



VE3RAM

# RAMBLER



Volume 40, Number 8, March, 1996

No, we have not changed the banner. We have just borrowed the banner, drawn by VE3DQ, from the September, 1979 edition of the Rambler. It was intended to depict the deplorable state of the roads in "Pot Hole Ottawa". If you've been driving Ottawa roads lately - need we say more ?

## B a r g a i n s Bargains !!!!!

If you are looking for a reserve or spare nicad battery pack for your radio - here is a real opportunity for you to purchase reconstituted nicads cells at drastically reduced prices - two cells for \$1.

Len, VE3LGZ, will be selling AA, sub C and half C nickel cadmiums at the OVMRC's regular March meeting. All cells hold a charge; some were checked after one year, others after 3 months.

If you have nicad cells or battery packs you intend to throw away, bring them along to the meeting and give them to Len. Those cells that can be restored will be sold as OVMRC property with proceeds going to the Club's treasury.

A reminder - NICADS ARE HAZARDOUS WASTE. Cadmium is one of the most toxic substances. Never dispose of nicads in the regular garbage. Better yet, give them to Len so that the Club can make some money from those that can be restored.

We are also investigating the possibility of selling the scrapped cells instead of disposing of them at the hazardous waste depot.

## Teacher/School Sought For Shuttle Contact

Two local hams, Dennis Mungham VE3ASO and Elaine Fortin VE3UXZ, are attempting to establish a project which would allow students to communicate with the space shuttle via amateur radio. They are looking for a teacher, affiliated with a local school, to volunteer to be the educational coordinator for the program. It is anticipated that planning for the event will take about 1-2 years with the educational coordinator expected to prepare (with Dennis' and Elaine's assistance) a proposal to be submitted to the Canadian Space Agency. NASA assigns the time schedules to chosen schools as part of SAREX (Shuttle Amateur Radio Experiment). The shuttle contact with the individual groups of students will last about 15 minutes. If interested please call either Elaine at 721-7070 or Jacques VE3TSC at 748-6597 (evenings).

**IT'S OFFICIAL  
THE OVMRC FLEA MARKET WILL BE HELD  
JUNE 8, 1996  
ALGONQUIN COLLEGE, LEES AVENUE**

The Ottawa Valley Mobile Radio Club

# RAMBLER

The Rambler is published monthly by:

The OVMRC  
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## The 1995-1996 OVMRC Executive

President: Ernie Jury, VE3EJJ, 728-3666  
Vice-President: Steve Middleton, VE3RUU, 731-6749  
Treasurer: Colin Finlayson, VE3UZU, 722-4452  
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Amateur Radio Training: John Moffat, VE3NJ, 224-5204  
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Flea Market: Ed Strange, VA3CEJ, 828-4804  
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Ralph Cameron, VE3BBM  
Doug Carswell, VE3ATY  
Gerry King, VE3GK  
Fred Noble, VE3BAJ  
Jerry Wells, VE3CDS  
Bill Wilson, VE3NR

## Joining or Renewing RAC Membership

When joining or renewing your membership in RAC, remember to quote "OTT-101" on your application. This will reimburse the OVMRC \$3 of your RAC membership dues which will be passed back to you in the form of a credit on your next year's OVMRC dues.

**OVMRC CODE PHONE - 737-0197**

*The OVMRC gratefully acknowledge the support of the Corel Corporation in producing the Rambler.*

## Mark Your Calendar !

### Next general meeting:

Thursday, March 21st at 1930 hours in the main auditorium of the Museum of Science and Technology. This will be one of those special meetings featuring an amateur radio "home brew" fun night. Bring your home brew items and join in the fun !

### Deadline for next Rambler:

Friday, March 29, 1996.

