



The Hamilton Amateur

The Hamilton Amateur Radio Club Newsletter 82 Years of Amateur Radio 1932 - 2014

Hamilton Amateur Radio Club,
117 - 350 King Street East,
P.O. Box 75073,
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Announcing the June Annual General Meeting

Greetings HARC Members. This is just a brief note to remind all of you that our meetings in June will be on evenings we are **not normally accustomed to**. Instead of the second Wednesday of the month for our Executive Meeting, we will be meeting on the **first Monday, June 4**. The General Meeting will be held on the **second Wednesday of the month, June 11**. These changes are a result of the school closing schedule dictated by the Hamilton Wentworth District School Board. Our meetings start promptly at 7:00 p.m. and finish at 9:00 p.m.

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Tube Stores in the Hamilton Burlington Area

by Greg Gignac

For those of you with tube equipment here are a couple of local suppliers of new and used tubes and other parts to keep things running.

Amateur Radio tubes are available at:
<http://www.thetubestore.com/Tubes/Ham-radio-RF-Industrial-Tubes>

You could also try:
<http://www.partsconnexion.com/>
for receiver tubes and higher quality parts like capacitors.



Presidents Message for June newsletter

by Roger Pimm, VE3UFZ

It's funny but true, too soon we grow old and too late we grow smart. So... we were at Tim's one Tuesday evening, after one of the regular Basic Ham classes, when the subject of Industry Canada (IC) requirements for band privileges came up. Now, I have been a volunteer examiner for several years now, and my understanding of the requirements went back to the infamous 'no code' decisions made last decade. I



I couldn't believe that code would still be an option to gain full band privileges, given the candidate got 70% plus on the Basic Examination. In all honesty, in all the time I have been administering the Basic and Advanced examinations I have never had a candidate want to do the 5 w.p.m. code qualification test to upgrade from a 'pass' certification (>70%) instead of rewriting the Basic Exam and gaining the coveted honours mark (80%). I guess the perception is that code is much harder to master than studying and improving the Basic Exam mark to honours status.

Well, I was wrong, and having never been asked to invigilate a code test to upgrade band privileges for a Basic Ham candidate, there was never the need for me to review the test standards and prepare a code qualification test.

Too late I grow smart!

So, here is the explanation that Rick VE3BK, our Amateur Service representative, and the Industry Canada technician confirmed for me.

There are 3 ways a Ham can gain access to all of the amateur bands. We are not talking about technical privileges here, just legitimate band access.

1. Pass the Basic Exam with 80% or greater mark.
2. Pass the Advanced Exam with 70% or greater mark. **I am still not clear whether the candidate must have Basic certification first.**

3. If the candidate is holding a Basic Certification (passed with 70% to 79%), they can upgrade to full band privileges if they pass the standard 5 w.p.m. test.

To earn your certificate with Basic Qualification, you'll need to pass a written exam. This exam has a 70% pass grade. It is a 100-question multiple-choice test, covering such topics as radio operating practices, basic electrical theory, and the Radio communication regulations that apply to amateur radio. A mark of 80% or more gives the candidate the additional privileges of Basic Qualification with honours. The additional privileges are full access to all amateur bands, all modes (even code if you wish to take the time to learn and use it).

Candidates for the Morse Code Qualification are required to demonstrate proficiency in Morse Code, by sending and receiving Morse Code at a speed of not less than 5 words per minute for three consecutive minutes. The examination is in plain language text and may include the 26 letters, 10 numerals, comma, period, question mark, dash, fraction bar, Q signals, and emergency signals. The examiner will allow candidates two minutes to review and correct their received copy before it is graded.

Candidates for the Advanced Qualification must pass a 70% pass-grade, 50-question multiple-choice examination covering electrical theory primarily related to the additional privileges granted to holders of the Advanced Qualification.

The examinations may be taken in any order but station operating privileges require a Basic Qualification. Candidates for the examination for Basic, Morse Code or Advanced qualifications are examined by an [accredited examiner](#).

Thank you for your patience, if you took the time to read this far, and I look forward to seeing you at Fox Hunts this summer, Field Day, Canada Day, and don't forget the Lighthouse Special Event. All of the dates and information are in our web site. Check it out.

I wish you good hamming, good DX,

Now, I am off to Sea!

