

Ottawa Amateur Radio Club

Groundwave

P.O. Box 8873, Ottawa, Ontario, Canada, K1G 3J2

CLUB EXECUTIVE

President

Glenn MacDonell, VE3XRA
(H) 613-523-4333
ve3xra@rac.ca

Past President

Dave Green, VE3TLY
(H) 613-728-8606
ve3tly@rac.ca

Vice-President

Tyler Tidman, VA3DGN
va3dgn@rac.ca

Secretary

Arthur Smith, VA3BIT
(H) 613-795-1154
va3bit@rac.ca

Treasurer

Margaret Tidman VA3VXN

Directors

Wayne Getchell, VE3CZO
(H) 613-225-7989
getch@magma.ca

Greg Danylchenko,
VE3YTZ
(H) 613-236-9291
greg.danylchenko@gmail.com

Ed Sich, VE3WGO
uhf_tv@yahoo.ca

The November 9th OARC meeting location will be held at Makerspace North (<http://www.makerspacenorth.com/>) at 250 City Centre Avenue, Bay 216). You will need to proceed to the ramp on the West side of the building to access the bays up on the second level at the back of the building. The nearest major intersection is Preston and Albert near the Canadian War Museum. It's a short walk from the Transitway's Bayview station. The main parking facilities are located on the East side of the building facing City Centre Avenue. There is limited parking on the ramp going up to the top level. We shall start to monitor VE2CRA at 1900H on November 9th to assist folks the night of the meeting. The speaker is Ralph Cameron, VE3BBM, describing the "Decommissioning of the Algonquin Solar Array".

The OARC is planning a field trip Saturday, November 12, 2016 at 1300h EST at the CFRA transmitter site 3km South of Bankfield at 5630 Prince of Wales Drive, Kars. There is room to park in the field or you may park on the shoulder of Prince of Wales. Details will be discussed at the November 9th OARC club meeting..

See you at the meeting.
Ian Jeffrey, VE3IGJ
Editor

Check out our Web Page: www.oarc.net

November 2016



**Next Meeting 7:30 pm, Wednesday, November 9th
(see location above)**

In This Issue....

| | | | |
|-----------------------------------|---|-------------------------------------|---|
| Club Information | 2 | New Membership Form | 5 |
| Minutes | 3 | Membership Form | 6 |
| Dates to Remember | 3 | | |
| mk's Words | 4 | | |

Membership
 Greg Danylchenko, VE3Y TZ
 (H) 613-236-9291
 greg.danylchenko@gmail.com

Groundwave Editor
 Ian Jeffrey, VE3IGJ
 (H) 613-837-7393
 ve3igj@rac.ca

Delegated Examiner
 Mike Kelly, VE3FFK
 (H) 613-322-0669
 ve3ffk@rac.ca

Historian
 George Roach, VE3BNO
 (H) 613-234-0885
 ve3bno@rac.ca

Webmaster
 Dianne Bruce, VA3DB
 (H) 613-225-9920
 va3db@rac.ca

IRLP
 Cary Honeywell, VE3EV
 ve3ev@rac.ca

Repeater
 Harrie Jones, VE3HYS
 (H) 613-978-1557
 harriej59@gmail.com



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 are noted 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 Rubber Boot Net runs week days at 07:30 on VE3MPC, 147.150 + hosted by 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 that 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 Phoenix Net meets Tuesday evenings at 20:00 on VE3MPC (147.150+, no tones).

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) 146.940/146.340 100Hz CTCSS required
 (UHF) 443.300/448.300 100Hz CTCSS required

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

IRLP Node 2040 146.940/146.340 (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 Monday night Capital City FM Net from 20:00 to about 21:45.



October Minutes

October 12, 2016

19:33 Meeting started by Tyler VA3DGN

Guests

- None -

Reports

RAC Winter Contest (Dave VE3KL)

(Dave VE3TLY not present)

To be held December 17 (00:00Z to 23:59Z).

Two stations at the Diefenbunker: CW and Phone. Can use lots of volunteers. Using N1MM for logging. Rules may have changed regarding distributed operation, so we may not be able to operate the Friday evening segment. However this is still under review by the contest organizers. Will be operating as VE3CWM. Typically show up at 8:00. Will be monitoring 2m simplex.

Membership Renewals

See Greg VE3YTZ who is ready and willing to accept your money any time.

Portable Station Demo (Greg VE3YTZ)

Rain held off until 13:00. Lots of participants.

Dave wrote up an article for this month's Groundwave. Lots of contacts despite the Scandinavian contest also happening at the same time, or perhaps because of it. Several contacts with Lithuania. Paul VE3ICV operated from his car and had no problem talking to Europe.