### OVMRC's Repeater:

**VE3TWO , 147.300MHz (+)  
444.200MHz (+)**

## Affiliated Clubs

The OVMRC exchanges newsletters with the following organizations:

Algoma ARC, Sault Ste Marie, ON  
Augusta Amateur Radio Assoc. Augusta, ME  
Border City Radio Club, Windsor, ON  
Chatham-Kent ARC Inc. Chatham, ON  
Calgary Amateur Radio Assoc. Calgary AB  
Comox Valley ARC, Comox, B.C.  
Halifax ARC, Halifax, N.S.  
Heritage ARC, Cobourg, ON  
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London ARC, London, ON  
Metroflex ACA, New York  
Ottawa ARC, Ottawa, ON  
Pioneer ARC, Nepean, ON  
RAC, Kingston, ON  
Scarborough ARC Inc. Scarborough, ON  
Seaway Valley ARC, Cornwall, ON  
Smiths Falls ARC, Smiths Falls, ON  
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Saskatoon ARC, Saskatoon, SK  
Thousand Island ARC, Brockville, ON  
West Island ARC, Dorval, PQ  
Winnipeg ARC, Winnipeg, MAN

## Sponsors

The OVMRC provides newsletters to the following organizations for their past support of our activities:

Bytown Marine, Ottawa, ON  
Kenwood Electronics Canada Inc. Mississauga, ON  
Corel Corporation, Ottawa, ON

# Ramblings

*Our President, Ernie Jury, VE3EJJ,  
would like you to know...*



I would like to report to you on a recent meeting of the Ottawa RAC Advisory Panel. "Hoppy" Hopwood, VE7RD, the president of RAC was the speaker. The meeting was chaired by Jim Dean, VE3IQ, and Doug Burrill, VE3CDC, was the secretary. Another member of the OVMRC, Larry, VE3WEH, was present also, along with several interested individuals..

The main topic of discussion was the effect of recent international initiatives to drop from the ITU regulations the requirements for radio amateurs to have a knowledge of morse code to operate on bands below 30 Mhz. Despite opposition from New Zealand amateurs as represented by the NZART, the New Zealand administration bowed to other pressures, and its delegation raised the issue at the 1995 World Radio Conference (WRC 95). Some European delegations expressed sympathy for dropping the code, while others opposed it. Procedurally, it was not in order to add this issue to the WRC 95 agenda, but New Zealand was successful in getting it on the agenda for WRC99. This initial focus on one requirement has been expanded to an examination of the entire set of regulations for the Amateur and Amateur Satellite Services. The IARU (International Amateur Radio Union), which has observer status at the ITU, asked for the opportunity to develop an amateur radio position on what the future regulations should be, and has formed the Future of the Amateur Service Committee (FASC). This is a critical undertaking for amateur radio operators world-wide, either we decide our future, or governments will dictate it without any input from us.

The review of the regulations is seen as an excellent opportunity to set the stage for the eventual acceptance of a world-wide operating certificate for radio amateurs, i.e. a certified amateur could operate in any country without further test requirements. This would need agreement on equivalency of

licences, which will influence any new qualification regulations that will have to be voted into place by ITU member nations. In some countries there will be opposition to changes as the current regulations are embedded in national legislation which is not altered lightly or easily. The planned RAC approach is to develop a set of proposed changes acceptable to Canadian amateurs and to vigorously promote them within the IARU and with government. Inevitably, some compromise will be needed. RAC also intends to develop a position paper for the Canadian government delegates to WRC 99. Lobbying on a world-wide basis requires a great deal of effort and expense. For RAC executives to undertake such effort on behalf of all Canadian amateurs needs considerable financial resources which must come from RAC membership fees. Since all Canadian amateurs stand to benefit, it is only fair that RAC should be supported by a majority of the Canadian amateur community. If you are not a member of RAC, do the right thing and join at the earliest opportunity!

Another item of discussion at WRC 99 will be an attempt to have the 40 metre band frequency allocation extended from 7.1 Mhz to 7.3 Mhz in regions 1 & 3 so that all amateurs can enjoy the same band width that we have in region 2.

In reviewing the status of the joint Industry Canada/RAC initiative on the delegation of amateur radio administrative functions, Hoppy indicated that the initial business plan was caught by the national budget cut and was turned back with a request it consider funding mechanisms more appropriate than the one presented. It has been reworked and will be considered by Industry Canada a second time in the near future.

The meeting was certainly informative and provided an opportunity for interested local amateurs to put forward their comments and ideas on the future direction of the hobby.

# Minutes

## OVMRC Regular Meeting, 15 February, 1996

Meeting was called to order at 19:32 hours by President Ernie. The meeting took place in the trains bay as we were bumped out of the auditorium because of a booking error.

