



Ottawa Amateur Radio Club

Groundwave

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April 2015



To those who have not yet renewed their OARC membership, this will be the last edition of the *Groundwave* you will receive.

As usual the April meeting is given over to the members to illustrate their home brew expertise. We are broadening the subject matter that can be presented. Presentations should be limited to five minutes and can be on anything that can be linked to amateur radio including operating methods as well as the traditional software, build projects, and experimental antennas and circuits.

See you at the meeting.

Ian Jeffrey, VE3IGJ
Editor



Check out our Web Page: www.oarc.net

**Next Meeting 7:30 pm, Wednesday, April 8th
in the Colonel By Room at Ottawa City Hall**

In This Issue....

Club Information	2	Tips for Working a DXpedi-	5
Minutes	3	OVMRC Soldering Course	7
Dates to Remember	3	Ham Radio Course	8
mk's Words	4	Membership Form	9

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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 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 Thursdays 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 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.



March Minutes

19h35 Meeting started with Glenn VE3XRA, President OARC

Guests: Zeno

Membership (Janice VA3PAX)

Has several membership badges for dissemination.

Club Project (Dave VE3KL)

Four sessions so far. Software Defined Receiver, concentrating on measuring noise figure. Wayne VE3CZO has helped considerably designing and building circuits that work up to 1GHz. Also a great help are Tyler VA3DGN and Clayton VE3IRR as well as many others. Thanks again to Richard VE3UNW for arranging for the lab at Algonquin College. Dave has developed an innovative approach to use equipment costing tens of dollars to be the equivalent of commercial equipment costing thousands of dollars.

Public Service Events

CN Cycle for CHEO (Harold VA3UNK)

May 3 from 7:30am to about 1:30pm. Hams provide logistics and safety support on the course as both fixed and bicycle mobile, and, this year, the 2K and 5K walks as well. Many roads will be closed and lots of hams would be appreciated. If you can help, please contact Arthur at va3bit@rac.ca or Harold at va3unk@gmail.com.

Lap the Gats (Mike VE3FFK)

This event is a bicycle race in Gatineau Park. 2015 is the second year for this event. The organizers definitely want us back to help with logistics and safety communications. Time commitment: about 7am to 1pm. Contact Mike if you can help out at ve3ffk@rac.ca.

Lanark Highlands (Mike VE3FFK)

A car rally race held north of Perth. No official word yet, but will probably be held on Saturday, May 2. More details are expected at the April OARC meeting.

June 6-7:

Dates to Remember

2015

- Feb. 7, 8 Canada Ski Marathon
- Apr. 8 Homebrew Night
- Jun. 10 OARC AGM and Elections
- Jun. 27, 28 Field Day
- Jul. 1 RAC Canada Day Contest
- Sep. 12 Hamfest
- Sep. 30 Membership Renewals Due
- Nov. 1 Joe Norton Award Subm. Due
- Dec. 19 RAC Winter Contest

Rideau Lakes Cycle Tour (Tyler VA3DGN)
A bicycle tour (not a race) from Algonquin College in Ottawa to Queens University in Kingston, then returning to Ottawa, held over the weekend of June 6-7. While there are typically four different routes, only one is supported. Ottawa hams are responsible for the route between Ottawa and Perth with the remaining legs covered by Lanark ARES and Kingston hams. We would appreciate many ham radio operators to help out. Hams are required for fixed locations (either Saturday or Sunday or both days) and mobiles (for both days). Depending on the location, hams are needed from 7am to about 1pm on Saturday, and 10am to 6pm on Sunday. To volunteer, please contact Gordon at gordon.mein@rogers.com or Tyler at va3dgn@rac.ca.

Other upcoming events (Tyler VA3DGN)

- May 9: Smiths Falls Amateur Radio Fleamarket
- May 15-17: Dayton Hamvention
- May 23: A Raspberry Pi "bootcamp" to be held at Algonquin College. Classroom to be determined. Probably an all-day event. More details at the April OARC meeting.

