

Rambler

Newsletter of the
Ottawa Valley Mobile
Radio Club
Incorporated



Aug 2014

Edition 59

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President's Rambling

Well we are gearing up from a new OVMRC year

hopefully we can make it an interesting one for all. The success will be measured in quality speakers, interesting topics, and the support from OVMRC's membership. With this momentum it is anticipated that our membership will increase in the coming year as with the volunteer support of our VE3JW station.

I am looking forward to your individual support to the executive and the associated OVMRC Chairpersons. We can't do it without you.

OVMRC has multiple environments that have asset management responsibilities that require special attention. The most

obvious are VE3JW and our communication trailer, RAM along with our repeaters VE3TWO. Darin Cowan, VE3OIJ, is responsible for VE3JW and Paul Labbé, VE3NJS, manages RAM and the repeaters.

However the OVMRC has over the years accumulated miscellaneous pieces of 'equipment' that may or may not have value to the club. We need to establish the usefulness of this equipment. To do this requires some dedicated time to sort through the OVMRC storage locker at the museum, so we are going to call for volunteers soon. The goal is to have some of this equipment ready for the OARC's Carp Hamfest on Saturday Sept 6th. You can call ahead to volunteer to sort the pile by contacting any of the executive.

73 Sandy VE3HAZ

2014-2015 Tentative Program

September 18, 2014: Norm Rashleigh, VE3LC:

Topic: Inexpensive SDR radio capability; Special door prize is DVB dongle;

October 16, 2014: José Campione, VA3PCJ/VE3DTI:

Topic: Five years/QRP/P with small antennas;

November 20, 2014: Technical clinic:

Topic: Is your radio within specs: more details later

December 18, 2014: Christmas dinner:

Topic: Good cheer and friendship, location TBD

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Meeting Date

Club Meeting:

Sep 18th
Thursday

NORM RASHLEIGH,
VE3LC

Inexpensive SDR radio capability; Special door prize is DVB dongle;

OVMRC Executive**2013-2014****President:**

Sandy Haggart, VE3HAZ

ve3haz@rac.ca**Vice-President:**

Michel Barbeau, VE3EMB

michel.barbeau@sympatico.ca**Treasurer:**

Beth Webster, VA3CEW

cemwebster@rogers.com**Secretary:**

OPEN

**Standing Committee
Chairpersons****Amateur Radio Exhibit:**

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ve3oij@amsat.org**Amateur Radio Training &
Accredited Examiner:**

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ve3lc@rac.ca**Membership:**

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ve3eus@rac.ca**Technical:**

Paul Labbé, VA3NJS

paul.labbe@usa.net**Radio Operations:**

VACANT

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cw527@ncf.ca**Webmaster:**

Chris Wiesner, VA3SM

va3sm@yahoo.ca

For information about the duties and responsibilities about all Executive and Chair positions, please visit the OVMRC forums, Member section or contact any member of the Executive.

Sponsors

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

• **ACCEPTABLE STORAGE,**
Ottawa, ON

• **KENWOOD ELECTRONICS
CANADA INC.,**
Mississauga, ON

• **TRAVEL-MOR TRAILER SALES,**
Ottawa, ON

• **PEPPERS RADIO SALES,**
Rockland, ON
Email: peppersradio@videotron.ca
WEB site: www.peppersradio.net

The club's web site is hosted by:

**PRIMUS TELECOMMUNICATIONS
CANADA INC..**

www.ovmrc.on.ca

**Visit the OVMRC Store
at**

<http://www.cafepress.ca/ovmrc>

OVMRC Life Members

Ernie Jury, VE3EJJ

Maurice-André Vigneault, VE3VIG

Ralph Cameron, VE3BBM

Doug Carswell, VE3ATY

Doreen Morgan, VE3CGO

OVMRC Repeaters

VE3TWO

147.300 MHz(+)/100

444.200 MHz(+)

Amateur Radio Exhibit**VE3JW**

Web site:

ovmrc.on.ca/ve3jw.htm

Canada Science & Technology
Museum

The Rambler is the official newsletter of the Ottawa Valley Mobile Radio Club Incorporated 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, 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:

*[Robert Cherry, VE2AGE](mailto:Robert.Cherry@ve2age.com)
cw527@ncf.ca*

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Ham Radio Interference

I was recently asked by a local ham radio club to speak about renewable energy, since I have designed and built several RE systems, both for myself and for others. This group is especially curious about how much radio frequency interference (RFI) there is with components of a solar-electric system, especially inverters.