The membership welcomed Paul (VE3TKU) from Merrickville, Coral (VE2CXS) and Gary (VA2CK). André (VE3CLW) is looking for assistance, interpreting satellites tracking data.

Leonard (VE3LPH) introduced the speaker. Hugh (VE3WM) spoke about amateur radio operating procedures. He reviewed the changes in the phonetic alphabet, calling methods and proper use of callsigns, joining QSOs in progress, emergency calls and words/phrases used along the way. It was a most enlightening presentation which generated a good discussion among the membership.

Ernie thanked Hugh for his timely and most informative presentation.

Ken (VE3KJB) presented the planned program for our April meeting. A variety show is being put together and to date half a dozen members volunteered to perform. Anyone interested in taking part is asked to contact Ken. He is also looking for an electronic keyboard/piano.

Rick (VE3IHI) reported on the Ski Marathon held last weekend. 1800 skiers raced from Gatineau to Lachute. More than 35 Amateurs helped provide communications for the marathon.

Ernie has not yet received any nominations from members for OVMRC appreciation awards. Members are urged to nominate persons they deem worthy of receiving Club recognition.

Ed (VA3CEJ) is organizing a Net Controller course. It will be held in the middle of March. It would be held from 19:00 to 21:00 and participants must have a handheld.

Ed has not received confirmation for a location to hold the Flea Market. The date will also have to be reconsidered. He will pursue this and bookings will be accepted within the next 10 days or so.

Ernie reminded the members that Guides On The Air will be held this weekend and the museum station (VE3JW) will be hosting groups. Anyone interested in helping is asked to contact Jerry (VE3CDS).

The club is still looking for two qualified members who can be appointed delegated examiners. If

interested, please call Jerry (VE3CDS).

John (VE3NJ) is looking for a few members who would be willing to show their ham shack to the radio course students. The code practices are still going on. Tune to 7050 every night at 21:30 (except Tuesdays) for 5 to 15 wpm code. A first contact certificate has been created by the course leaders and the first one was presented to Evelyn (VE3ECW).

Ernie reminded the membership that an extendable and transportable tower will be going on sale, through bids by Crown Asset. Anyone interested can call Wayne Corkery at 952-7963 for operational details of the tower.

Jake confirmed that this year's Field Day will take place at the museum. He is also looking at organizing a shopping trip to Montreal's Surplus Safari. It would cost \$35 to \$40 per person. If interested, see him after the meeting.

Dennis (VE3ASO) and Elaine (VE3UXZ) are looking for a volunteer coordinator, preferably a high school teacher, to work on a two year project. The plan is to make a presentation to the Canadian Aeronautical Space Agency to schedule a QSO between students at a school and a space shuttle in flight. If interested, you can call Elaine at 721-7070 or Jacques (VE3TSC), 748-6597 evenings.

At the next meeting, Len (VE3LGZ) will have rechargeable nicad batteries (recycled) for sale at bargain prices. Proceeds will be donated to the club.

A reminder to the membership that next month's meeting will be for our annual 'HomeBrew' event. Get in touch with Leonard if you intend to participate in the program.

The Window '95 software draw raised \$134 for the club coffers. Congratulations to Marcel (VE3FNG) who was the winner.

The 50/50 draw raised \$50 and was shared between the club and Dan (VE3XDD) who held the winning ticket.

Leonard forgot to bring the door prize. However, a ticket was drawn and the prize will be presented to Gordon (VE2HEX) at the next meeting.

The meeting was adjourned at 20:45. A social hour followed with coffee and cookies and conversations.

## Pop Can Pull Tab For Wheel Chairs

Written By Larry Wilcox, VE3WEH

Recently, on our local repeaters, some controversy arose over the collection of pop can pull tabs. This article will provide factual information obtained from Sheila Urquhart, Public Relations Coordinator for the Girl Guide House, 454 Parkdale Avenue, 761-1099, the Ottawa and district clearing house since 1992 for soda, beer and other tabs.

The Guides have been able to purchase a total of 75 wheel chairs with 14 customized wheel chairs having been given to needy children in our area. As a matter of interest, there will be a wheel chair presentation at the Guide House to a three year old girl in April. Today, an electric custom designed wheel chair costs between \$3,000 and \$4,000 !

