and 35 dollars a year with Rambler mailed.

The Rambler will still be available electronically, at the OVMRC website. This would take effect at the time of member's next renewal.

Motion put forth by ve3srs Seconded by ve3glt The motion was carried by the present membership.

Directors reports

VE3VIG- VE3JW Ops

There is equipment of all sorts to be used and available at the science museum, APRS, Digital Modes, Satellites, HF and Packet. If you are a Licensed Amateur Radio Operator, you're encouraged and welcome to operate At VE3JW. You can contact Maurice Andre VE3VIG at <u>ve3vig@rac.ca</u> for further details.

VE3TWO-Jake VE2TQX

No problems currently...all is well.

November 16, 2004

OVMRC Club Meeting

VE3CPH opened the meeting at 19:37 Hrs.

Welcomes were extended to:

Doug Mclean (No Call Yet) Kris VE3URL Sydney VE3GVI

VE3CPH asked if there were any technical problems,

It was put to the club by a local Ham (sri I missed the call) how bar code scanners work, Kris VE3URL offered the following website to obtain an explanation <u>www.phrack.org</u>.

Under the not so quite technical side,

There is a Morse code message on the new War Museum building, if seen from the opposite side does it spell out something vulgar. You be the judgeJ

This evenings Presenter was Ralph Cameron VE3BBM, his topic was:

Airborne Radio Equipment that he originally presented to the QCWA chapter 70 convention. It was an excellent presentation.

Club Business

Elias Zaydan VE3EKZ will be next Months presenter His topic will be RF fingerprinting and wireless profiling. Remember the date for this Meeting is December 9th, 2004(the second Thursday of the month not the usual third)

Chair Reports

Radio Ops-VA3CMD-I'm looking for volunteers to help act as net control for the Wise Owl Net on repeater ve3two on Friday nights at 2000 local please email me at va3cmd@rac.ca if you are interested

VE3JW-Nothing to report at this time, but remember volunteers are always welcome contact Maurice Andre VE3VIG to take part.

Membership-VA3PIP-Currently we have 60 paid up members

Rpeater-VE2TQX-Jake-there are some intermittent problems on the UHF side, will be dealt with.

Door Prize Winners

VE3EJJ- visual J++ software package VE3WEH-laser pointer 50/50 draw winner of 27\$ VA3DWC Dennis

Choosing A Satellite Radio

By Emily Clarke, W0EEC – VP of Project OSCAR

The purchase of a new radio is possibly the biggest decision and most debated decision a ham makes. When I started out I asked a dozen people and got as many answers. In the end, I made my decision not on what people told me, but by considering what I wanted the radio to do. Choosing a satellite radio is easy if you know what your needs are. Rather than make specific Currently only two operational satellites use HF. AO-7 lets examine recommendations. some capabilities.

Simultaneous Dual Band?:

Satellites generally transmit on one band and receive on another. There are a number of dual band radios, but can vou listen on 70cm and transmit on 2m at the same time? This cross band mode is an absolute requirement. If you have a radio that will do split band operation, this probably qualifies.

Full Duplex?:

Generally you don't need a full duplex radio for repeaters, however when operating satellites it is important

to monitor your own signal as it is retransmitted by the satellite. Although you can work the easy sats with a split band radio, full duplex is highly recommended. Radios with dual VFOs generally meet this criteria.

Handheld or Base?:

If you plan on working satellites indoors, antennas will probably be up on the roof or on a tower. You will need extra power (10 watts or more) because you will also have cable losses to overcome. If most of your contacts will be made outside with a handheld antenna, a handheld radio might be all that you need.

All-Mode?:

All mode radios are base or mobile radios that can do both FM and SSB/CW modes. They are more expensive

but put out up to 100 watts. FM only radios can be used for many satellites, but high orbiting satellites always use SSB/CW modulation. If this is your goal, an all mode radio is for you. A word of caution - some handheld radios say they are all mode, but it is generally only AM receive not SSB.

HF?:

general operates in Mode A (2m xmit, 10m receive) and AO-51 has a PSK mode that is 10m xmit and 2m receive. Note

> that you need HF privileges to operate AO-51 in this mode.

Packet?:

Some radios have built in terminal node controllers or TNCs. These convert data from the satellite and display them on a screen or computer, and vice versa. Other radios don't have built in TNCs but have a data port for a TNC. Make sure it supports 9600 baud data.

Computer Interface?:

Not all radios have the ability to be controlled by a PC running a tracking will program that automatically correct for Doppler shift. While not very important for FM, it is a highly desireable feature for SSB/CW operation. This feature isgenerally only available on all-mode base station radios.

