

The Hamilton Amateur Radio Club PO Box 91215, Effort Square PO Hamilton, ON L8N 4G4 Est. 1932 Inc. 1956 http://www.hwcn.org/link/harc/

### In This Issue

Future Meetings I
Anniversary QSL Card- I
Reginald Fessenden 2
HARC Executive 2
CW Operating Award- 2
HARC Chairs3
Minutes of the Jan 17th Meeting 3
Important Points 4
Contest Corner4
The Ingenious Ham 5
CLARA 40th Anniversary5
Other News 6

### Did you know?

 $|||,|||,||| \times |||,|||,||| =$ 12,345,678,987,654,321 Coca-Cola was originally green. The only food that doesn't spoil is honey.

# **The Hamilton Amateur**

The Hamilton Amateur Radio Club Newsletter — 75 Years of Amateur Radio 1932-2007

### **Future Meetings**

#### **Reminding members the** meeting room is open at 7:00 p.m. for socializing and the meetings begin at 7:30 p.m.

The speaker for February will be Mr. Eric Meth VE3EI talking about the new technology of digital radio and and its application in Amateur Radio. Eric works for Icom Canada where he holds the title of Territory Technical Support Specialist. Eric will also bring some of the new Icom equipment for digital communication and explain how it works. The topic could not be more current or more relevant for radio enthusiasts So bring a friend and join us for the Feburary meeting on Wednesday, February 21st.



In March, our own John Vandenberg VE3DVV, will walk members through a step by step process to get on IRLP, (internet radio linking project) and make contact through a repeater somewhere else in the world.We are now testing this process on our own VE3NCF repeater. John will show us how do do it, and supervise while those of us who bring a hand-held to the meeting actually try a contact with his supervision. Bring a radio to the meeting and join the fun.

In April, Laura Flatt a Spectrum Management Officer from Industry Canada will be speaking to us on the subject of radiocommunication

interference. Laura has promised to arrive with the Spectrum Management interference locator van equipped with the latest RDF instrumentation. We hope it will be warm in April and members can come out to the parking lot afterwards to have a look at the equipment.

### Anniversary QSL Card

The year 2007 marks the 75th year of continuous operation for the Hamilton Amateur Radio Club, (1932 - 2007).

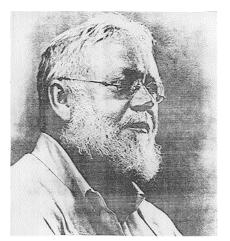
The winning design for the HARC anniversary QSL card was an entry submitted by John Hudak, VE3CXB, featuring a graphic portraying a 1930's operator at the station rendered in antique sepia tones with a message announcing our 75th anniversary and our club call, VE3DC.



Some eight designs were produced. However, of the seven designs ultimately submitted to the committee for consideration, John's sepia tone design was preferred by a wide margin. The card is now at the printer's and should be ready for QSL use shortly.

Club meetings - 3rd Wednesday each month - 7:30 pm (except July and August) at Hamilton District Christian High School, 92 Glancaster Road corner of Rymal Road (Hwy. #53) and Glancaster Road. Parking on location. Complimentary refreshments.

#### Volume 74, Number 6



## Reginald Fessenden 1866-1932

submitted by Casey, VE3CVP

What a coincidence that Reg Fesssenden died the same year that our Radio Club started in Hamilton. He was born on October 6, 1866 in Milton, Quebec Canada. At 20 years old, he moved to New York city and started working for Thomas Alva Edison who promoted him a year later to chief chemist in West Orange, N.J. In 1890 he moved to Pittsfield Mass. Working for Westinghouse, a competitor of Edison, for two years. After that he became professor of engineering at Perdue Univ. and later taught at University of Pittsburgh for three years. During those 14 years Fessenden had 5 jobs but was continuously interested in wireless radio communication. He wanted to send actual voice messages through the air, (can you imagine?), not through wires.