Field Day: June 27-28 (Greg VE3YTZ)

The old Main St location is available for one last time. Regional Group has bought the site and intends to build a subdivision known as Greystone Village. Construction will occur in 2016 which means 2015 is probably the last

(Continued on page 4)



mk's Word

TOP TEN REASONS WHY THE QSO DIDN'T HAPPEN

11 The QSO was fine, but the op at the other end couldn't type worth a hoot, so their log is a dog's breakfast. If the typing was OK, they had a disk crash and lost the day's logs.

10 The other op had a high noise level, so couldn't hear much of anything.

9 The other op was running at least a kilowatt and three quarters (and maybe a dime), so while I could hear them just fine, they couldn't hear my tiny humble (legal) station.

8 The other op was surrounded by local stations and couldn't hear me through the wall of QRM around them.

7 The other op had receiver trouble. Maybe the front end was toast. Maybe the 30 dB attenuator was switched in. Maybe it was one of those new fangled rigs with a combined RF gain and squelch control which was turned too far up, or down. Either way would kill a signal.

6 The other op was running QRP to an indoor antenna in the basement. Nobody could pull a call sign out of that pipsqueak signal.

5 The other op had lots of signal, but with the compressor at 11 and the bandwidth at 3, nobody could pull a call sign out of the muck of fuzzbox voice, background music, and fan motor noise. The dog in the op's lap was more intelligible. Too bad it hadn't been trained to howl in good CW.

4 The other op had lots of signal, but nobody could pull a call sign out of that combination of weird accent, auctioneer speech rate, and oddball phonetics.

3 The other op obviously couldn't copy CW, even my perfect CW, no matter how fast or slow I sent it.

2 The other op obviously couldn't send CW, no matter how fast or slow they sent it.

1 IT'S NOT MY FAULT

How many of these excuses have you used at some point? My favourite is "one way propagation". A signal can go from east to west, but not west to east. Really?

73 & Happy April
mk VE3FFK

Btw, I typed this all twice, because the computer ate my homework —really.

(Continued from page 3)

time we can use the back field. Vehicle entry will be via Oblate Road as in the past. The wide road leading to the main building will be blocked with construction materials. Signage will be in place and a map will be posted on the club's website. We are looking for volunteers to organize as well as to operate. A sign-up sheet was circulated.

April Meeting - Homebrew Night (Glenn VE3XRA) We are broadening the subject matter that can be presented. Presentations should be limited to five minutes and can be on anything that can be linked to amateur radio including operating methods as well as the traditional software, built projects and experimental antennas and circuits.

Have & Wants

Tyler VA3DGN: Older Raspberry Pi enclosure/case available to a new home.

Bryan VE3QN: Looking for snap-on toroids

Arthur VA3BIT: Looking for a Kenwood TH-F6A handheld

Janice VA3PAX: Micro-screwdrivers available to give away

Interesting Contacts

Norm VE3LC: On a Florida beach, QRP with FT-817 and internal battery, SSB on 20m, Opek 6 band ground plane vertical antenna to VK3OM long path. Bryan VE3QN: Several contacts on phone & CW, 17m SSB, 15m CW.

(Continued on page 6)



Tips for Working a DXpedition

Tips for working a DXpedition or don't let the next one get away.

Greg Danylchenko, VE3YTZ

Just several weeks ago we had an extraordinary opportunity to work the number one wanted DXCC entity - K1N - operating from Navassa Island (see their web site: <http://www.navassadx.com/>). Navassa was a relatively easy contact on HF as it is located in the Caribbean, between Haiti and Jamaica and south of Cuba. Under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS), Navassa is uninhabited and access is strictly limited. With no local residents, the only way to add Navassa to your DXCC totals is to wait for a DXpedition. The last activation of the island was 22 years ago. Well, K1N has now gone QRT and your next opportunity to add Navassa to your log, per USFWS policy, will be in a minimum of 10 years.

