

March 2002

Http://www.hwen.org/link/hare/

In this Issue

1	Fun on 160m at VE3DC Page 4	
2		
2	CQ WPX 2002	
2	Important points	
3	CW learning styles	
3	HARC Executive	
4	February minutes	
5	Secretary's notepad	
5	President's message	

The Hamilton Amateur Radio Club PO Box 91215, Effort Square PO Hamilton, ON L8N 4G4 Est. 1932 Inc. 1956

The Hamilton Amateur

The Hamilton Amateur Radio Club Newsletter - 70 Years of Amateur Radio 1932-2002

Fun on 160m at VE3DC

David VE3STT - Editor

If you recall, we had a little bit of winter, along with some ice and wind, in the early part of February. And, as you know, big antennas are "ice and wind magnets" particularly if erected in wide-open spaces.

Because the VE3DC contest site is located in a very open area, which makes for good signal reception and a chance to erect some fairly substantial towers and antennae for contest operation, the weather also seems to play a constant role. We are usually challenged with changing out guy ropes on an almost yearly basis and, specifically with each windstorm, we usually encounter some form of project that gets moved to the top of the pile rather quickly. Such was the case in early February.

After the wind, Don VE3VZ dropped by the site to check up on things. While he found the towers were still in great shape, with the associated 2m through 20m beams intact, the same could not be said for our lower band antennae. We suffered the loss of one thirty-foot support on our 80/160m horizontal loop. The wire for the loop ended up on the ground but the support was intact. When it came down however, probably due to rotten guys rope, it also yanked another support pole causing it to bend over about halfway up. That presented more of a problem because it needed to be reconstructed.

We had recently erected a Butternut HF-2V multiband vertical but it broke

apart about six feet up. It was guyed but because of the severe winds, it was no match for the elements.

And, last but certainly not least, the jewel of our low band operation, the

Next meeting's Speaker

March 20 "Ground Zero"

Serigo Bolito will speak at our March club meeting about emergency services at "Ground Zero." Serigo attended the Emergency Planning College at Arnprior, Ontario. He was a member of the Hamilton Wentworth Emergency Measures Organization and currently serves as Emergency Chairperson for Disaster Services at the Burlington branch of the Canadian Red Cross.

roughly 65ft high 160m inverted-L also succumbed to the stress of holding up some hefty ice loads in the wind. It gave way about 15ft. from the top of the vertical section of the L and toppled.

In view of the fact the annual CQWW 160m SSB contest was only two weekends away, it would take a Herculean effort to make repairs in time.

That effort came from the VE3DC contest crew. They know who they are! And thanks to their efforts, we were indeed on the air and in fact posted our second best score all-time in that contest:

674Qso - 54State/Prov - 10Countries: Score 209,536 Pts

That score has only been surpassed to date by the "Second Place WORLD" finish in 1998. We'll see if it's good enough to again crack the "Top 10

Club meetings – 3rd Wednesday each month (except July and August) - 8pm in the St. John's Ambulance Association building, 500 Upper Wellington Street (on the Mountain). Park behind the St. John's building, NOT the Police station. Complimentary refreshments!

box"?

Anytime you would like to help out in the maintenance of the VE3DC contest site, and to participate in a contest, you are more than welcome to contact Rick VE3BK to find out how you can get involved!

Page 4

David VE3STT - Editor

I'm not sure what happened last month, but for some reason I neglected to print a "Page 4" for the newsletter and in lieu you were treated to a double dose of "Page 3". My apologies! I have included the Page 4 from last month in this month's newsletter at no extra charge!

CQ WPX 2002

David VE3STT - Editor

The month of March means the CQ WPX contest! This is a great contest because basically anybody can work anybody for points! And, one of the unique aspects of this contest is the TS (Triband/Single Element) category, in which the "pop gun" stations can compete amongst themselves. I have added some specifics about that category in italics.

If you want the complete rules, there is a great website at:

http://home.woh.rr.com/wpx/ But, here are some of the basics you'll need to know.