John Faughn • KD0CAC

I'm a ham (KC2FSW) and host a two-meter repeater (147.045, with the same call letters) that is powered by a 150-watt off-grid PV system. Early on, the first issue I had was interference from a pulse-width-modulation (PWM) type charge controller. We were not able to run that controller in PWM mode, due to a high level of RFI. I changed repeater radios around that time and the controller did not affect the

new radio. Unfortunately, the new radio had a tendency to burn out controllers—four of them, all different types from various manufacturers. From what we could gather, it was stray radio frequency (RF) coming in from the repeater antenna via the solar-electric modules that was burning out the charge controller front ends. Bob Gudgel, a fellow ham (and electronics designer) from MidNite Solar, sent me a Classic controller to see if we could blow that up, but it's still running after three years—and there have been no RFI issues with this controller. As for inverter RFI, some are worse than others. The OutBack inverters tend to interfere at the lower HF frequencies, but rarely on the two-meter or higher bands. The interference from inverters on the AM broadcast band is legendary in the RE business. Feedback from other hams suggests that torite cores

on the inverter and radio DC cables work well. They need to be large enough to fit around both the negative and positive conductors. These can be found at electronics supply houses. Capacitors are also used to filter out RFI. The best defence against RFI is distance—the farther your radio is from the inverter, the better! Our county's emergency management office and the National Weather Service both love my repeater because it never goes down in an outage. This repeater has seen frequent use over the past 10 years by these agencies to pass weather, health, and welfare traffic.

73!

Roy Butler • Four Winds Renewable Energy, Arkport, New York

This article was published in Home Power Magazine Issue 153, Feb/Mar 2013

Voltage Drop

Is there a different voltage drop calculation for direct current (DC) as opposed to alternating current (AC)? I have a project that will take my solar-electric module string wires about 300 to 400 feet, carrying 9 amps at 480 volts DC. What size of wire do you recommend, and how do I calculate that?

Rance Macdonald • Denver, Colorado

There is not a different calculation for AC versus DC voltage drop. Voltage drop is a function of voltage (regardless of DC or AC), amperage, distance, and the resistance of the wire.

This equation calculates voltage drop by percentage:

$$\% \text{ voltage drop} = \frac{2 \times \text{distance} \times \text{amps}}{1,000 \text{ ft.}} \times \frac{\text{Ohms}}{1,000 \text{ ft.}^*} \times 100\%$$

*This can also be written: 1 Kft., which equals 1,000 ft.

By rearranging the voltage drop equation, you can solve for a specific ohms/Kft. value. Then, you can use the *National Electrical Code (NEC)* Chapter 9, Table 8, to find the wire size having an ohm/Kft. value that does not exceed the calculated ohms/Kft. value.

$$\text{(Ohms/Kft.)} = \frac{\% \text{ Vdrop} \times \text{volts} \times 5}{\text{amps} \times \text{feet}}$$

Resistance Table for Stranded Uncoated Copper Wire

Size (AWG)	Ohms/Kft.
14	3.14
12	1.98
10	1.24
8	0.778
6	0.491
4	0.308

Let's say you are aiming for a maximum voltage drop of 2%. Assuming 480 V, 9 A, and 400 ft., you have:

$$\text{Ohms/Kft.} = \frac{2 \times 480 \times 9}{9 \times 400} = 1.33$$

On the *NEC* table, we find that #10 AWG stranded (uncoated) copper yields 1.24 Ohms/Kft., less than 1.33. This means we can use #10 AWG or larger diameter wire and not exceed a 2% voltage drop.