We are told that the Navassa crew logged 138,409 contacts with 35,702 unique call signs! Were you one of those contacts? Proximity to the United States and the pent-up demand meant that if you tuned around the HF bands you would have heard the huge pile-ups that this particular DXpedition generated. This is not a very auspicious situation for us little pistols. Still, no matter how modest your station, it was possible to work Navassa. How? Well, a very interesting article was recently posted on the Mediterraneo DX Club web site. (See <http://www.mdxc.org/k1n-interview-for-mdxc-by-w0gj/#more-6209>.) The co-leader of the Navassa DXpedition, Glenn Johnson, WØGJ, provided some valuable tips which may prove useful once the next big DXpedition gets on the air, including South Georgia Island (VP8 in January 2016). In case you wish to track these things, the following web site provides information about announced DXpeditions: <http://www.ng3k.com/misc/adxo.html>.

Please keep in mind that due to the large pile-ups, K1N worked split almost the entire time. The entire article is interesting reading, so I invite you to check out the Mediterraneo DX Club web site where it is found, but to zero in on the tips, here are Glenn's useful suggestions:

1. Listen and act on instructions from the DX operator.
2. LISTEN to and LEARN the rate and rhythm of the operator.
3. LISTEN to WHERE the operator is listening and his PATTERN of moving his VFO, know where he will listen next! Learn to use your radio (split/simplex, etc).
4. Do NOT jump to and call on the frequency of the last station worked. The DX station will NOT hear you because the din is total unintelligible chaos. Move UP or DOWN from that frequency, as we on our end were continuously tuning up or down after each QSO, so if one jumps onto the last-worked frequency, we will not hear you, even if you were the only one there, as we have tuned elsewhere.
5. TURN OFF ALL SPEECH PROCESSORS AND COMPRESSION! Do NOT overdrive ALC. There is a night and day difference in listening to NA/SA and EU pileups. The horrible distortion makes it impossible to copy many, if not most EU call signs. There were MANY loud stations that we did not work, simply because we could NOT understand their terribly distorted call sign. Have you ever listened to yourself in a pileup? We gave many stations a "19" signal report. Very loud, but extremely unintelligible! You want to have INTELLIGABILITY, not distortion!
6. Give your call sign ONCE and ONLY ONCE! DO NOT KEEP CALLING! We would tune on by those who did not stop calling. We are looking for RATE and getting stations into

(Continued on page 6)



(Continued from page 5)

the log. You should be, too!!!

7. If the DX station comes back with your call sign, **DO NOT REPEAT YOUR CALLSIGN, AS WE ALREADY KNOW IT** or we would not have answered you. Many stations (in all modes) would repeat their call sign two, three, and even four times! We only want to hear "5NN" or "59" from you. Anything else is a total waste of time and **CHEATS** others out of a chance to get into the log. Only repeat your call sign if it needs correction, and then let us know it is a correction. Anything else is cheating others out of a contact, as our propagation windows and time on the island are limited and we need to maximize the opportunity for everyone. **SPEED.**

8. Take some time to listen to the next DXpedition working NA and listen to the rate and rhythm of the operator. It is fast, quick, and efficient, and more people get into the log! Then listen to him work EU. The wise operator will catch on quickly to what it takes to get into the log!

9. **SPREAD OUT!** Our highest rates (for any continent) were working the edges of the pileup where there was less QRM and weak stations were much easier to work than loud stations in the middle of the pileup. If we say, "Listening 200 – 210," 70% of the pileup sits exactly on 200 in an unintelligible din, 25% of the pileup sits on 210 and is almost as bad. 5% of the pileup will be spread out somewhere between 201 and 209, making them very quickly put into the log. **S P R E A D O U T ! ! ! !**

(VE3YTZ Comment: In my experience, Number 9 is the number one suggestion, work the edges, if you are a little pistol, you'll never out-muscle the big guns, so don't even bother.)

10. **LOUD is NOT better! MORE AUDIO COMPRESSION is NOT better!** Finding the spot to be **HEARD** is the **MOST** important thing you can do to get into the log. My biggest thrill (and I'm sure on both ends) is finding the lone weak station and

getting him into the log quickly.