Whatever your decision, they can sometimes become permanent. Though you can quickly sell a radio you aren't happy with using online auctions it's generally a decision that is difficult for hams to make. So the best advice is to buy a radio that meets your needs and possibly needs you may have in the future.





Web Resources

Wire and toroids

In this Web Resources I will give some links that relate to a recent antenna project I undertook.

Last Winter, worried that if bad weather brought down my main antenna I would be without an antenna (or with frostbite trying to put it back up) I decided to put up a second antenna. So, an inverted L of length 67ft went up with 16 radials and an air spaced capacitor to reduce the inductive side of the antenna's reactance. It worked well and tuned all bands from 80m to 10m. This Winter I wanted to try something different and looked at the standard dipole. My G5RV I suspect is poor on 30m so I decided to cut a dipole for that band. As I wanted to be able to tune other bands I decided to feed it with some twinlead that I had picked up on sale from Radio Shack a long while back and so far had not used (this is the thicker 300? TV antenna twinfeed labeled as 'higher quality'). Feeding the dipole with twin feed give the antenna the label of a "doublet" and I searched around on the web for advice or anecdotal comments on performance. Many of my radio books said that this would be a good basic performer. What would be the length? Well a quick calculation with the calculator showed I needed about 46ft for the digital part of 30m. However, I wanted an inverted V configuration (I left the single line in the tree from the vertical part of the inverted L), so the length was reduced by about 5%, which puts it in about 44ft. If you feel you cannot remember the formulas for calculating dipoles etc try

http://www.qsl.net/kb5wck/antenna.html#dipole

Now, 44ft doublets I had heard about on the Elecraft e-mail reflector. The topic does reappear from time to time. For example,

http://www.ac6rm.net/mailarchive/html/elecraft-list/200
1-10/msg00931.html

Another site with mention of a 44ft doublet (described as an extended double zepp (EDZ), which this antenna will be for 10m) is

http://www.n4ekv.com/antennas.asp

This is a rotating design and the third and fourth pictures show the antenna and some mounting details.

So, the length of 44ft (along with 88ft) is an arrangement recommended by L. Cebik, whose antenna website I have mentioned before in previous articles. A quick check of his website shows that it is a topic of an older article and part of a nice new article he has recently added to his site.

First the older article which talks about the 44ft doublet and has the title 'Suppose I Could Have Only One Wire Antenna. . .'

http://www.cebik.com/aledz.html

The newer article is a pdf file of a talk given at the Four Days in May (FDIM) QRP conference held during Dayton Hamfest. This is enticingly titled 'My top five backyard multi-band wire antennas' and can be found at

So the 44ft doublet was constructed, but of course I needed a balun for between my unbalanced ATU and the twinfeed. Back to the books (I probably read my collection of radio related books as much as the web material). A 4:1 balun was called for and the current or guanella type was recommended in the ARRL's Antenna Handbook. There was some designs in that book but a check on the web produced an interesting design. This was previously a kit produced by the New Jersey QRP club, but the the basic parts I had in my junk box.

http://www.njqrp.org/balun/index.html

The construction is detailed in a pdf document and the link is on that page. I like the design as there is a clever pointer to the winding that ensures that the input and output of the wire appear at opposite ends across the diameter of the toroid.

I did not have the same size toroids as used in the kit but the late Doug Demaw, W1FB, in his QRP Notebook recommended the T50-43 for QRP levels and I had those in the junk box. Details of the above book and a single review can be found at

http://www.amazon.ca/exec/obidos/ASIN/0872593657/qid=11 01526223/sr=1-1/ref=sr_1_0_1/701-4337065-3360329

Personally, I think this book is unbelievable value and full of great circuit designs if you are wanting to try building receivers or transmitters. Do not be put off by the font or the basic appearance of the text. The content is very good.

Using the New Jersey kit design I built and boxed the balun in a cheap radio shack box.

For this antenna project all I had to buy were the box and two binding posts (less than \$10), all the rest I had in the shack. I snatched a little time from the family during the kid's nap time one Saturday afternoon and put up the antenna. The balun had been tested with a 200? resistance across its output and I knew it worked. The antenna was up about 30ft with the dipole arms coming down at an angle of about 100 degrees between them. Using my antenna analyser I found I had SWRs of: 11:1 on 40m, 3:1 on 30m (the target band), 5:1 on 20m, 4.5:1 on 17m and 15m, 5:1 on 12m and around 4:1 on 10m (there is a little variation across this band). Now, this is for my set-up and if you try building one of these antennas your SWR may be different. Those SWRs are good for an ATU to deal with so I was happy. On receive I found the antenna as good as my 102ft G5RV and actually less noisy (so a better signal to noise ratio). The reduced noise could be that the 44ft doublet is further away from my house whereas the G5RV runs close to it. On transmit, well it works! I have had some 20m QSOs and 599s in PSK but not had too much time to fully test it. After one long QSO I quickly went out and opened the balun box to feel the toroid and there was no discernible heating at all when touched. The balun box and its connectors are weather shielded by using a cleaned-out milk bag and taping to the bag carefully to the cable and twinfeed.