He patented, in 1901, a highfrequency alternator. This invention produced a continuous radio wave instead of the interrupted sparkgenerated pulse with which Marconi was experimenting in Morse code transmission. Fessenden was not alone in this attempt to surpass Marconi. Lee de Forest invented the "audion" vacuum tube and was building wireless systems in competition with Fessenden. Reginald's plan was to limit the signal to one frequency for better

### HARC 2006-2007 Executive

#### President

Mardy Eedson VE3QEE 905-648-0187 ve3qee@rac.ca meedson@cogeco.ca

First Vice President Brian Bowie VA3BMB 905-521-5729

Second Vice President Mike Hewitt VE3MHX n8tdd@netscaspe.net

Secretary & Past President Roger Pimm VE3UFZ 905-560-2628 rpimm@cogeco.ca

#### **Treasurer** Fred Robinson VE3GCP 905-575-5197 FredRobinson@MountainCable.net

Repeater Chairman John Vandenberg VE3DVV 905-692-3802 JVandenberg@mountaincable.net

**Director** Paul Selvey,VE3XPS pselvey@cogeco.ca

reception over long distances, and to provide modulation, which would be decoded at the receiver into voice and music. By 1905, Marconi, de Forest and Fessenden were at each other's throats, embroiled in patent infringement lawsuits.

On Christmas eve 1906, Fessenden broadcast his voice, violin and recorded music. The first broadcast in history was received by the stunned owners of Fessenden radio sets and ships on the Atlantic ocean. In 1912, he blended the incoming signal with a locally produced signal, creating a beat-frequency tone. This was the first heterodyne circuit, which became a standard part in radio technology.

Deserted by his financial backers, he spent more time in courts fighting infringement of his patents. At the time of his death, on July 22, 1932 he had over 500 patents to his credit, one of the most prolific inventors in America. Most of his inventions were related to radio.

~ information from: BookRags.com

## Order Of The Gavel CW Operating

Applications for the CW operating award are received in February. Casey the Awards Chair will receive the applications. Bernie, VA3XJ was the award winner last year (so he is out of contention this year). Your big chance.

PURPOSE: To promote the use of CW and to stimulate an interest among the newer Hams to operate in the HF bands.

RULES:

 The event is open to all members of the HARC.
 The award may not be won two consecutive years in a row.
 The contest will be an

annual event.
4. Only the previous 12 months will be considered, from January 1st through December 31st.
In case of a Ham of less than 12 months licensed, the score will be prorated by dividing 365 by the number of days licensed, times the score of points attained.

5. The following point system will be used to decide the winner: 200 watts or more input scores I point per QSO.

Under 200 watts input scores 2 points per QSO.

Under 10 watts input scores 5 points per QSO.

6. The total points from above calculation will be augmented by a DX multiplier of 1, 2, or 5 points per DX country in relation to the power levels listed above. DX will be the current ARRL DX country list. There

will be no DX multiplier for USA. 7. A valid QSO will contain OTH, RST, and name.

Please submit the following form not later than the February meeting (this year 2007, I like to ask the Executive to extent to March mtg.).

The judges may want to see your logs before making their final decision. Include QSO's from Jan. I to Dec. 31 inclusive. A valid QSO must be in the CW mode using your own Call-sign and must contain the standard report. i.e. RST, name, call and QTH.

Fill in the applicable blanks in the form to compute your score.

#### CW OPERATION AWARD

I. No. of QSO under 10 watts (non DX) 2. No. of QSO under 10 watts (DX) 3. No. of QSO under 200 watts (non DX) 4. No. of QSO under 200 watts (DX) 5. No. of QSO at or over 200 watts (ALL) 6. SUB TOTAL OF ABOVE:

### **General Meeting** January 17, 2007

by secretary Roger Pimm VE3UFZ

Guest speaker for the evening was Steve Bratina who gave an illustrated talk about his adventures restoring live steam equipment, everything from locomotives tractor engines and steam shovels, to his current efforts restoring a steam power plant.