11. **LISTEN** to the DX operator's **INSTRUCTIONS!** As we would constantly tune our VFO, if we find a clear spot, we would often say, "33" (meaning for YOU to transmit on 14033, 28433, etc) and a few would listen and get into the log very quickly. You cannot hear these hints if you keep calling, calling, calling, calling..... Many times I would say, "listening 200-210" and after a while would say, "listening 240-250". Often 30-45 minutes, even and HOUR later, I would find **MANY** still calling on the original "200-210"of course, they would never show up in our log, as I was not listening there. **LIS-TEN, LISTEN, LISTEN, and LISTEN SOME MORE.** The less you transmit, the better chance you have of getting into the log.

12. **LISTEN**

13. If you don't want to get into the DX log, just ignore the above suggestions.

(VE3YTZ Comment: I would add a Number 14 to the list. When a DXpedition first gets on the air everyone and his uncle wants to work them; that is tough going for us little guys. If they are one the air for any duration, then your luck will improve half way and up to $\frac{3}{4}$ of the way through as the big guns have already bagged the entity on all bands and all modes (Hi!) and probably, we hope, have moved on. However, in the last few days all the desperate and the procrastinating operators jump-in, so your chance of success drops off again. In my opinion, your best opportunity is roughly between the 6th and 11th day of a 14 day operation.)

(Continued from page 4)

Glenn VE3XRA: SSB net on Tuesday happened to result in a 150km contact on 70cm.

Other stuff relating to OVMRC (Norm VE3LC) OVMRC has purchased two Yaesu System Fusion digital repeaters which can be configured for either/both analog and digital

(Continued on page 7)



OVMRC Soldering Course

Peter Carss ,VE3XEM, will give a short course on soldering which is a very practical skill needed for amateur radio operations if you build any circuitry or assemble a station. The course will be Tuesday evening from 19:00 to 22:00 on 24 March and 31 March, if needed. Peter will discuss and demonstrate various aspects and considerations of successful soldering techniques. For those wishing to develop a personal soldering skill there will be opportunity to make a coaxial jumper cable by putting PL259 connectors on a short piece of RG 58 cable. The cost of the cable project kit is \$10.00 We can handle cash or personal cheques but not credit cards. Payment can be made at the monthly OVMRC meeting on 19 March or on the evening of the course, 24 March. If you are going to undertake the jumper cable assembly project your early response is needed as there is a lead time for obtaining some of the parts. Because of the practical soldering aspects of the course it will be held on the mezzanine level of a hangar building adjacent to the Museum building where the classes were held in the fall. We will assemble in the foyer of the main building and go as a group accompanied by a security person who will take us to the hangar.

If you intend to participate in the course please advise Ernie Jury, VE3EJJ, <ve3ejj@rac.ca>, without delay, particularly if you will be needing a cable kit so the correct number will be available.

Brain Teaser

Given that a mirror is a two-dimensional surface, why does it switch left and right but not top and bottom?

Give up, go to: <http://io9.com/5971306/why-do-mirrors-reverse-left-and-right-but-not-top-and-bottom>

Call Sign License Plates

Just a FYI for members who want their call sign licence plate and they can't get it because some one else still has it.

Go to a Service Ontario licence office and provide them with your drivers licence and your Industry Canada certification. If the plate is issued, then staff are to call the "hot line" or Joey at (613) 544- 2220 ext 5168. You pay for your plate (they do a manual payment) and send to the OCP office in Kingston. They will do all the paper work that is needed and send you your call sign plate in the mail.

I found this out today as I tried to get my new call sign plate, and of course it was taken. I hope this will help save some other hams the hassle of getting plates when they get their new call.

73 de Rick VA3RZS

Transmission Line Web Site

As mentioned by Dave Conn recently , David Knight, has an excellent web site (<http://www.g3ynh.info>) entitled *From Transmitter to Antenna* which describes the theory and practice of HF power transmission . It contains everything you ever wanted to know about transmission lines, matching, SWR, etc

(Continued from page 6)

FM. The System Fusion repeaters Will operate as a dual band repeater on 2m and 70cm, and replace the existing analog repeater at VE3TWO.