The Guides collection system started after Ray Pearse, a member of the Royal Canadian Legion, organized and formed the "Pop Tab Committee" in 1992. The Guide House is the clearing house for the tabs in Ottawa and district . They arrange to have a magnet passed through all the tabs to ensure their purity, packed , weighed and delivered to Alcan Aluminum in Guelph, Ontario.

Last year, the Guides delivered over nine, yes, that is nine tons or 18 million pure aluminum tabs to Alcan ! The cans are not wanted because they are painted and are recycled through the blue box system. Alcan pays an average of about .47 cents a pound based upon the market value of aluminum. The 100% pure aluminum tabs are being collected by various groups such the Canadian Forces in places like Croatia, the Arctic, etc., and by Stewardesses, by schools, bowling clubs and by about 10,000 Girl Guides. Thanks to David, VE3UES, and his persistent efforts, the OVMRC has now been added to the list. It is a very worthwhile effort for you to save and collect aluminum tabs. Please bring them in to any OVMRC regular meeting and give them to either David, VE3UES, or Larry, VE3WEH and you'll be contributing to the purchase of a wheel chair for a needy child !

## GIRL GUIDES ON THE AIR

Written by Jerry Wells, VE3CDS

During the weekend of February 17 Girl Guides visited amateur radio stations all across North America and overseas. At VE3JW, the station at the Museum of Science and Technology, we were visited by approximately 60 Girl Guides from various local guide companies along with their leaders and some parents.

On Saturday, the band conditions were not too bad and we were successful in contacting stations in Alberta, Ontario and Europe. The Guides that were with us had an opportunity to talk to other Guides in these locations. The stations contacted were VE6BBP in the Calgary area, VE6KC in Vermillion Alberta, VE7RCD in Victoria and VE3JLP, Paul in Metcalfe just south of the city. We had one overseas contact in Switzerland.

On Sunday, conditions were about the same and we were able to establish contacts with stations in B.C., Manitoba and Ontario. The stations worked were VE4GGC in Winnipeg, VE7BOY in Langley, VE7BKF on Thetis Island and VE3NVM in Kanata. The Guides really enjoyed their chats with other Guides. The station on Thetis Island, which is one of the smaller gulf islands in the Strait of Georgia just off the east coast of Vancouver Island, proved to be the most interesting contact. There is a small community on the island with but one Girl Guide. VE7BKF had just about given up hope of making a contact when we heard him and gave him a call. We had a very excited young lady on the air, as she spent quite a bit of time talking to several of the Guides at VE3JW. I would say that that contact, to that isolated spot, was the highlight of the whole weekend.

It is hoped that the exposure to amateur radio experienced by these young ladies will serve as an incentive for them to study and become amateurs at some future date.

The following Club members participated during the weekend - Jake, VE3TQX; Maurice-Andre, VE3VIG, along with his packet station; Roger, VE3XRR; Mark, VE3AIU; Clayton, VA3CBJ; and Jerry, VE3CDS.

# Amateur Radio Operating Procedures

In view of the continuing controversy over what constitutes "acceptable and proper" operating procedures on amateur radio, the Rambler will publish a series of articles designed to provide an insight into "proper" operating procedures.

Listening to amateur radio conversation is a good way to acquaint yourself with the formal and informal procedures which are used during contacts with other stations. However, remember that although there are many good operators, there are also a number of poor ones who may have, through no fault of their own, picked up someone else's bad operating procedures.

The following is the first in a series of what we hope will be helpful pointers to assist you become an accomplished amateur radio operator.

## **MICROPHONE TECHNIQUES**

The efficient use of radiotelephony depends to a large extent on the method of speaking and the articulation of the operator. As the distinctive sounds of consonants are apt to become blurred in the transmission of speech, words of similar length containing the same vowels sounds may sound alike. Special care is necessary in their pronunciation.

Special care is also required when handling the microphone. The microphone should not be held too close to your mouth. This may cause distortion, slurred words and transmissions that may have to be repeated in order to be understood. A good tip is to speak across your microphone, not into it. In other words, hold the microphone at an angle to your mouth.

Speak all words plainly and clearly so that consecutive words are not run together. Avoid the tendency to shout, to accent syllables artificially or to speak too rapidly. Keep the rate of speech constant, neither too fast nor too slow. Preserve the rhythm of ordinary conversation. Avoid the introduction of unnecessary sounds such as "er" and "um" between words.

Sometimes the circuit, especially on HF, may not be reliable because of noise, fading or interference or the information you are trying to convey is complex or confusing. Under such situations the receiving station may ask you to use the phonetic alphabet to ensure your message is received correctly. Sometimes call signs can be confused because the letters "B", "C", "D", "E", "P", and "V" sound so much alike, especially if you speak too quickly. And by the way, be sure to use the international phonetic alphabet.

Next month, we will discuss "How To Start a Contact".

## **DF Training**

RAC's negotiations with Industry Canada includes the possibility of amateurs policing their own hobby. This could mean amateurs having to trace or hunt out stations which transmit malicious interference. It does take some skill to do this.

In an effort to prepare amateurs for such an eventuality, OVMRC members have been conducting "Bunny Hunts" almost every month. The more experienced hunters are offering interested amateurs an opportunity to gain training by accompanying them in their cars as observers as they participate in monthly Bunny Hunts.

While participating in Bunny Hunts is fun, tracing or hunting out malicious interference is very serious business which uses all of the skills acquired in bunny hunting. So there is a very practical side to the monthly hunts. Interested amateurs are invited to contact Larry, VE3WEH, who will coordinate training.

History teaches that men and nations behave wisely once they have exhausted all alternatives

## New Product Information

### **Luminescent Keys**

Kenwood Amateur Radio is now offering luminescent DTMF key pads for the TH-22AT and TH-42AT handheld radios. This new key pad is designed to increase operator convenience in low light situations while requiring no additional battery current drain as with back-lit key pads. The luminescent key pad receives its energy from any light source similar to many watch faces.

### **Back - Lit Microphones**

Back-lit microphones for Kenwood's most popular mobile radios will soon be available as an accessory. Ergonomically designed to feel right in your hand and a large back-lit key pad, the new MC- 52DM (8 pins) and MC-53DM (modular) will be compatible with current model Kenwood radios and many previous units.

### **Programming PL Tone Into Memory**

If you have been trying to program a PL tone into your radio without success, here is a tip! The selection and input of the PL (Private Line) is simple. A user may program a repeater frequency and offset successfully into memory. The confusion begins when the user cannot store the PL tone to memory channel. When the memory channel is changed or the radio is shut off the PL tone disappears.

Make sure that you program a PL tone into memory by selecting and enabling the PL tone before you enter the frequency into memory. If you forget to add or change the PL tone later then rewrite the entire contents to a memory channel again.

### **A New Source of Supply**

Sheldon Harvey, VE2SHW, has recently opened a new Amateur Radio outlet in Greenfield Park, Quebec called Radio H. F. While he specializes in shortwave and scanning equipment, he carries all the major lines of amateur radio gear, antennas and accessories.

Sheldon advised the Rambler that he will ship order anywhere in Canada. A free price list is available for the asking. You are invited to contact Sheldon for all your amateur radio equipment requirements at his store by using the toll free number, 1 - 800 - 463-3773.

### **Field Day Training Planned**

It has been determined that a number of amateurs are hesitant to participate in Field Day because they don't know what to expect or the procedures to be followed., etc. It is understood that no one wants to be embarrassed before his peers. As a result, a lot of amateurs are missing out on much fun and the personal satisfaction of participating in Field Day and making contact with distant stations.

The OVMRC has decided to conduct a Field Day training session on a Sunday morning at the Museum of Science and Technology. The session will explain such things as how to make, acknowledge, and log contacts and other practical Filed Day procedures. It is planned to conduct the training session in June, one or two weeks prior to Field Day.

### **Some History**

Taken from the Club's History prepared by Ed Morgan, VE3GX

The OVMRC's call sign VE3RAM was selected by its membership in September, 1959. The letters "RAM" have dual significance; they are the first three letters of the Club's newsletter "Rambler" and stand for "Radio Amateur Mobile".



