

# West Island Amateur Radio Club Bulletin

# February 2011 Edition

# Upcoming Meeting - February 21st 2011 This month's topic "Round Table"

Field Day - Space Day - Software Defined Radio - UHF Repeater and Other Topics

# President's Message and Report

by Ken Fraser, VE2KLF

>>> WI ~ ARCS <<<

#### Around the QTH:

As some of you have already heard, the dumping of the QTH basement is proceeding, albeit slowly. Thanks to Andy, VE2DNN and his crew I was relieved of a 1962 Ford Anglia engine and associated transmission (part of my son's collections) which freed up a few more square feet in the basement. I am currently constructing a small shelf to accommodate my wireless router and cable modem on a panel which will probably also require some EMC suppression techniques for the HF operations at the QTH. Unfortunately this time of year is also burdened with tax calculations for commercial corporations (which I am involved with) ... Ah, to find the time for amateur radio ... sniff.

### January 2011 MTG:

Once again George, VE2NGH produced a very useful talk on repeaters with 'on the floor' demonstrations of a VHF duplexer and the repeater itself from the MARC portable unit (standard 600 kHz separation of Tx and Rx frequencies). The characteristics of the duplexer were displayed on an HP spectrum analyzer with a tracking generator operating as a magnitude / frequency response plotter. George discussed the different connections in duplexers: the 'rat-race' or hybrid loop and tandem setups of the resonators and how to tune the resonators. He stressed the importance of the cables (phasing) in the connections. All of this was to achieve a Tx / Rx isolation of 90 dB or more when coupled to a common antenna with minimal insertion losses on the Tx side especially. Again, thanks George for a very practical demo, which I am sure, was enjoyed by all present.

### February 2011 MTG:

We are departing from our usual agenda this time around by having the coffee/cookie break and 50/50 draw at the end of our meeting. The tentative agenda is as follows:

- CSM reports from club members who participated
- follow up on Field Day preparations
- other business
- a discussion on Software Defined Radio to be led by Bob, VE2AXO \*
- coffee/cookies and 50/50
- FIN, with time for rag chews
- \* You might wish to check out the current issue of QEX for an interesting article on a homebrew SDR transceiver.

**Notes:** Thanks to Charles, VE2RFI we were informed that DTV, CTV (CFCF 12) is now on the air on Channel 51 UHF. Where the Tx is located is unknown at the moment. Does anyone have info here?

If you have not already paid your 2011 dues, please see that Malcolm, VE2DDZ receives your dues <u>along with your filled</u> <u>out subscription form</u> for receipt and records either at a meeting or by mail to the WIARC postal box.

The Canadian Ski Marathon occurs on February 12 and 13, 2011. The operation is East to West this year from Lachute to Buckingham. For those who wish to monitor the proceedings of some of the CSM traffic locally, it should be on VE2RM (147.000 [-] MHz) Saturday, Feb 12.

# C U on the 21<sup>th</sup> of February – 2011 ...

de .ken. VE2KLF

# What Happened Minutes of the January 2011 WIARC meeting

by Keith Glashan, VE2MTL

Minutes of the January 2011 WIARC meeting by Keith Glashan VE2MTL

- As I, Keith VE2MTL was away, Charles VE2RFI agreed to take the minutes for me. Thank you Charles. I hope I am interpreting your notes accurately. As I have been advised, the meeting began at 19:52. Ken VE2KLF presided and welcomed the 25 attendees. There was the usual roll call with call signs. The details of the Monday January 17, 2011 meeting are as follows.
- 1. **Visitors:** There were 3 first time attendees this evening. They are Marc-Andre VE2EVN, Richard VE2ARW, and Eamon VE2EGN. Welcome to all. Hope you all become regulars.
- **2 Morgan Arboretum:** Ken VE2KLF showed the Christmas card that the club received from the Morgan Arboretum. In it they thanked us for our donation during the field day event.
- 3. **Ski Marathon:** The members were reminded that the Canadian Ski Marathon will be the week-end of Feb 12<sup>th</sup> and 13<sup>th</sup>. This year the course proceeds from Lachute going westward to Buckingham. To participate, you must sign up.
- **4. RAQI Q&A:** Vern VE2QQ informed the members that Mario from RAQI would be taking questions 'on-air' beginning Thursday Jan 20<sup>th</sup> at 17:00 on 146.700. Mario promises to stay as long as there are questions to answer.

- 5. **Fractals:** Ken VE2KLF talked about fractal antennae with respect to their usage for digital TV.
- 6. **Dues are Due:** Malcolm VE2DDZ reminded the members to pay their dues for 2011. Don't forget to fill out the forms and get your receipt. Thanks.
- 7. **Space Day 2011:** Ken VE2KLF announced the dates for the Science and Technology days this year. This year, this popular event takes place May 25<sup>th</sup> and 26<sup>th</sup> with the 24<sup>th</sup> set aside for setup.

After the break, Guest Speaker: George VE2NGH took the floor. Before he started his presentation, he touched on his early plans for field day. He proposed that we consider a coordinated event with MARC and the Concordia University Amateur Radio Club. He suggested that the venue this year be Millennium Park in Dorval. He is hoping that we put up a tower and beam as we have in the past. He did not exclude using Pine Beach or Centennial Park. He concluded with the suggestion that we all consider the various options, and that we take it up again at the February meeting. Finally, George got into his presentation on 'repeaters and duplexers'. He suggested that the vast majority of Hams on 2 meters use repeaters. As a matter of fact, they probably use repeaters the vast majority of the time. Since many of us never actually see a repeater or its components. George brought a portable repeater with him for the demonstration. Perhaps the most impressive piece of equipment was the set of cavity filters. Did I say that this was a "portable" rig? He had a slide show as well. In it he showed how all

the components are assembled, and explained the main function of each one. We are certainly all familiar with a receiver and a transmitter. However, there are 2 critical components that make the whole thing work. Firstly you need a controller. George explained how it senses incoming signals and turns on the transmitter, all the while timing everything for 'time-out' situations. He mentioned that it is responsible for sending the station ID every so often as required. Some controllers have other considerations such as 'phone patches' or 'IRLP' connections, or 'remote functions' received from a control operator.



George, VE2NGH giving presentation

The second critical piece of hardware is the 'duplexer'. Its job is to allow you to simultaneously use one antenna for receiving and transmitting. Consider for the moment that the repeater is putting out full power as it is receiving micro volts as input. The duplexer keeps all that power from destroying the receiver and, by using the highly selective notch filters of the cavities, allows the receiver to focus on the single input frequency. Thanks George for bringing all that equipment tonight. I am sure that you

satisfied the curiosity of many of the attendees who took for granted the functions of a 'repeater' and who now truly appreciate the real 'magic' that they perform for us so reliably. Thanks too for the talk. You are most welcome to entertain us any time.

This month the winner of the 50/50 draw was Sheldon VA2SH. Congratulations, and thanks for donating your winnings to the club.

This month, there were some QST magazines available as door prizes. Thanks, Andy.

Something Punny - Don't join dangerous cults - Practice safe sects!

The meeting adjourned at 22:10. See you Feb 21<sup>st</sup> 2011.

73, and good DX de Keith VE2MTL de Charles VE2RFI

# **International Space Station News**

An interesting articles was submitted to this month newsletter by Morrie, VE2BWS about students communicating with the astronauts on the ISS via ARISS (Amateur Radio International Space Station).

http://www.nunatsiagonline.ca/stories/article/98789 nunavik students hold out of this world computer chat/

# **Swap Shop**

If you like to advertise an item you wish to part with, please send an email to <a href="mailto:ve2cwi@rac.ca">ve2cwi@rac.ca</a> before the first Monday of the month for publication in that month's edition to the editor attention.

### Footnotes About Us

## The West Island Amateur Radio Club was founded in 1972

Mailing Address - P.O. Box 884 Pointe-Claire, Quebec H9R 4Z6 E-mail: VE2CWI@RAC.CA

**Executives:** 

President :Ken Fraser,VE2KLFTreasurer :Malcolm Harper,VE2DDZVice-president :Charles Robitaille,VE2RFISecretary :Keith Glashan,VE2MTL

**Directors:** 

Editor: Bram Paterson. VE2XCS Webmaster: Wayne Hodgins. VE2WRH

**QSL Manager:** Bob Loranger, VE2AXO

**Accredited Examiners:** 

Larry Dobby, VE2DO@RAC.CA Stuart Truba, VE2XX@RAC.CA

Articles and comments are always welcomed; please submit them before the first Monday of the month for publication in that month's edition to the editor's attention, VE2CWI@RAC.CA

Website: http://www.wiarc.ca

Repeaters: VE2RWI VHF - 146.910 MHz (-)

VE2RWI UHF - 443.050 MHz (+) (141.3 Hz CTCSS tone transmitted by both repeaters).

### **Monthly Meetings**

Held the 3<sup>rd</sup> Monday of every month, except July & August at: Lakeside Heights Baptist Church, 275 Braebrook, Pointe-Claire (West Island part of Montreal). Visitors are always welcomed.

### **WIARC NETS on the 146.91 Club Repeater**

Information Net each Sunday evening at 8PM running for approximately an hour.

All are welcome to participate.