

Rec'd May 10/94

# THE OVMRC RAMBLER

Volume 37, Number 5 - May 1994

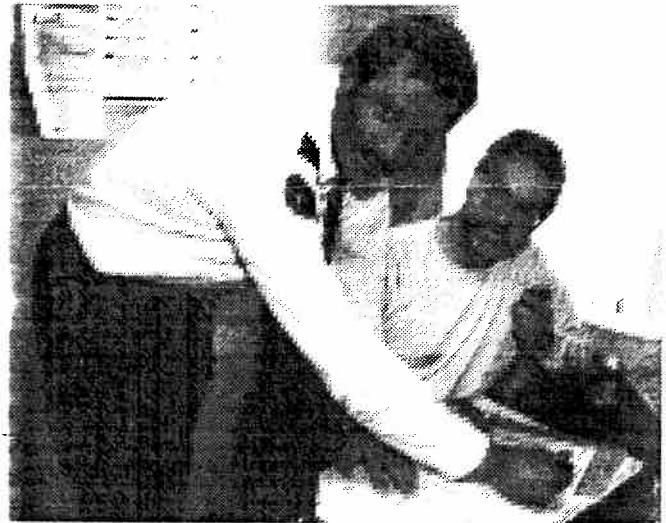
## Kanata Fire Department Leads The Way

Written by Paul Griffiths, VE3PGL

The Kanata Fire Department in a precedent setting move has joined forces with local amateur radio operators which will guarantee communications for the Kanata police and fire departments and relief organizations if and when a disaster strikes the area, such as an earthquake, flood, hurricane, aircraft crash, etc.

David Guilbault, Kanata's Deputy Fire Chief, initiated the move. Following negotiations with Kanata municipal authorities, Deputy Guilbault contacted the Emergency Measures Radio Group, led by Joe McPherson, to make all the necessary arrangements. The EMRG sponsored the establishment of an amateur radio station in the Eagleson Road fire hall. The station was installed so that if and when a disaster occurs designated volunteer amateur radio operators could proceed directly to the station if they did not have their amateur radio with them and start providing immediate communication assistance.

In addition to the many amateur radio repeaters in the Ottawa-Carleton region, the Ottawa-Carleton Emergency Measures Unit recently commissioned a new amateur radio repeater, VA3EMU, for the exclusive use of the EMRG during an emergency. One of the many features of the new repeater is the ability to interconnect (autopatch) with the local telephone network. This feature will allow volunteer amateurs to communicate with any of the services the City or Fire Department may require in the event of a disaster in Kanata.



Checking out the new amateur radio are, left , Deputy Fire Chief David Guilbault and EMRG representative Paul Griffiths, VE3PGL.

The new Eagleson Road amateur station is comprised of a Kenwood 702A transceiver, a Pyramid 22 ampere, 12 volt DC power supply and receiving and transmitting its signal is a Diamond X300 antenna.

Kanata firemen and volunteers from the amateur radio community worked together to install the antenna, cable and radio. A very special "thank you" goes out to Norm Dorion of Dorion Electric Ltd, who supplied the heavy duty concrete drill that was required to cut through the concrete wall at the fire hall.

Deputy Guilbault has stated that Kanata's firemen will, in the near future, be canvassed to determine whether there is sufficient interest among them to arrange for an amateur radio operators course.

### Show and Tell - 7 to 7:30PM

**MAY 19TH MEETING STARTS IN THE MUSEUM PARKING LOT AT 7:00PM. YOU'RE INVITED TO DEMONSTRATE YOUR VHF, UHF OR HF MOBILE RIGS. PRIZES WILL BE AWARDED. REGULAR MEETING FOLLOWS AT 7:30PM WITH DR. TERRY MCCOMB SPEAKING ABOUT "LIGHTNING"**

# RAMBLER

The *Rambler* is published monthly by:

The OVMRC  
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### **The 1993-1994 OVMRC executive**

*President:* Jerry Wells, VE3CDS, 225-7374  
*Vice-President:* Larry Wilcox, VE3WEH, 747-5565  
*Treasurer:* Richard Adams, VE3EIT, 749-2619  
*Secretary:* Ernie Jury, VE3EJJ 728-3666

