



Ottawa Amateur Radio Club

Groundwave

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From the Editor:

September 2013

Just a few reminders:

The OARC Hamfest takes place Saturday, September 7 at 09:00.

The September 11 general meeting features speaker Dave Goodwin, VE3AAQ, on the topic of "Ham Radio Culture Shock: A Canadian Ham's Two-Year Adventure in Asia".

The portable station demonstration takes place the following Saturday, September 14, at 09:00 in Andrew Haydon Park.

The 2013/1014 annual membership renewals are due September 30. Bring your cheque to the Hamfest or the September meeting or mail it in.

In the June newsletter I neglected to thank the outgoing executive for all their hard work and also to thank the contributors to the Groundwave, especially Mike Kelly.

Ian Jeffrey, VE3IGJ, Editor



Check out our Web Page: www.oarc.net

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

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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.

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.

Please support your local radio organisations. They support you!

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 Rubber Boot Net runs week days at 07:30 on VE3MPC, 147.150 + hosted by Ed, VE3GX or Mike, VA3TJP. The Rubber Boot net has been running since the early 1980's and is popular for the early risers and the go to work crowd.

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.

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.

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.



Dates to Remember

June Minutes

Meeting Opens
- 2013-06-12 19:31 EST

Membership
- talk to Al to renew your membership
- 3 early renewals are in
- up to about 90 members

Recent Events
Hamvention
- possibly less people than last year
- Wayne had a great time at the flea market
- Arthur enjoyed the saturday bike ride, 27.5km, twice what it was last year
- Norm was waving the RAC flag
- Greg attended Contest University (250 people there)

Rideau Lakes Cycle Tour
- 1200 cyclists
- very successful event

Upcoming Events
Field Day
- June 22nd, 23rd
- Just behind the building at 175 Main St
- setting up at 9:30, 10am
- meeting at Elgin Street Diner at 8:30
- on the air at 2pm

Hamfest
- September 7th

Car Rallies Looking for People
- Black Bear Forest Rally - Gilmour - July 12th, 13th
- Galway Cavendish Forest Rally - Peterborough - August 10th
- contact Mike VE3FFK or Jamie VA3JME

Portable Station Demo
- the Saturday after the Hamfest
- moving to Andrew Hayden Park
- Kristies at 8am
- setup from 9am to 10am, operation from 10am to noon, teardown from noon to 1pm

2013

Sep. 7 Hamfest
Sep. 30 Membership Renewals Due
Nov. 1 Joe Norton Award Subm. Due
Dec. 28 RAC Winter Contest

2014

Feb. 8, 9 Canada Ski Marathon
Apr. 9 Homebrew Night
Jun. 11 OARC AGM and Elections
Jun. 28, 29 Field Day
Jul. 1 RAC Canada Day Contest

- Any band, if you can get it there, then it's portable

Have and Wants
- Peter VE3BQP - Looking for a KPC2 TNC

News
- VE2CRA is 50 years old this year

Award Presentations
- Volunteer of the Year Award
- Awarded to Arthur VA3BIT
- Homebrew Night People's Choice Award
- awarded to Norm VE3LC
- Claire Fowler Award
- awarded to Dave VE3KL

Diefenbunker
- last week there was a meeting of a small group of board members
- they invited Nick and Dave to come in and talk about the tower project

Main Event
Richard VE3UNW gives a quick talk on knot-tying for Field Day

Budget Review
- Janice VA3PAX presents this year's budget
- Greg VE3YTZ moves to accept as presented
- Brian VE3QN seconds
- Vote: For, unanimous

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mk's Word

Summer seems to be winding down again. There's Halloween stuff in the buck stores, pushing it's way in past the back-to-school displays. The EX isn't even done yet - I know, the EX hasn't been around for a couple of years, but that time of year always seems to mark the end of one year and the start of the next for me. Everybody remembers the EX, but how many of you remember the amateur radio display? How many of you worked it? Did you work it just to get in?

I'm writing this on the tenth anniversary of the 2003 power outage (remember when they were called failures?) Yet another example of how systems get both more efficient and brittle at the same time. They may hold up better most of the time, but when they break, they break bigger. So, what are you doing to get ready for the next one? How about the next time the financial system breaks? (Sorry, it's too far from Halloween for scary stories like that, I guess.)

On to the fun stuff.. speaking of power failures, I was once again in the Quebec countryside for a contest. This time it was the CQ VHF contest in mid July, at the cottage of Dave, VE3AV. The contest weekend coincided with a big storm, and of course, the power went out for many days. The trusty generator came along with us though, and we had more than enough power for the rigs and the fridge, and what more does one need for a contest weekend in the summer. The big bonus was the quietest noise floor I have heard for quite a while. Propagation was just OK on 6m, and pretty crummy on 2m, at least that's how we saw it. It could have been the antennas too, but I choose to blame the ionosphere, since I don't have to try to fix that.