Upcoming Contests

This coming weekend features the RSGB Commonwealth Contest, the North American RTTY Contest as well as several state QSO parties: Idaho, Wisconsin, and the QCWA spring QSO party. Tyler VA3DGN: March 28 is CQ-WW-WPX SSB contest

(Continued on page 8)



Ottawa Amateur Radio Club

Groundwave

April 2015

RallySport Ham Radio Course

See below the official announcement of the annual RallySport Ontario Ham Radio Course. We are always looking for more ham operators at our events.

For volunteers at events it makes it much more enjoyable and satisfying to be in on all the logistics of running the event. Plus there is a wider range of opportunities available at events for radio operators. For new operators who haven't yet purchased equipment RSO always has loaner packages available.

Note – the Tall Pines committee has committed for a second year to subsidize accommodation expenses of course participants. To be considered for subsidy you must apply to Ross Wood at ross@tallpinesrally.com We can also assist you with suggestions for suitable places to stay.

RALLYSPORT ONTARIO 2015 HAM RADIO COURSE
RallySport Ontario is pleased to offer a Basic Ham Radio Course to facilitate official licensing of more amateur radio operators to assist with official communications at rallies.

WHEN - Saturday, May 23 and Sunday, May 24, 2015 from 9:30 A.M. until 4:30 P.M.

WHERE – Loblaws (cooking school room upper mezzanine), 400 Kent Street West, Lindsay, ON K9V 6K3
Coordinates N44 21.034 W 078 45.692

ELIGIBILITY - This course is open to anyone, however the class will be cut off at 25. If more than 25 apply, preference will be given to RSO members.

REGISTRATION - Go to <http://www.kwrc.on.ca/hamclass/>

COST - \$40 per person. Payment may be made in the following ways:

(1) Mail a Cheque (Payable to "RallySport Ontario" and include your email address) to:

RallySport Ontario
C/O Peter Gulliver
1026 Communication Road
SELWYN ON, K9J 6X2

(2) By Interac - Send Interac email transfer payment to treasurer@rallysport.on.ca

Contact Pete Gulliver at same email with password or phone 705-292-7232

Note - Your registration will not be considered complete until payment has been received.

COURSE DESCRIPTION

This course will be a condensed version of the full course offered by various clubs. Participants will be expected to study course materials in advance independently.

The two days of in-class sessions will concentrate on reviewing key topics and to answer specific questions. A portion of the in-class sessions will deal specifically with ham radio procedures at rallies.

Official testing will take place at about 3:00 P.M. on Sunday May 24. Approved examiners will supervise the testing. The exams will be marked immediately. Successful applicants will be assisted directly with application for license.

Course instructors will be Roger Sanderson VE3RKS and Len Arminio VE3LRM.

Ross Wood

(Continued from page 7)

Canadian Ski Marathon (Harold VA3UNK)
Pins for Zeno (3 years) and Harrie (35 years)

Presentation by Harrie VE3HYS

"Lightning and grounding, a presentation to the Ottawa Amateur Radio Club". Lightning is the result of a potential charge difference between positive and negative ions. Harrie discussed the theory of lightning, different kinds of lightning, safety when lightning is nearby, and how lightning affects the radio amateur.

Hamfest (Ed VE3WGO)

September 12 from 9am to noon. Circulated a sign-up sheet. Ad ready for TCA. Would like 25-30 volunteers. Sign-up sheet will be circulated for the next several meetings.

Joe Norton Award awarded to Tim Pychyl VA3PYC.

Glenn VE3XRA closed the meeting at 21h19.

50/50 won by Ian VE3IGJ

Meeting minutes taken by VA3BIT

2014-2015 Membership Application/Renewal
Ottawa Amateur Radio Club Inc., Box 8873, Ottawa, Ontario K1G 3J2

- Single \$25 (\$20 after Feb 1, 2015)
- 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, 2014 to August 31, 2015.

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: _____

<p>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.</p>	
<p>Do you want an OARC NAME TAG? Yes <input type="checkbox"/> Second or Replacement Yes <input type="checkbox"/></p>	
<p>ORDER DETAILS - As to appear on badge:</p>	
First Name _____	Call Sign _____