### **Standing committee chairs**

*Amateur radio exhibit:* Cy Webster, VE3SIY, 733-2371  
*Amateur radio training:* Bob Shaw, VE3SUY, 737-9443  
*Field day:* Allan Barnes, VE2TYJ, 746-5994  
*Flea market:* Lorraine Boulay, VE3VAT, 228-7111  
*Historical:* Mike Beausoleil, VE3BGP, 739-8871  
*Hysterical:* Neil Herber, VE3PUE, 829-4668  
*Membership:* See hysterical (don't ask)  
*Newsletter:* Dan Doctor, VE3XDD, 745-9214  
*Publicity and programs:* Dave Champagne, VE3QQQ, 567-9233  
*Radio operations:* Steve Middleton, VE3RUU, 731-6749  
*Technical:* John Pope, VE3ACI, 989-3629

### **Ramblerites**

*Contributors to this issue:*

Hugh D. Clark, VE3WM  
Mike Kelly, VE3FFK  
Larry Wilcox, VE3WEH  
Jacques Choquette, VE3TSC  
Paul Griffiths, VE3PGL

**OVMRC Code Phone: 746-2065**

## **Mark Your Calendar!**

### **Next general meeting:**

Thursday, May 19th at 1900 hours. An exhibit of members HF, BHF & UHF mobiles in the museum parking lot; followed by a talk by Dr. Terry McComb of NRC on "Lightning"

### **Next executive meeting:**

Thursday, May 26th at 1930 hours in the volunteers room at the Museum of Science and Technology.

### **Deadline for the next issue of the Rambler:**

Thursday, May 26th, 1994.

### **Affiliated clubs**

*The OVMRC exchanges bulletins with the following organizations:*

Augusta Amateur Radio Association, Augusta, ME  
Border City Radio Club, Windsor, ON  
Chatham-Kent Amateur Radio Club Inc., Ridgetown, ON  
Calgary Amateur Radio Association, Calgary, AB  
Halifax Amateur Radio Club, Halifax, NS  
Heritage Amateur Radio Club, Cobourg, ON  
Kingston ARC, Kingston, ON  
London Amateur Radio Club, London, ON  
Ottawa Amateur Radio Club, Ottawa, ON  
Pioneer Amateur Radio Club, Nepean, ON  
RAC, Kingston, ON  
Scarborough Amateur Radio Club, Inc., Scarborough, ON  
Seaway Valley Amateur Radio Club, Cornwall, ON  
Sudbury Amateur Radio Club, Sudbury, ON  
Saskatoon Amateur Radio Club, Saskatoon, SK  
Thousand Islands Amateur Radio Association, Prescott, ON  
West Island Amateur Radio Club Inc., Dorval, PQ

### **Sponsors**

*The OVMRC provides bulletins to the following organizations for their past support of our activities:*  
Bytown Marine, Ottawa, ON  
Kenwood Electronics Canada Inc., Mississauga, ON  
Seaway Communications Co., Cornwall, ON

# Ramblings

Wise words from our President, Jerry Wells, VE3CDS



May, the month of spring and all sorts of pleasant outdoor activities. Wasn't that a bear of winter? I do not recall such cold and heavy snow in the last few years. Anyway it's gone for another season. How about the fleamarket? Did you get anything that you were after or did you just buy on impulse and then try to figure out how you were going to get it into the house without the XYL casting a questioning gaze upon you as you fabricated what both you and the boss knew was a pretty tall story. I know, I tried them all and never seemed to manage to come up with an acceptable story. But that's part of the fun of going to the fleamarkets. On to other things. The MAJOR activity coming up in June is Field Day. June 25 and 26, Saturday and Sunday. Lots to do! If you want to operate on phone or cw - contact the organizing committee under the Chairmanship of Alan, VE2TYJ. If you want to help putting up the antennas and tents, etc., contact Alan, VE2TYJ. In fact contact Alan, or Steve, VE3RUU, or Richard, VE3UNW. These three gentlemen will be there to ensure that everything gets set up on time and there are operators scheduled on the various stations. There will be others that will be on hand to organize the different stations and you will be hearing more about that from Alan at our May and June meetings.