SSB: March 30–31, 2002 CW: May 25–26, 2002

Starts: 0000 GMT Saturday Ends: 2359

GMT Sunday

Only 36hrs of the 48hr contest period permitted for Single Operator stations. Off periods must be a minimum of 60mins in length and clearly marked in the log. Listening time counts as operating time. Multi-Operator stations may operate the full 48 hours.

Object of the contest is for Amateurs around the world to contact as many amateurs in other parts of the world as possible during the contest period.

Important points

Executive Meetings

The HARC Executive committee meets each month, except July and August, at Mohawk College in room E031A. All members are invited to attend and participate. The meetings are scheduled monthly to fit the schedules of the Executive members.

VE3NCF [146.760- & 444.075+ MHz] The HARC operates VE3NCF repeater, located atop the Niagara escarpment. It's open for use by all Amateurs. Special features are a privilege of membership. VE3NCF is part of the VE3RPT link system.

Check-In and Swap nets

The HARC "check-in net" is held every Tuesday evening, except July and August, at 7:30pm. The HARC "swap net" follows at 8:00pm.

Examinations

Amateur radio licence examinations are conducted the second Wednesday each month, except July and August. Contact the voluntary examiners to make an appointment. Each test costs \$3.00.

HARC Fleamarket

The HARC Fleamarket is held annually at Marritt Hall, Ancaster. Contact the Fleamarket chair for information. Hamfest 2002 date will be announced shortly for October 2002! Thanks to everyone that attended and helped with Hamfest 2001!

Membership Information

Club membership, including all privileges, is \$25.00 per person, per year, September 1 to August 31.
Additional memberships, for immediate family members living in the same home, are \$1.00 per person. One newsletter is sent to each address.

The Hamilton Amateur

The Hamilton Amateur is published ten times each year. It is not published in July or August. The deadline for article submission is the *last Saturday* of the month for the next month's issue. The preferred format is ASCII code (.txt files). Articles will be checked for spelling and grammar, but the author is responsible for the factual content. E-mail submissions to David VE3STT at ve3stt@rac.ca

The 1.8, 3.5, 7, 14, 21, and 28 MHz bands may be used. No WARC bands allowed. Observance of established band plans is recommended.

- 1. Single Operator (Single Band and All Band)
- (a) Single operator stations are those at which one person performs all of the operating, logging, and spotting functions. Only one transmitted signal is allowed at any time. Maximum power allowed is 1500w total output power. (SINGLE-OP)
- (b) Low Power: Same as 1(a) except that output power shall not exceed 100w. Stations in this category will compete with other low power stations only.
- (c) QRP/p: Same as 1(a) except that output power shall not exceed 5w. Stations in this category will compete with other QRP/p stations only.
- (d) Assisted/with Packet: Same as 1(a) except the passive use (no self-spotting) of DX spotting nets or other forms of DX alerting is permitted. Stations in this category will compete with other Assisted stations only. (SINGLE-OP-ASSISTED)
- (e) Tribander/Single Element (TS): Tribander (any type) with a single feed line from the transmitter to the antenna and single element (TS) category. During the contest, an entrant shall use only one (1) tribander for 10, 15, 20 meters and single-element antennas on 40, 80, and 160. (TB-WIRES)

The T/S category was established to allow stations with modest antenna's to compete with each other in the WPX contest. The MAXIMUM antenna that can be used on the high bands (10 - 20) is a tribander with a single feed line. This does not mean a stack of tribanders, or a tribander fed with feed lines for each band. You are not required to have a tribander. If you only have a vertical, or dipoles, you are still eligible to enter the T/S category. For the low bands (40 - 160), the MAXIMUM antenna that can be used is a simple wire dipole, sloper, inverted vee, long wire or a single vertical for each band (or a multi band antenna). You can not use sloper arrays with reflectors but can use directional slopers as long as the other antennas are not fed and do not act as reflectors/directors. The same goes for verticals. You could have a vertical for each band, but may not use vertical arrays.

