



Ottawa Amateur Radio Club

Groundwave

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From the Editor:

January 2012

The Ottawa Amateur Radio Club's next meeting will be held Wednesday, January, 11, 2012 at 7:30pm in the Honeywell Room of Ottawa City Hall on Lisgar St. second floor. This is not our usual meeting room.

Our speaker will be Bertrand Zauhar (VE2ZAZ) who will be speaking on the fascinating topic of Earth-Moon-Earth (EME) Communications. EME, also known as Moon Bounce, allows earth bound radio amateurs to communicate with their fellow earthlings by bouncing a signal to the moon and back again.

Ian Jeffrey, VE3IGJ, Editor



Check out our Web Page: www.oarc.net

**Next Meeting 7:30 pm, Wednesday, January 11th
in the Honeywell By Room at Ottawa City Hall**

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Ottawa Amateur Radio Club

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Articles may be submitted for use in this publication provided that they portray events or activities that promote Amateur Radio. Letters and comments are also welcome. Submissions may be made by mail addressed to the Editor care of the OARC, or by e-mail to "ve3igj@rac.ca". Deadline for submissions occurs three days after the regular monthly meeting of the OARC.

Please support your local radio organisations. They support you!

Club Information

The Ottawa Amateur Radio Club Inc. is an association of Radio Amateurs devoted to the promotion of interest in Amateur Radio communications in the National Capital Area and to the advancement and achievement of club members.

Regular Meetings of the OARC Inc. are held on the second Wednesday of each month (except July and August) in the Honeywell Room which is on the second floor of Ottawa City Hall, formerly Regional Municipality of Ottawa Carleton Headquarters, on Lisgar Street. Meetings commence at approximately 19:30 hours. Further details about each meeting is elsewhere in this publication.

Executive Meetings of the OARC Inc. are normally held on the first Wednesday of each month at 19:30 hours. Contact the President to confirm the date, time and place of the next meeting.

The CAPITAL CITY FM Net meets every Monday (except some holidays) at 20:00 hours on the club repeater **VE2CRA 146.940(-)** to pass traffic and to make announcements of interest to Amateurs in the National Capital Region.

The SWAP Net is a service provided and conducted by Ed Seib, VA3ES. This feature appears on the Capital City FM Net. To list items and make inquiries, got to <http://www.ncswapnet.ca>. You may reach Ed at 613-738 8924 or e-mail him at va3es@rac.ca.

The POT-HOLE Net is a SSB/HF net sponsored by the Ottawa Valley Mobile Radio Club and is conducted every Sunday at 10:00 hours on **3.760 MHz**. All amateurs are welcome to check in.

The POT-LID CW Net is an informal slow-speed CW net sponsored and conducted by Ed Morgan, VE3GX, and meets every Sunday, except during July and August, at 11:00 hours on **3.620 MHz**, to promote interest in CW and CW procedures.

The QCWA CHAPTER 70 Net meets every Monday evening at 19:30 hours on repeater **VE3MPC 147.150(+)**. You do not have to be a QCWA member to participate.

The Ottawa Valley VHF/UHF SSB Net is sponsored by the West Carleton ARC. Look for it every Tuesday night (except the first Tuesday of the month) around 21:00 on **144.250**, (roll calls after net on 50.150, 432.150, 222.150, and 1296.100.) Horizontal polarization is preferred.

The Ottawa Amateur Radio Club bulletin "Groundwave" is published and distributed to club members. Publication dates may vary but it is hoped that the bulletin arrives at its destination before the events listed in it have expired. The bulletin is not published for July and August when meetings do not occur. Every effort is made to provide accurate information in the bulletin, however we are all human and mistakes can be made. The OARC accepts no responsibility for any damages that may result from this. The opinions expressed in this bulletin are those of the author.

Voice (VHF) 146.94/146.34 100Hz CTCSS required
 (UHF) 443.300/448.300

VE3TVA Amateur Fast Scan Television Repeater
 Currently off the air and looking for a new home.