### HARC 2006-2007 Chairs

Awards Chairman Casey VanBroekhoven VE3CVP 905-385-8724 <ve3cvp@gmail.com>

**Contesting Manager/Property** Rick Danby VE3BK 905-544-3253 <rdanby@sympatico.ca>

**Education Chair /Flea Market** Mardy Eedson VE3QEE <meedson@cogeco.ca>

Volunteer Examiners Lorraine MacPherson VA3NZ 905-389-7653 <va3nz@rac.ca> and Bernard Granby VA3XJ 905-527-7175 <berngran@hwcn.org>

Field Day Co-ordinator David Bruton VE3DWJ 905-383-9808 < am983@hwcn.org>

**Repeater Chairman** John Vandenberg VE3DVV 905-692-3802 <JVandenberg@mountaincable.net>

Health & Welfare Chairperson Mary Urbanski VE3OGQ 905-388-8383

Hospitality Bernie Granby VA3XJ 905-527-7175 <berngran@hwcn.org>

Membership Chair/Web Page Emsley Mitchell VE3JAI 905-627-0333 <eamitch@mcmaster.ca>

**Newsletter Editor** John Hudak VE3CXB 905-627-9475 <hudakjm@mcmaster.ca>

**Public Liaison Co-Chair** Stanley Bolibruch VE3GFE 905-528-4002 and Neil Galloway VE3VNG 905-383-6986

Swap Net Controller Don Grisenthwaite VE3DDQ 905-388-1365 <ve3ddq@cogeco.ca>

Communication Michael Kerbs VA3WXS 905-523-9005 <mkrebs@sympatico.ca>



guest speaker Steve Bratina



The business meeting was started at 8:30pm by Mardy VE3QEE after a very rewarding coffee break

Reports:

Secretary - No mail has been received. An Email request has been forwarded to the club by RAC requesting that one of us volunteer to follow up on address changes of RAC members. This isn't a particularly onerous job, probably 3 or 4 requests per year. The difficulty would be in finding the new forwarding address of the RAC member using the internet 411 facility. Emsley VE3JAI volunteered to take on this task. Thank you Emsley.

Treasurer – Fred VE3GCP reported that, in a nutshell, we had a successful Christmas party. There were 43 people attending. All accounts for the party have been taken care of.

Education – Mardy VE3QEE reported that the fall Basic course got off to an slow start. A couple of the students left the the course, one for a medical reason and another for a job promotion that entailed a move. Another joined the group recently and has been working hard in order to finish with the rest. The three people currently taking the course are within 2 weeks of completion and Mardy has expectations of their success.

Health and Welfare – Bernie Gelber VE3AOO passed away on December 24, 2006. Howard Lancaster VE3DAL passed away on November 23, 2006. Mary VE3OGQ sent condolence

February 2007

cards to both families. Thank you Mary.

Contest – Rick VE3BK reported on a number of contest results and showed a number of QSL cards and certificates. Roger VE3UFZ volunteered to set up a binder to hold all of the Lighthouse Contest QSL cards and certificates.



Rick presented the club with a certificate for the 2004 CQ 160M phone contest. The contest group ranked first in Canada and 8th in the world. Congratulations to all participants. Rick handed out some blank generic QSL cards and announced the upcoming CQ 160M contest which will be on February 25/25, 2007. Details for this contest can be found in The Hamilton Amateur. Mardy urged all members to check in on the contest site. Contesting can be a lot of fun, especially when you get to operate a rig with a KW amplifier. Call Rick VE3BK for information on the location. Feb 10 to 11th there will be a British Columbia QSO party. All Hams are invited to make a contact with our fellow Hams out in BC. Contest rules are in the RAC magazine, The Canadian Amateur (TCA). It was suggested (not moved) that copies of our certificates be scanned and put on our club Web Site. The executive will discuss this item at our next meeting (January).

Repeater – John VE3DVV reported that the repeater is now back on standby batteries. The batteries have been replaced, and the charge controller has been replaced. All costs have been covered. The batteries provide backup for the VHF rig only.

