



Ottawa Amateur Radio Club

Groundwave

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Check out our Web Page: www.oarc.net

March 2007

Well, despite the major course changes this year due to the lack of snow, the Canadian Ski Marathon went off without any hitches. I believe a good time was had by all. Mike has more details in his column.

The Project assembly meeting took place on Saturday, February 24. From Greg's pictures, it looks like a good turnout. I hope those of you who participated had fun.

I see they're planning to do SuitSat-2. I hope it works out better than SuitSat-1 or you'll hear me ranting again!

The March meeting presentation is by Ray Pelletier, Institute for National Measurement Standards, NRC. His talk will be on the history an operation of the CHU Station Shortwave Service.

See you at the meeting.

Ian Jeffrey, VE3IGJ



**MARCH MEETING 7:30 pm, March 14th
in the Honeywell Room 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 "ve3igi@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 (2nd floor of the Old Teacher's College) 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.

The CAPITAL CITY FM Net meets every Monday at 20:00 hours on the club repeater **VE2CRA** 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, call Ed at 613-738 8924 or e-mail him at va3es@rac.ca. Also available on the web: <http://www.igs.net/~swap>.

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 Thursday evening at 20:00 hours on repeater **VE3TWO 147.300+**. 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 Ottawa Amateur Radio Club bulletin "Groundwave" is published and distributed to club members by mail. 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 output tone
(UHF) 443.300/448.300

VE3TVA Amateur Fast Scan Television Repeater
Video/audio beacon & input 439.25 MHz (audio sub. 443.75)
Video/Audio output 914 MHz (FM)

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.

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.



February Minutes

The February 14 meeting was called to order at 19:35, a few minutes late due to the snowstorm outside.

Guests were:

- John Cook (no call)
- Rick Bandla, VE3CVG
- Tom Zinck, VA3NFA
- James Hall, VE3MYZ/

Corrections to January minutes:

It seems that free BSD is not like Linux, Linux is like free BSD.

New business:

We need a person to chair (be) the nominating committee for the 2007-08 executive. Someone has to convince people to volunteer for the club executive.

VA3DB has CDs of the HamFreeSBIE software demonstrated at the January meeting. <http://blogs.ittoolbox.com/unix/bsd/archives/ham-radio-on-freebsd-14564>

VE3FFK noted the project parts are in. People can collect them on payment of the balance. The project build location and time were decided.

OARC Name badges were distributed to those who hadn't picked them up in January.

VE3CVG, assisted by VA3NFA presented a talk on the DSTAR system, including the capabilities, equipment availability and the progress of the Ottawa Amateur Radio Digital Group in getting a DSTAR repeater system running in Ottawa. It will not be re stated here, but see <http://www.wcarc.on.ca/oardg> . Much of the needed hardware has been purchased with a New Horizons grant. More amateurs, especially "seniors" (over 50) to share the management or other parts of the project work would be welcome. Their largest current need seems to be for a site that has good access, power, phone and internet connectivity. Antenna height would be nice to have also. They are also looking for someone to write an article for TCA, as well as some-

Dates to Remember

2007

- Feb. 10,11 Canada Ski Marathon
- Apr. 11 Homebrew Night
- Jun. 13 OARC AGM and Elections
- Jun. 23,24 Field Day
- Jul. 1 RAC Canada Day Contest
- Sep. 1 OARC Hamfest and RAC Forum
- Sep. 30 Membership Renewal Deadline
- Nov. 1 Joe Norton Award Subm. Due
- Dec. 29 RAC Winter Contest

one to do ongoing progress reports to RAC and TCA.

Harold, VA3UNK presented a well illustrated synopsis of the 2007 Canadian Ski Marathon. Despite the large changes from a "routine" marathon, the radio end of things went very well with over 50 hams assisting about 2000 skiers. Early morning conditions were -20s and windy.

Haves and wants:

John Cook stated that he has a quantity of tubes to dispose of. VE3CZO offered to convey them to the vintage radio club tube bank. One person wanted summer to arrive, and another wanted a donation of a DSTAR radio.

The 50-50 draw, for \$15.50, was won by Ernie, VA3OEB.