Justine Sanchez • Home Power technical editor

HAMing It Up

With the Ottawa Valley Mobile Radio Club

The OVMRC is offering instructional training classes for people who would like to obtain their Amateur Radio Operators license i.e. a "HAM" license

- No high level knowledge required
- No age limitation
- Learn the basics electrical and radio theory, radio regulations, and practical sessions operating a live station here at the museum at VE3JW

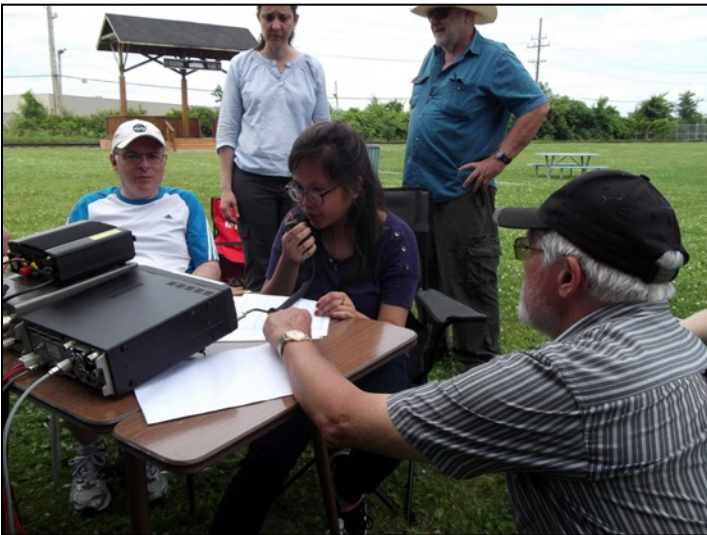
Registration: September 23, 2014, at 19:00 hrs.

Location: Canada Science and Technology Museum

Cost: \$150, which covers the cost of printed materials handed out and basic project components needed for the practical session.

Information: - www.ovmrc.on.ca/radio-course.htm -
www.rac.ca/en/amateur-radio

To Register: Email Norm Rashleigh, VE3LC at
rashleigh@sympatico.ca



The VA3CUA Get On The Air (GOTA) station.



Our president, Sandy VE3HAZ, relaxing and reading amateur radio magazines after long hours of SSB operation.



The VE3RAM mobile station, all powered by solar energy.



David VE3ZZU operating portable with his KX3 HF rig.



Maurice-Andre VE3VIG operating his brand new portable amateur radio go box.

2014 Field Day Photos

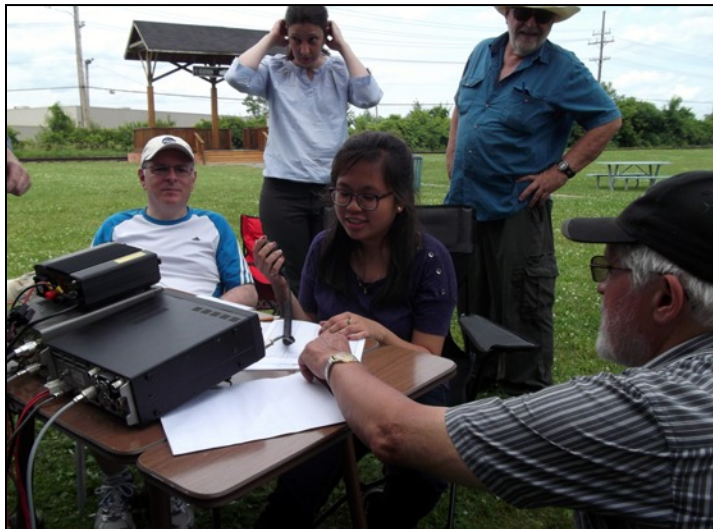
Courtesy of: Michel Barbeau



David, VE3ZZU tuning his Buddipole antenna.



Joe, VE3EUS arrives on the Field Day site.



First, Joe VE3EUS makes at stops and observes that nice setup of the GOTA VA3CUA station.



Joe, VE3EUS couldn't believe the number of CW contacts already made by Maurice-Andre, VE3VIG using his portable amateur radio go box.



Joe, VE3EUS thinks that Ernie, VE3EJJ does pretty well on SBB too.