Near Vertical Incident Skywave (NVIS) Experiment (Tyler VA3DGN)

Sunday 13:00 to 16:00 on 80m, 60m, 40m

Organized by VEPOA in Kingston. Local operators will hash out details regarding OARC participation on VE2CRA at 19:00 Thursday (tomorrow).

Possible locations: Corkery CC and Petrie Island if there are sufficient interested operators.

Joe Norton Award (Tyler VA3DGN)

Deadline November 1 at 17:00. Prize is a plaque and \$500 cash. Need applications!

Club Field Trip (Tyler VA3DGN)

Dates to Remember

2016

- Sep. 10 Hamfest
- Sep. 30 Membership Renewals Due
- Nov. 1 Joe Norton Award Subm. Due
- Dec. 17 RAC Winter Contest

2017

- Feb. 11, 12 Canada Ski Marathon
- Apr. 12 Homebrew Night
- Jun. 14 OARC AGM and Elections
- Jun. 24, 25 Field Day
- Jul. 1 RAC Canada Day Contest

Current plan is to have a tour of CFRA transmitter site near Manotick, probably in November. Harrie VE3HYS: Can fit 10 people into the transmitter building at a time, but can have more people outside. OVMRC members are welcome. Rick VE3IHI may be making hot chocolate onsite!

November Meeting

No suitable room available at City Hall, so Tyler has arranged to use the MakerSpace location at City Centre: 250 City Centre Ave, Bay 216. Access is up stairs on side of building with entrance at the rear.

Club Project (Tyler VA3DGN)

Looking for ideas. We do have some ideas, but no details yet.

Maker Faire

Being held on Saturday and Sunday this coming weekend. Admission \$10 for adults. Oriented towards children and families.

Jamboree on the Air (JOTA)

Also being held this coming weekend.

Rally of the Tall Pines (Mike VE3FFK)

Car Rally held near Bancroft on November 26. Need lots of radio operators to help with closing roads. Contact Mike if interested.

www.tallpinesrally.com

OVMRC Meeting (Norm VE3LC)

Wednesday, October 19, at the Aviation Mu-

(Continued on page 5)



mk's Word

The October meeting pointed out a difficulty we seem to have. To have the meeting go smoothly, we need to get the computer, projector, sound system and members to the same room at the same time. Mostly we have managed to make that happen, but can you think of a back up plan to ensure that meetings go more smoothly?

Yesterday was the NVIS "Event", an idea from the Peel ARC. Much fun was had. ZTU and I headed to Petrie Island, a spot with a known low noise level and, at least in October, lots of elbow room. KL, DGN, BIT and ZTF were out at our field day site, the Corkery Community Centre, another radio friendly spot. The idea behind splitting the local effort into two was to see how well NVIS would work between a pair of widely spaced locations in the City of Ottawa. Our participation was mostly sorted out just a few days before, on VE2CRA. The weather definitely didn't help us. If you take it as an emergency exercise, well, emergencies never happen in good weather somehow. Anyway, despite the rain it was (mostly) fun. At Petrie Island we were on a picnic table with a roof over it, so most of the water on the rig, log, paddles, etc. was what dripped off clothes, hats and hands. The rig was the IC 7200 running 75W out of a battery. The antenna was the 80/40 dipole I used at the portable station demo, with the addition of a pair of wires acting as a 60m dipole at right angles to the original ones. Having to support the center as well as four, rather than two ends meant the antenna took way too long for us to set up. For once there were too many trees, and we had to move the antenna around quite a bit. It turns out that wet leaves all over the feed point don't help the antenna much. By the time the batteries in the antenna analyzer died I wasn't sharp enough to figure it out, and ended up spending a bit of time chasing an "intermittent" that wasn't there. Most of the activity was on SSB, probably the first HF voice contacts in my log this year. I haven't heard much about how they did over at Corkery, beyond the bare details of the log, but what I wanted to find out was how well we could reach our neighbours. From that point of view, the results were pretty good, with solid contact into Deep River and King-

ston. Communications between Corkery and Petrie, on all 3 bands (80,60 and 40m) went very well, both on SSB and CW. Lessons learned: We should have done some reconnaissance of the site in the preceding week. Since we didn't have that, we should have arrived sooner, to be ready for the 13:00 start time. A few pictures would have been nice. One or two more operators at Petrie would have been nice. If we had that, we might have ended the day with a readable log. We might have spent less time setting up the antenna if we had more brains working on the problem. Who knows, with even one other person there, we might even have had sense enough to operate from inside the car. Now I have to dry everything out, and fix the one casualty of the day, a cable reel that held the antenna.

As I mentioned last month, the Rally of the Tall Pines is coming up on Nov 26. If you want to play, contact Ross, VE3WOD, at ross@tallpinesrally.com. They need a lot of operators and can always use more. It isn't hard, but it is important.