Speaking of our June meeting, there is another very important function to be carried out at it. The election of officers for the coming year! A nominating committee has been formed and you may have already been contacted by them. Give serious thought to

serving on the club's executive. This year nearly all of the current executive have served for two years and, according to our bylaws, they must step down. Here is your chance to guide the club for the 1994 - 1995 term.

For those of you that attended the April meeting (there was over 90 people in attendance) I am sure you got as much enjoyment as I did in listening to Gerry, VE3GK talk to our newly licenced club members. The comments heard after the meeting were filled with enthusiasm and genuine interest in the where with all of amateur radio as only VE3GK can tell it. Thanks Gerry, you really turned on this group and all of the old timers just loved to hear it again.....

By the time you receive this issue of the Rambler, the new 70 cm repeater should be up and running at the repeater site. Initially, the repeater will be on 70 cm in and 70 cm out. If all goes well the mod to tie in the 2 meter repeater will be done so that the output of the 2 meter repeater will also be on 70 cm. John, VE3ACI will give us the details as we progress.

For the benefit of the newly licenced hams and anyone else interested in upgrading their cw in anticipation of field day, I have prepared a data sheet showing the W1AW code practice schedule. Code is sent at speeds of 5, 7.5, 10, 13 and 15 wpm. On alternate nights higher speeds are 35, 30, 25, 20, 15, 13 and 10 wpm. W1AW puts an excellent signal into Ottawa on both 40 and 80. Call me if you would like a copy of the schedule.

# Minutes

OVMRC Regular Meeting  
21 April, 1994

## Call to Order

President Jerry, VE3CDS, called the meeting to order at 1945 hours. He welcomed seven visiting amateurs and one new member.

The President introduced the club's radio course instructors; Bob Shaw, VE3SUY, course director and technical lecturer; John Moffat, VE3NJ, technical lecturer; Brice Wightman, VE3EDR, code analyst and lecturer; and Jerry Wells, VE3CDS, code practice and lecturer.

Bob Shaw and John Moffat introduced the radio class of '94. They stated that all had met the basic requirements and 7 had passed the advance test. Twelve had passed the 5 wpm test and 4 of these had met the 12 wpm requirement. The members of the class are:- Bill Anderson; Colleen Bigelow; Paul Brien, VA3HOE; Fernand Charron, VA3CHA; Marc Charron, VA3MDC; Heather Cooke, VE3QTE; Lane Cunningham, VA3LRC; Murray Harris; George Iznardo, VA3JCI; Rochelle Jean; Courtenay Johnson, VA3CSJ; Josh Kauffman, VA3KAJ; Nelson Laporte, VA3NDL; Steven Lemay, VA3SVN; Mark Levey, VE3JZP; Howard Osterer, VA3JCC; Andrew Ralph, VA3ARO; Dan Reardon, VE3GUU; Bruce Richardson, VA3GBR; Robert Roy, VA3RJR; Don Taylor, VA3DWT; Tim Terrill, VA3TLT; Sue Welsh, VA3SUE.

## Guest Speaker

The speaker for the evening, Gerry King, VE3GK, was introduced by the President. Gerry's talk was light-hearted with many hints to help the new amateur get on the air from both a technical and operational approach. The President thanked Gerry for his instructive and humorous presentation.

## Old Business

The President reported that Al Barnes, VE2TYJ, had investigated the possibility of purchasing a 70 cm repeater and found that a 70 cm repeater had been purchased last year and there had been agreement to purchase a new controller for it. John Pope, VE3ACI, is in the process of calibrating the new controller and expected to commission it

within the next few weeks.

## New Business

A bulk buy of specially tempered aluminum tubing for beam antenna construction is being put together. Contact Paul Cooper, VE3JLP, 821-2167, or Dave Goodwin, VE2ZP, 684-1432 to join in the buy.

Larry Wilcox, VE3WEH, noted that the defensive driving course will take place on Saturday, May 21. There is still room for additional participants. Call Larry at 747-5565.

## Committee Reports

Lorraine, VE3VAT, brought everyone up to date on the flea market. A large truck is required to pick up and deliver the tables. Volunteers are required for the talk-in; for security; and for the refreshment facility. Sue, VE3SLC, also needs percolators for tea and hot chocolate.

Al, VE2TYJ, requested that those interested in operating a station, VHF, UHF or HF, on Field Day, to advise him of the times they would like to participate.