After the completion of his Field Day site inspection, Joe, VE3EUS (right) is dictating his food order to our valiant president Sandy, VE3HAZ (left)

<h2 style="text-align: center;">2014-2015 Meeting Dates</h2>	<h2 style="text-align: center;">What's Happening Elsewhere!</h2>	<h2 style="text-align: center;">Rambler Deadlines</h2>
<p>September 18 Inexpensive SDR radio capability</p> <p>October 16 Five years QRP/P with small antennas</p> <p>November 20 Is your radio within specs?</p> <p>December 18 Christmas Dinner</p> <p>January 15 TBD</p> <p>February 19 Flea Market</p> <p>March 19 TBD</p> <p>April 16 Home Brew</p> <p>May 21 Show & Tell</p> <p>June 19 Annual General Meeting Elections.</p> <p>Note:</p> <p style="color: red;">Our first meeting will be in classrooms 4&5 not the auditorium.</p>	<p>Ottawa Amateur Radio Club (OARC) www.oarc.net/blog/</p> <p>Rideau Lakes Amateur Radio Club (RLARC) ve3rlr.dyndns.org/</p> <p>West Carleton Amateur Radio Club www.wcarc.on.ca</p> <p>VE3ORF/3730 Group www.ve3orf.com/</p> <p><i>Seems quiet in the "Valley" no events submitted..</i></p>	<p>Meeting date minus 13 days</p> <p>Sep 05</p> <p>Oct 03</p> <p>Nov 07</p> <p>Dec 05</p> <p>Jan 02, 2015</p> <p>Feb 06</p> <p>Mar 06</p> <p>Apr 03</p> <p>May 08</p> <p>Jun 05</p> <p>Please submit articles for the Rambler to the editor:</p> <p style="text-align: center;">Robert Cherry</p> <p>No later than the deadline for the desired edition.</p> <p style="text-align: center;">September Rambler submission deadline is:</p> <p style="text-align: center;">Friday, 5th Sep 2014</p>
<p>Technical information:</p> <p>What have you found or read lately that might be interesting to others. Write it up and send the information to the Rambler Editor, Robert Cherry (cw527@ncf.ca) even if it is an URL</p>	<p>Coming Events:</p> <p>The International Lighthouse and Lightboats Weekend (ILLW) 16-17 August 2014 - Duration 48 hours from 0001 UTC 16.8.2014 on the museum grounds. To help us organize we need to know who's willing to participate and in what capacity, effort and time. OVMRC's communication trailer RAM will be on site. Space is available for those who want to set up their own station. So what is needed, amateur radio operators for sure, since the main objective is making contacts. However we need helping hands to setup (10:00 hrs. on Saturday 16th August) and take down (after 14:00 hrs. on Sunday 17th August). Some form of lunch and snacks will be available for the participants so please let us know if you are available. Email Sandy at dah542@gmail.com to confirm.</p> <p>Radio Training course: OVMRC is pleased to have Norm Rashliegh, VE3LC, as the lead instructor for the coming year for the OVMRC's Amateur Radio Course. The first introduction session starts at 18:30 hrs. Tuesday, September 23 at the Canada Science and Technology Museum in class room #8. Tell your want to be amateur radio operator friends it only costs \$150.</p>	<p>OVMRC Repeaters</p> <p>If you are interested in learning about or helping with the OVMRC repeaters contact our technical chair-person, Paul Labbé, VE3NJS, (paul.e.labbe@gmail.com). Extra pairs of hands are always welcome.</p>

Ottawa (Carp) 18th Annual Hamfest/Fleamarket!

Saturday, September 6th, 2014 (one week after the Labour Day weekend).

Fleamarket: Many Radio Amateurs (Hams) and electronics hobbyists will be displaying and offering items for sale. Many Commercial Vendors and Volunteer Organizations are coming to the hamfest, and bringing their Excellent Door Prizes!

On-site Radio Licence Exams! An excellent opportunity to get your licence, or upgrade during the hamfest! It helps us prepare (but it's not absolutely necessary) if you contact us at fleamarket@oarc.net to pre-arrange your exam. Just show up and we'll help you get started.

Breakfast and Coffee will be available at the concession area!

Time: Fleamarket opens at 9 am until 12 Noon. Vendor Setup 7:30 am, Tailgaters Open 8 am.

