



Ottawa Amateur Radio Club

# Groundwave

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October 2016

The speaker for the October meeting is Dave Conn, VE3KL. Dave will be speaking on the pros and cons of bandpass vs. bandstop filters.

See you at the meeting in the Festival Boardroom.

Ian Jeffrey, VE3IGJ  
Editor



Check out our Web Page: [www.oarc.net](http://www.oarc.net)

**Next Meeting 7:30 pm, Wednesday, October 12th  
in the Festival Boardroom at Ottawa City Hall**

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Ottawa Amateur Radio Club

# Groundwave

*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.



## September Minutes

September 14, 2016

19:34 Meeting started by Glenn VE3XRA

### Guests

VA3ZYD Yaroslav, VA7XU Carl, VE3YDK Doug, Juergen (no callsign), Andre (no callsign)

### Membership (Janice VA3PAX)

Janice is prepared to take your money for membership renewals.

### Field Day (Mike VE3FFK)

At Corkery Community Centre again this year. Tried to find other sites closer to the centre of Ottawa, but no luck. Operated 2A with an additional VHF/UHF station and a GOTA (Get On The Air) station in accordance with ARRL rules. A writeup was included in the Groundwave earlier this year, with significantly fewer contacts than in previous years.

Dave VE3KL: About 580 CW and 168 phone contacts. Built and evaluated several new (to Dave) antennas. Dave will review the antennas used at a presentation next month. Dave brought a modified Windom antenna (to include 30m) which Dave brought for show & tell.

### RAC AGM (Glenn VE3XRA)

Held in Hearts' Content, Newfoundland this year. About 1.5 hour's drive from St John's. Heart's Content is this year celebrating the 150th anniversary of the first trans-atlantic communication cable between Newfoundland and Ireland. The cable itself is no longer operational, but ham radio operators at the Newfoundland end managed to communicate with Irish ham radio operators. Further information on RAC's AGM can be found on RAC's website rac.ca.

### Carp Hamfest (Ed VE3WGO)

Held last Saturday, September 9. Friday was setup. This year was a good hamfest with a near record 403 attendees. There were 53 vendors (45 private, 8 commercial) and 6 examinations with two passes. Net income was about the same as in past years. Sales of extra chances tickets were down. There was a huge number of Door Prizes with a

## Dates to Remember

### 2016

- Sep. 10 Hamfest
- Sep. 30 Membership Renewals Due
- Nov. 1 Joe Norton Award Subm. Due
- Dec. ?? 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

Grand Prize of an Icom IC-V80, a big box of accessories and shortwave radios from Peppers Radio, and prizes and gift certificates from Radio World, Durham Radio, Macfarlane, Armitron, Netty and Maple Leaf. Successful transition from Dave Scobie for food to the building concession. Many thanks to the many volunteers who helped out this year, and to ICOM for donating the IC-V80.

### Portable Station Demo (Janice VA3PAX)

This coming Saturday, 18 September at Andrew Haydon Park at the gazebo. Setup is at 09:00 with operation from 10:00 to 12:00. Both operators and visitors are most welcome. Breakfast is at 08:00 at Kristy's. Al VE3ZTU : Norm will be bringing his fox/bunny hunting transmitters as an additional exercise. The frequencies/modes used will be FM CW. Glenn commented: A major RDF exercise is held annually, this year in Europe so our exercise on Saturday might be good training.

### SBO-OVSAR 20th Anniversary Celebration (Glenn VE3XRA)

Sauvetage benevole Outaouais - Ottawa Volunteer Search and Rescue is celebrating its 20th anniversary this coming Saturday at the Aviation Museum. OVSAR has invited partner agencies such as EMRG and OARC to attend, and members of OARC are most welcome. Please RSVP to Glenn if you want to attend. Near Vertical Incident Skywave (NVIS) Experiment (Glenn VE3XRA)

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## mk's Word

Lets see, what happened since the last mk words...