Meshing around in Hamilton

by Ron Pereira VE3RTJ

At the April general meeting, I gave a presentation on Ham Mesh networking. I was assisted by Anthony, VA3IDL, who made the drive in from Mississauga to talk about activities happening at his club. This article is presented as a follow-up to that discussion, to offer some suggestions on how to get involved in this relatively new branch of amateur radio.

Amateur mesh networking grew out of the work of the High Speed Multi-Media working group formed by the ARRL some 10 years ago. Since then, the term HSMM has become synonymous with amateur mesh networking. The most prevalent, and arguably most successful, mesh software is now called Broadband Hamnet. Much has been written about it, so rather than repeat all that work done by others, I'll refer you to their website: <http://www.broadband-hamnet.org>.

Getting started with mesh networking is one of the least expensive forms of radio tinkering I've done. All you really need is a compatible wifi device, and a computer. Most ham shacks these days are equipped with the computer. To

date, certain versions of the popular Linksys WRT54 home wifi router, and several models of the Ubiquiti line of commercial wifi radios can be loaded with the BBHN firmware. Each have specific strengths.

The Linksys routers come with a Linux based computer. It's greatest strength is the ability to run various Linux programs right on the router device, removing the need for an attached computer. The Linksys router is great if you want to experiment with Linux on a small scale. I've begun my Linux education using several of these devices.

The Ubiquiti radios are a little more purpose-built. Also based on Linux, they can also support small Linux applications right on the radio. Unlike the Linksys, they don't have a built-in router or switch; they only have a single network connection. The biggest difference between Ubiquiti and Linksys is the quality of their radio. The Ubiquiti radio has higher power output, greater sensitivity, and deals with interference and noise much more effectively than the Linksys.

So what does it cost to get started? I've picked up Linksys routers at Value Village and the Salvation Army Thrift Shop for around \$5. Be careful to check the model and version to be sure they're compatible with BBHN. Refer to the 'shopping list' on their website. I've also picked up Linksys routers from Kijiji. EBay has lots, but the prices are usually higher than I'm willing to pay.

If you prefer new, Canada Computers sells the Cisco Linksys WRT54GL, which is compatible with BBHN, for about \$70.

For just a bit more, you can order new Ubiquiti radios from <http://www.ubntu.ca>. I have two Nanostation M2's, and can highly recommend them

for simplicity of use and effectiveness. The M2 is self-contained, with an 11db cross-polarized antenna array and weatherproof housing. Simply stick it up a pole and go. I've currently got one strapped to the roof rack on my van as a mobile node.

I'd recommend starting out with two devices so that you can see how they interact in a mesh.

Once you've gotten a node or five working, it's time to ask the inevitable question that all meshers ask: "what now?" A quote that I read about amateur mesh networking: "Broadband Hamnet is a solution in search of a problem".

Agenda for the June 11 Annual General Meeting

Welcome to all, and introduction of new members and visitors.
Nominations from the floor followed by an election to fill the vacant director's position.
Committee reports.
Highlights of the past year, a review.
Summer and Fall programme of events.
Nostalgia slide presentation.
Social meet and greet with refreshments.
Adjournment

HARC (Hamilton Amateur Radio Club)

General Meeting Minutes

05/14/2014

I. Call to order

Roger Pimm VE3UFZ called to order the General meeting at 19:17 on 05/14/2014 @ The Westdale Secondary School, 700 Main Street West, Hamilton, ON.

II. Sign In

Attendance was conducted by the circulation of the members sign in sheet.

18 members / visitors were present. Welcome visitor Susan Webster VE3TLK and Boudewijn Tenty VE3TOK

III. Speakers

There was no guest speaker this evening as it was Homebrew Night. Four members brought in their projects for discussion and were scrutinized by their peers after a brief explanation of their project and their usefulness in the shack. Presented by Rick Danby VE3BK was an RF choke. Roger Pimm VE3UFZ showed off a PVC quad that he'd been assembling for the hidden transmitter hunts. Mardy Eedson VE3QEE had set up an indoor antenna attached to a software defined radio project kit "Lil Pup" as it's called. John Vandenburg VE3DVV brought in a "Wobulator" that he assembled as a project. All very useful projects, fun to build, and well presented. After a review by members present, the votes were cast. John Vandenberg took home the Crawford trophy for a job well done on his "Wobulator". Congratulations John!

