



Ottawa Amateur Radio Club

Groundwave

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

CLUB EXECUTIVE

President

Diane Bruce VA3DB
(H) 225-9920
va3db@rac.ca

Past President

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

Vice-President

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

Secretary

Richard Hagemeyer, VE3UNW
(H) 225-5310
ve3unw@rac.ca

Treasurer

Janice Neelands VA3PAX
(H) 236-9291
va3pax@rac.ca

Directors

Brian Campbell, VE3ZRK
(H) 737-3933
ve3zrk@rogers.com

Ernie Brown, VA3OEB
(H) 225-7798
va3oeb@rac.ca

Wayne Getchell, VE3CZO
(H) 225-7989
Getch@gamma.ca

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

Harrie Jones, VE3HYS
(H) 739-9365
hjones@chumottawa.com

Check out our Web Page: www.oarc.net

October 2005

Did you ever play Trivial Pursuit? How about the Amateur Radio version of Trivial Pursuit? At the December meeting, we'll divide into teams and compete to answer challenging questions about amateur radio. Questions will be developed and delivered out loud by our venerable club examiners, Richard Hagemeyer and Mike Kelly. Teams will then put their heads together to come up with the answer. Don't let your team down--start studying now!

The October OARC presentation is entitled "Underwater ELF Communication" (or something like that) by Ian Jeffrey. I'm still working on the title never mind the talk!

Don't forget to apply for the Joe Norton Award if you are eligible.

Ian Jeffrey, VE3IGJ



OCTOBER MEETING 7:30 pm, October 12th in the Honeywell room at Ottawa City Hall

In This Issue....

Club Information	2	Field Day Report	7
September Meeting Minutes	3	Question Bank Corner	8
Dates to Remember	3	OARC Membership Renewal	9
Mk's Words	5		
Hamfest Report	6		
Joe Norton Award	6		

Membership

Ernie Brown, VA3OEB
(H) 225-7798
va3oeb@rac.ca

Groundwave Editor

Ian Jeffrey VE3IGJ
(H) 837-7393
ve3igi@rac.ca

Delegated Examiner

Mike Kelly, VE3FFK
ve3ffk@rac.ca

Coffee Guy

Brian Campbell, VE3ZRK
(H) 737-3933
ve3zrk@rogers.com

Historian

George Roach, VE3BNO
(H) 234-0885
(Fax) 567-2372
ve3bno@rac.ca

Webmaster

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

IRLP Manager

Cary Honeywell, VE3EV
(H) 590-9873
ve3ev@rac.ca

Repeater

Harrie Jones
(H) 739-9365
Hjones@chumottawa.com



Ottawa Amateur Radio Club

Groundwave

October 2005

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 VE3TEL, **147.03** 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 only those of the author.

Voice (VHF) 146.94/146.34 100Hz output tone
(UHF) 443.300/448.300

VE3ATV 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 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.



Dates to Remember

Minutes

The **OARC monthly meeting** was held at Sept 14th, 2005 at Ottawa City Hall, Ottawa, ON and was called to order at 19:30 by President Diane, VA3DB. About 30 were present.

1. Richard, VE3UNW handed out the **new club QSL card** prior to the meeting start.
2. Diane, VA3DB called for **visitors** and offered them **free coffee**:
 - a. **Kester Trim** is interested in becoming licensed. He works for the Salvation Army and has recently transferred to Ottawa.
 - b. The next visitor was sent out of the room to get his own chair. No name was mentioned (**Secretary's opinion**: I think we need to work on greeting people).
3. Diane, VA3DB held up a **lost enamel tin cup** which was left at the Hamfest.
4. There were no corrections offered to the published **June minutes** and they were deemed ok.
5. Diane, VA3DB **thanked Ian, VE3IGJ** for his work as previous secretary and Groundwave editor. She offered the thanks of the club and support for his continuing work as editor. A round of applause was heard far and wide.
6. The executive wishes to bring back a tradition of asking members at the monthly meeting for "**Have's & Want's**". Since we haven't done this in a while, we would hold tonight's version just before the break.
7. **Joe Norton Award**: A call for Joe Norton submissions was made. All members are asked to encourage those eligible hams to make a submission. Martin, VA3SIE handed his submission over. We now have two for this year. Additional information is available in the Groundwave.
8. **Amateur Television Presentation**: Dave,

2005

- September 3 OARC Hamfest and RAC Forum
- September 30 Membership Renewal Deadline
- November 9 Joe Norton Award Submissions Due
- December 17 RAC Winter Contest

2006

- February 11,12 Canada Ski Marathon
- April 12 Homebrew Night
- June 14 OARC AGM and Elections
- June 24,25 Field Day
- July 1 RAC Canada Day Contest

VE3TLY, introduced Wayne Getchell, VE3CZO. Wayne loves VHF/UHF and has been into ATV most recently. He has been a member of the OARC since the NRC days. At this point Brenda Butler claimed her tin cup, but graciously filled it with water for Wayne. Wayne offered to make his slides available on the club site. A few notes are offered here.

- a. The local ATV repeater is VE3TVA
 - i. Outputs: 439.25 MHz AM VSB and 914 MHz FM
 - ii. Input: 1.2 GHz
- b. The range is about 30-50 Km from CJOH on Merivale Road near Baseline
- c. When not in use, the repeater beacons the NASA channel. If it is not doing this, Wayne would appreciate an email or phone call.
- d. You need a minimum of a 12 dBi broadband antenna with a low SWR. Located above the treetops is better. A good downconverter helps too.
- e. A little bit of interference can cause you some grief. There is some packet activity in the middle of the 440 output. There is

(Continued on page 4)



(Continued from page 3)

also cellular phone activity from 869-894 and pagers are located in the 932-950 segment. These will affect you more or less depending on your location.

- f. Depending on your situation, a pre-amp might be better than low-loss cable. Front end overload could be a problem if you are near sources of interference.
 - g. A few decent antennas are available from commercial sources. Homebrewing an antenna is also a good choice; in fact there are way too many choices, making selecting a design daunting.
 - h. Wayne showed a number of slides detailing construction and performance measurements.
 - i. Wayne has “extra” material at good prices for those who are serious about building antennas.
 - j. A satellite receiver is a good choice if it has a 70 MHz input. Wayne has a few “extra” of these as well, but only for serious folks.
 - k. He had lots of slides detailing mods for the Curtis Mathes receiver and passed around a HOWTO paper.
 - l. Wayne will also provide support for those needing to tune their system once constructed.
 - m. More slides about filters and preamps. You really need to review his PowerPoint slide set if you are interested.
 - n. All scrap metal was purchased at Cohen & Cohen for \$3/lb.
9. Martin, VA3SIE spoke about an upcoming **Maple Island “DXpedition”** with Bob, VA3RCS on September 25th, 2005. He had a handout sheet for anyone interested in joining them. Maple Island is part
- of Canadian Islands on the Air.
10. **Haves & Wants:** Kris, VE3URL needs an **Elmer** to help him diagnose an ICOM IC20. The output power was 10 Watts but now is 1 Watt and he doesn’t want to operate QRP.
11. The meeting broke for **coffee** from 20:58 to 21:17
12. **Finance:** Janice Neelands, VA3PAX explained the confusion surrounding the budget presentation in June. She also explained to us how a not-for-profit company (the OARC) works financially. One of the issues surrounds assets which may have stipulations or restrictions. She presented an updated (and simpler) Balance sheet and will have handouts at the next meeting.
13. **Field Day:** Harold gave a Field Day report, but it was pretty much the same as other years – it was real hot and it rained! This year was a “two sling shot” year which added to the entertainment considerably. Harrie, VE3HYS’s rig died in the CW tent a couple of hours into operating. Richard, VE3UNW’s rig was liberated from the phone tent and once the microphone was sawed off, used in the CW tent. Harold had an older rig of questionable integrity that proved its worth for the next 22 hours in the phone tent. There was enough food to feed an army and everyone even remotely associated with Field Day was fed. (**Secretary’s invitation:** There’s enough food for **YOU**; come out next year)
- a. **504 CW** contacts
 - b. **274 SSB** contacts
 - c. **12.5 VHF/UHF** contacts (I think the number was 10-15)
 - d. **25** participants and operators
 - e. **15** visitors signed the guest book
 - f. Score: **~3500**
14. **Hamfest:** Greg, VE3Y TZ reported on the Hamfest. The event went very well, even compared to last year. He presented the financials and noted that all deviations were small compared to

(Continued on page 6)



Mk's Words

How was your summer? Aren't you glad you don't have to go back to school? (If you DO have to go back, my condolences).

So have you noticed many newcomers to the HF spectrum? Have you been one of the newcomers to HF? What do you think so far? At the Hamfest (thanks again Greg) there were a lot of nifty toys for HF and VHF operators, both new and old. [Is that new and old operators or new and old toys? Ed] I hope you found something to follow you home.

Speaking of home, Graham and Bytown marine seem to be settling into their new home in the East end of town. Some people are still trying to find him. Maybe they should try the telephone.

With the long hot summer there have been very few excuses NOT to get outside and play radio. Ever since June and Field Day, there has been at least one day a week that I have been able to get out and shake the dust off the bottom of twenty metres. No spectacular DX, but a fair number of quality rag chew type contacts. I am still learning how to put up an antenna. If anyone has a design for a wire antenna with better than 0 dBi gain and only one rope to fuss with, then I'd like to hear about it. My next try will likely be a vertical, either a vertical Zepp (J-pole to the 2m crowd) or an end fed half wave. I'll keep you posted.

Another summer activity in the "fun stuff" category was a bit of bunny hunting. VE3TWO was getting some interference from time to time. The signal wavered up and down the top of the band. It has components through the spectrum, and when centered in the pass-band, was even getting through the CTCSS. Anyway, finding it was fun. Let me put a picture in your mind. Imagine me on my bike, with a DF antenna on the front of the thing. The antenna has a horizontal support pipe extending forward over the front tire. The boom is also horizontal, at right angles to the support. At each end of the boom is a vertical dipole. Two receivers and the DF electronics are in the handlebar bag, along with a city map. The battery to run all this stuff is down near the

pedals. The bags in back contain other stuff, like a jacket, water, lunch etc. This whole picture was pedaled around down Gatineau (ex Hull), around the Museum of Civilization, around the government buildings, AND their terraces and underpasses. In all this only one person, a security guard walking between work and lunch, asked what I was up to. He was just curious. On the other hand, one person came up to me and said "You MUST be a ham, how do I get into that stuff?" The signal was eventually tracked down to a government building on the Gatineau side of the river. Getting the racket stopped is now in the hands of Industry Canada. I hope they get back from vacation soon.

Bob and Martin (VA3QV/RCS and VA3SIE) are planning to get outside at least once more, to put Maple Island (near Green Island) on the air. If you are reading this before Sep 25, give them a contact or better yet, a visit. If you are reading this after that date, ask them how it all went.

Skills learned in portable operation, whether Field Day, an afternoon's outing, or a DXpedition could come in handy in a situation such as our southern neighbours are facing after hurricane Katrina. After listening to the HF emergency nets, or even the media reports, have you made any changes to your emergency plans or kits? Around here, I'm thinking about what has to be done to beef up the 72 hour "go kit" to permit me to hold out for a week without outside services. The first thing to get added to my list is a water purifier. There is no shortage of bad things that "could" happen, but with a little planning you can be much more comfortable in difficult circumstances.

Antenna time is coming – again.

73..mk VE3FFK



Joe Norton Award

From the 2005 Hamfest Manager

I want to thank the 2005 Hamfest Volunteers. I think we had an outstanding event and without you there would be no OARC Hamfest. Thanks to Brenda Butler, Karen Price, Robert Montreuil, VA3CDD- Dean, VA3DB - Diane, VA3PAX - Janice, VA3UNK - Harold, VE2AGE - Robert, VE3ANO - Al, VE3AV- Dave, VE3CBJ - Clayton, VE3CDA - Ben, VE3CZO - Wayne, VE3EV - Cary, VE3FFK - Mike, VE3IGJ - Ian, VE3IHI - Rick, VE3LBW - Peter, VE3LOW - Russ, VE3PC - Paul, VE3TLY - Dave, VE3UNW - Richard, VE3URL - Kris, VE3WGO - Ed, VE3XK - Doug, VE3ZRK - Bryan, VE3ZTU - Al.

The photo shows Greg presenting the ICOM IC-208H, generously donated by Elkel Ltee. To the winner, Reg Gulliford, VA3RWG. We certainly hope he enjoys his prize and tells all his radio amateur friends what a great Hamfest the OARC puts on every Labour Day Saturday.

Greg, VE3Ytz

The OTTAWA AMATEUR RADIO CLUB INC. annually awards the Joe Norton Trust Award for the advancement of amateur radio. The amount of this award is \$500 and a wall plaque.

Applications must include a written submission of no less than 600 words and no more than 900 words to the executive of the Ottawa Amateur Radio Club Inc., setting out his or her interests, achievements and plans to contribute to the advancement of amateur radio.

Entries must be received by November 2, 2005. For complete details on eligibility and entry, see the description on the OARC web page <http://www.oarc.net/norton.html>.

(Continued from page 4)

previous years and well within the noise. He noted particularly that the City of Ottawa moved from a daily rate to an hourly rate this year. This saved us a small amount, but we believe that the change is ultimately designed to increase the fees charged. Finally, Greg announced that next year will be his last as Hamfest Manager and he is hoping someone will step up and shadow him next year to assure a smooth transition. Diane, VA3DB thanked Greg for the excellent effort.

15. Diane, VA3DB won the evenings **50/50 draw** and took away **\$23**.

16. The meeting was **adjourned** (still too late) at 21:45.

Signed:

Richard Hagemeyer, VE3UNW
Club secretary.

Secretary's Postscript: In June, Martin, VA3SIE gave a short talk on his **QRP setup**. The crowd was clamoring for a Groundwave article. How about it Martin?





From the 2005 Field Day Manager

Field Day 2005 is now in the books. The presence of rain seems to be a prerequisite for this event. We did get some rain - this time it was a small dumping just after the start of Field Day. This year we started the setup on Saturday morning about 10:30 am. It was a hot day - 30 plus Celsius. Two of us used slingshots to get lines up in the trees for the antennas. The antenna raising took longer than last year - we can blame the heat.

A G5RV was to be used by the CW station. For the phone station, we set up a 80 metre and multi-band inverted dipole - 40 m to 10 m).

The CW station, TS-430 and Kenwood tuner was set up in a camper. The phone station was set up in a tent.

We took time for lunch - macaroni and cheese. This was one of three excellent meals. For lunch we also had salad, cake, fruit cocktail.

Both stations were ready to go for a 2 pm start. The CW station started at 2 pm. Around 3:30 pm, the CW station experienced problems. We took the radio from the phone tent and got the CW station back up. A FT-767DX which had not transmitted in over 20 years was put in the phone tent. It was hooked up to an auto-tuner/power meter. It was nice to see that it still works, especially after we made sure we the coax correctly hooked up. The change in radios seemed to be the incentive to get going on the phone tent.

For dinner we had homemade chilli. Dessert was a couple of homemade cakes. Lunch on Sunday was leftovers.

Operations continued on to 2 pm Sunday. Teardown was started about that time and was done very quickly. Everything was packed up and the site was cleared by 3 pm.

Thanks to all who came out to help with setup, tear-

down, food, operate, log, or donate equipment:

Al VE3ANO, Chris VA3CME, Claire VE3NPC, Clayton VE3CBJ, Craig H, Dean VA3CDD, Diane VA3DB, Greg VE3YTZ, Harold VA3UNK, Ian VE3IGJ, Janice VA3PAX, Jervin VA3JEV, John va3ge/ve3dyj, John va3jbs, John ve3tg, John ve3cxl, Martin va3sie, Mike ve3ffk, Pat ve3tc, Paul ve3icv, Richard ve3unw, Rick ve3ihi

Some of the visitors included: Peter VE3BQP, Larry VE3WEH, Patrick VA3CMD, Bob VA3QV, Peggy VA3PGY, Bill VE3NOD, Russ VE3LOW, Bryan, VE3ZRK, and Yin VA3YH and son.

For the statistically minded the 2005 counts were:

504 CW contacts and 278 phone contacts over approx. 24 hrs of CW and 22 hrs of phone.

2004 counts were: 450 CW, 335 phone.

2003 counts were: 373 CW, 479 phone.

Maple Island DXpedition

Sunday 25th September 2005

Did you hear or work us? Send us a report!

This is the date that Bob (VA3QV/VA3RCS) and Martin (VA3SIE) will be cycling into Maple Island (just south of Green Island) and activating it for the Canadian Islands Award Program.

We're hoping to be joined by other radio amateurs who are interested in running the radio stations for a while, or just hanging out and watching the activity.

For further details see the fine website at <http://www.sunim.plus.com/maple/index.html>.

Regards,

Martin, VA3SIE



Question Bank Corner

As part of the build-up to the Christmas game. I have produced the first instalment of "Question Bank Corner". Test your knowledge against the newbies! These are questions from the basic and advanced exam. Answers are at the bottom of the page.

Richard Hagemeyer, VE3UNW

1. Authority to make "Radiocommunication Regulations" is derived from:
 - a. the Radiocommunication Act
 - b. the General Radio Regulations
 - c. the Standards for the Operation of Radio Stations in the Amateur Radio Service
 - d. the ITU Radio Regulations
2. Which of the following types of equipment is NOT included in the list of field strength criteria for resolution of immunity complaints?
 - a. broadcast transmitters
 - b. broadcast receivers
 - c. associated equipment
 - d. radio-sensitive equipment
3. If two receivers of different sensitivity are compared, the less sensitive receiver will produce:
 - a. a steady oscillator drift
 - b. more than one signal
 - c. more signal or less noise
 - d. less signal or more noise
4. A 6 volt battery is connected across three resistances of 10, 15 and 20 ohms connected in parallel.
 - a. The current through the 10 ohms, 15

ohms and 20 ohms separate resistances, when added together, equals the total current drawn from the battery.

- b. The current flowing through the 10 ohm resistance is less than that flowing through the 20 ohm resistance.
 - c. The voltage drop across each resistance added together equals 6 volts.
 - d. The voltage drop across the 20 ohm resistance is greater than the voltage across the 10 ohm resistance.
5. What is an EXCLUSIVE NOR gate?
- a. A circuit that produces a logic "1" at its output when all of the inputs are logic "1"
 - b. A circuit that produces a logic "0" at its output when only one of the inputs is logic "1"
 - c. A circuit that produces a logic "1" at its output when only one of the inputs are logic "1"
 - d. A circuit that produces a logic "0" at its output when all of the inputs are logic "1"
6. A half-wave dipole antenna is normally fed at the point where:
- a. the voltage is maximum
 - b. the current is maximum
 - c. the resistance is maximum
 - d. the antenna is resonant

Answers: 1-a; 2-a; 3-d; 4-a; 5-b; 6-b.

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 1 Feb)) 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: _____

KENWOOD

TS-480HX/TS-480SAT

HF/50MHz All-Mode Transceiver

KENWOOD
NETWORK COMMAND SYSTEM
with Voice over Internet Protocol capability



Bytown Marine Limited
Unit B1, 2212 Gladwin Crescent
Ottawa, ON, K1B 5N1

(P) 1-613-723-8424
(F) 1-613-723-0212
(E) gwalker@bml.ca