Another great Hamfest. Thanks to WGO. Without him pulling the show together, it wouldn't happen, no matter how many volunteers were around. Ed noted that every year seems to see about the same number of private vendors more or less, but that the names and call signs change. Maybe the same gear is coming out of different basements each time, only to change hands again for another year. However it works, it works. This year I was able to get out on the floor a bit, thanks to ZTF being there to cover the exams for a while. I wish I could have got to even more of the tables, but my wallet is glad I didn't. All that followed me home was a RigBlaster. I still have to figure out exactly what it does, but it should be an interesting toy to play with.

Meanwhile at the exams, six people tried them. Some weren't as prepared as they thought, others hadn't prepared and just wanted to try it. One got Basic with Honours and another got that plus their Advanced. For those of you who haven't done an exam this century, that translates to HF privileges for one, and that plus the ability to build Kilowatt transmitters, etc. for the other.

A week later was the portable station "demo" in Andrew Haydon Park. Great turnout, good weather, (until the end), and much fun. My objective for the day was to tune up an 80/40 dipole, built around a couple of Diamond Antenna traps actualy coils). After many lowerings and raisings of the thing, it was finally brought into resonance, or close enough, on both bands. Somehow Murphy was snoozing, as tune up meant shortening, rather than lengthening things. I even made my traditional one QSO on it before packing up just as the rain approached. Unfortunately there was no time to spare to chase LC's hidden transmitters, but maybe next time. I made it out of the park dry, but got thoroughly rinsed on the way home. At least it wasn't cold. If you weren't there, you missed some good fun.

Next up is the NVIS "activity" on October 16. The idea is for stations to get on the air with antennas that send HF signals straight up, rather than at the horizon. I expect I will use the 80/40 dipole mentioned above, with the addition of a 60m dipole off the center of it. All this only works if the antennas at both ends of the path are aiming up. It doesn't do any good if one is NVIS and the other guy decides to use his mobile whip, or lofty tri-band yagi. It should be interesting. I hope more details come together before the 16th.

November will see another running of the Rally of the Tall Pines out of Bancroft. They are always looking for hams to help out. If you want to play, contact Ross, VE3WOD, at [ross@tallpinesrally.com](mailto:ross@tallpinesrally.com).

I recently received a largish box from the RSGB. It contained the archive of their publication RAD COM and its predecessors on a bunch of CDs. It wasn't cheap, but it should provide for lots of top notch reading material for the long winter we know is bound to arrive all too soon. It's always easier to read about a project than actually build it yourself, but every once in a while an article will start you down the road to putting hardware together.

73 mk  
VE3FFK

*(Continued from page 3)*

16 October 2016 from 13:00 to 16:00 Eastern Time. NVIS is a skywave radio-wave propagation path that provides usable signals in the range between groundwave and conventional skywave distances — usually 50–650 km. No restrictions will be imposed on equipment or locations, but Ottawa stations are definitely wanted and invited. Frequencies:  
SSB: 3.700-3.750; 5.375, 7.060--7.070  
CW: 3.550; 5.3465; 7.030  
Coordinated by Peter VE3POA (Peel ARC)  
Interest was expressed by members; Glenn will reply to Peter. Further preparations will be discussed at the October meeting.  
2016-17 OARC Project (Glenn VE3XRA)  
A project is expected, but no proposals or de-

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tails yet.

### Joe Norton Award (Glenn VE3XRA)

Honours those new to the hobby who have demonstrated participation and leadership in ham radio activities. Open to any new ham in the Ottawa area that has been licensed in the last three years.

Award is \$500 and a plaque to take home. Further guidelines are on [oarc.net](http://oarc.net). Deadline for submissions is 1 November.

### OVMRC Ham Radio Course (Norm VE3LC)

Already started but can take additional participants. 31 already registered. Course costs \$150 and covers 13 weeks. Next session is Monday, Sep 26 from 19:00 to 21:00. Location is at the Aviation Museum. To register, contact Norm at [ve3lc@rac.ca](mailto:ve3lc@rac.ca).