IV. Contesting

Rick VE3BK announced the Field Day 2014 taking place June 28-29 at the Devils Punch Bowl. Inviting members to contact him at ve3bk@hamiltonarc.ca if they would like to participate. VE3DC was listed on pg 45 for field day 2013 for taking 4th place in our division. Rick also drew attention to a few of the other articles that were listed in the TCA magazine ie antennas for home, Mesh Networks, Canada Day and other contests listed on the Contest Calendar...watch the Events Calendar at <http://www.hamiltonarc.ca/activities/events-calendar/> Rick also noted an article in QST magazine pg 84 announcing field day 2014 For information regarding Field Day 2014 please contact Dan va3dj@hamiltonarc.ca

V. Treasurers Report

Dave VE3DWW reported on the finances to date. Mardy VE3QEE moved to accept the report as discussed. Rick VE3BK 2nd the motion and was carried by members present.

New Business

- 1) Gary VE3TTO had asked for assistance in Olgas Boys & Girls night out 5-10KM run. This race is to take place June 04 2014. Proceeds to Dr Kemp Hospice. Interested operators should contact Gary at ve3tto@gmail.com meeting place is at Bayfront Park Meeting time 5pm. Any and all assistance is appreciated by Gary.
- 2) After a brief discussion by Roger VE3UFZ regarding the work that Paul Fleck VE3HTF had done with the members of a strategic planning committee, with the aid of the written handout, Mardy VE3QEE moved to accept the HARC Vision and Mission Statement as written with one exception. To replace the wording as follows:

"The Hamilton Amateur Radio Club will be a club offering amateur radio operators a venue to practice our hobby building on community participation, engaging in *scientific experimentation* exploring the science of communications".

Change to:

"The Hamilton Amateur Radio Club will be a club offering amateur radio operators a venue to practice our hobby building on community participation, engaging in *technical investigation* exploring the science of communications".

This change in wording follows the Industry Canada's, Radiocommunications Regulation, (RIC 3) were as the stated purpose is described as: The *Radiocommunication Regulations* describe the *amateur radio service* as a A radiocommunication

service in which radio apparatus are used for the purpose of self-training, intercommunication or technical investigation by individuals who are interested in radio technique solely with a personal aim and without pecuniary interest.”

This motion to accept the change and accept both the HARC Vision and Mission statements were seconded by Jack VE3WBT and accepted by all in attendance.

- 3) Casey VE3CVP had asked for volunteers to assist him in the removal of some of his antenna and tower as he was moved to a seniors living center and the equipment needed to come down at his prior residence. Rick VE3BK had agreed to arrange with Casey a time to remove the equipment.
- 4) Roger VE3UFZ on behalf of Paul VE3HTF announced a breakfast social to be held on the first Saturday of each month at The EGG & I Family Restraunt 53 / 2 HWY and Rymal Rd Ancaster. Meet at 9am.
- 5) Jim VE3EEZ announced the first Hidden Transmitter Hunt for 2014. Hidden transmitter hunts are held from May through September near the end of each month. See the website for the schedule. <http://www.hamiltonarc.ca/2014/05/01/the-h-a-r-c-hidden-transmitter-hunt-schedule-2014/>
- 6) Ron VE3RTJ had asked for any interested parties who would like to get involved with a MESH Router Network to contact him. Ve3rtj@gmail.com
- 7) Ron VE3RTJ announced a few more repeaters in the Kitchener Waterloo Area that you may want to check out.
Owned by Robert McKinlay, on a 360 ft tower running 50 watts
VE3RDM/U 442.500 +T 136.5...Echo link
VE3RDU/V 145.270- T 136.5
VE3ESM/U 442.550 + T 136.5

Next meeting

June 11, 2014 @ The Westdale Secondary School, 700 Main Street West, Hamilton, ON.

Adjournment

Motion to adjourn the meeting at 20:50

Moved by Mardy VE3QEE

Motion seconded by Jack VE3WBT

Thanks to all in attendance

Minutes submitted by: Jim Sawadski VE3EEZ

Hello Club Members

Field Day information and organization meeting for the Hamilton Amateur Radio Club is taking place this Saturday, June 7 at 1:30 PM at Dan Martinak's residence (VA3DJ). He lives on the farm at 897 Mud Street in Stoney Creek just past 8th side road on the North side. All participants in Field Day are welcome. We will be finalizing Bands, locations, electricity etc. See you there.