Meeting adjourned at 21:05

-mk VE3FFK



mk's Words

Another Ski Marathon is in the books. Number 21 for me, but it's still fun and still challenging. This year, a lack of snow at decision time made for some big changes to the trail, with skiers traveling in big loops and passing each other in opposite directions. Checkpoints in untested locations were the rule rather than the exception. We expected all sorts of confusion and lost skiers. We expected communications difficulties. We expected checkpoint personnel to get lost, or set up in the wrong spots. Amazingly, none of this happened. We didn't even lose any luggage, let alone skiers. We even managed to work our routine "magic" where a skier with an inbound message was found on the trail. I got to see a mom and kid get re-united at a checkpoint after being separated on the trail. It is rare to see the results of our work so directly, but it is part of what makes public service radio fun to do.

Unrelated to the marathon, except by temperature was another example of what happens when you ignore the rule of "measure twice, cut once". I decided it was time to check the measurement of the NVIS dipole for my kitchen station. It resonated at 7.55 MHz, so I figured I should cut a foot or so off each end. I proceeded to do so, and measured the resonant point again.. you are ahead of me on this, aren't you? Yup, I should have lengthened instead of shortened, but it was cold out and I was in a hurry, so instead of just unwrapping a few feet of overlap at the ends, I now have to bring out the torch and add a chunk to the darned thing. It remains to be seen whether I can get up enough enthusiasm to re-work it before spring returns. Word to the wise; get back inside before you do your thinking. Your brain works better when it's warm - at least mine does.

Another session at Colledgeville, another CQ 160 contest and another EMRG meeting round out the past month.

Colledgeville was fairly routine this month, except that we had some new volunteers. We can always use more, and this year past year seems to have been a good one

that way. Give me a holler if you want in on the fun, or just want more info.

The VE2OJ crew did the usual CQ 160 contest effort again. Conditions were good but not spectacular. We could have used a few more watts, but at least the antenna stayed in the sky this time. Good conditions or bad, getting called by Europe on 160 is still a thrill.

Another EMRG meeting happened since the last Groundwave. Many of you who are reading this were there, so I'll skip the details, but it seems to me that there was a lot more of "...has been completed and is ready to use" than "... is in the works, planned, coming soon. That has to be good news. Stay tuned to emrg.ca for the details.

Now, only a month or so 'till spring. Only a month or so after that 'till real spring.

73, keep building stuff.

mk VE3FFK

WSWSS to Disband

A sad sign of the times. The Western States Weak Signal Society will cease to exist as of February 1. Amateur Radio Newsline's Jeff Reinhardt, AA6JR, has more:

Word of the demise of the Western States Weak Signal Society comes in the re-posting to the VHF Reflector of a note received by Jim Foster, NN7K, from the society's treasurer Paul Hammer, A6CHJ. In it, Hammer says that he is the only functioning officer remaining. He says that requests for members to fill the other vacant positions did not yield enough volunteers.

- 73 Diane VA3DB

RAC Director's Report

1 February 2007

by Dave Goodwin VE3AAQ
Director, Ontario North/East
Radio Amateurs of Canada

As of 1 January, I am now your representative on the Board of Directors of RAC.

This is the first of what I intend to be monthly reports to Amateur Radio Clubs in Northern and Eastern Ontario. This will be one means by which I can keep RAC members informed of my activities on your behalf. Please consider this an invitation to contact me with your concerns and comments about RAC and Amateur Radio.

Just before I assumed office, I spoke with Bill Unger VE3XT of Thunder Bay. Bill graciously agreed to serve as an Assistant Director. Bill is well-known and well-regarded, especially among Amateurs in Northern and North-western Ontario, and brings innumerable strengths and experience to RAC.

On 16 January, I participated in the monthly RAC Board meeting by telephone conference call. The single most important matter that came up was a report from a committee led by RAC Mid- West Director Bj Madsen VE5FX recommending a significant restructuring of Amateur Radio licensing in Canada. The key recommendation was to create a new Foundation Licence as an entryway into Amateur Radio. Many of you may have worked stations in the UK signing M3, MM3, MW3 or MI3 call signs. These are new Amateurs licenced under a process that became a model for the committee's recommendation. The full details of this proposal should appear on the RAC website in February.