The May meeting program will be a Mobile Radio Night in the museum's parking lot. If you have a mobile rig bring it along for others to see and benefit from your ideas. This will be followed by a talk by Dr. Terry McComb of NRC on "Lightning and Protection Against It".

The June meeting will be the annual meeting and election of officers.

The door prizes consisted of 10 tickets on the flea market raffle drawn by the guest speaker, Gerry King.

There was a draw for a classic brass morse key donated by Jerry Wells, VE3CDS. The draw was from among the students of the class of '94. The winner was Murray Harris. The President adjourned the meeting at 2125 hours and was followed by a social hour with coffee, tea and cookies.

# Historic Chronology of Radio

Researched and written by Hugh D. Clark, VE3WM

I've always been interested in history. To me there is nothing more thrilling than stumbling across an article about someone like Dr. Mahlon Loomis who in 1866, a year before Marconi was born, made "disturbances in the atmosphere". Who was he? What happened to him? Why did he not get credit for what he did? Even though the use of radio or wireless spans less than a century, the stories are legion. "Now, from the thrilling days of yesteryear" let me introduce you to some of the people, discoveries, happenings and dates that made it all possible.

1842  
Samuel Morse experiments with telegraph without wires.

1864  
James Clark Maxwell shows theoretically that electromagnetic waves must exist.

1866  
Dr. Mahlon Loomis sets up "disturbance in the atmosphere" by signalling 14 miles using kites covered with copper fine wire between mountains in Virginia and later between two ships.

1875  
Thomas Edison observed while experimenting with vibrating magnets that sparks were produced and deduced that they were oscillatory in nature.

1876  
Alexander Graham Bell invents the telephone.

1882  
Bell using conduction method establishes communications between two vessels over a mile apart.

1887  
Heinrich Hertz transmits and receives electromagnetic waves across a room.

1888  
Thomas Edison discovers that electronic particles are emitted from an electric light bulb.

1894  
Marconi Begins experiments in Italy.

1897  
Marconi Wireless Telegraph and Signal Company was formed in the U.K.

1897  
First coast station opened on Isle of Wight off England's south coast.

1898  
First vessels fitted with wireless. First commercial use of wireless.

1899  
(March) Marconi establishes communications between England and France across the English Channel.

(March) Godwin Lightship first to summon aid by radio when it was struck by another ship.

(October) First use by military when Marconi equipment was shipped to South Africa for use in the Boer War. First warships in both the U.K. and the U.S.A. fitted with radiotelegraphy

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# Historic Chronology of Radio

Continued from page 5

1900

First fire department (London, England) fitted with W/T. First use of wireless to pass organized meteorology information.

1901

(December) First transatlantic signals received by Marconi at St. John's, Nfld. from U.K.

1902

First transmission of continuous wave (CW) by Fessenden using the Alexanderson Alternator. First transmission of the human voice by Fessenden using the Alexanderson Alternator.

1903

First fullscale wireless tests conducted between North America (Glace Bay, N. S. and Cape Cod, Mass.) and U.K. (Poldhu). Limited public access to the system.

1903

First international wireless telegraphy conference (Berlin). It failed because of insufficient number of governments ratified the convention.

1904

Fleming patents Diode valve (vacuum tube) . CQ-D distress signal introduced by Marconi Co. First Canadian Coast Stations installed along the east coast and St. Lawrence by Marconi Co. on contract to the Canadian Government.

1906

(December) First broadcast program of speech and music by Fessenden. Second Berlin Radio Conference. Set up of permanent organization in Berne, Switz. and convention to take

effect in July. 1908. Lee DeForest develops the triode vacuum tube.

1907

First use of radiotelephone to and from a mobile station by DeForest on Hudson River ferry. (October) Limited press and commercial service undertaken by new Marconi stations in Cape Britian and Ireland.

1908

DeForest broadcasts music from Eiffel Tower in Paris. Second Berlin Wireless Conference officially accepts CQ-D as distress call but SOS is proposed to replace it by mid-1912.

1909

Liner REPUBLIC sunk in collision, help summoned by radio and in the first large scale rescue conducted by radio, over seventeen hundred were rescued. Marconi's transatlantic service fully opened to public correspondence.

1910

First communications with an aircraft in flight, by McCurdy in U.S.A. First time signals transmitted from the Eiffel Tower.

1911

A TV system using electronic scanning described at a conference in London, England.

1912

(April) Liner SS TITANTIC/MGY struck iceburg. Although over 1500 lost, wireless hailed as the saving force that allowed 712 people to be rescued. SOS first used along with CQ-D. Investigation into Titantic disaster resulted in Automatic Alarm Receiver proposed ( for distress).

# Where's the After-Easter Bunny - VE3BNE(Unofficially) ?

Story by Larry Wilcox, VE3WEH with assistance from Jacques Choquette, VE3TSC

What a day for "B" hunting, it was cool and cloudy with no snow, no freezing rain and no slush! Jacques and I having won the -24°C COLD hunt in January, decided to have our hunt during the spring. It was held on April 9th; check-ins were taken from an unrelated position (to confuse the early DFers) at 10.30am.

A mad dash in the car and a rush to set up the "Bunny Hutch" , a 5 element beam mounted on a clothes line tripod and we were on the air at about 11.00am from the open, upper level of the eastern parking complex at the St. Laurent Shopping Centre. Or at least we thought we were until Jacques pointed out that I had the WRONG cable hooked up and had my SWR/Power meter reversed! We were transmitting on a 1/2 wave mobile antenna; a great way to confuse everyone, eh? We started transmitting at about 40 watts to the northeast between two highrise apartment buildings. The direction of the beam and power level was changed on several occasions in an attempt to confuse the hunters.

The hunt was won by John, VE3JKG, and Bob, VE3SZA, in a mere one hour and five minutes. They found us at 12.05pm after driving from Bells Corners, along Bronson to the Airport Parkway, Wakley and Russell



Part of the group which finally found the "Bunny's Lair" on the upper level of the eastern parking complex at the St. Laurent Shopping Centre.

Road, north on St. Laurent Blvd, Coventry Road and finally through the entire parking lot at St. Laurent Shopping Centre. They now have Bunny, VE3BNE, in their possession and can claim exclusive bragging rights. They will be planning the next hunt and will furnish details as their plans materialize.

The second place arrivals with only six minutes to spare, were Chris, VA3SID, and Al, VE2TYJ. Al was so frustrated from driving around the block looking for us that Jacques finally told him we were not on ground level! We announced the Bunny Hutch site at 1300 hours and asked all arrivals, including Rob, VE3SJM and Darryl, VE3EKV, to identify the various sounds we transmitted. Honourable mention to Rob, VE3SJM, for identifying the most sounds. Rob, by the way, also heard interference on the Bunny hunt frequency and tracked a real RAT to the Pretoria Bridge area. Congratulations to all the other participants; Bob, VA3RCS, who was bike mobile and nearly found us but ran out of steam; and Maurice Andre, VE3VIG. We hope many more amateurs will join in the fun on the next hunt.



The winning Bunny Hunters, John, VE3JKG, and Bob, VE3SZA, showing off their equipment.

# Upcoming Fun Events

## Techno Days

Again this year the Museum of Science and Technology will be the scene of feverish activity. The museum will be sponsoring Techno Days during the week-end of June 17-18-19. The OVMRC will be participating in Techno Days with an operating display of amateur radio. Operators with 2 meters and /or HF privileges are required to operate the equipment. Anyone interested in participating in this activity is asked to contact Steve, VE3RUU.

## Field Day

The last week-end in June is "Field Day". This annual event is a 24 hour activity involving 2 meters, HF and packet operations. It is a fun event which brings together a cross section of OVMRC's membership which promises participants fun, a good variety of tasty food and the fellowship of other amateurs. Required for this major event are helpers to set-up antennas, tents and equipment, as well as 2 meter, HF and packet operators. Contact Field Day Coordinator Al Barnes, VE2TYJ to arrange a scheduled operating time.

## Defensive Driving Course

Would you like to make an investment that pays off in reduced car accidents, fewer personal injuries and overall cash savings? If your answer is "yes" then you should be enrolling in the Defensive Driving Course being offered by Canada Safety Council course instructor Larry Wilcox, VE3WEH.

The one day course teaches the principles of defensive driving, collision avoidance techniques, the 6 adverse driving conditions, the time-interval formula, the habitual eye-lead-time technique, and the pre-trip mental inventory. OVMRC members and their vehicle driving age family members who are interested in this course are invited to contact Larry Wilcox, VE3WEH, any evening, after 6.00pm at his home.

