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Volume 59, Number 08 - May 2014



Next meeting - May 28th, 2014

Ragchew and Fleamarket: 19h30, Club meeting: 20h00

St-Ignatius of Loyola Parish Church 4455 West Broadway, N.D.G. - Montreal

It's the Annual Show and Tell Finish up your projects and tell us all about it.

MarcOgram

The MarcOgram is published nine times per year on the second to last Wednesday of August through May, excepting December, by the Montreal Amateur Radio Club. Advertising and copy deadline is two week prior to publication.

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The marcOgram team needs you!

We're always on the lookout for interesting articles to include into your monthly newsletter. Do you have a ham radio news item you would like to contribute or just pass along to the marcOgram editors? Just send your document or links to editor@marc.ca

Club Activities - Monthly Meetings

Club meetings are held on the last Wednesday of the month at St-Ignatius of Loyola Parish Church, 4455 West Broadway, N.D.G. - Montreal. 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 stops at or near the door!

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 same venue as the monthly meetings (see above). Should you wish to attend one of the meetings you are welcome. Just speak to one of the directors beforehand to make certain that the meeting has neither been cancelled, nor the location changed.

Club Directors

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MARC Fundraiser WE NEED YOUR SUPPORT

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

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

The "Marcogram" publishes eight issues from September to May. We also publish a summer edition during the month of August. So we actually publish nine issues in all. We have a list distribution of about 200 persons. With a full year commitment, you get 1 issue free. A business card placed for 9 issues would only be \$ 40.00. We are asking for all members with family or friends who have a business to place an ad. You could also advertise a special function.



A Word from the President

Hello all,

Well this is the last issue before the summer break and I will say this, that our MarcOgram editorial staff has certainly done a wonderful job with our club's news letter. It's thanks to dedicated members and contributors that we succeed in putting out such a nice news letter. Next year however we will be in for some changes. I have received notice from Sheldon, VA2SH that because of health reasons, effective immediately he must step down from his position of contributing editor. Marc-André has also made notice of his intention to step down as layout editor after the August summer issue. To both of you, and I know I join the rest of the MARC Board of Directors as well as the club membership in saying, thank you so much for all the hard work you've put in. You have been key players in the successful production of the MarcOgram.

Let it be heard here first that the MarcOgram is currently looking for a chief editor. If you are interested in the position, please send an email to editor@marc.ca

Annual Fees are:

General Members	\$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.

Field day is once again upon us and things will be a little different this year. We'll once again be doing a joint effort with WIARC and operating under the club's call sign of VE2ARC. Eamon Eagon, VE2EGN has been working hard organizing everything for us. This year, the plan is to go with wire antennas and newbie operators are welcome. For those that wish it, training sessions will be held on Saturdays in May and June (with the first to be held on May 24th). If you wish to register your interest, or find out exactly which dates are available, please send an email to ve2egn@gmail.com.

A word to the wise regarding the VE2RED repeater. Marten, VE2WU has been very kindly hosting this repeater at his Covey Hill QTH. This site has always been a temporary one and this is the understanding that we have with the frequency coordinators. Well, this spring we will be taking VE2RED off the air from Marten's QTH and will hopefully have a new location to announce in the coming weeks. I'd like to take this occasion to thank Marten for his participation and help in maintaining this repeater for us all this time. Your contribution has not gone unnoticed and we greatly appreciate everything you've done for the club.

This month's meeting topic is show and tell. What projects have you completed/started over the past winter? Please bring it in and show it to your fellow club members. We all want to see what you've been working on of late and your mini-presentation will be welcome at this month's meeting. Until then, be safe and good DX.

73 de Paul, VE2OFH

Club Call Sign: VE2ARC

Club Website: http://www.marc.qc.ca

Club Email: ve2arc@rac.ca

Repeaters

VE2BG

147.06

MHz (+)

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

VF2RFD

147.27 MHz (+)

Owned and operated by Montreal Amateur Radio Club.



NEAR-fest XV - May 2-3, 2014

Spring brings in the new year's flea market season and the opportunity to find all those needed station accessories and equipment. Our stations are often evolving works-in-progress and there's almost always room for new capabilities or small improvements. For those who are more interested in the technology or radios, flea markets provide an opportunity to purchase professional grade test equipment at prices that are within the reach of many people. With a long history of attending NEAR-Fest, Nora and I weren't going to miss out on the spring 2014 event. NEAR-Fest has been mentioned occasionally at MARC meetings; this year we thought that we'd extend an invitation to MARCOgram's editor, Marc-Andre VE2EVN, so he could see NEAR-Fest for himself.