I agree with the proposal, although my mind is still open to other opinions. The key things I find attractive are:

- there is a clear requirement for any new Amateur to have a mentor, someone who will help guide the new

- ham's first steps in Amateur Radio
- a practical test will require the prospective Amateur to actually demonstrate the basics of connecting up equipment and antennas
- just to take the exam, a prospective Amateur must have made a certain minimum number of contacts on both HF and VHF, made under the guidance of a licensed Amateur
- licences expire with no renewals after three years. To upgrade to a higher, permanent class of licence, a Foundation licensee must produce a log showing at least 250 contacts.
- getting an Amateur licence will require an investment of time and energy not only by the new Amateur, but by established Amateurs as well.

The RAC Board have asked that committee for recommendations on its implementation. The Board have not yet officially adopted the report as RAC policy, and we have not yet recommended it to Industry Canada. There's still plenty of time for you to comment, and I want to hear from you.



RAC HF Band Planning Committee

Sadly, this committee went very quiet at a critical time: our former committee chair simply failed to communicate with the members over a prolonged period. Consequently, when the major changes in US sub-band allocations on 80, 40 and 15 metres, RAC was caught flat-footed. The committee has been re-ignited by our new chair, Bob Nash VE3KZ of Milton ON. Bob is supported by a group of dedicated HF operators from coast to coast, including Ontario representative John Connor VE3TG of Ottawa. You can contact either Bob or John with your suggestions or concerns using their @rac.ca or callbook addresses.

The matter of interference to Canadian 80m SSB nets was raised by RAC President Earle Smith VE6NM, who was a guest at the ARRL's annual board meeting in January. There have been clear

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cases of deliberate interference to some Canadian nets by a very few US Amateurs. RAC anticipates ARRL will take effective action on these matters very shortly.

I'd like to remind one and all that no net has any contracted right to any particular frequency at any particular time. The first person on any particular frequency at any particular moment is the only one with any priority. If a traditional net frequency is occupied by someone else at net time, you may ask the occupant to move, but if they decline, it is responsibility of the net controller to find another frequency for that session of the net. Politeness and courtesy works both ways.

RAC Staff Changes

In November, RAC lost one of our greatest strengths. Debbie Norman VA3RGM, RAC's long-serving General Manager, passed away from cancer. Debbie's corporate knowledge can never be replaced. Amateur Radio, and RAC in particular, were extremely fortunate to have such a skilled, agreeable person handling the business side of keeping RAC going.

We are also losing the services of Guy Charron VA3FZA, who has retired to pursue his many other interests. Guy was a long-time volunteer at RAC HQ, then a part-time employee, and worked virtually full-time at the RAC office over the last several months. He has been a tremendous source of strength.

We have a new Treasurer. Dave Parks, VE3AV, of Ottawa, a former RAC Assistant Director, has taken on this critical volunteer job at a key moment in our transition. It takes money and good money management skills to keep an organisation like RAC working, and Dave bring a great deal of relevant professional experience to the task.

For now, the RAC office has some temporary assistance and the RAC Executive is working hard to come up with new ways to operate our Headquarters. We will always depend on volunteers for many things, but permanent, well-trained, professional staff are key to

RAC's future success.

On the volunteer front, RAC is looking to fill a new executive position: Vice-President Public Relations (VPPR).

Appeal for New Members

If you are a RAC member, thank you so much. Your membership fees do a great deal to sustain RAC in its critical ongoing mission to protect, defend and expand Amateur Radio. You also support RAC in providing services to Amateurs across Canada, such as advocacy with Industry Canada, bi-monthly issues of TCA Magazine and the QSL Bureau system, to name but a few.

If you are not a RAC member, please join. We need your help. I have been a ham for over thirty years, since I was a teenager, and I intend to keep at it at least as long. I see RAC membership as the best insurance that I can continue to enjoy my hobby forever more. I think \$52.95, including GST, it is a bargain to get a TCA subscription, all those essential RAC membership services and a long-term future for this great hobby.