In other news, the magloop project is still ticking along. Although every work session seems to put us "just one more" session from completion, it sure is a moving target. I THINK the last of the potential show-stopping problems has been worked out, but of course when working without a recipe and blazing a new trail, one never knows. I'm

getting impatient to see it up and running in it's final form. Electrically, we knew it would go after the first week. It's all the mechanical gymnastics that take the time.

Meanwhile, some of the end fed antenna designs out there on the Internet are starting to get my attention. Maybe by the time s*** starts to fall, something will be ready to put up alongside the magloop.

The hamfest is coming up soon, as is the first of the 2013-14 season OARC meetings. I'm looking forward to not being a director, but at the same time I expect I will probably miss all the inside stuff (and dessert) that goes on at exec.

That's all for now, I have to start printing exams for the exam session at the hamfest. See you at Carp
73 , mk
VE3FFK

(Continued from page 3)

Election

- Nominating Chair: Norm VE3LC

- This year's Candidates:

	Last	Proposed	Status
	-----	-----	-----
- President	VE3XRA	VE3XRA	Accepted
by Acclamation			
- Vice Pres.	VA3DGN	VA3DGN	Accepted
by Acclamation			
- Secretary	VE3DNI	No one	Position
Vacant			
- Treasurer	VA3PAX	VA3PAX	Accepted
by Acclamation			
- Director	VE3CZO	VE3CZO	Accepted
by Acclamation			
- Director	VE3FFK	VA3BIT	Accepted
by Acclamation			
- Director	VE3ZTU	VE3ZTU	Accepted
by Acclamation			

Prizes

50/50 - \$18.00 to Brian VE3QN

Meeting Closed

2013-06-12 21:32 EST

Jean Richard, Secretary



Magnetic Monopoles

One of the very first facts you learn about electromagnetism—long before you walk into your first physics class—is that every magnet has two poles. Cut a bar magnet in half and you wind up with two magnets, each of which has its own north and south poles. And that's true for every single object in our experience that boasts a magnetic field—whether it's the entire Earth or an iron atom. There are no solitary poles.

Strangely, though, there is no fundamental reason why that has to be the case. In fact, there are a few good reasons to suspect that there might be single-poled magnetic objects—magnetic monopoles—floating about in the universe. If these particles exist, they are probably quite rare, but that hasn't stopped physicists from looking for them. Here's why: If they exist, they could help answer long-standing questions about the nature of the universe, shedding light on the way fundamental forces of nature are tied together.

So over the past few decades, physicists have scoured Antarctic ice and lunar dust and scrutinized rocks culled from ocean beds and polar volcanoes. They've tried to create monopoles in particle colliders and have searched for signatures in cosmic rays that collide with Earth.

In every case so far, the search has come up dry. But a few years ago, my colleagues and I, along with other research groups, came across evidence of something that looks and acts very much like a naturally occurring monopole would. Our monopoles are confined to particular materials, and they arise only when the spins of atoms are aligned in just the right way. But unlike their still elusive, relatively unconstrained brethren, they do offer some hope of new technologies. One day, we might be able to manipulate magnetic charges much as we control the flow of electric charges today. It's almost impossible to predict where this new capability could lead; we could see devices that are capable of performing computations or storing information or energy in entirely new

ways. But before we can know what monopoles can do, we must get to the bottom of how they behave.

Read more at:

http://www.mmsend10.com/link.cfm?r=128035108&sid=26294316&m=2886208&u=IEEENY&j=14781083&s=http://spectrum.ieee.org/semiconductors/materials/the-hunt-for-the-magnetic-monopole/?utm_source=techalert&utm_medium=email&utm_campaign=081513

From the IEEE Spectrum Website

Portable Station Demo

Saturday, September 14, 2013

Back by popular demand is the portable station demo where Ottawa area amateurs have the opportunity to show off their portable stations in a relaxed and pleasant setting. Scheduled for Saturday, September 14 between 10 am and noon in the gazebo area of Andrew Haydon Park, you are welcome to come out **and** admire the handiwork of other amateurs as they operate their portable stations. You are more than welcome to take the key, microphone, or keyboard and add a "new one" to your list of contacts. Perhaps you have a portable station of your own and would like to gain prestige points and admiration of visitors and OARC Members alike. You are therefore more than welcome to grab one of the many picnic tables that are available and operate your own station. Set up will begin at 9 am.

You can see the location at this site: <http://goo.gl/maps/rlBQF>

We hope to see you out.

Greg, VE3Ytz



Tree Antennas

Using trees for antennas, not holding up antennas but the tree as antenna, goes back as far as a 1917 UK patent. There are two general methods used to connect to a tree for using it as an antenna. The first is to drive a nail into the tree some distance up from the ground, and the second is to use a coupling coil around the trunk close to the ground. The 1917 patent proposed the first approach while some US military studies in the 1970's examined the second method.