For SO2R configurations, you may not exceed the limits above. You may switch any combination of antennas as long as you only use 1 tribander and wire antennas. For your second radio on the high bands, you could use a 15 meter dipole if the run radio was using the tribander on 20. On the low bands, the run radio could be using a dipole on 40 and the 2nd radio could be using a dipole on 80.

- (f) Band Restricted (BR): An eligible entrant must hold a license restricting operation to less than the six (6) contest bands (160, 80, 40, 20, 15, 10) on both modes. Examples of such licenses are: Novice, Technician, 4 class license, etc. Since frequency privileges differ from country to country, competition is within one's own country. (BAND-LIMITED)
- (g) Rookie (R): An entrant in this category shall have been licensed as a radio amateur three (3) years or less. (ROOKIE)
- 2. Multi-Operator (All band operation only)
- (a) Single-Transmitter: Only one transmitter and one band permitted during the same time period (defined as 10mins). Exception: One and only one other band may be used during any 10min period if and only if the station worked is a new multiplier. Use a separate serial numbers for the multiplier station. Logs found in violation of the 10min rule will be automatically reclassified as multimulti. Maximum power allowed is 1500w total output power. Your log MUST show the correct serial number sent for each contact. (MULTI-ONE)
- (b) Multi-Transmitter: No limit to transmitters, but only one signal and running station allowed per band. Note: All transmitters and receivers must be located within a 500 meter diameter

HARC 2000-2001 Executive

President
Emsley Mitchell VE3JAI

627-0333

eamitch@mcmail.cis.mcmaster.ca

Past President
Linda Hardwick VA3LJU

389-4091

va3lju@rac.ca

Vice President (open)

Vice President Chris Cuthbert VE3PKY

547-3169

aj630@hwcn.org

Secretary Fred Robinson VE3GCP

575-5197

fredrobinson@mountaincable.net

Treasurer

Walt Bayliss VA3WWB

bayliss@nas.net

Director Stanley Bolibruch VE3GFE

538-4002

area or within property limits of the station licensee, whichever is greater. All operation must take place from the same operating site. Maximum power allowed is 1500w total output power. (MULTI-MULTI)

Exchange: RS(T) report plus a progressive contact three-digit serial number starting with 001 for the first contact. (Continue to four digits if past 999 and five if past 9999.) Multi-operator, multi-transmitter stations use separate serial numbers for each band. Your log MUST show the correct serial number sent for each contact.

Contacts between stations on different continents are worth three (3) points on

28, 21, and 14 MHz and six (6) points on 7, 3.5, and 1.8 MHz.

Contacts between stations on the same continent, but different countries, are worth one (1) point on 28, 21, and 14 MHz and two (2) points on 7, 3.5, and 1.8 MHz. Exception: For North American stations only - contacts between stations within the North American boundaries (both stations must be located in North America) are worth two (2) points on 28, 21, and 14 MHz and four (4) points on 7, 3.5, and 1.8 MHz.

Contacts between stations in the same



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166 Parkdale Av N Hamilton, ON Tel: (905) 547-8420 Fax: (905) 547-8422 Toll Free:

St. Catharines, ON Tel: (905)682-9200 Fax: (905)682-8922 Toll Free:

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country are worth 1 point regardless of band.

The multiplier is the number of "valid" prefixes worked. A PREFIX is counted only once regardless of the number of times the same prefix is worked.

A station may be worked once on each band for QSO point credit. Prefix credit can be taken only once.

CW learning styles

The following note was submitted as e-mail to ve3dc@rac.ca

(If you might dust off the key/paddles for the WPX CW contest, here's a great article on our ability to learn, and potential roadblocks to learning, CW. This article is credited to KE4ARH..ed)

There are four identified types of learners in the world - Auditory, Visual, Tactile, and Kinesthetic.

Auditory learners absorb information and are at their best in situations that require the use of hearing.

Visual people form 'pictures' in their mind to learn and to interact with their environment.

Tactile individuals are those who need to touch and feel to absorb information best.

Kinesthetics are people who require action and body movement.

Most humans exhibit some combination of all types but tend to favour one type overwhelmingly over the other types. When we apply the characteristics of these learning types to the issue of learning Morse code, the fact that so many claim they cannot learn code becomes a little easier to understand.

The process of learning Morse code would go something along these lines: hear the code > process the code > write the code. Repeat this enough and your nervous system builds a pathway between the ear, the brain, and the hand. The ear detects the dits and dahs and sends them to the brain for processing. The brain processes the audio and tells the hand to write the character. Pretty simple. As long as you are not a visual learner!

Visual learners learn best by forming pictures in their mind. They absorb information best when the instructor or teacher draws a diagram on the board. They are the ones you see in class or conversation, staring somewhere unseen as they try to write or read these mental pictures. The natural Morse code learning path for them would be: hear the code > picture the code > process the code > write the code. This works until the visual person gets to the higher code speeds. Once above a certain level the brain simply does not have enough time to accomplish the extra processing step it must do in order to learn and to execute the skill.

Some folks who find the code to be easy will tell you that they "hear the rhythm"

HARC 2001-2002 Chairs

Awards
& Volunteer Examiner

Lorraine MacPherson VA3NZ 389-7653 ab510@hwcn.org

Contesting
<u>& Property Manager</u>
Rick Danby
VE3BK 544-3253
rdanby@hwcn.org

Education & Membership Mardy Eedson VE3QEE 648-0187 meedson@home.com

Emergency

Gary Notto VE3TTO 387-1103 ve3tto@rac.ca

Volunteer Examiner Bernie Granby VA3XJ 527-7175 berngran@hwcn.org

Field Day David Bruton VE3DWJ 383-9808 am983@hwcn.org

<u>Fiea Market</u> John Kirstein VA3AWK 648-6456 OBSKDS@netcom.ca

<u>Health/Welfare</u> Mary Urbanski VE3OGQ 388-8383

Hospitality
Monthly Volunteers

<u>Newsletter/Web</u> David Jones VE3STT 549-1919 ve3stt@rac.ca

Public Liaison Co-Chair Stanley Bolibruch VE3GFE 538-4002

Public Liaison Co-Chair Neil Galloway VE3VNG 383-6986

Repeater/Technical
David Bruton
VE3DWJ 383-9808

Swap Net Control Frank Love VA3FWL 679-4524 of the code, and that they don't "listen for individual characters" but "hear the words". These comments are dead giveaways that the hams that do well with Morse code are auditory learners. And just as a Ted Williams and Carlos Delgado can't understand why anyone is unable to hit a 95mph fastball, auditory learners cannot fathom how in the world Morse code could be difficult.

And while it is more difficult for some learning types. I am not suggesting is that it is impossible for visual learners to learn code. What I am suggesting is that perhaps it is time for a little understanding for those who are having difficulty learning Morse code. A supportive environment will go a long way toward helping the frustrated visual types and increase the chances that they will someday overcome their learning barrier and move to the next level of licensing if they so choose. Perhaps someone has a method for learning code that can be tailored to each specific learning type.

Just as a teacher must adapt his or her teaching methods to enhance learning for all types, so must the Amateur Radio community adjust its attitude to help everyone become better at the Morse code. The first step is understanding the issue.

More information about learning styles can be found here:

http://www.metamath.com/lsweb/dvclearn.htm

http://bsd-server.nc.edu/virtcol/ss/learn.html

February minutes

Fred VE3GCP - Secretary

The meeting was called to order by the president Emsley Mitchell VE3JAI, at 8:07pm.

Emsley pointed out that there was symmetry in the numeric expression of today's date, 02/02/02.

Announcement

The editor apologized for an obvious error in the current issue of THE HAMILTON AMATEUR, our club

bulletin. In fact it was mailed out with two page 3's and no page 4. It did serve to demonstrate that some people actual do read it and noticed the problem. David, our editor advised that the missing page would be included with the next mailing. I guess this points out how we are blessed with such a good editor that we take the bulletin for granted.

Emsley also announced that David Bruton VE3DWJ has agreed to repeat again this year as Field Day Coordinator. David made an invitation to all members to volunteer for their favourite band get involved. At this time we are looking most importantly for band captains.

Our guest speaker, Steve Parsons VE3SMP was introduced. Steve is a representative of Radioworld Sales Inc. Steve did a show and tell of some of the toys he has. This included some of the latest Miniature Technology available to Amateurs at this time. He also had a handout bio about his background in computers and technology.

Steve ended his talk with a brief "question & answer" period. His talk was very well received.

9:30pm - Coffee, donuts and fellowship.

Business

Gord Barber told his story of how last month he was able to locate microfiche copies of the Letters Patent and Incorporation of the HARC in 1956.

The treasurer Walter Bayliss VA3WWB made his report and a copy is was retained for this exec meeting.

Mardy Eedson VE3QEE gave his membership report; 89 paid members, 79 of which are Primary and 10 Family. He also pointed out that there are some active members who have not renewed for this year yet. Mardy will pursue this and consider discontinuing the bulletin to those individuals.

Bernie Granby VA3XJ explained briefly about the proposed abolition of the Morse code requirement from the Amateur License. He suggested that we support this, as it will happen sooner or later anyway. In the meantime it creates a division of the Amateur ranks, into Code and Non-code groups. He also suggested that each of us should BRING A FRIEND to the next meeting.

Brad Pearman VE3EBP announced that he is currently teaching a small class of Basic License students. There is no advanced class at this time but he is willing to start one if needed.

The secretary asked for nominations or volunteers for the vacant position of Vice President.

Mary Urbanski VE3OGQ announced that Jim Hardwick VE3OWL has had a trip to the hospital but is expected back home this week. Jim's wife Linda VE3LJU is on the club executive.

Meeting adjourned at 10:15pm.

Secretary's note pad

Fred VE3GCP - Secretary

Those of you that attended the February meeting know that it was very well received and our thanks goes out to Radioworld Communications for sending Steve Parsons VE3SMP.

The Tuesday following the club meeting we had our executive meeting as usual and there was a good bit of the routine business that was dealt with. Since the resignation of David Near VE3DNN as VP we have been seeking a replacement for him, so if you would like to nominate someone or volunteer, we would be happy to hear from you.

As you may already know, John Kirstein VA3AWK is our new Flea Market chairman. Spring is not far away so that means a young man's (and lady's) fancy turns to thoughts of Field Day. David Bruton VE3DWJ will coordinate this event again this year so contact him about the band you are interested in. In view of the fact that this is the 70th Year of the Hamilton ARC wouldn't it be justifiable to put on a big effort and win the top FD spot as we have done in the past. Our club has historically been a top contender and a gold medal this year would seem to be appropriate.

If you have a project that you are working on or would like to enlist the

help of other club members why not call me and we will try to give you a bit of time at a club meeting. This could be a good approach to antenna design and construction for Field Day. At the last meeting, Bernie suggested that each of us try to bring a friend or member that we have not seen at the general meeting for a while, good idea Bernie. Maybe we could get some of the Old Dogs of Field Day out to a meeting.

Anyway, the club is like making a stew, what we get...is the result of what we put in.

President's message

Emsley VE3JAI - President

Last meeting the speaker was Steve Parsons from Radioworld. Steve brought with him some state of the art ham gear (handheld, mobiles, power supplies, etc). Those of you who were absent from this meeting really missed out on a fine presentation.

State of the art micro-electronic devices are fine but there are other areas or aspects of the hobby that hams find equally or more interesting. Home brewing is one such area and in my opinion there is no greater satisfaction in this hobby than designing and building a project and have it work beyond your wildest expectations.

Home Brew night is a few meetings away, so let's get busy with those projects if you have not already started. There is still enough time for even a moderately ambitious project. Think, for example, how great it will be if that home brew antenna is used on Field Day to work a number of DX stations including Nunavut and the Yukon.

Finally let's start thinking about Field day. It's a great opportunity to become involved in the hobby and is an excellent learning experience. Everyone is welcome to participate regardless of license of qualification.

See you at the next club meeting – March 20th!

Don Graziano VE3OCY/VE3VZ, is a long-standing member of our club. He is well known for his technical background and has worked hard for the club for many years. In recent years Don has gotten very busy with the contest group and has become a serious student of the contest. On trips that he took (with his wife Mary VE3YOC) he made slides and videotapes of some of the most well-known and elaborate DX/contest stations in Canada. Don knows these operators and their stations quite well and this made an interesting presentation. One very obvious fact about all of these stations was the huge (expensive) antenna farms. It was pointed out that you don't become a contest champ with just a big buck station though; you must also have the experience and dedication. The show included pictures of Garth VE3HO, a world famous DXer, John VE3EJ, Canada's top contester, Sam VE5SF, a top (low power) contester and Don VE6JY, the top contester in Western Canada.

The meeting was adjourned to donuts and coffee just after 9pm and many members stayed for the fellowship until past 10pm.

dB loss in connectors Pt.1

The following note was submitted as email to ve3dc@rac.ca

(Once again, while scanning some of the better internet reflectors in my never-ending quest for even more knowledge about our hobby, I came across an interesting question about just how much loss we endure through the tiny PL259's, and other connectors, we use to get our signal from point A, our transmitter, to point B, our antenna. Here are the two explanations..ed)

From the April 1988 Bullsheet, newsletter of the Texas DX Society

Coax Fittings Redux by Bill Schrader K2TNO

I've always fallen for the old adage that says that UHF coax fittings add losses

HARC 2001-2002 Chairs

Awards
<u>& Volunteer Examiner</u>
Lorraine MacPherson
VA3NZ 389-7653
ab510@hwcn.org

Contesting
<u>& Property Manager</u>
Rick Danby
VE3BK 544-3253
rdanby@hwcn.org

Education & Membership Mardy Eedson VE3QEE 648-0187 meedson@home.com

Gary Notto
VE3TTO 387-1103
ve3tto@rac.ca

Volunteer Examiner
Bernie Granby
VA3XJ 527-7175
berngran@hwcn.org

Field Day David Bruton VE3DWJ 383-9808 am983@hwcn.org

Flea Market John Kirstein VA3AWK 648-6456

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Repeater/Technical
David Bruton
VE3DWJ 383-9808

Swap Net Control Frank Love VA3FWL 679-4524 and should be kept to a minimum. Recently, I had occasion to clean out my toolbox (after ARRL Phone at NR5M) and found 5 right angles, 4 barrels, 3 double-males, and several short lengths (1-3 feet) of RG-8X. I decided to test this adage by connecting up this wild assortment of coax fittings into a plumber's delight series arrangement and then checking the loss and SWR problems on several frequencies.

The test set up consisted of my TS-930S or 2m rig feeding a dummy load with a Daiwa power meter as the indicator. I measured RF power at 14, 28 and 144MHz using either rig wired directly to the load or when fed through the mess of fittings.

The connections were made at random, simply to use up as many fittings as possible. When done, there were 17 male-female coax joints in the line, as opposed to two male-female coax joints when feeding the dummy load directly.

The results below show the additional loss due to the 15 coax joints.

Frequency	Attenuation (dB)	SWR Change
14MHz	Not Detectable	Not Detectable
28MHz	0.3	+0.1*
144MHz	2.0	Not Measured

* SWR was 1.1:1 with coax only; this value increased to 1.2:1 when the series of joints was added.

The results show that UHF coax fittings themselves add negligible loss in the HF spectrum and are surprisingly good even at 144 MHz. Thus, for HF purposes I conclude that addition of right angles, jumpers, etc., does not add significant additional attenuation or reactance. Rather, it is certainly the coax length itself that causes the biggest losses.

Caveats: Coax joints are deleterious for reasons other than their possible RF loss characteristics. These include:

1) PL-259s are frequently assembled and soldered incorrectly.