# Packet Radio For Novices

Written by Andrew Levey, VE3AIU

What is this system everyone keeps talking about called Packet Radio? The easiest way to describe it is to say it is a form of communication that sends many packets through a radio.

Here is a list of the things you'll need to get on packet. You'll need a two meter or HF radio, a computer and a TNC. No explanation is required describing the radio or computer needed, but what is this thing called a TNC? A TNC is a device very similar to a telephone modem in that it accepts digital signals from your computer (terminal) and converts them into tones or packets which are suitable for transmission to a distant location. Conversely, the TNC also receives tones from your radio and converts them into digital signals which are understood by your computer. A TNC also controls the "push to talk" function of your transmitter, keying the radio whenever it needs to transmit data. The TNC is also capable of adding the required addressing and performing error checking. These latter two functions are done by means of some software for packet radio you can purchase.

There are a number of TNCs available on the market today, I will list just the more common ones of which I'm aware.

Baycom markets a very simple TNC that is easily attached to your computer and needs no power supply. As a result this is a popular model with amateurs who do a lot of travelling.

Kantronics sells a TNC that has a built-in "mail box". However, this latter model has a drawback in that you must reconfigure its PC board so that you can use your computer's power supply.

MFG manufactures a TNC which is similar to Kantronic's. I do not know too much about MFG's TNC other than I understand it is a better product than Kantronic's.

For the more adventurous, you can build your own TNC. Parts required and building information is readily available through your local BBS.

The cost of a TNC will run anywhere between ten dollars to four hundred dollars. For

those just starting in packet radio, I would suggest you pick-up a used TNC at a flea market, from the BBS or swap nets.

You can usually always find some good used equipment at or on the above-noted and at bargain prices.

Turning to the computer opens a series of unlimited options; computers can be anything from an XT to a Pentium. I ran my packet system for six months on a dual disk drive computer which had no hard drive. You do not need a large capacity computer to run packet.

The software you will need to run your packet system will vary on what you want to do and whether or not your computer has a hard drive. There are any number of software programs available. Before committing yourself to any one program, attend the packet meeting, held every third Wednesday of the month at the Museum of Science and Technology, and speak with those amateurs who are experienced and will share their knowledge with you. Additionally, listen in on the packet net every Monday evening at approximately 8:30pm on VE3CRA, 146.940 negative offset. And needless to point out, amateurs being the helpful people that they are, you can get on almost any repeater and ask for assistance in establishing a packet system and you're sure to receive all the advice and help you require to get started.

If you are presently on packet radio, you are invited to send me any questions or comments at VE3AIU @ VE3AMK on 146.850 negative offset. You can also contact me, direct, by telephone, I am listed in the OVMRC Directory under VE3AIU.

## March Meeting's Venue

The OVMRC's March regular meeting has, once again, been "bumped" from the museums auditorium to the railway bay area. Arrangements have been made to turn off the railway sound effects.



**ATTENUATION & POWER RATING COAX CHART**  
**NOMINAL ATTENUATION & AVERAGE INPUT POWER**  
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dB LOSS per 100 FEET								
COAX	10MHz/PWR	50MHz/PWR	100MHz/PWR	200MHz/PWR	400MHz/PWR	1000MHz/PWR	1000MHz/PWR	1000MHz/PWR
9913EQUAL	4 ..... 4000	9 ..... 1800	1.4 ..... 1100	1.8 ..... 700	2.6 ..... 500	4.5 ..... 260		
9913FLEXIBLE	4 ..... 4000	9 ..... 1800	1.3 ..... 1100	1.8 ..... 700	2.7 ..... 500	4.5 ..... 260		
9914EQUAL	5 ..... 3000	1.1 ..... 1100	1.6 ..... 800	2.4 ..... 525	3.5 ..... 350	6.0 ..... 190		
RG213/U	.62 ..... 3700	1.6 ..... 1300	2.2 ..... 850	3.2 ..... 540	4.7 ..... 350	8.9 ..... 190		
RG8/U FOAM	51 ..... 2775	1.2 ..... 975	1.8 ..... 637	2.7 ..... 405	4.2 ..... 262	7.1 ..... 142		
RG8MINI(X)	1.0 ..... 1500	2.5 ..... 500	3.4 ..... 350	5.4 ..... 300	8.0 ..... 200	13.5 ..... 110		
RG58/U	1.2 ..... 730	3.1 ..... 280	4.5 ..... 180	6.8 ..... 125	10.0 ..... 85	17.0 ..... 50		
RG58/AU	1.4 ..... 650	3.3 ..... 255	4.9 ..... 170	7.3 ..... 110	11.5 ..... 75	21.5 ..... 44		
RG58/AU <sup>THINNET</sup>	1.4 ..... N/R	2.9 ..... N/R	4.3 ..... N/R	6.2 ..... N/R	8.8 ..... N/R	14.7 ..... N/R		
RG214/U	.55 ..... 3700	1.3 ..... 1300	1.9 ..... 850	2.7 ..... 540	4.1 ..... 350	8.0 ..... 190		
RG223/U	1.2 ..... 800	2.8 ..... 310	4.1 ..... 205	6.0 ..... 137	8.8 ..... 90	14.5 ..... 53		
RG174/U	3.3 ..... 170	2.8 ..... 72	8.4 ..... 50	15.0 ..... 36	24.5 ..... 25	34.0 ..... 16		
RG142/U	1.1 ..... 9000	2.7 ..... 3500	3.9 ..... 2400	5.6 ..... 1600	8.2 ..... 1100	13.5 ..... 650		
RG178/U	5.6 ..... 710	10.5 ..... 340	14.0 ..... 240	19.0 ..... 170	28.0 ..... 123	46.0 ..... 78		
RG316/U	6.0 ..... 1250	9.4 ..... 600	10.4 ..... 450	13.2 ..... 330	16.5 ..... 240	31.0 ..... 160		
RG393/U	6 ..... 25000	1.4 ..... 9500	2.1 ..... 6300	3.1 ..... 4300	4.5 ..... 2800	7.5 ..... 1700		
RG179/U	5.3 ..... 1600	8.5 ..... 780	10.0 ..... 570	12.5 ..... 420	16.0 ..... 310	24.0 ..... 200		
RG11/U FOAM	35 ..... 2775	1.1 ..... 1000	1.5 ..... 650	2.2 ..... 400	3.2 ..... 260	5.4 ..... 140		
RG11/U SOLID	66 ..... 2500	1.3 ..... 1000	2.0 ..... 650	2.9 ..... 400	4.2 ..... 260	7.1 ..... 150		
RG59/U SOLID	1.1 ..... 1300	2.4 ..... 480	3.4 ..... 310	4.9 ..... 200	7.1 ..... 135	12.0 ..... 77		
RG6/U CATV	0.9 ..... N/R	1.5 ..... N/R	2.0 ..... N/R	2.8 ..... N/R	4.0 ..... N/R	6.5 ..... N/R		
450 OHM LL	N/R	N/R	35 ..... 1000	N/R	N/R	1.10 ..... N/R		

*The above data is for general reference information purposes only.*

**DIRECT BURIAL CABLE RECOMMENDATION GUIDE**

Definition Direct burial cable can be used underground with or without conduit.

Stipulations 1 Cable should be buried below the frost line. Deeper than 24" below ground level. 2. Water cannot penetrate through connectors or breaks in the cable jacket.

Notes 1. If using conduit, always assume standing water will be in it. 2. All connections must be water tight. If the jacket tears water can enter the insides of the cable. When this happens, the electricals of the cable will change over time. 3. If the cable is allowed to stand in water, eventually the water will penetrate the cable, thus damaging the cable. *Buried cable is thermally insulated by the earth, it's year round temperature will only vary a few degrees. if a buried cable is not damaged, the attenuation will be constant for the useful life of the cable.*

