

# marcOgram



Official Publication of The Montreal Amateur Radio Club Inc. Box 53047 - RPO Dorval, Dorval Quebec H9S 5W4

A MARC Monthly Newsletter

Volume 53, Number 9 August 2008

*Next meeting - Wednesday 24 September 2008*

**Ragchew and Fleamarket: 19:30, Club meeting: 20:00**

St. Ignatius of Loyola Parish Church

4455 West Broadway (corner of Terrebonne) in N.D.G. - Montreal

(Please enter by the back door)



## A Word from The President

Hello,

Well, it hasn't exactly been a spectacular summer so far but it hasn't been bad either. Hopefully you've all been enjoying your summer activities and will continue to enjoy what is left of the summer and I look forward to seeing you all this fall-

73 de Jim.

### DIRECTORS

**President:** James R. Hay, VE2VE  
514-697-7205

[jrhay@HayA.qc.ca](mailto:jrhay@HayA.qc.ca)

**Vice President:** V Sheldon Werner, VA2SH

[sheldonm.werner@mac.com](mailto:sheldonm.werner@mac.com)

**Secretary:** Bob Paknys, VE2JBP

[ve2jbp@rac.ca](mailto:ve2jbp@rac.ca)

**Treasurer:** Vernon Ikeda, VE2MBS  
514-684-7944

[ve2mbs@rac.ca](mailto:ve2mbs@rac.ca)

**Directors:**

**Craig Brander, VE2YGK**

[craigyul@total.net](mailto:craigyul@total.net)

**Earl Paris, VE2ESP 514-524-4633**

**Nicholas Kalantzis, VE2WPT**

[ve2wpt@videotron.ca](mailto:ve2wpt@videotron.ca)

**Steven Fell, VE2SWC**

[ve2swc@marc.ca](mailto:ve2swc@marc.ca)

**Ron Campbell, VA2RJC**

[va2rjc@videotron.ca](mailto:va2rjc@videotron.ca)

**Paul MacDougall, VA2YQ**

[mapletree@vsn.ca](mailto:mapletree@vsn.ca)

**Club Call Sign:** VE2ARC

**Club Website:** <http://www.marc.qc.ca>

**Club Email:** [ve2arc@rac.ca](mailto:ve2arc@rac.ca)

### Repeaters

**VE2BG 147.06 MHz (+)**

*Owned and operated by Montreal Amateur Radio Club. Located on the Point Claire water tower.*

**VE2RED 147.27 MHz (+)**

*Owned and operated by the Montreal Amateur radio Club.*

**VE2RJS 449.975 MHz (-)**

*Owned by the Montreal Amateur Radio Club and operated by the Cote St. Luc Amateur radio Association.*

### Meetings of the Board of Directors

Meetings of the Board of Directors are open to any member to attend. Board meetings are held on the first Wednesday of the month (Sept. to June) at 7:30 PM at the Montreal Association for the Blind, 7000 Sherbrooke St. West.

Should you wish to attend one of the meetings you are welcome. Just speak to one of the directors before-hand to make certain that the meeting has neither been cancelled, nor the location changed.

The MarcOgram is published nine times per year on the second to last Wednesday of September through June, excepting December, by the Montreal Amateur radio Club. Advertising and copy deadline is one week prior to publication.

### Editor

Ron Campbell, VA2RJC  
[va2rjc@videotron.ca](mailto:va2rjc@videotron.ca)

Tel: 514-767-2804

#### Annual Fees are:

GeneralMembers... \$25.00

Associate Members \$25.00

White cane members \$15.00

Family members (per family) \$30.00

The membership year runs from September 1 to August 31. Membership received on or after June 1 commences immediately and extends through the subsequent membership year - covering a period of up to fifteen months.

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The opinions expressed herein are, unless otherwise stated, solely those of the authors concerned, and not those

of the Club, the Directors or members and do not represent the policy of the Club.

### Club Activities - Monthly Meetings

Club meetings are held on the last Wednesday of the month. The meetings will be held in the Lounge which is the rearmost door on the South side of the building unless we have reason to hold it in the Parish Hall which is the first door on the South side of the building. An informal flea-market and ragchew session starts at 19:30 with the formal meeting starting at 20:00. STM buses 51, 162, and 105 stop

### From the Editor's Desk

Well here we are at last enjoying our summer weather or at least I hope you all are. This subject of weather has received a lot of news coverage throughout the world but also in my recent travels, I have heard many people from several countries tell me that the weather they have been experiencing is different from what they remember from previous years. My wife and I were in Italy in early July, the local temperature was a high of 38 °C with humidity at 80%. we then went to Belgium and the weather was awful, rain, thunderstorms and temperature of 17 °C. We then arrive back in Montreal to find that things had not been much better here. By my books, this is a good sample of "weather change."

Another subject that I've heard quite a lot about on the radio since our return is "recyclable garbage." Again during my recent travels I had the opportunity to witness the approaches to the the subject by different cities. The most unique was that of Brussels (Bruxelles). Apart from the normal coloured containers for the usual waste, paper/cardboard, plastics and plants etc, they also have special containers for glass. Not just any glass, but different types of glass. One needs to undergo some form of practical training before you

**75<sup>th</sup>. Anniversary Fundraiser WE NEED YOUR SUPPORT**

In order for MARC to reach some of its goals, the BOD have decided to increase the advertising in the marcOgram newsletter. The rates are as follows:

Business card	\$ 5.00 per issue	Quarter page	\$ 7.00 per issue
Half page	\$12.00 per issue	Full page	\$20.00 per issue

The "Marcogram" from September to May, which is eight issues. This year we added June, which becomes a free month. So we actually publish nine issues. We have a list distribution of about 200 persons. A business card placed for 8 issues would only be \$ 40.00. We are asking for all members to try and contribute either via a donation, or asking a friend or family who has a business to place an ad.

can utilize these containers. Here's a picture of my YL making the attempt.



Who said life was simple!!!

That's it -  
*Your editor..*  
*Rjcam the Video-n-Podcast Ham,*  
*VA2RJC*

**From the ARRL****DUTCH AMATEUR RADIO SATELLITE NOW LIVE**

The linear transponder aboard the new Dutch OSCAR 64 satellite <http://www.arrl.org/news/stories/2008/05/22/10117/?nc=1> (otherwise known as Delfi-C3 <http://www.delfic3.nl/>) is now open for CW and SSB operation.

The spacecraft boots into transponder mode whenever it is in full sunlight. Ground controllers will briefly switch the satellite to either "basic" or "science" configuration once every two weeks; otherwise, the linear transponder will be the default mode. The transponder uplink passband is from 435.530-435.570 MHz with a down-

link passband from 145.880-145.930 MHz. The transponder CW beacon can be heard at 145.870 MHz.

Delfi C-3 was successfully launched April 28, 2008 from India aboard a Polar launch vehicle <http://www.arrl.org/news/stories/2008/04/28/10067/?nc=1> and was successfully commissioned, currently transmitting telemetry on the 2 meter amateur band. In addition to its 2 meter downlink, Delfi C-3 has an uplink on the 70 cm band.

The satellite was developed by a team of some 60 students and faculty members from various polytechnic schools in The Netherlands. Delfi C-3 carries two experiments -- one involving thin film solar cells developed by Dutch Space, and an autonomous wireless Sun sensor from the Dutch Government Research Institute (TNO). E-mail reports are welcome [info@delfic3.nl](mailto:info@delfic3.nl).

**ARRIS TEAM LOOKING FOR GROUND STATIONS**

Do you want to be part of the international network of ground stations that help support Amateur Radio on the International Space Station (ARISS) operations ARISS is looking to add numerous ground stations capable of relaying ISS Amateur Radio sessions with schools and also serve as back-up communications relays should they be needed. Locations all over the world will be considered, but the greatest need for stations is in Central America, South America, Falkland Islands, Western Australia, Canada and Alaska.

The following are guidelines for stations wanting to be considered: Third Party agreement with United States or waiver from their telecom agency; ability to speak and understand English; minimal horizon obstructions; 24/7 access and availability of station; operator(s) willing to support scheduled contacts at various times; phone patch; AZ/EL tracking satellite system, preferably an auto tracking system with the capability for manual override; multi-element Yagis for 2 meters and

**dvcam-ham productions**

**Ronald J Campbell, VA2RJC**

Editor - marcOgram

**Podcast and Video Production**

**podcam@gmail.com**

Tel: 514-767-2804

<http://podcam.libsyn.com>




## Submissions for entry into marcOgram

For submissions of text only it is preferable that you send as a ".txt" file, however, MS Word is acceptable.

For pictures please use "jpg" format with maximum size 400 x 240. Where possible use at least 240 dpi.

For clip art if possible use "gif". Maximum size 480 x 340 pix. This will give a picture size of approximately 8 Kb.

Contact me at:

[va2rjc@videotron.ca](mailto:va2rjc@videotron.ca)

Home Tel: 514-767-2804

70 cm (circular polarization preferred); pre-amps and transmit output greater than 70 W. If you can specify your station's EIRP and receive sensitivity (thereby taking into account cable losses, pre-amps and antenna gain), it would be greatly appreciated.

Stations that can support the following will be given special consideration, but these items are not required: Auto Doppler adjustment of frequencies; ability to speak and understand languages other than English; 1.2 and 2.4 GHz satellite hardware; Packet; SSTV; Digital ATV; redundant power system, and high-speed Internet.

If you or your club would like to be considered for selection as one of the new ARISS ground stations, send an e-mail to ARISS with details about your station and contact information <[ARISS-telebridge@amsat.org](mailto:ARISS-telebridge@amsat.org)>. -- Information provided by Frank Bauer, KA3HDO, ARISS International Chairman

HF DIGITAL VOICE PROGRAMS  
ONCE AGAIN AVAILABLE FOR  
DOWNLOAD

Citing codec (coding/decoding) licensing issues, three free Windows programs for sound card-based HF digital voice were yanked from their download site for a short time recently, surprising hams who are interested in HF digital voice operation; several online groups that supported the software were also closed for a short time.

WinDRM, DRMDV and FDMDV, all written by Cesco Lanza, HB9TLK, used a codec that was developed for the US Department of Defense and NATO. Rights to various forms of the codec are held by several companies. According to Gary Pearce, KN4AQ, the companies have "winked" at ham radio use for several years, but a recent complaint caused the programs to be pulled from the download site. "Lanza did a quick rewrite to use an open-source codec, and now WinDRM and FDMDV are back," Pearce said. "DRMDV, an intermediate program between the other two, has been abandoned. WinDRM could always use the open-source Speex codec, but FDMDV users will need to download the new version."

Pearce said these three programs all allow hams to transmit and receive digital voice by connecting their PC sound card to an ordinary SSB transceiver: "The result has been surprisingly high quality audio, with virtually no noise -- sort of like listening to FM, but in the narrow bandwidth of a sideband signal. WinDRM, the best sounding program, uses 2.5 kHz of spectrum. FDMDV sounds a little rougher, but uses only 1.1 kHz of spectrum. They both use OFDM modulation, a set of close-spaced carriers that are each modulated with a little bit of data to add up to the final digital signal. The main problem with HF digital voice is that it needs fairly strong signals. FDMDV works better with weaker signals than WinDRM."

Pearce said that none of the available open-source codecs work as well as the old one: "MELP <<http://en.wikipedia.org/wiki/MELP>>, or Mixed Excitation Linear Prediction, was designed specifically for

high-quality, low data-rate voice communication. So the on-air audio might suffer some with the new version. Digital voice users have been waiting and hoping for someone to concentrate on developing a codec optimized for ham radio use, but none has been forthcoming."

FDMDV and WinDRM can both be downloaded from Jason Buchanan's, N1SU, Web site <<http://www.n1su.com/>>.

The AOR digital voice modems and D-STAR radios both use the AMBE 2020 vocoder, and are not affected by the coding changes; the AMBE 2020 vocoder is a proprietary chip that is embedded in each unit.

For more information on WinDRM, check out QST Editor Steve Ford's, WB8IMY, article ["Life Could Be a DReaM," pages 38-40] in the April 2007 issue of QST.

GERMAN RADIO MANUFACTURER HALTS TRANSCEIVER PRODUCTION

In a surprise move, Hilberling GmbH <<http://www.hilberling.com/>> has stopped production on the much anticipated PT-8000 series of HF/VHF Amateur Radio transceivers. Apparently due to CE marking regulations <[http://en.wikipedia.org/wiki/CE\\_mark](http://en.wikipedia.org/wiki/CE_mark)>, Hilberling had to make constant adjustments to the design of the radio and was unable to repeat the performance of prototypes in production models and was not able to justify the expense involved with further redesign work. The CE mark certifies that a product has met European Union health, safety and environmental requirements, ensuring consumer safety. Array Solutions <<http://www.arrayolutions.com/>> -- which had been set to be the North American distributor for the transceiver series -- featured the PT-8000 at its booths at the 2008 Dayton Hamvention.

Hans Hilberling, DK7LG, explained in German on the company's Web site

why the company canceled production of the PT-8000 series:

"Production of the PT-8000 equipment series has been halted. Due to the persistent challenges we've had to overcome in the process of bringing the official EU-wide manufacturer's model to fruition, it became necessary to make more and more adaptations in the design of this cutting-edge transceiver. The lofty design goals of the PT-8000 could be attained in some prototypes. We encountered difficulties that we could not overcome at justifiable expense in guaranteeing, without reservation, a high standard of mass production involving many suppliers. We appreciate the great interest this project has attracted over its entire course." -- Translation by Rick Lindquist, WW3DE

The PT-8000 was featured in a 4-page pull-out advertisement in the May 2007 issue of QST. The ad stated that Hilberling had not yet received approval by the FCC to market the radio in the US. All digital devices -- including Amateur Radio equipment -- must be approved by the FCC, meeting the requirements of FCC Part 15 and RSS 210 (Radio Standards Specifications, Industry Canada) to ensure its compliance as an unintentional radiator and as a generic receiver. Approval was granted in May 2008. Testing was done in April and May 2008 by Professional Testing (EMI) of Round Rock, Texas.

According to the QST ad, the PT-8000 was set to feature:

- \* An automatically tuned preselector
- \* Precision matched first and second mixers, designed by Synergy Microwave, with third intercept points at 40+ dBm
- \* Three roofing filters at 2.7, 6 and 12 kHz
- \* Six hybrid amplifiers from LF to VHF with third intercept points at 50+ dBm
- \* Seven 16-pole ladder filters working in combination with DSP filters in the 10.7 MHz second IFs of each filter
- \* 13.8 V HF MOSFETs (metal-oxide-semiconductor field-effect transistor) in the 100 W power amplifier; high efficiency (70 percent) SD3933 HF MOSFETs in the 600 W final amplifier
- \* Three additional 70.7 MHz roofing filters in the transmitter stages for clean output
- \* Designed with UHF and microwave transverters in mind, 1 Hz frequency resolution with the ability to connect transverters to both receivers simultaneously
- \* Taps at the first and second IFs for analysis, monitoring and experimentation
- \* Easily updatable firmware

The price for a 10 W PT-8000 started at \$12,000, going up to \$16,000 for the 600 W model. Commercial and military grades were priced at an additional \$10,000.

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**sion. from The ARRL Letter/  
American Radio Relay League**

## VE2BG News

While we haven't yet solved the periodic deafness from which VE2BG suffers there have been developments which are news worthy. First thanks to the United Irish Societies of Montreal for allowing the use of their van to help move the equipment which we had stored at the water tower and also thanks go to John Gilroy and Joe Glover for helping Jim and Vernon with this task.

The City of Montreal will be doing some work on the valves associated with the water tower and the stored equipment had to be moved to allow access to the trap door, so that city workers could obtain needed measurements, in teh shack housing the repeater. Within the next year VE2BG News

Until that time VE2BG will remain where it is and efforts are being made by representatives of the City of Pointe Claire to ensure that the repeater will remain housed at the water tower.

As we have more news we will keep you advised.

*James R. Hay, VE2VE*

[ve2ve@marc.ca](mailto:ve2ve@marc.ca)

*President*

*Montreal Amateur Radio Club*

*(VE2ARC)*

## Tactical media artwork utilizing the electromagnetic spectrum

*Presented by Matthew Biederman  
(VA2XBX)*

Matthew Biederman (VA2XBX/P) is a graduate of the West Island Radio Club classes. Under the call sign, he will be operating a high frequency transceiver in the open air of Cabot Square. He will be attempting long-distance communication with as many different operators as possible over the



### Justin Grow

*Dell Direct Store, Montreal  
Sales & Finance Representative  
Promenades St-Bruno*

*Place your order online:  
[www.dell.ca/directstore](http://www.dell.ca/directstore)  
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*Dell Direct Store: 450.461.9595  
Office: 1.800.999.3355 ext 5386  
[justin\\_grow@dell.com](mailto:justin_grow@dell.com)*

course of the intervention. Each complete communication will be logged and mapped creating a diary of the airwaves every night. In addition to voice communications, he will work with digital communications on HF, in order to send and receive SSTV (SlowScan Television), WEFAX (from NOAA Satellites), PSK31, Hellschreiber, and many more. All of the actions' audio will be played in Cabot Square, creating a sonic landscape of the electromagnetic spectrum in real time. All of the audio will be archived and made available under a creative commons license. The aggregate of these actions build into the overall DAREDX (radio.dare-dare.org) project.

“DAREDX” is a tactical media artwork which uses the electromagnetic spectrum to establish a public presence on the airwaves

#### LOCATION:

*Montreal, Quebec*

*Cabot Square  
Ste. Catherine St & Lambert- Closse  
Metro: Atwater*

#### DATES:

Friday, August 29th – Sunday, September 21st  
17:00 – 21:00 EDT  
(21:00 – 01:00 UTC)

#### PROJECT SYNOPSIS:

Today's radio spectrum is predominately utilized by the military and governmental organizations, with government regulating bodies doling out expensive licenses to corporations for the right to broadcast en masse in public space. These powerful "one way" broadcast licenses have come to be understood as 'radio' versus the initial conception of radio as a "many to many" communications medium. Except for a small fraction of frequencies allocated to amateur operators, who simply need to pass an exam to receive the right to use the spectrum, there is no other way for the public to gain any access to this resource, arguably one of Earth's most important, and only inexhaustible resources.

**STEPHEN PICKFORD --TRAVEL EXPERT**

Host of The Travel Hour with Stephen Pickford and Friends (formerly CIQC's Travel World Radio Show)  
--www.stephenpickford.com

Our situation today is far from Guglielmo Marconi's visions of radio's ability to save lives and enlighten humanity, or Velemir Klebnikov's 'Radio of the Future'. Instead, today's radio spectrum is a tightly controlled, profitized commodity. In this light, DAREDX seeks to re-establish the public's presence and right of occupation within the radio spectrum. While there exists an active and progressive amateur radio community worldwide, it is out of sight from the general public. DAREDX will expose and access the radio spectrum by aurally re-broadcasting nightly explorations throughout the radio spectrum.

Activating the evening air of Cabot Square in order to re-establish the connection of the spectrum to public space, DAREDX will allow the public in the square to hear the signals in which we are enveloped. Re-invigorating the words of an infamous amateur operator in the early 1900s when told by the US Navy to remove himself from a particular frequency: "Say, you navy people think you own the ether. Who ever heard of the navy, anyway. Beat it, you, beat it." The spectrum will no longer remain closed

to the ears and eyes of the public, and instead will become part of the natural landscape of Cabot Square.

There will also be a series of public talks, walks, and workshops held every Sunday afternoon at 2PM. Sunday the 31st will be a micro power FM Transmitter workshop, during which participant will build their own FM transmitter to take home with them. Other Sundays will include talks from local HAM radio enthusiasts, pirate radio operators, and a sonic 'drift' through Montreal to listen to the invisible electromagnetic radiation around our city.

DAREDX will run every evening (except Mondays) from the 29th of August until the 21st of September from 5PM to 9PM (21:00-01:00 UTC).

For more information, please see [www.radio.dare-dare.org](http://www.radio.dare-dare.org)  
<<http://www.radio.dare-dare.org>>

Or contact:

[m.biederman@sympatico.ca](mailto:m.biederman@sympatico.ca)

#### BIOGRAPHY:

Originally from the United States, Matthew Biederman (Montréal) has realized performances, installations, and exhibitions of his works since 1990. He collaborates internationally with a variety of cultural workers and artists. His work has been recently shown at Arts Electronica, ISEA, amongst other institutions and festivals. [www.mbiederman.com](http://www.mbiederman.com)  
<<http://www.mbiederman.com>>

#### ACKNOWLEDGMENTS:

DAREDX is part of the Office of Spectral Ecology's 2008 program. [www.spectralecology.org](http://www.spectralecology.org)  
<<http://www.spectralecology.org>>

DAREDX is funded in part through in-kind donations from Antimodular Research.

73,  
Charles A. Wimer  
Amateur Radio Call: KC8EHA

## **RAC Bulletin #2008-16 - RAC announces a newly revised HF Band Plan.**

RAC announces a newly revised HF Band Plan.