Location: W. Erskine Johnson Arena, at the north end of the Carp Agricultural Fair Grounds, 3832 Carp Rd, Ottawa, (Carp) Ontario, Canada

>> See our online map at <http://oarc.net/fleamarket>

Admission: \$6 per person. \$12/vendor table (plus admission)
\$5/tailgate (plus admission)

Vendor Table Reservations: to reserve email us at fleamarket@oarc.net

or phone or text to 613-853-2281.

Our web site info page is at <http://oarc.net/fleamarket>

Talk in: VE2CRA , 146.940 MHz, 100 Hz.

Presented by the Ottawa Amateur Radio Club (OARC).



2014 Field Day Entry Form

2014 Rules

Datestamp: 2014-07-29 10:23:31 PDT

Confirmation: 2bc3b7c33efed359

Use the following link if you want to update your Field Day entry:

[http://www.b4h.net/cabforms/fielddayupdate.php?](http://www.b4h.net/cabforms/fielddayupdate.php?callused=VE3RAM&confirmation=2bc3b7c33efed359)

[callused=VE3RAM&confirmation=2bc3b7c33efed359](http://www.b4h.net/cabforms/fielddayupdate.php?callused=VE3RAM&confirmation=2bc3b7c33efed359)

Thanks for using the web to submit your 2014 ARRL Field Day entry. Print this page to use as proof that you submitted your entry.

Call Used: **VE3RAM** GOTA Station Call: **VA3CUA** ARRL/RAC Section: **ONE** Class: **5A**

Participants: **12** Club/Group Name: **Ottawa Valley Mobile Radio**

Power Source(s): **Generator, Solar**

Power Multiplier: **2X**

Bonus Points:

Description	Points
100% Emergency power	500
Set-up in Public Place	100
Natural power QSOs completed	100
GOTA Bonus	40
Submitted via the Web	50
Total Bonus Points	790

Score Summary:

	CW	Digital	Phone	Total	
Total QSOs	66	20	89		
Total Points	132	40	89	261	Claimed Score = 522

Submitted by:

Michel Barbeau, VE2EMB

243 Station blvd., Ottawa, Ontario CANADA K1G 6L8

E-mail: michel.barbeau@sympatico.ca

Comments:

(blank)

Band/Mode QSO Breakdown:

	CW	Digital	Phone

	QSOs	Pwr(W)	QSOs	Pwr(W)	QSOs	Pwr(W)
160m						
80m						
40m	60	100			31	100
20m	3	100	19	5	3	100
15m						
10m			1	5		
6m						
2m						
1.25						
Other						
Satellite						
GOTA	3	100			55	100
Total	66		20		89	

GOTA Bonus: No GOTA Coach

Name/Call	QSOs	Bonus Points
Alan Steele, VA3STL	58	40

Supporting Documentation Required

Based on your selections, the ARRL expects to receive supporting documentation:

- via e-mail to: fieldday@arrl.org

Your entry was e-mailed to: fieldday@arrl.org with a copy to michel.barbeau@sympatico.ca

Version: 1.21

Revision Date: June 29, 2014

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Web form by [WA7BNM](#)



MEMBERSHIP FORM

- The membership year starts in September and runs to the end of August of the following year.*
- Regular membership is open to licensed amateurs.*
- Associate membership is open to all unlicensed radio enthusiasts.*
- Membership includes an e-mail subscription to the Club newsletter, the OVMRC Rambler.*

Date: **PLEASE PRINT**

RENEWAL NEW CHANGE OVMRC NAME TAG (COST \$10.00) No Yes

Call Sign	Surname	Preferred First Name
Street		Apartment Number
City	Province	Postal Code
Home Phone	Work Phone	E-mail Address
Are you a member of Radio Amateurs of Canada (RAC) Yes <input type="checkbox"/> No <input type="checkbox"/> RAC ID: _____ Expiry Date: / /		

Full Membership (Not a Member of RAC) \$35.00/year
Full Membership (Member of RAC) \$25.00/year
Associate Membership (Unlicensed) \$15.00/year

Amount Enclosed

\$ _____

Cheque Cash

My Interests are: VHF/UHF Phone VHF/UHF Digital VHF/UHF CW
 Satellite HF Phone HF Digital HF CW

Current Occupation:
If Retired, Former Occupation:
Skills: (Please list them all)

COMMENTS

OVMRC NAME TAG – ORDER DETAILS

First Name:

Call Sign: