

Ottawa Amateur Radio Club

# Groundwave

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

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February 2016

Don't forget to sign up for the Canadian Ski Marathon February 20 and 21.

For the February meeting a movie night is planned perhaps Part 1 of *The Secret War*.

[https://en.wikipedia.org/wiki/The\\_Secret\\_War\\_%28TV\\_series%29](https://en.wikipedia.org/wiki/The_Secret_War_%28TV_series%29)

See you at the meeting.

Ian Jeffrey, VE3IGJ  
Editor



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

**Next Meeting 7:30 pm, Wednesday, February 10th  
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.*

*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 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.

## January Minutes

January 13, 2016

1930 Meeting started by Glenn VE3XRA

### Guests

Christine from Innovation, Science and Economic Development (Formerly Industry Canada)

Guy George

VE3TXB Tim

VE3OXU Chris

Vince Blaga

### Reports

RAC Winter Contest (Dave VE3TLY)

-Saturday, December 19 at the Diefenbunker Museum

-9 OARC members plus 5 members of the Diefenbunker radio volunteer group

-Two stations: CW and Phone

-CW station operated with 100 watts, Phone station had the use of a linear amp

-12 hours on the Saturday: 370,000 points

-40,000 more points than we have ever achieved in the past

-79 multipliers (previous best was 65)

-Multipliers: VE3FFK worked VO1MP (extra mult) in the last minute of the contest

### Club Project (Wayne VE3CZO)

Two projects: Battery Keeper & Battery Keeper Jr  
Battery Keeper

-Very low current consumption (~7.5uA)

-Reverse polarity protection

-Powered by battery itself, while monitoring battery, to avoid drawing power from mains

-Uses line voltage for charging mode only

-One LED

-Cost is about \$45 (depending on \$ exchange);

Four sessions

Battery Keeper Jr

-Simple trickle charger that operates off a 24V power supply

-Magnitude of trickle current is hard wired during construction

-Won't charge a battery from a depleted state.

-First Battery Keeper Junior is \$13, additional units are \$7 each; one session

## Dates to Remember

### 2016

Feb. 20, 21 Canada Ski Marathon

Apr. 13 Homebrew Night

Jun. 8 OARC AGM and Elections

Jun. 25, 26 Field Day

Jul. 1 RAC Canada Day Contest

Sep. 10 Hamfest

Sep. 30 Membership Renewals Due

Nov. 1 Joe Norton Award Subm. Due

Dec. ?? RAC Winter Contest

Both chargers will work with lead-acid and NiMH batteries

Project will include basic soldering instruction. Both chargers use surface mount devices.

Info: Standard vehicle battery chargers consume about 15W on a constant basis, thus costing about \$10 per year if constantly plugged in.

Project sign-up sheet was passed around.

There's a possibility that Wayne will not be able to go ahead with the project due to personal reasons.

In that case, Dave VE3KL has a backup plan: Antenna Modelling / Construction for 70cm; cost will be about \$20

-Using 4nec2 to simulate a 70cm dipole, then change to the 60m band and add loading coils

-After designing a 70cm Yagi, build the beam antenna, test it, and compare with design specifications

-Learn how to tune or change the resonant frequency of the antenna in one/two steps and refine the model if necessary

-Check out an Android/iTune App

-Five or six sessions

### Upcoming Events

CSM (Harold VA3UNK)

-50th anniversary, 43rd year for ham support

-Being skied in reverse this year (Buckingham to Lachute)

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## mk's Word

Its a slow time in the calendar around here, with a little time before the next CW contest, and weeks before the Canadian Ski Marathon. With all the time available, I started wondering (a dangerous thing as you all know). Just what exactly constitutes "Public Service"? How much of what we do is actually for the public? In the past year, I volunteered to do radio for the CSM, the CN Cycle for CHEO, the Lanark Highlands Forest Rally, the Rideau Lakes Cycle tour, Lap the Gats for Parkinsons, the MS Bike Tour, and the Rally of the Tall Pines. Of these seven events, it could be argued that the CSM, RLCT, and two car rallies aren't really public service, but just support for a bunch of kids of all ages out having fun. It might be participant service, but not public service. Participation of hams certainly makes it safer and more convenient for those in the event, but they all know the risks when they enter. Our participation serves as good practice in handling unexpected situations and tactical traffic handling. Its great practice meeting the challenge of packing up and operating from feeding stations, checkpoints, someone else's vehicle or building. But is it public service? What do you think?

In any case, give UNK a shout about helping out with the CSM, there is always room for one more. This year I'm going to be at the net control station, rather than my usual gig as admin 2 radio op. It has been a long time since I felt like a newbie at the CSM, so wish me luck.

For me, the CSM has been the marker for the middle of winter, a season I endure, rather than enjoy. Although this has been a benign winter so far, I still have a kid's impatience for the bike riding, field playing, shirt sleeves weather to come. I think I will make a New Year's resolution (even if it is a Chinese New Year's one) to get out on the bike more often once the snow goes away, and not be so fussy about the weather before heading out. There may even be a radio involved in the process somewhere. So keep bugging me on my progress, while I tip my cap to guys like BIT who have already been on two wheels in 2016. 73, mk, VE3FFK

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- Feb 20 & 21
- 2m repeaters
- Most ham volunteers are at checkpoints
- About 600 messages per day get passed on the net
- Need minimum of 30 hams per day
  - checkpoints
  - shadowing
  - safety vans
  - safety skiers
- a great training opportunity
- Mike VE3FFK pointed out that rookies don't get assigned alone, they will be assigned with someone who's done it before.
- hams are the first to arrive at a checkpoint and the last to leave
- we expect over 2000 skiers this year
- For more information: [www.radio-1.ca](http://www.radio-1.ca) or email Harold at [va3unk@rac.ca](mailto:va3unk@rac.ca)

### Haves & Wants

Janice: Lots of name badges have been printed and are available. Replacement badges can be made for about \$11.  
Left over juice from December's meeting is available on the table at the back.  
OARC (& RAC) memberships are free for the first year to new hams

### Interesting Contacts

Bryan: Australia contacts (long path) VK3UNI on 20m on a net he coordinates  
Mike VE3FFK: 160m (Stew Perry) contest has now worked a total of eight US states on 160m.

### Show & Tell

Glenn VE3XRA spoke about the Broadband Hamnet on 2.4GHz using consumer equipment designed for WiFi.  
Dave VE3KMV: 2.4 and 5.8GHz Broadband Hamnet gear

- Ubiquiti WRT54 on standard WiFi channels
- Ubiquiti Nanostation Loco nodes that can work on ham frequencies available used for about \$25.
- Streaming audio, video
- IP (SIP) phones; demonstrated connecting a Ubiquiti node directly to an IP phone

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-Network has servers running on Raspberry PI's

-Clayton VE3IRR showed a network diagram of the current Ottawa network  
 -Peter VE3XEM has been working on connecting from Orleans, and is looking for interested hams between Orleans and the YMCA in downtown Ottawa

Wayne VE3CZO

-Demonstrated vices for helping keep SMD's in place while soldering.  
 Available at Lowes (\$7) and Busy Bee Machine Tools (across from Princess Auto) (called a machinist's 3" vice)

Upcoming Contests

Mike VE3FFK: CQ 160 CW, ARRL January VHF Sweepstakes, both happening last weekend of January

Presentation (Bryan VE3QN)

Regulating Radio: Who, Why, Where, When, How WRC15 has already taken place so presentation includes a summary of the World Radio Conference held in November

Thanked Christine for attending our meeting  
 -Christine has worked for Industry Canada for the past 10 years

-Chairperson of Working Party 5A, leads the IC team that RAC (and Bryan) associates with at WRC's.

-Twitter: #RAC at WRC15, @ve3qn  
 -Glenn preented a book (200m and Down) and a "little something to go with the book" to Bryan VE3QN on behalf of OARC and RAC.

Glenn closed the meeting at about 2142.

Minutes taken by VA3BIT

## Brain Teaser

From last month:

*You are locked in a room that contains no metal of any sort (not even on your person) except for two identical metal bars. One bar is a magnet, the other is not magnetized. You can tell which is the magnet by suspending each by a thread tied around its center and observing which bar tends to point north. Is there a simpler way?*

Congratulations to Brice Wightman.

Touch the end of one bar (Bar A) to the middle of the other bar (Bar B). If it sticks, Bar A is the magnet. If not, Bar B is the magnet.

## Humour

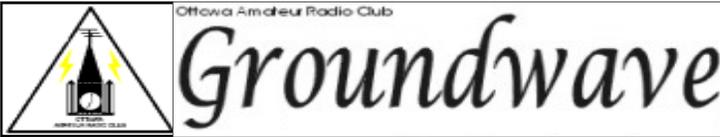
**If** lightning hits the caboose of a 3 km long train, how long does it take to reach the engine?

It depends on how good the conductor is.

**Two** antennas met on a roof, fell in love, and got married. The ceremony wasn't much but the reception was excellent.

**Normal** people believe that if it ain't broke, don't fix it. Engineers believe that if it ain't broke, it doesn't have enough features yet.

**Two** engineers were standing at the base of a flagpole, looking at its top. A woman walked by and asked what they were doing. "We're supposed to find the height of this flagpole," said Sven, "but we don't have a ladder." The woman took a wrench from her purse, loosened a couple of bolts, and laid the pole down on the ground. Then she took a tape measure from her pocketbook, took a measurement, announced, "Twenty one feet, six inches," and walked away. One engineer shook his head and aughed, "A lot of good that does us. We ask for the height and she gives us the length!"



## North American “RST” Stations on the Air Activity Set for Feb./Mar.

The “RST” stations will take to the airwaves in February and March from several locations in Alaska, Yukon Territory, Northwest Territories, and Nunavut, with members of the North Country DX Association (NCDXA) at the helm. All call signs will have “RST” suffixes: KL7RST, VY1RST, VE8RST, and VY0RST. The idea is to further promote Amateur Radio in that part of the world. The joint KL7, VY1, VE8, and VY0 is a first.

The event gets under way on February 15 at 0001 UTC, and it continues through March 27 at 2359 UTC. Exchange signal report and state/province. (The NCDXA RST stations will send town or city).

All modes on 160 through 6 meters will be used, and SWLs are welcome to participate. The object is to work or log (SWL) as many NCDXA “RST” stations as you can from their different locations. Work/log each “RST” station only once per QTH/ band and mode. Cross-band, cross-mode, or remote operating is permitted.

As wildcards, portable “RST” stations will also participate and are worth 3 points each/mode and band, but they must be one of the four “RST” stations. The portable stations must be outside their own prefix area to count — for example, KL7RST/VY1, but not KL7RST/KL7.

Plans call for having stations on the air from Whitehorse, Yellowknife, Anchorage, Fairbanks, Rankin Inlet, a Canadian research station near the North Pole on Ellesmere Island, a diamond mine in Northwest Territories, an Alaskan bush school and many other communities, possibly including an Alaskan glacier or two.

QSL manager is K7ICE. KL7YK is LotW administrator for Alaska, VYOCF for Nunavut, VY1MB for Yukon, and VE8MN for the Northwest Territories. Optional full color certificates are available via e-mail for working/hearing any of the “RST” stations.

## Rallye Perce Neige

### Urgent call for experienced workers!

It is a great event with a long tradition of amazing winter stages. They treat their volunteers very well.

With just a few weeks to go, we are badly in need of just about every kind of worker. We are searching in particular for experienced time control marshals. As well we are in need of people to work security, and tech inspection.

Rallye Perce Neige does provide subsidized accommodations for \$25, for the weekend. We will also provide your lunch on Saturday. Saturday night there is a spaghetti supper once your day is done, at no cost. There will be a rock band playing Saturday night as well.

Your help is truly appreciated. Without you, there is no rally. Please fill out the form below and return it to [rallyaddicts@gmail.com](mailto:rallyaddicts@gmail.com).

Regards,  
Jenn Murray, Chief Control Marshal  
\*\*\*\*\*

Name:  
Email:  
Address:  
City:  
Province:  
Postal Code:  
Phone:  
Cellphone:

Club affiliation:  
HAM Radio License:

\*\*Emergency Information  
Emergency Contact Person:  
Emergency Contact Relationship:  
Emergency Contact Number(s):  
Health Conditions:

\*\*\*Worker Experience  
Previous Perce Neige Experience:  
Previous Rally Experience:  
Medical Certification:

\*\*\*\*Registration Information  
Requested Tasks:  
Vehicle make and model:  
Accommodation Required:  
Estimated Day and Time of Arrival:  
Availability Restrictions:



**2015-2016 Membership Application/Renewal**  
Ottawa Amateur Radio Club Inc., Box 8873, Ottawa, Ontario K1G 3J2

- Single \$25 (\$20 after Feb 1, 2016)
- 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, 2015 to August 31, 2016.**

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 January.

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

ORDER DETAILS - As to appear on badge:

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