### Important Points

#### **Executive Meetings**

HARC Executive committee meets each month, except July and August. Members are invited to attend and participate. The meetings are on the Tuesday following the club General Meeting each month.

#### VE3NCF 146.760 - & 444.075 +

HARC operates VE3NCF repeater, located atop the Niagara Escarpment. It's open for use by all Amateurs. Special features are a privilege of membership.

### <u>Nets</u>

HARC "check-in net" is held every Tuesday evening at 7:30 p.m. HARC "swap net" follows at 8 p.m. All contacts are welcome.

### **Examinations**

Amateur radio license examinations are conducted the second Wednesday of each month, except July and August. Contact the voluntary examiners to make an appointment. There will be a fee for each examination.

### **Membership Information**

Club membership, including all privileges, is \$25 per person, per year, Sept 1 to Aug 31. Additional membership, for immediate family living in the same home, is \$1 per person. One newsletter sent to each address.

### The Hamilton Amateur

The Hamilton Amateur is published ten times each year (not in July or August). Deadline for article submission is the last Saturday of the month for the next month's issue. Preferred format is .txt file. Articles will be checked for spelling and grammar, but the author is responsible for factual content. Email submissions to Editor, John Hudak VE3CXB, <hudakjm@mcmaster.ca> Awards – Casey VE3CVP presented the Order of the Gavel to Roger VE3UFZ for his service as President for the 2005-2006.



### Contest Corner by Rick Danby VE3BK

The CQ160m SSB contest takes place from 7:00 p.m. Friday February 23rd until 7:00 p.m. Sunday February 25th. The station VE3DC will operate from the contest site for this 48-hour period. Since 160 meters is a nighttime band we will concentrate our efforts during the hours of darkness We hope to operate the station all Friday night through Saturday morning, take time off for the Burlington Amateur Radio Club Spring Flea Market, (if you can stay awake) sleep in the daytime and return to operate again on Saturday night through Sunday morning and possibly late afternoon until 7pm, Sunday.

We plan to operate Multi -Operator and use a single transmitter with a linear amp. This allows us to take turns and make a schedule if someone wants a specific time. The single radio also means there will be no interference from other transmitters on site. Please let Rick know if there is a chance you could operate, observe, or help log. If you could be available for a specific time we can put you in at the time you want. Send Rick an e-mail to help plan our participation. This is a good contest in which we have had good results over the years. It is very surprising what DX you can work on 160m. More info is available on the web at <http://www.cq-amateurradio.com/awards.html> 73 Rick VE3BK

### The Ingenious Ham

by Rick Danby VE3BK

We do things out of need sometimes. This is a story of a Ham friend of mine who is a little bit embarassed by



what he did because it worked so well with little effort and no real theory applied, so he would like to remain anomynous. He is likely embarassed by the fact that he is an advanced amateur, from the old school and just got extremely lucky by his ingenuity.

Here's what happened: My friend got the itch to play Ham Radio again after a 12 year absence from the hobby. Family, computers, job etc. became a distraction from Ham radio DXing, Field Day etc. Over the years, his triband beam ended up with a broken element, his WARC band dipole fell to the ground as well as something happened to his rotatable 40m dipole as well. For safety, his scanner antenna was removed, the broken antennas taken off the tower. Being a free standing tower of about 55 feet, it remained and the coaxes were left on the tower but cut at the bottom for lightning safety.

Here is the good part: Wanting to get back into Ham radio, at least ragchewing with me and some of his other buddies who are Hams and still his friends, he had to come up with something to get back on the air. Back in the good old CB days, we had done many strange things for antenna experimentation. He acquired the reputation as being the "antenna man". He was the theory man and some of the rest of us were the practical men.Well....the first antenna he "loaded up" was the ground system in his shack, which consisted of a 5 foot piece of wire to a ground. He used his antenna tuner with no ground and no ground on his rig. He was able to talk to Renzo VE3NYX (one of the Contest Group) and myself with a 59 signal.