In This Region

I will try to get out to several clubs in our region as I can, but realistically, I'm probably not going to get much beyond the Ottawa-Kingston area, due to costs and real-life commitments (I'm still a wage slave, you see). But I do want to hear from you, both members and non-members of RAC. Please contact me by phone, mail, or e-mail.

73,

Dave Goodwin VE3AAQ
PO Box 27084
Ottawa ON K1J 9L9
VE3AAQ@rac.ca





Brainteaser

This month's puzzle:

Who's on First?

Allow me to bring back Socrates and the slave boy for a little exercise in probability theory. They are arguing about sports: In a best-of-seven tournament (such as the baseball World Series), what is the probability that the contest will be decided in a four-game sweep? Assume that the teams are evenly matched, so that each team has a 50-50 chance of winning any single game.

Socrates: In a best-of-seven series, how many ways can a team score a clean sweep?

Boy: Just one way. You've got to win four in a row, with no losses.

Socrates: And how many ways could we form a five-game series, with four wins and a single loss?

Boy: Well, you could lose either the first, the second, the third or the fourth game, and win all the rest.

Socrates: And what about losing the fifth game?

Boy: If you win the first four, you don't play a fifth.

Socrates: So to build a five-game series, we take a four-game series and insert an additional loss at each position except the last, is that right?

Boy: I guess.

Socrates: Therefore we can create a six-game tournament by taking each of the five-game series and inserting an additional loss in each of five positions. Thus we have 4×5 , or 20, six-game series.

Boy: If you say so.

Socrates: Then each of the 20 six-game series can be expanded in six different ways to make a seven-game series, and so there are 120 seven-game variations. Adding it all up, we have $1+4+20+120$ cases, for a total of 145. Exactly one of these cases is a clean sweep, and so the probability is $1/145$.

At this point, the boy, who knows something about baseball, points out that of 98 best-of-seven World Series, 19 have been won in a clean sweep, suggesting an empirical probability nearer to $1/5$ than to $1/145$. Socrates is not swayed by this fact.

Socrates: Do not be distracted by mere appearances; here we study *ideal* baseball. Let me demonstrate by another method.

Boy: Go for it.

Socrates: Suppose for the moment that the teams always play a full schedule of seven games. Since each game can have either of two outcomes, there are 2^7 , or 128 possible sequences. Now go through the list of 128 patterns and remove all of those in which play continues after a team has already achieved four victories. I find that there are 70 distinct patterns remaining. Two of those patterns are clean sweeps – one for each team – and so the probability is $1/35$.

Boy: You're getting warmer. Try this: Winning four games in a row has a probability of $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$, or $1/16$. Either team can have the clean sweep, so the combined probability is $1/16 + 1/16 = 1/8$.

Deductive logic has led us to three different answers, at least two of which must be wrong. Any suggestions?

Last month's puzzle:

You have just found yourself on the magical island of Consistency on which live three tribes: Whites, Reds, and Blues. Now, it turns out that Whites always tell the truth, Reds always lie, and Blues always alternate between a lie and the truth, but one never knows with which they start. These tribes have no distinguishing physical characteristics, and after walking a ways you encounter three persons you know (somehow) are each from a different tribe. The names of the three persons are

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FCC Drops Code

Mr. White, Ms. Red, and Mrs. Blue. You then have a conversation with Mrs. Blue:

“To which tribe does Mr. White belong?”

“White, of course.”

“And Ms. Red?”

“Red!”

“And then you must be Blue?”

“Right you are!”

Is Ms. Red really a Red? If not, what is she?

Answer:

Case 1: Mrs. Blue is really from the Blue tribe and her statements are FTF. If this is the case, then statement three is False and Mrs. Blue is not of the Blue tribe, contrary to our assumption. Therefore, this case must be wrong.

Case 2: Mrs. Blue is really from the Blue tribe and her statements are TFT. If this is the case, then according to the False statement, Ms. Red isn't from the Red tribe. But she can't be from the White or Blue tribes either because the True statements already assign those tribes to the other two people. That leaves no tribe left for her to be, which is a contradiction (we were told that each person is from a different tribe). So this case must also be wrong.

Case 3: Mrs. Blue is really from the White tribe. If this is the case, then everything that she says is True, including the last statement where she says that she is from the Blue tribe. But she can't be from both the Blue AND White tribes! This case must be wrong.

Case 4: Mrs. Blue is really from the Red tribe. If this is the case, then everything that she says is False. This means that Mr. White, who apparently isn't from the White tribe, must be from the Blue tribe. It would also mean that Ms. Red, who apparently isn't from the Red tribe, must be from the remaining White tribe. Since this is the only case that doesn't have any contradictions, it must be the right case, and we conclude that Ms. Red is from the White tribe.

NEWINGTON, CT, Feb 23, 2007

A new Amateur Radio Service regime now is in place. The requirement to demonstrate Morse code proficiency to gain HF privileges officially disappeared from the FCC's Part 97 rules today at 12:01 AM Eastern Time. At the same time, some 200,000 Technician licensees without Morse code exam credit acquired HF privileges equivalent to those available to Novice licensees. The League is marking the occasion with a W1AW special event aimed at welcoming newcomers to the HF bands. The "[W1AW HF Open House](#)" has included exam sessions under both old and new rules. ARRL Chief Operating Officer Harold Kramer, WJ1B, points to the still-growing number of ARRL Volunteer Examiner Coordinator (ARRL VEC) test sessions now on the schedule across the US as evidence that the rule changes will provide a shot in the arm to Amateur Radio.

A Morse code requirement for Amateur Radio licensing has been on the books in the US in one form or another since 1912, and CW continues to be a favorite mode, especially in the contesting, DXing and QRP communities. The transition to a Morse code-free licensing system in the US has not been without controversy, however, and the issue has been a divisive one within the Amateur Radio community since the FCC eliminated the 13 and 20 WPM Morse code exam elements in 2000.

More than two dozen countries around the globe already have dropped their Morse code licensing requirements in the wake of World Radiocommunication Conference 2003. WRC-03 delegates agreed to let individual national administrations decide whether or not they wanted to retain a Morse code test for HF access. Cyprus appears to be the latest country to have eliminated its Morse code requirement. Others already on the list include the United Kingdom/Great Britain, Canada, and Germany.

From the ARRL Web Page

MEMBERSHIP APPLICATION / RENEWAL

Ottawa Amateur Radio Club, Inc.

Box 8873 Ottawa, Ontario K1G 3J2

- Renewal New New Ham (FREE if licensed in current membership year)
 Single (\$25, \$20 after Feb. 1) Family (\$30) Junior (\$15)
 Emailed PDF Copy Mailed Copy *Add \$5.00 for mailed copy of Groundwave.*

(Please note: membership year is September 1 to August 31.)

Family Name: _____ First Name/Initials: _____

Address: _____

City: _____ Prov: _____ Postal Code: _____

Home Phone: _____ Work Phone: _____ Ext _____

E-mail address: _____ @ _____ (For Groundwave mailing)

Callsign(s): | _____ | | _____ | | _____ | Fax: _____

Qualifications: Basic Advanced Grandfathered

Year Licenced: _____

Other Family Members

Name: _____ Callsign(s): | _____ | | _____ | | _____ |

Qualifications: Basic Advanced Grandfathered

Year Licenced: _____

Name: _____ Callsign(s): | _____ | | _____ | | _____ |

Qualifications: Basic Advanced Grandfathered

Year Licenced: _____

Name: _____ Callsign(s): | _____ | | _____ | | _____ |

Qualifications: Basic Advanced Grandfathered

Year Licenced: _____

Interests: _____

Comments/Suggestions: _____



Above: Two happy CSM volunteers: Mike Kelly, VE3FFK and Ian Jeffrey, VE3IGJ.

Below from left to right: Dave Conn, VE3KL, Janice Neelands, VA3PAX, Ernie Brown, VA3OEB, and Mike Kelly, VE3FFK at the kit building session on February 24. Thanks go to Mike Kelly for the idea and the organization. Photos courtesy Greg Danylchenko, VE3Y TZ.