## Fleamarkets

The following is a list of fleamarkets we have heard about which may be of interest to you.

MAY

- 6 & 7 Hamfest, Deerfield-Rochester, N.H.
- 7 Hamfest, Smiths Falls, Lombardi Fair Grounds. Talk in on 147.210+
- 14 OVMRC Fleamarket. St. Laurent Arena, 716 Morin Street, Ottawa. Admission Free. Talk in on 147.300+
- 20 -21 ARRL Hamfest, Rochester, N.Y.
- 29 Tracy ARC Hamfest, Tracy Curling Club, Tracy, Quebec. Talk in on 145.370-

JUNE

- 4 Central Ontario Amateur Radio Fleamarket, Bingeman Park, Victoria Street North, Kitchener
- 18 Quinte ARC Hamfest & Computer Show, Dick Ellis Arena, Harder Drive, Belleville. Talk in on 146.985- and 146.835-
- 18 Cornwall ARC Hamfest, Nativity Hall, 301 McConnell Avenue. Talk in on 147.180+

JULY

- 2 Hamfest, 1023 Tachereau Blvd. Longueuil, Quebec.

AUGUST

- 13 Hamfest, Burlington, Vermont

SEPTEMBER

- 10 Hamfest, Berlin, Vermont
- 21 to 24 Hamfest, Antique Wireless Assn. Canandaigua, N. Y.

## Murray Harris Wins New CW Key

Murray Harris, one of the students on the clubs radio course, was the lucky winner of a new Nye Viking telegraph key, donated by Jerry Wells, at the club's April meeting. Murray has passed his basic and 5wpm and is closing in on the 12 wpm code requirement. Congratulations Murray!



# Getting Ready To Go To A Fleamarket

Written by Mike Kelly, VE3FFK

Be prepared, of course ! Try to put together a list of the sort of things you're looking for. The list may never leave your pocket, but it makes a very useful starting point. Bring a packsack, so you can buy more than one item to carry in each hand. Consider bringing a hand truck or luggage cart if you are looking for a large, bulky or heavy item like a transformer, or power supply (chances are that you won't be parked just outside the door to the fleamarket - that's my spot).

If you're looking for "major" equipment, like a transceiver, bring old magazine ads or reviews that list the price and vintage of the gear you are thinking of getting. Paper copies of the "swap net" listings with the asking prices are also handy to have on hand. If you already have a rig, bring along the manual for it. That way, if you come across a filter or other accessory, you'll be able to determine whether or not it can be used with your rig. Some people need to bring the manual along just to let them know how many pins their microphone connector has, or what style of power plug they have on the back of their rig.

If you are just looking for bits and pieces, bring along a flashlight so you can check the deep recesses of the cardboard boxes under the tables where the real bargains hide! A tape measure will let you know if that wonder of a bygone era will fit in your trunk. It will let you know if that meter will fit in the panel you saw for sale in the other corner of the hall. An adjustable wrench and a few screwdrivers come in handy, as does a multimeter and a 9 volt battery. The former for getting things out, and the latter for checking things out.

If you can swing it, bring along someone who knows more than you do, or at least someone who can be level headed when you find the bargain of the century and want to head back to the bank machine (again?). If you both have handheld transceivers, bring them along. It makes it easier to find each other across the hall, and you can keep each other

advised of what neat bargains you're finding. You may not find any of the items on that list I mentioned at the beginning of this article, but you aren't likely to leave without having picked up some addition to your collection. At the very least, you will have learned something about where amateur radio came from, and is going. The bottom line is have fun, talk to people, enjoy a few snacks from the food area. I hope to see and talk with you at the next fleamarket !.

## Letter to the Editor

Dear Rambler Editor:

Pertaining to the thoughts expressed by VE3XAG in "Are VE Licence Plates An Invite To A Breakin ?", may I ask someone to write a few lines on the origin of radio amateur plates and of their purpose.

In my opinion they should only be displayed when the amateur has a reliable means of wireless communication on board or on himself with access to 911 and/or police, ambulance, etc. Otherwise, what is the point of creating false hope with the general public?

With the widespread use of mobile cellular telephones, who needs the radio amateur for e.g. accident reporting.

I recently turned in my VE licence plates. The fee in Ontario is \$15 for exchanging licence plates.

Why should the general public, and my neighbours in particular, know that I am a radio amateur ? Of what possible service could I be to them ? I prefer to keep a "low profile". So why should I publicize ?

Sincerely,  
Ziggy Bernhoff, VE3JDA

Editor's Note: While you may have a point Ziggy, VE3XAG's point was that VE licence plates draw thieves attention to the fact that you may have radio equipment in your vehicle.

## The QRMT Filter

Reprinted from the Calgary ARC's monthly newsletter 'Key Klix'

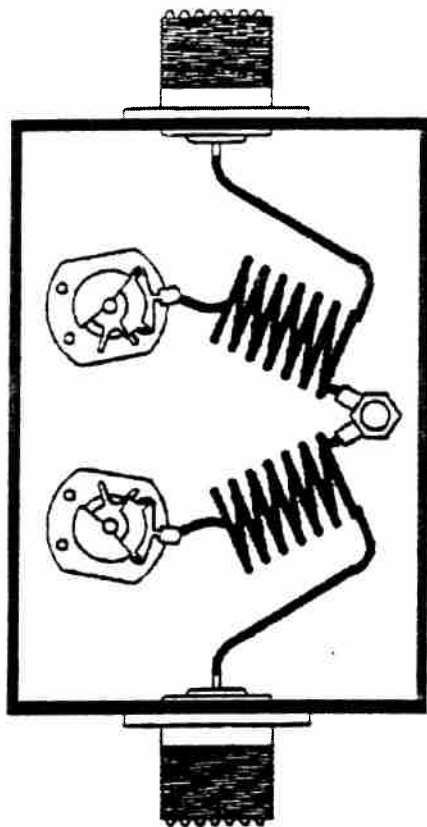


Fig. 1

This filter, when carefully built, should help tighten up the receive front end on intermod plagued radios. I have put about 80 watts through the filter for a considerable time with only a detectable rise in filter temperature above ambient. This was done at the frequency the filter was tuned for.

When tuned for repeater use, split the difference between TX and RX frequencies. The filters I made were usable + or - 1MHz with an acceptable swr seen by the transmitter (below approx. 1.5: 1) This filter is actually quite simple and easy to build. Pay particular attention to coil construction. Both coils should be as close to identical as can be for hand wound. Spending more time winding almost perfect coils, and symmetrical layout of the chassis, will yield better filter performance. I cannot stress this enough - try to make each side of this filter as close as possible to the other.

### COIL CONSTRUCTION

I used 14 ga. copper wire. Wind the coil with an o/d of 1/2" & 7 turns. Be careful not to kink or bend the wire when removing the insulation. Use an Exacto knife to score the insulation so it can be removed carefully. This will result in more uniform coils. I used a Snap-On 1/4" drive, 1/4" deep socket as a form to wind the coils on. The coils were close wound with no space between windings. Then I spread the windings the width of an Exacto knife blade by twisting the knife between the windings progressively. Light drag on the knife blade between the windings or "feeler strip drag", indicates uniform spacing. More time was spent on the two coils than the rest of the filter

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# The QRMT Filter

Continued from page 10

## Variable Capacitors

Panel mounted, screwdriver adjustable, approx. 2 - 10 pf.

## Chassis Layout

A 1" x 2" x 3" Hammond aluminum mini box was used. These are now metric equivalents and are not exactly the size stated, see fig. 1. The taps on the coils are at 3/4 of a turn from ground. Use SO239 or BNC connectors as required.

## Tuning the Filter

Set up as shown in Fig. 2a. Transmit through a swr or directional watt meter into the filter. Tune both caps for flat swr. Now set up as shown in Fig. 2b. The purpose of this step is to get your TX power out of the filter. It is possible to have a flat swr and no power coming out of the filter - a sort of resonant dummy load. Tune both caps for maximum power to the dummy load. Repeat step 1 and recheck both steps. You may see a slight bit of reflected power on the input side to get maximum power out. This can all be done in one tuning step a lot quicker if you have two directional watt meters, which most of don't (Fig. 2c). I have an HP608d signal generator! I was not able to measure any appreciable receive signal attenuation. This was done on the frequency the filter was tuned to.