This is very good as Renzo is in the West end of the city, I am in the centre of the city and my friend is in the east end.....amazing. This was the first week of January....very cold outside. Now I suggest he throw a wire over his roof to load up as a longwire as his shack is in the basement beside a window and could very easily have just a single wire out of the house and thrown over his peaked roof on the house, as a temporary antenna. His remarks on that suggestion:"What, are you trying to make me look bad?" He was worried about his reputation as a ham and antenna man, having a wire lying there visible to someone walking by. Guess I couldn't blame him, but I thought he wanted something to get on 80m etc. and I was just trying to help. He had other plans.

Well, 2 days later we're back on 160m testing his vertical temporary antenna..... say what?.....what are you using?.....your signal is 59 plus 30...wow, what did you do? Next we have to test 40m...59 with only 40 watts. Next is 17m (a band I usually don't go on but can) and he is 56 and I am 57 with 100w. Can't stop now, 80m next with 59 plus 20 over at only 8 watts and him at 10 watts. In comes VE2FPD Robert 80 km North of Ottawa giving us a 59 report. Renzo joins in to see how good the mystery antenna is working. All our friend will say on the air is that it is a temporary vertical antenna. Next we go to 40 meters again to ragchew with Renzo. Our friend is impressed with his antenna. Later Renzo left and we went to 160m again. Wayne ND2G gave us both good reports on 1.865 Mhz.

That was it for antenna testing for a couple of days. I found out on the phone, just what he had done for a temporary vertical antenna. Not only was it a temporary vertical antenna, but it was a tower antenna that was inductively coupled to his 55 foot tower and about a 5 foot mast, making the antenna very broadband. Here's what he did. He had 3 coaxes cut off at the bottom of his tower. It was very cold outside, so this is when the best antenna work is done hi hi.

He had one antenna left on the tower, a 2m antenna. He checked for continuity on the coaxes, because the 2m antenna would appear as a short circuit because of it's matching. The other 2 coaxes were open because his beam and dipoles had been taken down. So....the coax that showed the short, was shorted together and went to the centre of his coaxial feed to the shack. The ground sheath of the feeder coax was connected to the ground rod for his tower. He used this with his tuner, with the good results listed above. Later he found that it had a 2.1:1 across the whole 160m band and was resonant at 7.040 Mhz on the 40m band at 1.1:1....oh what luck for a temporary vertical tower antenna that he threw together (the connections are only taped and wrapped) in about 45 minutes!!!!

Lucky yes, but let's look a little about the theory of that antenna that seems to work so well in so many places. The 2 meter antenna will act like a capacitance top hat which will in effect, make the antenna appear longer so that a shortened antenna will work on the 160m band. It is pretty close to 1/8 wavelength on 160m and with the tuner taking up the slack, worked very well. For 80m it is pretty close to a 1/4 wavelength, with the tuner being needed. Oh by the way, he found out that the built in tuner in his rig will do just fine tuning this antenna, must be that it is so close to so many bands that the manual tuner is not required, making it easier to change bands, let the radio tuner do the work and you are instantly ready to talk. For 40m, it was a surprise that it was resonant at 7.040 and right across the band is good because of the broadband effect of the big tower. On this band it would be around a 1/2 wavelength with a capacitance tophat. Renzo doesn't think this antenna should work, but the proof is there. My friend got very ingenious when the need was there. He is back on the air after a 12 year absence with a minimum of effort. His vertical is not the end all of antennas as proven when I worked Juan Amilio HK5CPH in Cali, Columbia 2 days later when my friend and I were ragchewing on

40m. HK5CPH was 59 plus 15 over in my shack, but my friend said he was only 57-58 at his shack. Of course no 2 antennas are the same and I am sure that his vertical will have a different angle of radiation than my 1/2 sloper that is at a 45 degree angle to the south. His temporary antenna will probably outperform my 1/2 slopper on 80m for DX as he has a much lower angle of radiation which is good for that long DX skip off the ionosphere when conditions are right. I can't wait to get on the air with him and compare signal reports with some DX stations. Time will tell.....his temporary tape and wrap should last for the winter I am sure.