Ralph Hartwell, W5JGV, has a section of his web-site dedicated to this type of antenna.

http://w5jgv.com/tree_antenna/index.htm

[Signal Propagation at 400 kHz Using an Oak Tree with a HEMAC as an Antenna AD735330.pdf](#)

Another example of the first method is: "The Tree Antenna" http://www.w7aia.org/techinfo_files/docs/RCC_Oct_2006_WB7ESV_The_Tree_Antenna.pdf

Some historical information can be found at :

<http://www.rexresearch.com/squier/squier.htm>

It would be interesting to see someone try this out at the portable station demo in September. This idea could render obsolete sling shots, potato guns, and all the other launching devices used to get wires up into trees.

The picture below shows W5JGV's implementation of coupling to the tree.





Power Line Interference

AC Bulletin 2013-021E - Power Line Interference Contact Information

2013-06-10

Industry Canada has just posted contact information to report Power Line Radio Interference. This information covers all the major Power Line companies in Canada. The posting can be found at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10641.html>.



The information is provided with the cooperation of the Canadian Electricity Association and its member power utilities. Radio Amateurs in Canada are encouraged to use this contact and reporting information when confronted with suspect power line interference. Radio Amateurs of Canada is pleased to see the release of this information which is the culmination of ongoing discussion at meetings of the Canadian Amateur Radio Advisory Board (CARAB) between RAC and Industry Canada.

Norm Rashleigh, VE3LC. RAC representative to the Radio Advisory Board of Canada (RABC)

HAARP Shut Down

The High Frequency Active Auroral Research Program (HAARP) — a subject of fascination for many hams and the target of conspiracy theorists and anti-government activists — has closed down. HAARP's program manager, Dr James Keeney at Kirtland Air Force Base in New Mexico, told ARRL that the sprawling 35-acre ionospheric research facility in remote Gakona, Alaska, has been shuttered since early May.

"Currently the site is abandoned," he said. "It comes down to money. We don't have any." Keeney said no one is on site, access roads are blocked, buildings are chained and the power turned off. HAARP's [website](#) through the University of Alaska no longer is available; Keeney said the program can't afford to pay for the service. "Everything is in secure mode," he said, adding that it will stay that way at least for another 4 to 6 weeks. In the meantime a new prime contractor will be coming on board to run the government owned-contractor operated (GOCO) facility.

HAARP put the world on notice two years ago that it would be shutting down and did not submit a budget request for FY 15, Keeney said, "but no one paid any attention." Now, he says, they're complaining. "People came unglued," Keeney said, noting that he's already had inquiries from Congress. Universities that depended upon HAARP research grants also are upset, he said.

From the ARRL web site 2013-07-15:

<http://www.arrl.org/news/haarp-facility-shuts-down>

Propagation Software

W6ELProp predicts ionospheric (sky-wave) propagation between any two locations on the earth on frequencies between 3 and 30 MHz. There is no charge for W6ELProp when used for non-commercial purposes.

Version 2.70 permits the user to specify a terminal location by its IARU Grid Locator, and permits the user to optionally display areas for only one prediction frequency at a time in the Frequency Map.

Go to <http://www.qsl.net/w6elprop/> for details.

The OTTAWA AMATEUR RADIO CLUB presents the:

OTTAWA (CARP) HAMFEST - FLEAMARKET

SATURDAY, SEPTEMBER 7, 2013

(THE WEEKEND AFTER LABOUR DAY)

9:00 AM to NOON

Tailgaters & Vendors Setup: 7:30 am

at the..

*** CARP AGRICULTURAL FAIRGROUNDS ***

W. Erskine Johnston Arena - 3832 Carp Rd, Ottawa (Carp), Ontario

From Ottawa or Hwy 416, take Hwy 417 west to Carp Rd (exit 144), then go 11 km north to the fairgrounds. We are located at the W. Erskine Johnston Arena – follow the signs along the route.

TALK-IN: VE2CRA 146.940 – MHz, 100 Hz

\$6 general admission

*

Excellent Door Prizes!

\$12/ vendor table (+ admission)

*

Ham Radio Licence Testing
- Get yours, or upgrade!

\$5/ tailgater (+ admission)

*

Breakfast & Coffee Counter

FOR TABLE RESERVATIONS & INFORMATION CONTACT:



Ed Sich (VE3WGO)

email: fleamarket@oarc.net

Phone: 613-963-8065

web: www.oarc.net/fleamarket

2013-2014 Membership Application/Renewal

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

- Single \$25 (\$20 after Feb 1, 2014)
- 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, 2013 to August 31, 2014.

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 _____