IRLP Node 2040 146.94/146.34 (VE2CRA/VE3RC)
 (Code 411 for info) (Code 204 for activity)
 (Code 88 for time)

For further information please contact the Repeater Chair.

Note: The IRLP link is not connected to ECHOLINK. Please do not try to connect using the alpha keys on your keypad. It just confuses the operator.

Note: The IRLP link is disabled during the Capital City Net each Monday. It is disabled from 2000 to 2145 Mondays except for May to August when the link is disabled from 2000 to 2020.

VE3TEN

Tuning in the beacon so that it makes sense requires you tune to **28.175** on CW and read the tone that is there . The spaces between the elements are the higher tone. If that doesn't work, tune to **28.175.28** on lower sideband for better results.



Dates to Remember

December Minutes

Meeting Opens

- 2011-12-14 7:35pm

Current Events

Club Projects

- Glenn announced that all three projects were going ahead
- Glenn discussed the projects and informed everyone that Mike Kelley was collected the funds for the projects
- deposit is \$35 per project you wish to join
- pay tonight or next meeting

Joe Norton

- The Joe Norton Award was presented to Margaret Tidman, VA3VXN
- Unfortunately the plaque was forgotten and will be presented in January .

General Meeting

Trivia Night

- Paul Coverdale, VE3ICV, was the host of the trivia night
- The "Ham Ducks", the team of Mike (VE3FFK), Al (VE3ZTU), Rick (VE3IHI) and Dave (VE3KMV) won trivia night with 22 Timmy cards.
- Brian Campbell, VE3ZRK won best home brew noise maker for this rubber chicken (again)

Jean
VE3DNI

2012

- Feb. 11, 12 Canada Ski Marathon
- Apr. 11 Homebrew Night
- Jun. 13 OARC AGM and Elections
- Jun. 23, 24 Field Day
- Jul. 1 RAC Canada Day Contest
- Sep. 8 Hamfest
- Sep. 30 Membership Renewal Deadline
- Nov. 1 Joe Norton Award Subm. Due
- Dec. ? RAC Winter Contest

Once again the Canadian Ski Marathon (CSM) is spooling up. This year is the 46th anniversary for the CSM. Radio is a few years behind that.

The CSM depends on ham radio volunteers to provide important and timely safety and logistical communication for the benefit of the skiers. The amateur radio CSM web page (<http://www.radio-1.ca/>) is up and running with 2012 information. The event runs between Buckingham and Lachute (eastbound) in western Quebec, snow or shine.

If you would like to volunteer this year, please email Harold, VA3UNK, (radio1@admin2.ca). Although no promises can be made, assignment requests are generally first-come, first-served.

We would appreciate you updating your volunteer record indicating your availability this year. The website can be found at <http://www.radio-1.ca>. Assignments and additional information will become available as we get closer to the CSM weekend. If you are not available, we can always use spare equipment so perhaps you would consider loaning a radio or antenna to someone who needs it. If you have any questions, contact Harold at radio1 at admin.ca. Come out on the weekend of February 11, 12 and help make 39th the best year yet!

Harold, VA3UNK

2012 Canadian Ski Marathon

The Canadian Ski Marathon will be held on February 11-12, 2012 and the group that organizing radio communications is looking for radio operator volunteers.



mk's Words

All of the things mentioned last month, except the Collegeville exercise, have come and gone, so once again it has been a busy time.

I expect there will be other comments in this issue about the RAC Winter contest, but I have to add my two cents worth. It is still a thrill to have a ZL in New Zealand answer your call, or to work your way through a pile up calling you. For that matter it is a thrill to get through the pile up to a rare multiplier. Contesting as an "Official RAC" station, rather than just any VE call sign makes it all the more special. Although we are, of course, always the most considerate and ethical of contesters, representing RAC, the OARC and the Diefenbunker museum on the air makes us all the more aware that we have to be on our "Sunday best" behaviour. At the same time, contesting with a group of friends makes this easy to do. We had an interesting event, in the form of a power outage just before noon, at the height of the contest. It's kind of spooky to have the power and lights go out, followed by an announcement that begins with "This is not a drill", when you are in a nuclear bomb proof bunker. This sort of thing that doesn't happen in other contest locations, and certainly doesn't happen when contesting alone.