**Recommended steps for direct burial cable.**

Bury the cable in sand or finely pulverized dirt, without sharp stones, cinders, or rubble. If the soil in the trench does not meet these requirements, tamp four to six inches of sand into the trench, lay the cable, and tamp another 6 to eleven inches of sand above it. A creosoted or pressure-treated board placed in the trench above the sand, prior to back filling, will provide some protection against subsequent damage (digging or driving a stake etc). Lay the cable in the trench with some slack. A tightly stretched cable is likely to be damaged as the fill material is tamped. Be sure and examine the cable as it's being installed for any damage during storage. In difficult installations, such as heavy stones/rocks, rubble, or coral, or where paving is to be installed over the cable, a polyethylene water pipe, maybe buried and used as a conduit. The pipe protects the cable and usually makes it possible to replace or add cables at a later date. Additionally, the pipe should be crowned so no water will be allowed to "STAND" in the pipe. In conclusion, this information is intended to aid the user in achieving the longest cable life possible in an underground application. It is assumed that the user has studied the application, has determined that any failure of the cable will not result in a hazardous condition, and accepts responsibility for the cable choice.

# Potpourri

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



OVMRC - Congratulations to Joe Tondreau, VE2JHT, for having achieved 2nd place in the CW Single-Op in the recent International Police Association Radio Club contest.

Ottawa - The FCC RFI Interference Handbook can be accessed at the following Web site, "www.fcc.gov/Bureaus/Compliance/WWW/tvibook.html.

Scarborough - VE3HHS/W4 is initiating a North American Network to operate an informal net for establishing communications with other amateurs or for passing traffic. He will be on the following frequencies 3760 (1100-1200 UTC), 7160 (1200-1300 UTC) and 14160 (1300-1400 UTC). All amateurs are invited to join in.

Chatham - The special events station CG3V celebrating this city's 100th birthday, used a variety of modes (HF, VHF, UHF, Packet) made close to 200 contacts. Over 130 certificates have been mailed to Canada, USA, British Isles and Europe.

Lambton County (Ontario) - Seems that budget cutbacks hits everyone and the local Canwarn System is about to be cancelled. This link between amateurs and Environment Canada has proved very useful in past weather incidents (i.e. tornadoes). Weather services are to be centralized in Toronto, thus losing this facility for quick public warnings. A proposed alternate is links via the Internet.

London - In 1957 a set of codes was established to represent sayings. Then, "73" was meant to say "My love to you". In 1959 it was changed to "Accept my compliments" as a friendly word between operators. Finally in 1980 it was changed again to mean "Best regards"

Calgary - We are secondary users of the UHF band. We need to be made aware that the recent allowance of these to a commercial product could lead to problems with amateur radio. Differential GPS has been allocated a

series of frequencies at 440,2875 -440.5 and 445.2875-445.5 in steps of 250 Hz.

West Island (Montreal) - The following is a list of gateways to which we can access with "TELNET". These are regular packet systems which have an interface to Internet.

Sudbury - gw.va3lug.ampr.org  
Montreal - mtlgw.ampr.org  
Sherbrooke - shergw.ampr.org  
Rouyn - ve3noq.ampr.org  
Trois Rivieres - trgate.uqtr.quebec.ca  
Quebec City - 192.77.51.4  
Montreal - hamgate.concordia.ca  
Cape Cod - hamgate.mvangel.com  
Colorado - amprgw.rmsd.com  
Winnipeg - ve4umr.ampr.org  
Winnipeg - ne4ip.ampr.org  
Pinawa MB- ve4pin.ampr.org  
Salt Lake City - uugate.wa7slg.ampr.org  
Cambridge Mass - gw.wlrmx.ampr.org  
Houston - sugarland.ampr.org  
England - g6phf.ampr.org  
Moscow - gw.ra3apw.ampr.org  
Internet - New Canadian amateur radio Web sites:

Montreal - www.pubnix.net/wiarc  
Ottawa - www.worldlink.ca/oarc  
Sudbury - gw.va3lug.ampr.org  
Halifax - www.cen.cs.dal.ca/

CommunitySupport/HARC/harc.html

Ottawa - On April 14th there will be a special event station held at the Museum of Science and Technology to celebrate the first year re-opening of the amateur radio exhibit, VE3JW. Frequencies will be 3860, 7260, 14260 (+ - QRM) and 147.300 (+) during the hours of 1400 - 2200 UTC. To receive an 8 x 11 certificate, send a SASE (if letter size is received certificate will be folded) to VE3JW, Box 5530, Station "F", Ottawa, Ontario, K2C 3M1.

OVMRC - Recently established, the OVMRC Web page address is -  
www.worldlink.ca/ovmrc