News About Town

by Mardy Eedson VE3QEE

Field Day Is Just Around The Corner

Field Day takes place on the weekend of June 28th and 29th. Participants are meeting on the morning of June 28th at the Devil's Punch Bowl on the mountain brow above Stoney Creek. (East of #20 Hwy), where the illuminated cross can be seen. This is the same location we have used for the past several years. Visitors, operators and loggers are welcome throughout the 24 hour period of operation. We will be setting up on Saturday morning. At 2:00 PM local time the Field Day operation begins and continues for 24 hours through the night until 2:00 PM Sunday local time. It is expected that stations will be making between 200 to 800 contacts during the 24 hour period depending on propagation conditions and operator stamina. Please join us to learn about putting up antennas, equipping a station, operating and logging, in other words, all the skills for getting on the air and having fun. The field day team welcomes your support.

Canada Day Is Next

Immediately following Field Day, the Contest Site will be hosting Canada Day operators. The published contest period is 0000 UTC until 2359 UTC on July 1st, which translates to 8:00 P.M.

Monday June 30th until 7:59 P.M.
Tuesday June 1st. If you do both the Field Day and Canada Day contests you can be on the air four days in a row. Again, visitors, operators and loggers are invited to participate. It is a good learning experience and we can use all the help you can provide. Talk to Rick VE3BK regarding location and times. <ve3bk@hamiltonarc.ca>



Library Showcase

First Vice President, Paul Fleck, will be staffing a table at the Hamilton Public Library Main Branch on June 13th to promote the Hamilton Amateur Radio Club and demonstrate the rewards that Amateur Radio Service offers.

HARC Summer Barbeque

The Flecks are hosting a HARC barbecue on August 9th at their home in Freelon. All members and spouses/partners etc. welcome. See the web site at <hamiltonarc.ca> for more details as we get closer. In the mean time save the date.

HARC Executive**President**

Roger Pimm, VE3UFZ
ve3ufz@hamiltonarc.ca

Past President

Mike Krebs, VA3WXS
va3wxs@hamiltonarc.ca

First Vice President

Paul Fleck VE3HTF
va3htf@hamiltonarc.ca

Second Vice President

Mardy Eedson, VE3QEE
ve3qee@hamiltonarc.ca

Secretary

Jim Sawadski, VE3EEZ
ve3eez@hamiltonarc.ca

Treasurer

Dave Bruton, VE3DWJ
ve3dwj@hamiltonarc.ca

The executive committee meets on the Wednesday one week prior to the club meeting in Room 124 at Westdale Secondary School. Club members are welcome to attend and observe.

Lighthouse and Lightship Weekend

In the third weekend of August HARC will be putting a demonstration station (or two) on the air at the Beach Strip within sight of the Burlington Light House. We have "activated" this light house for the past five years and sought contacts with other lighthouses and lightships around the world. The area is a high traffic location and we answer many questions about the hobby during two days of operation. The time is approximately 9:00 A.M. until 4:00 P.M. depending on band and weather conditions. The dates are August 16th and 17th. Visitors, operators and loggers are invited to participate.

Hidden Transmitter Hunts

The dates for future transmitter hunts are listed below:

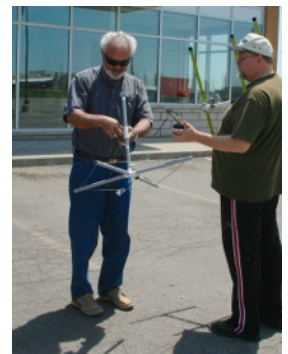
June 22nd at 1:00 PM

July 27th at 1:00 PM

August 24th at 1:00 PM

September 28th at 1:00 PM

See the HARC web site at <hamiltonarc.ca> for details about how the hunts are conducted, the starting location, and the boundaries of the area where the transmitter is concealed. Join us for a hunt and hook up with someone on-site.



The H.A.R.C. Monthly Breakfast Gathering!!

When: Saturday, June 7th, 2014

Time 9:00 A.M.

Where: The Egg & I

Location: Ancaster



1242 Garner Rd W, Ancaster, ON L9G 3K9

The H.A.R.C. breakfast meetings will be held every month, including July & August, the first Saturday each month.

Bring your appetite and see you there!

Wear your VE3DC "T" shirt and you'll be entered into a draw for a FREE breakfast, the following month!

Don't have a "T" shirt? We'd like to help out, wear your H.A.R.C. club badge and you qualify.