I'm looking forward to finding out what this "Maker Space" thing is all about. There are lots of makers among us, but space? Not so much. I always seem to end up working with stuff on my lap, with the table in front of me covered with bits and pieces. When the project really gets going, I've been known to solder on the floor.

73 mk VE3FFK

October Meeting Presentation

The slides for the talk given by Dave Conn, VE3KL, at the October OARC meeting are now available on the OARC web site:

<http://oarc.net/blog/2016/oct/13/slides-ve3kls-field-day-lessons-learned/>



(Continued from page 3)

seum. Presentation: Implementation of an APRS messaging to SMS texting gateway.
www.ovmrc.on.ca

Haves & Wants
- None -

Interesting Contacts

Bryan VE3QN: VK7XX in Tasmania this afternoon
Greg VE3YTZ: Eyeball QSO with TF3IRA (Reykjavik, Iceland) (Club station)

Presentation

(Due to a mixup on the part of the executive, the projector didn't make it to the meeting)
Field Day antennas and EMI "Lessons Learned" Presentation is available on Dave's website: ve3kl.com. Due to co-resonant issues between adjacent antennas (mutual coupling), we experienced significant interference between stations, and, in Dave's opinion, came dangerously close to smoking the CW and phone transceivers. Dave suggests building bandpass filters as a club project for next year's Field Day.

Meeting ended at about 21:10.

50/50 won by Bryan VE3QN.
Minutes taken by VA3BIT.

New Membership Form

This month's Groundwave has a new style of Membership Form. This form is pdf fillable. If you have received the Groundwave by email you can just fill out the form from your computer, print it, and send it to the post office box or bring it to the OARC meeting (with money of course).

In future there is the possibility of handling renewals totally electronically but rather than pull a Phoenix we will take this one step at a time!

Editor

Subsurface Antennas

Subsurface (*buried or submerged*) antennas have obvious military and espionage advantages. In addition to stealth invisibility, they are relatively hardened against nuclear blasts compared to above-surface designs. The comparative-merits of many designs have been studied theoretically and in practical tests, but most of that is classified. There have been several cycles of amateur interest over the past 90 years. A number of websites currently have information about buried antennas, but a large part of that is pure nonsense. The bottom-line is that optimally-designed subsurface antennas do not work as well as typical above-surface designs, but they work better than most people would expect and they can be used both for transmission and reception of LF, MF, HF, VHF and UHF signals over considerable distances.

©2004 Martek International All rights reserved.

Luxembourg Effect

The action of the ionosphere upon an electromagnetic wave is, at least in theory, not perfectly proportional to a wave's amplitude; i.e., the action is not perfectly linear. Because of that, two or more strong waves from different transmitters simultaneously passing through the same part of ionosphere can theoretically cross-modulate each other. That effect is known as the 'Luxemburg Effect,' because the first reported case where it was thought to be heard involved transmissions from Radio Luxemburg. There have been many reports of similar cross-modulations since. However, the effect is not generally heard between transmissions of most powerful transmitters, so it is likely that most, if not all, reported cross-modulations have been due to causes other than ionospheric nonlinearity.

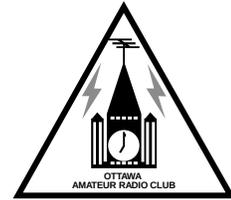
©2004 Martek International All rights reserved.

OARC Membership Application/Renewal

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

- Single \$25 (\$20 after February 1)
- Family \$30
- Junior \$15 (under 18 years of age)
- New Ham \$0 (licensed in current membership year)

- Emailed Newsletter \$0 Mailed Newsletter \$10



| | | | |
|--------------------------------|----------------------------------|-----------------------------------|--|
| Name | <input type="text"/> | Phone | <input type="text"/> |
| Callsign(s) | <input type="text"/> | Year Licensed | <input type="text"/> |
| <input type="checkbox"/> Basic | <input type="checkbox"/> Honours | <input type="checkbox"/> Advanced | <input type="checkbox"/> Morse <input type="checkbox"/> RAC Member |
| Email Address | <input type="text"/> | | |

| | | | |
|--------------------------------|----------------------------------|-----------------------------------|--|
| Name | <input type="text"/> | Phone | <input type="text"/> |
| Callsign(s) | <input type="text"/> | Year Licensed | <input type="text"/> |
| <input type="checkbox"/> Basic | <input type="checkbox"/> Honours | <input type="checkbox"/> Advanced | <input type="checkbox"/> Morse <input type="checkbox"/> RAC Member |
| Email Address | <input type="text"/> | | |

Postal Address

Membership year is September 1 through August 31, inclusive. 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.

First Name on badge Callsign on badge

First Name on badge Callsign on badge

Notes