The project went well and I am pleased so far with the results.

kkaa

http://www.cebik.com/fdim/fdim9.pdf

Rambler, Dec 2004

Continued on page: 6

Jerry Wells OVMRC Amateur of the Year Nominations

We would like to nominate **Ernie Jury**, **VE3EJJ**, for this year's Jerry Wells award because of his wide range of activities within the club and in particular his involvement in training and encouraging new amateurs. Ernie is known throughout the club but perhaps the full extent of his current involvement and activities associated with the club may not be known by all. His contributions this year are as follows.

- Ernie, along with Bob Shaw, VE3SUY, is teacher and director of the amateur radio course run by the OVMRC. The commitment to preparing and delivering this course which runs two nights a week from Sept. to Dec. is considerable. He always makes the course content enjoyable and informative and he has many dramatic demonstrations too, to illustrate electrical concepts. This year the course graduated another 10 students.
- At weekends he is the Pot-Hole net controller which is held at 10am Eastern on both Saturday and Sunday on HF, throughout the majority of the year.
- If the Pot-Hole net was not enough for Ernie's weekends, he is also a regular operator on Sundays at VE3JW where he not only operates the station but informs the general public about amateur radio. He was also at the helm of VE3JW during our first 2m simplex contest, when 'JW was a designated club station.
- Ernie is a regular active participant at Field Day and this year was no exception, with him manning a station on 80m and encouraging others to operate with him. (It should be noted that Ernie is a mean shot with a slingshot for getting line over trees and also good at organising people during mast raising and lowering).
- During club meetings Ernie is still busy helping the club by being the audio-visual organiser and controller.
- He is currently a club committee member, through the radio amateur training, and has been an executive member in previous years as treasurer.
- As if all this was not enough, this past year Ernie became an accredited radio amateur examiner for Industry Canada.
- Besides all these `official' activities, Ernie is always happy to help individual amateurs, providing suggestions and assistance when necessary.

To summarise, Ernie has quietly and efficiently provided considerable input and time to the OVRMC as well as amateur radio in general. Input that helps the running of the club, the training and encouragement of new members and which matches the club objectives. His efforts and work in the area of amateur radio training is perhaps enough to merit his nomination, but as described Ernie has provided much more significant input. We are therefore pleased to nominate Ernie Jury, VE3EJJ, for the Jerry Wells award and would like to say "thank you, Ernie!" for all your work.

Nomination submitted by:

Alan Steele VA3STL Gerald Trottier VA3GLT We wish to nominate **Steve Cochran**, **VE3SBC**, for the OVMRC Amateur of the Year Award.

- 1. Steve has been most valuable resource in helping put together the OVMRC Emergency Response Trailer. His handy skill at woodworking allowed him to completely refurbish the gutted trailer, constructing the consoles and finishing the interior.
- 2. Steve was a great help in installing and wiring the equipment of the trailer
- 3. Steve participated in the many Emergency exercises with the CASARA team, which consisted in locating a downed aircraft or lost vehicle.
- 4. Steve participated in the Field Day exercise helping set up and take down, and providing operating time.
- 5. Steve volunteered to organize the International Lighthouse Special Event Weekend, rigging up the Museum Lighthouse, arranging for the production of QSL cards and overseeing the operations during the weekend. He has been a valuable participant in this event in the past.
- 6. Steve is active promoting Amateur Radio while volunteering in several ways at the Science and Technology Museum, and also in helping other Ameteurs.

Nomination submitted by:

Maurice-André Vigneault	Larry Wilcox
VE3VIG	VE3WEH

Continued frompage: 5

Christmas is soon coming and so is the RAC Winter contest. For the pdf of the rules see

http://www.rac.ca/downloads/canwin2004.pdf

If you enjoy QRP and want to try QRPp (1W and below) then check-out QRP-Canada's 'Run with RAC' competition and try 1W in the Winter contest. The categories can be found at

http://www.qrp-canada.com/QRP%20Run%20with%20Rac.htm

That is it for Web Resources for 2004. Have a happy holidays and a prosperous and peaceful 2005.

73 Alan ,VA3STL (va3stl@rac.ca)