So there you have it.....hams can be ingenious when cold weather and need dictate.

73 es hv fun with your ant projects Rick VE3BK

### CLARA 40thAnniversary Challenge

submitted by John, VE3CXB

Canadian Ladies Amateur Radio Association (CLARA) is celebrating it's 40th. anniversary with a challenge to all YL's and OM's (young ladies and old men). Work 40 YL's on amateur radio between Jan. 1, 2007 and Dec. 31, 2007. They can be any YL, not just a CLARA member.

#### CATEGORIES:

CW or Phone on HF/VHF (including repeaters) DIGITAL (including Echolink, IRLP, RTTY, PSK31, etc. MIXED MODES

Contacts can be made on nets. Logs should include: date of contact, name & call sign of YL operator, and band or mode

Cost of commemorative certificate in Canada, including postage, is \$5.00.

Deadline for log submissions is March 1, 2008. That gives you a whole year.

Submit logs to: Kathy Steels VE3GYL 444 Jellicoe Cres. London, ON, N6K 2M5 email: ve3gyl@gmail.com More info: www.clara.comm.sfu.ca/ event.html

### Other News

### by Mardy, VE3QEE

Casey, VE3CVP, our awards chairman asked me to mention two awards which are coming up soon. First of these is **The Order of Merit Award**. Here are the rules of this award.

(1) The Order of Merit Award is given in recognition of distinguished service in the realm of Amateur Radio.

(2) An award committee consisting of not less than three, nor more than five Past Presidents of the club. who are members in good standing, shall be appointed by the executive committee of the club. Appointments shall be for a period of three years and reappointments are permitted. Such committee to appoint their own chairperson.

(3) Persons elibigle to be nominated for the award shall satisfy rules 4 & 5.

(4) The nominee shall be a member or past member of the club.

(5) The person shall have performed a service to amateur radio which: is not that normally expected for any appointed or elected position or office -or- which has promompted and has resulted in greater interest and enjoyment from amateur radio for the members of the club, or any allied organization, and which is worthy of recognition by the club.

(6) Any club member may nominate a person (in writing) for this award, provided that the nomination: (a) states the service performed by the nominee, and (b) is signed by three current members.

(7) The nominations shall be forwarded to the awardcommittee.

(8) A nomination shall be deemed acceptabble for the award provided that not more than one member of the award committee abstains from voting, or casts a negative vote. The decision of the committee shall be final.

(9) The award will not be given on an annual or fixed time basis, but according to the frequency that such truly distinguished services are performed. or groght to the attention of the club.

The second award coming up is the Crawford Trophy. The Crawford "home brew" Trophy is awarded anually in April for the best home made device for use in the amateur radio shack. The name "home brew" conveys the idea that the device was constructed in the home workshop, thereby requiring skill and patience in producing a product of quality. It also suggests that the device was made at home during leisure hours rather than at the place of employment. The purpose of the Crawford Trophy is to encourage radio amateurs to build their own equipment. The prime purpose for making a device would be for improved amateur radio communications, and/or for testing amateur radio equipment. At Home Brew night members are invited to show us and explain their home brew projects. If your project is not already completed or underway, there is still time to put something together. This announcement is both a "heads-up" for members and an appeal for participation.

For the information of members with HF capability, there is an informal group who talk on 14.135, in the 20 meter phone band, Mondays, between 7:00 p.m. (local time) and 8:00 p.m. This group is open to anyone, but it was started by a few of us getting set up for HF and wanting to test our equipment and antennas. Participants often include Mike VA3WXS, Roger VE3UFZ John, VE3CXB, Fred, VE3GCP, Rick, VE3BK, Emsley, VE3JAI, Mardy VE3QEE, Ron VE3OUW, Ian VE3SOF, You are welcome to join in.