Label the TX and antenna of the filter. Theoretically, it should not make any difference which way it is used after tuning. I suspect the minuscule differences in the 2 perfect, identical, hand wound coils may have something to do with this.

Fig 2a

TX - SWR MTR - FILTER - 50 OHM DUMMY LOAD

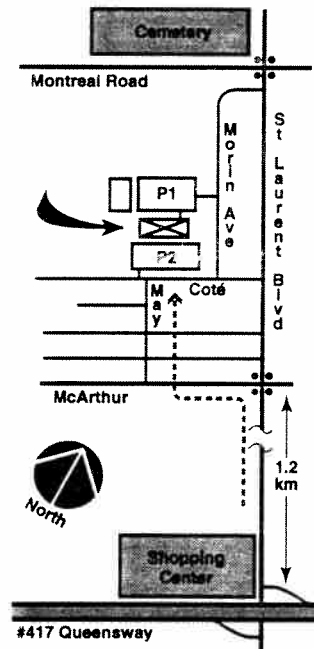
Fig 2b

TX - FILTER - WATT MTR - 50 OHM DL

Fig 2c

TX - SWR - FILTER - WATT MTR - 50 OHM DL

Ottawa Valley Mobile Radio Club Inc.  
**OVMRC Flea Market**  
**14 May, 1994**  
716 Morin Avenue, Ottawa



- Doors open at  
08:00 for vendors  
09:00 for the public
- Table Reservations:  
Ken Barry (VE3KJB)  
(613) 746-4823
- Wheelchair access  
from parking lot P1
- Talk-in on 147.300+
- Prize draws

**FREE  
ADMISSION!**

PLIE007

# Potpourri



*A sampling of news and comments from newsletters and newspapers from across the country - written by Jacques Choquette, VE3TSC*

Kingston. In amateur radio "break" means an emergency situation and "break break" means a life threatening one. Any station hearing this should quickly say "go ahead break", all other stations must remain silent while the emergency traffic is passed. Do not use those words if you wish to join a conversation, just give your callsign during a courtesy pause.

London, Ontario. The Red Cross were made aware that packet radio can pass large volumes of traffic in emergencies and thus paid for an MFJ interface that connects between radio and a packet TNC.

Calgary. Apparently Russian hams are allowed to operate from a different area than their home call area without having to make special arrangements. Previously, they had to obtain special permission which involved considerable paperwork. Now they use the same 'slash' mode as the rest of the world (i.e. RA1AA/3).

FCC ( U.S.A.) . A ruling has passed that amateur radio operators volunteering their time and equipment for emergency communications are protected from state ordinances forbidding possession of equipment that can tune police/ rescue squad frequencies.

West Island, Montreal. Radio Shack, USA has released a digital signal processor for ham/SWL which quickly sold out. Called the DSP-40, it sells for \$80 US. It has adjustable widths for CW/SSB and an noise reduction position. One sad point, it's not yet

available in Canada.

Ottawa, (PARC). The Sendai, Japan's subway, is the most advanced system on earth by using 'fuzzy logic'. In 1991, Los Angeles needed a control system for its subway but did not consider 'fuzzy logic'. Why not? The simple answer is that for a technology invented in the USA it had been neglected only to have the Japanese pick it up, nurture it to profitability, and sell it back to the Americans.

## **I Am A Ham**

**By Barb, AA3DV -Dedicated to Russ,AA3CH**

Being a ham is a very special treat,  
So many people to talk with and to meet,  
Never a dull moment when driving a car,  
Talking, laughing and listening near or far.

Tuning the low band rig is such a big hit,  
To talk with the world by a dah and a dit,  
When disaster strikes the ham is always there,  
To relay messages from his ham shack chair.

Family and friends who are waiting to hear,  
That everything is okay from ones held dear,  
Computer BBS is part of the fun,  
Talking through a keyboard is for everyone.

Many a time a ham goes out of their way,  
To work public service events for a day,  
How it makes us feel so very good to give,  
Something to the community where we live,  
I'm so proud to be Barb AA3DV,  
Being a ham is so wonderful to me.  
This poem was written from my heart to  
show my appreciation to the special ham in  
my life who introduced this hobby to me.