The HF band plan presently in use in Canada has been adopted in 1996. Since, many changes have happened in the Amateur world and other band plans have been revised and modified. Let us only mention the changes announced by the FCC in 2007 affecting the US band plan and the revised one adopted by the IARU Region 2 countries at the Brasilia conference in September 2007.

Just under two years ago, Radio Amateurs of Canada had asked Bob Nash, VE3KZ, a former First Vice President of RAC, to re-activate the HFBPC (HF Band Planning Committee) with a goal to review and modernize the Canadian HF Band Plan. Bob's committee has since worked very hard in studying and consulting all across Canada to eventually come up with a band plan proposed to the Board of Directors of Radio Amateurs of Canada. The RAC Board has adopted this plan at its July 2008 meeting and the new band plan is now on the RAC Web page at:

[http://www.rac.ca/service/bandplans/hfband\\_e.php](http://www.rac.ca/service/bandplans/hfband_e.php)

RAC wants to thank the HFBPC members for their hard work and wishes the Canadian Amateur community much pleasure in using the new band plans.

73,

Daniel A. Lamoureux, VE2KA  
Vice President International Affairs,  
Radio Amateurs of Canada.

[ve2ka@rac.ca](mailto:ve2ka@rac.ca)

## **APCO Canada & NENA Ontario 2008 Conference & Trade Show**

**November 16-19, 2008  
Westin Hotel and Convention  
Centre  
Ottawa, Ontario**

**marcOgram - August 2008**

The AGENDA DETAILS are now available on line for the APCO/NENA 2008 Conference and Trade Show. To access this information go to :

[www.apco.ca](http://www.apco.ca), then select Conferences, then select Ottawa 2008, then select Register.

At the top of the registration page there is a link to the Agenda Details. As additional specifics become available they too will be posted in this area so keep checking.

## **Annual Simulated Emer- gency Test (SET) October 4-5, 2008**

The Simulated Emergency Test is a North America-wide exercise in emergency communications, administered by the ARRL and the RAC Emergency Coordinators and Net Managers. Both ARES and the National Traffic System (NTS) are involved. The SET weekend gives communicators the opportunity to focus on the emergency-communications capability within your community, while interacting with NTS nets. The 2008 dates are Oct 4 and 5. ARES units and other groups are free to conduct their SETs anytime between September 1 and November 30 if an alternative date is preferred. The activity period should not exceed 48 hours.

RAC administers our Canadian SETs.

Among other objectives we aim to strengthen the relationship between ARES and served municipalities and relief agencies. It is vitally important that this be done at the local EC level.

The deadline for receipt of all reports is January 31, 2009. Reporting forms are available here. After their chosen SET weekend, participating ECs and Net Managers must send their completed forms to:

RAC HQ  
Attention VPFS  
720 Belfast Road, Suite 217  
Ottawa, ON K1G 0Z5

### **Purpose of SET**

1. To find out the strengths and weaknesses of ARES, NTS and other groups providing emergency communications.
2. To provide a public demonstration -- to served agencies such as Red Cross, Emergency Preparedness and, through the news media, of the value to the public that Amateur Radio provides, particularly in time of need.
3. To help radio amateurs gain experience in communications using standard procedures and a variety of modes under simulated- emergency conditions

### **National Traffic System**

The main function of NTS in an emergency situation is to tie together all of the various local activities and to provide a means by which all traffic destined outside of a local area, section or region can be systematically relayed to the addressee

### **----Late News----**

## **Hurricane Gustav – Notice to all amateurs in IARU re- gion 2 - August 27, 2008**

Hurricane Gustav is currently making its way through the central part of the Caribbean basin and has passed through Dominican Republic and Haiti and will affecting the island of Cuba in the next few hours. It has been requested that IARU R2 member societies remind their members to be aware of emergency communications that may occur in that region, and to keep those frequencies clear for emergency traffic. This message does not indicate any particular frequencies that may be used for this purpose.

73, Vernon - VE2MBS - RAC News Service [racnews@rac.ca](mailto:racnews@rac.ca)

Bill Snyder's List of Hurricane Frequencies

<<http://hurricanefrequencies.com/>>

**RADIO H.F.**



**PO Box 67063-Lemoyne  
St-Lambert, Quebec  
J4R 2T8**  
tel/fax :450-671-3773  
**sans frais - toll free in Canada**  
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