### Hases & Wants

Dave VA3AE: Boxes of stuff are available to give away.

Janice VA3PAX: Sign from hamfest for a free tower Juergenrgen (guest): Free tower at a friend's qth; tower needs to be taken down.

### Recent Contacts

Mike VE3FFK: CY9C (St Paul Island) 2-3 weeks ago

### Show & Tell

Dave VE3KL: Showing off an antenna he built for Field Day and will be using it at the portable station demo on Saturday. The antenna is useful on 80, 40, 30, 20, 15, 10m bands.

Presentation: Off Grid at VA2GN (Dave VE3TLY) Operating ham radio at Dave's cottage in Quebec using a system currently configured with a 40 watt solar panel, a 75Ah battery, a battery booster and monitor, a homebrew 3-state charge controller and homebrew low power 12V gas generator. The station itself uses an HF transceiver. Dave also outlined the rationale behind the 3-state battery charger, and some of the difficulties that RFI can present if power conversion equipment is not carefully selected.

### Nametags (Janice)

Lots of older nametags are available for pick-up.

Meeting ended at about 21:31.

Minutes taken by VA3BIT.

## Tall Pines Rally

Please be sure to mark the November 25-27 weekend on your calendar. That is the weekend for the 2016 Rally of the Tall Pines. The Tall Pines committee has been hard at work and it's time to get the volunteers signed up.

As the Pines keeps growing and adding exciting new features, our needs for volunteers are greater than ever. So please pass this message on to others.

Check out the Pines website at [www.tallpinesrally.com](http://www.tallpinesrally.com) for details.

While on the website, if you have not already registered for 2016, please go to the worker section and register. We have tried to keep the process very straightforward for you. So whether you registered as a worker previously or are a first-time registrant, go to the Worker tab on the website, then click on 'Register' and follow the cues from there to either update your profile or to create a new profile. If that doesn't work, use 'Worker Registration'. Note – be sure to answer at the top 'Yes' to "I am registering as a worker for the Rally of the Tall Pines 2016." If you are stuck, email the registration team at [worker\\_registration@tallpinesrally.com](mailto:worker_registration@tallpinesrally.com) for assistance. When you have completed your registration or update, click on 'Submit' at the bottom of the page. We need all of you, including committee, stewards etc. to register, as we work extensively with the database to make plans. Note – our volunteer needs on Thursday are very specific and mostly require experienced help. Contact us directly about Thursday tasks.

As in the past we are assisting volunteers with subsidized accommodations. See 'Accommodations' in the Worker section for full details and for online payment. Subsidized accommodations will be provided once again at Elmer's Hunt Camp, at Limerick Lake Lodge and at Cedar Ridge Camp. If you stay two nights, you pay for the first night and the rally pays for the

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## NVIS

Peter Ayearst, VE3POA of Kingston (and a member of the Peel ARC) has sent out some details below regarding a Near Vertical Incidence Skywave test. For more information, see the link to the Peel ARC website <https://ve3xr.wordpress.com>

There will be an on air NVIS event to be held October 16th, 13:00 - 16:00hrs. To date the following clubs have expressed interest in participating: Hamilton, Peel, Niagara, Kitchener, Kingston, and York Region. Other clubs have been reached out to and we are now waiting confirmation of participation. It would be great if there was some interest from the Ottawa area and are able to join us in on the fun.

Bands of interest are 40, 60, and 80. Suggested frequencies for SSB are 3.700-750, 5.375, and 7.060-070. CW, 3.550, 5.3465, and 7.030.

This is more about experimentation and playing radio vs a competitive contest.

No restrictions on equipment or locations, just get on the air with what ever antenna one thinks will work well for NVIS communications. Individual, group, at home, or in the field stations are all encouraged. More the better and likely better chance of QSO's.

If you know of any other groups that may be interested, by all means please let them know. Hope to hear Ottawa on the air.

*Thanks to Bob Mackenzie, VA3RKM, for forwarding this information.*

*(Continued from page 5)*

second. Anyone staying three nights should first check with Ross re subsidy. To assist workers in the Registration process and in finding accommodations at the Pines we have Trish Groom waiting to assist you re accommodations and Greg McGrath re other Registration questions. If you have questions, one of us will be sure to reply. You can contact Trish directly at [accommodations@tallpinesrally.com](mailto:accommodations@tallpinesrally.com) or Greg at [greg.mcgrath@tallpinesrally.com](mailto:greg.mcgrath@tallpinesrally.com) In addition there are

many other volunteer perks including free Tall Pines merchandise and a free post-rally dinner.

With a super compact Route Plan and Schedule, we are able to squeeze two passes of recce for all stages into Friday, so we will need helpers to supervise that all day. Meanwhile we will be doing the usual final route preparation, so we will need just a few helpers on Thursday and lots of helpers on Friday. In addition Shakedown is scheduled on Friday evening. The rally runs all day Saturday as usual, finishing with the Awards Banquet on Saturday evening, at the Bancroft Fish & Game Club.

Rally Headquarters will be at the Dungannon Rec Centre on Hwy. 62 south. Almost all activities except the Banquet will take place there. Note also that Technical Inspection of the competitors' cars will take place at M & M Parts & Service (the big building behind M & M ESSO on Hwy 62 S) on Friday afternoon and evening. The official VOLUNTEERS' MEETING will be held at Rally HQ at 9 P.M. on Friday evening.

We also need lots of help on the WORK DAY on SATURDAY, OCTOBER 22. Please advise if you can attend then by e mailing Ross Wood directly at [ross@tallpinesrally.com](mailto:ross@tallpinesrally.com) Anyone who assists on the Work Day will receive a \$10 subsidy on the RallyCross on Sunday. Note – competitors are invited to assist on the Work Day. This not only offers them an opportunity to contribute to the event, but also affords a chance to preview the stages.

Note – we will again be using the RallySport Ontario electronic timing equipment. If you already have experience with the equipment and would like to work with it at the Pines, be sure to indicate specifically what you would like to do on your Registration form.

If you have any further questions or concerns, please feel free to contact me or Trish or Greg.

Ross Wood, Clerk of the Course [ross@tallpinesrally.com](mailto:ross@tallpinesrally.com)

Trish Groom & Greg McGrath, Assistants for Volunteer Registration & Recruitment



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October 2016

## OARC Portable Demo Day

The weather man predicted rain for our Portable Demo Day as usual. To make things even worse, the Solar experts warned us of poor HF radio conditions. But our fearless organizer and leader, Greg, VE3Y TZ, never even hinted at a possible cancellation of this event. For the record, the weather was beautiful, sunny and warm with a slight easterly breeze from 7AM to exactly noon when the event was scheduled to end. Then the rain came. What about the solar experts? Were there any HF bands in good shape? Well, as it turned out, the bands cooperated extremely well. We did most of our operating on 40, 30, 20 and 17m. These bands were wide open all morning. What a great time for us. We had the usual Scandinavian DX contest to play in with several QSO's into Sweden and Finland.

This year we added a 2 m Bunny Hunt (Barry, VE3NJK and Norm, VE3LC). This provided lots of fun for those who did not bring an HF rig. Many thanks to both Barry and Norm for adding this activity to our event.. They had to get up bright and early to set up the beacons well before 9 AM.

Twenty-seven of us met, one of the best attendance days for the event which is always partly radio and partly social. Liliana brought coffee and Margaret baked some scones and banana cake for the group.

So, a handful of us proceeded to the park around 9:00 AM after having breakfast at Kristy's to set up our radio stations.

When we arrived, the weather was warm and sunny. Of course, Mike, VE3FFK, and a few others were already there setting up their radios and antennas. Our Dipoles, verticals, rigs, batteries and all of the gear started being assembled. Barry and Norm had already hidden the 2m transmitters. What a great start. When Dave got his six band off-center fed antenna and radio set up (with much appreciated help from Barry(VE3NJK), John(VA3JYK) and others) he quickly noted that 40, 30 20 and 17m bands were wide open. This boded well for the gang.

The theme for this year's operation was definitely focussed on the traditional radio modes: CW, SSB and FM. Greg did not operate on AM this year which he did in 2014 as a great surprise to us all with his QSO into Alberta.

The rigs this year were a mix of QRP and QRO radios as usual. Several antennas appeared which included: a six band off-center fed dipole, a trapped dipole, a 20/17 metre vertical and some small verticals with limited radials.

Here are a few examples of what was going on:

Paul, VE3ICV worked OH2BAI and SM6NET in the Scandinavian Activity Contest on 20m CW, using his FT-817 with only 5 watts and a home-made mobile whip on the car. This

should be an inspiration for new Hams. You can have a lot of fun with a very modest rig. It is a good idea to learn CW as it has a big advantage over SSB for QRP/DX.

Greg(VE3Y TZ) worked one station in Greece (17m, SSB), and on 20 SSB as well as an Italian station, a Lithuanian and W6R (special event station promoting the highway Route 66). Al (VE3ZTU) worked his first HF contact using his own call. He was on SSB, 20 metres and it was a Lithuanian station.

Here is some information from Mike:

"I usually only make one or two QSOs during the demo day (demo hour?), since I'm a rag chewer. This time it was a 20 minute contact with KD9CK, Mike, in St. Charles IL. He was using a G5RV up 75ft, driven by a TS590 at 80W on 7.023MHz. Sigs were 579 with QSB, both ways. We talked about our ham histories, as usual, and about our feelings about bugs (the Morse kind), as he was using a Blue Racer from around 1966. (and using it pretty well, too) I had to wrap things up so I could get packed up and out of there before the rain hit. I was using the IC7200 at 75W, and the freshly trimmed up 80/40 dipole at my end."

Doug Tuill brought an interesting station which included a PRC-319 radio and a half wave 20 metre end fed antenna. The PRC-319 is a HF manpack transceiver designed by Mullard Electronic Laboratories in 1988. Read more about it (<http://www.g0ozs.org/clansman/files/g8yqn.pdf>) or contact Doug. One interesting feature about this 50W HF rig that it came with a fully automatic antenna tuner connected to the transceiver with coax up to 50m long.

Ian(VE3IGJ) brought along his very popular KX3 from Elecraft and connected it to a small 20m whip antenna. This is a great all purpose station for QRP operation.

Perhaps next year we can add a few digital modes to the mix. A good demonstration of Whisper would be of great interest to most of us. Maybe we can contact South Africa or Australia using very low power and a decent antenna.

Well, like all events, they gradually come to an end. In this case, it started to rain lightly around noon, our scheduled time to shut down. Our good friend Mike travels with his bicycle and got thoroughly drenched on the way home. However the event was a great success; we had excellent band conditions and a large turnout of club members and visitors. It was especially nice to meet and chat with Ann Henwood (Margaret's mother). I hope that we can get some pictures posted on the OARC Web page.

A special thanks to Greg for organizing this event and adding his usual cheer and optimism to our radio club. See you all at next year's event.

Vy 73,Dave, VE3KL



**2016-2017 Membership Application/Renewal**  
 Ottawa Amateur Radio Club Inc., Box 8873, Ottawa, Ontario K1G 3J2

- Single \$25 (\$20 after Feb 1, 2017)
- 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, 2016 to August 31, 2017.**

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 \$10.00 plus tax). Ordered badges will be available in February.

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

ORDER DETAILS - As to appear on badge:

First Name \_\_\_\_\_    Call Sign \_\_\_\_\_