Next up will be the CQ 160 contest, again from the "wilds of rural VE2 land". The ARRL version of the contest at the beginning of December was fun, but not spectacular. We will have to see if the rest of the continent found conditions to be the same. One issue that likely did not affect the other competitors was the loss of their amplifier. We made a mistake while setting up the station and rendered the amplifier unusable. It should be back on line by the next one, and we will have to find new mistakes to make.

There are two more exams in the pipeline, continuing the trend of recent years. Most recent candidates want to use amateur radio for other interests, such as search and rescue, sailing, car rallies etc. Some are looking for a hobby in retirement, after an initial, unfollowed inter-

est back in high school, and a small number are attracted to the technology and "cool factor" of all the things we can do and build. For some people the reasons are a mix of the above. How does this compare with your beginnings in amateur radio?

The OARC projects (plural!) have taken their first steps forward. With three projects to choose from there are more ways to play than in previous years. So far we have 17 participants, including the project leaders. It promises to be even more fun than in the past.

I hope you got some time on the air over the holidays. I hope you got some new toys under the tree. Most of all I hope you had a relaxing time and are re-charged and ready to go for 2012.

73 mk VE3FFK

50th Anniversary of OSCAR 1

On December 12, 1961 the first Amateur Radio satellite took to the skies. Known as OSCAR 1 (Orbiting Satellite Carrying Amateur Radio), the satellite was part of a payload launched from Vandenberg Air Force Base aboard an Agena rocket. It was inserted into a 431 X 245 kilometer orbit inclined about 81 degrees to the Earth's equator.

The satellite was in orbit for 22 days and was heard by more than 570 amateurs in 28 countries as it sent "HI" in high speed Morse code on 2 meters. OSCAR 1 re-entered Earth's atmosphere on January 31, 1962.

See the article "Project OSCAR +50" by ARRL Laboratory Test Engineer Bob Allison, WB1GCM, in the upcoming February issue of *QST*. You can also watch video interviews with amateur satellite pioneers at the 2011 AMSAT Space Symposium.

More info at <http://www.arrl.org/news/50th-anniversary-of-oscar-1>



Build Something

A couple of years ago, a group of local hams were talking on the club repeater, and the talk got around to building stuff. One of the guys said, "You can't really build anything anymore." I almost fell out of my chair. That's simply not true. There are still many companies out there selling kits that are not only fun to build, but are useful additions to the ham shack. There are even reports that Heathkit plans to start selling kits again.

Here are a couple of sources:

Elecraft (www.elecraft.com). In my mind, Elecraft has become the premiere ham radio kit company, if not the premiere ham radio company, period. The new K3, for example, outperforms just about anything on the market by many accounts. Personally, I have built the KX-1, which is a real blast to operate from a park bench or to take on vacation. I also have and use the W1 wattmeter.

TenTec (www.tentec.com/categories/Kits). While perhaps known more for their ready-made rigs, they also sell a line of single-band transceivers and receiver kits.

QRP Kits (www.qrpkits.com). QRPKits.com sells kits that cater to the QRP crowd, that is hams who like to operate low power. They offer many different radios and accessories.

Below are some other companies whose kits have good reputations, but with which I have no personal experience:

Small Wonder Labs (www.smallwonderlabs.com)
Wilderness Radio (www.fix.net/~jparker/wild.html)
Milestone Technologies (www.mtechnologies.com)
Ham Gadgets (www.hamgadgets.com)
Almost All Digital Electronics
(www.aade.com/index.html)
FAR Circuits (www.farcircuits.net)
Jackson Harbor (www.wb9kzy.com/ham.htm)
QRPme (www.qrpme.com)

QRP clubs are also a good source of cool kits. QRP operators are natural builders and tinkerers, and many of their designs are quite unique. They also like sharing what they've done with other hams. Check out the offering of the American QRP Club (www.amqrp.org), the Four State QRP Club (www.wa0itp.com/4sqrpkindex.html), and the Arizona SQRPIons (<http://www.azsqrpiions.com>).

Ready to rock and roll? Here are a couple Web sites that you might want to check out before you dive in:

Electronic Construction from A to Z (www.mtechnologies.com/building/atoz.htm). This site includes a page that lists all the tools you'll need to become a successful kit builder.

Crystal Sets to Sideband: A Guide to Building an Amateur Radio Station (www.qsl.net/k3pd/book.html). This site not only discusses kit building, but also radio theory.

The Joy of Kit Building by N6HI (<http://members.cox.net/jrehak/wm-2kit.htm>).

I hope that I've whetted your appetite for building a kit or two. They're a lot of fun to build, and you really do get a rush from operating a radio or using a piece of test equipment that you built yourself.

If you know of other kit sources, or if you've built a kit lately, I'd like to hear about it. Leave a comment below or e-mail me at cwgeek@kb6nu.com.

For more on ham radio, see: Ham radio in the 21st century.

This blog post was contributed by Dan Romanchik, KB6NU, an amateur radio operator for 40 years and an experienced EE. It appeared in EDN magazine.



RAC Bulletins

Trustee wanted for Defence of Amateur Radio Fund (DARF) 2012-01-08

RAC is looking for a person to fill the recently vacated trustee position in DARF. The DARF trustee must be a licensed amateur and may not be an officer, employee, director or agent of RAC. DARF is a Trust Fund established in the early 90's to provide financial support for travel expenses of an Amateur representative on the Canadian delegation to World Radio Conferences to defend the Amateur Radio Bands.

The World Radio Conferences occur under the aegis of the International Telecommunications Union, a United Nations agency responsible for information and communication technologies and managing the radio spectrum. Moving the short wave broadcasting allocation out of the 40 Metre band was accomplished at a WRC and was a major victory for amateur radio.

As a Trust, DARF's role is to raise and manage donated funds. These funds can only be used for the stated purposes. All decisions by the trustees must be unanimous to ensure that the purpose of the DARF trust is upheld. Funds are held in a trust account at a major chartered bank and can only be withdrawn with two of three trustees' signatures. The current trustees are Gerry Hohn, VE6LB, Dave Snyder, VE4XN, and one vacancy. DARF has no policy role. The Board of Directors of RAC set policy and nominates the amateur representative on the Canadian delegation.

If you are interested please provide your name and a brief resume [no more than 500 words in French or English] email communication preferred to:

Paul Burggraaf, VO1PRB
51 Greenspond Drive
St. Johns NL, A1E 5Z9
Vo1prb73064;rac.ca

Geoff Bawden VE4BAW , RAC Presidentt

There is going to be a Dxpedition to Pitcairn Island (OC-044, CQ Zone 32) between January 20th and February 4th, 2012. The operator lineup is made of Jacques F6BEE, Gilles VE2TZT, Nigel G3TXF, Michel FM5CD and Vincent F4BKV

They will be on all bands 160-10 metres including the WARC bands during their stay.

They will try and upload the VP6T log to LoTW during the operation if they can. if not, they will upload the logs after their arrival home. They will try to update their VP6T log on "ClubLog" as often as they can during the operation.

For their operating plans, QSL information and other information, take a look at the Dxpedition web site at: <http://www.vp6t.org/>

My name is Marc Adornato and I'm a local artist who makes vintage and antique art out of old (often discarded) media machine parts, etc. (* I'm also an antique radio enthusiast and member of the Ottawa Vintage Radio Club.) A friend suggested I contact the Ottawa Amateur Radio Club - and in particular attend the hamfest/flea market to find neat old parts to use in my artworks.

I seem to have just missed the OARC hamfest/flea market so I figured I'd try contacting a few of you to see if someone could put me in touch with a parts person, or may have parts for sale yourself.

I'm specifically looking to buy the old vintage jewel pilot lights (the coloured jewel faceted glass looking caps, not the actual light bulbs.. I have tons of the bulbs and vacuum tubes to trade). If you have any of these old jewel lights, know someone who may have some, or need a photo to see what I'm even talking about.. please contact me. I could buy or trade vacuum tubes, or perhaps something else for them.

Thanks in advance for your time.

Best regards,
Marc Adornato
613.447.5462
[<marcadornato@yahoo.ca>](mailto:marcadornato@yahoo.ca)



Radio Amateur Hall of Fame

Director's Report

First let me wish you all the best for 2012 and I hope that it is a great year for you. The bands have been getting better and even 10M is starting to open up on a regular basis. Next time you turn on the rig why not try listening on the higher bands.

This last December I made time to operate in the RAC winter contest and had a blast. Now that I am retired I can actually get more radio time. I am even heating up the soldering iron and going to complete all those QRP kits that I have had for years and never got around to completing.

One thing I am trying to do this year is to check into nets on a more regular basis and two I would like to highlight are the North West Ontario Phone Net which meets daily on 3750 kHz at 0115 UTC. The other is the Trans Provincial Net that operates daily on 7055 kHz from 1200 UTC until 2200 UTC. The Net Control Stations would appreciate a check in from you. If there is a net that I may not know about please let me know and I will mention it here.

One other issue confounding RAC is the inconsistencies in the Amateur Radio Data base that Industry Canada maintains. Since we no longer pay for our station license IC is relying on Amateurs themselves to maintain their data. Most Amateurs are, but there are a few that are not current. IC has a new site that allows Amateurs to set up an account and modify our details. Remember we are required to notify IC when there is a change in our location. The link to set up your personal account is:

<http://www.ic.gc.ca/eic/site/025.nsf/eng/home>

(English)

<http://www.ic.gc.ca/eic/site/025.nsf/fra/accueil>

(French)

You will need your number from your certificate to get started and the usual list of questions. Once you set up your account you can then modify it if re-

quired.

Some of the call signs that contain incomplete information include the following list for Ontario. If you have any information on these please update the data or let me know and I will see to it. Also some could be silent keys and again please let me know.

VE3ABK, VE3CDH, VE3CDL, VE3CER, VE3FPS, VE3GGC, VE3HDG, VE3JPF, VE3RCR, VE3RNP, VE3SCE, VE3SNP, VE3SRL, VE3SWL, VE3THS, VE3ULY, VE3WBS, VE3XIS, VA3CGD, VA3DOT, VA3GGC, VA3MCM, VA3SCG, VA3YAC

If you have any questions or concerns please email me at ve3xt@rac.ca.

Bill VE3XT

North East Ontario Regional Director

Radio Amateurs of Canada



Dave Green, VE3TLY, and Margaret Tidman, VA3VXN, operate station VA3RAC at the Dieffenbunker during the RAC Winter Contest.

2011-2012 Membership Application/Renewal

Ottawa Amateur Radio Club Inc., Box 8873, Ottawa, Ontario K1G 3J2

- Single \$25 (\$20 after Feb 1, 2012)
- Family \$30
- Junior \$15 (under 18 years of age)
- New Ham - Free (if licensed in current Membership year)
- Emailed *Groundwave* Mailed *Groundwave* (add \$10.00)

Please Note: Membership year is September 1, 2011 to August 31, 2012.

Family Name: _____ First Name/Initials: _____

Address: _____

City: _____ Prov: _____ Post Code: _____

Home Phone: _____ Work Phone: _____

E-mail address: _____ (For *Groundwave* mailing)

Callsign(s): _____

Qualifications: Basic Advanced Morse Code
Year Licensed: _____ RAC Member? Yes

Other Family Members

Name: _____ Callsign(s): _____

Qualifications: Basic Advanced Morse Code
Year Licensed: _____ RAC Member? Yes

Interests: _____

Comments/Suggestions: _____

All members who are in good standing on or before the December General Meeting will be eligible for a free one-time name badge. Members who wish a second or replacement badge may purchase one at the Club Price (approx \$7.50 plus tax). Ordered badges will be available in January.

Do you want an **OARC NAME TAG**? Yes Second or Replacement Yes

ORDER DETAILS - As to appear on badge:

First Name _____ Call Sign _____