NEAR-Fest (New England Amateur Radio fest) is a two-day event held at the Deerfield NH fairgrounds, starting Friday at 9:00am and ending mid-afternoon Saturday. It's about a 5-hour drive from Montreal, depending on the condition of the bridge you use and the traffic. Our West Island location makes a departure via the newly completed highway 30 the best choice. The border crossing adds an unknown delay; this time we were lucky - there were only a few cars lined up and we were through in less than 10 minutes. The route down has pleasant roadside stops operated by Vermont and New Hampshire.

We arrived at the site at around 15:00, the weather was perfect - sunny, but not too hot. Friday is a chance to survey the 'fest and see what's available.

What can you find at NEAR-Fest? Eventually just about any piece of radio equipment or electronics that you can imagine, including a wide array of test equipment and tools will turn up. Nearby commercial vendors also attend; you can buy lots of smaller items and avoid the difficulty and cost of a cross-border delivery. The major expense Friday was a healthy high-calorie meal from one of the on-site kitchens.

Friday night was spent in an Econo Lodge in nearby Manchester.

Saturday dawned sunny and clear - perfect flea market weather. A healthy breakfast at the site gave us energy for the day of walking that was ahead of us.



Marc-Andre - Saturday breakfast

I carry a list of the equipment that I'm looking for but there's little worry that absent anything on my list, I'll always find something that "needs" to be added to the station or test setup at home. Nora and I had been thinking of adding mobile H.F. to our Subaru Forester for a while. The Opek 80m to 2m antenna (similar to an Outbacker) that I found wasn't on my list, but with that antenna we could have H.F. mobile available on our way home if I could find a suitable mount. NEAR-Fest has several vendors with trunk-lid mounts. Did I want to save the money or add an H.F. mobile capability to the Subaru? Installation was easy and straightforward, and completed with 15 minutes on-site.



Oscilloscopes and other test equipment are available

The flea market is a treasure trove for anyone who's interested in antique radio equipment, or parts and (Continued Page 5)

supplies for a restoration job. Radios from many manufacturers are available, including Collins, National, Hallicrafters, Hammarlund, Heathkit, etc.



Lots more of this at NEAR-Fest

Marc-Andre found some of the items on his list, demonstrating NEAR-Fest's ability to deliver what you're looking for.



1/2" Andrews Sureflex with N connectors, just \$5!

We stayed until the door prize drawings were finished, just in case we won something, and then headed home. The major door prize was a very nice Flex Radio Systems FLEX-3000 software-defined radio. We didn't win it.

The trip home was fun and we managed to make two contacts on 20m with our FT-857D and the new H.F. antenna. All together, it was another successful NEAR-Fest.

Remember that the autumn NEAR-Fest will be held October 10 and 11, 2014.

Check out the web site: www.near-fest.com

Leo, VE2SI Photos by VE2SI & VE2EVN.

Hamfests

There are a few hamfests left before September.

Hamfest du Quebec - Sunday, June 1, 2014, Sponsored by the Club Radioamateur Sorel-Tracy

Location: Colisée Cardin 200 rue Victoria, Sorel-Tracy, Qc Opens at 6am to all

Admission is \$8 (0 - 12 years free), Tables \$15 (includes one admission)

For more information, visit www.hamfest.qc.ca

Ontario Hamfest - Saturday, July 12, 2014, Sponsored by the Burlington Amateur Radio Club.

Location: Milton, Ontario

For more information visit www.barc.ca or email

barc.ontariohamfest@gmail.com

ARRL Field Day

The ARRL Field Day is Saturday and Sunday, June 28 and 29 this year. Planning is under way for another joint MARC-WIARC Field Day event in Beaconsfield. There are likely to be some training or information sessions. If you are interested in the training or just want more information about the MARC/WIARC Field Day, contact any member of the MARC board. Otherwise, make sure to come down and visit. This is an important annual club event.



VE2SOTA Mégactivation 2014

The annual VE2 Summits on the Air get together will be in the Montreal area this year. The dates are the 29th, 30th, and 31st of August. Stay tuned for more information in the summer issue.

Radio Talk 2014

The date for Radio Talk 2014 has been set to Saturday, September 20. Planning is proceeding. For more information see www.radiotalk.ca

Marc-Andre, VE2EVN

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DX and CONTEST NEWS

Hello again and I hope that you had the chance to work some exciting DX during the last month.

This May edition of the Marcogram is the last edition of this season, so I will cover three months of DX and contesting activities. Obviously all the major DX operations and most contest dates are already "set in stone", but there might be some discrepancies and changes as some of the smaller DX operations do get canceled or postponed and some DX operations do come up at the last minute. Fortunately due to summertime propagation conditions on the HF bands, not many DX operations are held, but since summer is also vacation time for many people, there are a number of "holiday style" DXpeditions. That is why for the latest news it is very important to check out the various DX bulletins which are available. A nice website for DX news especially if the expedition does not have its own website is the DX Bulletin on DX World, http://dx-world.net/

I also subscribe to "The Daily DX" which publishes daily except on weekends, and is an excellent source of DX operations planned and scheduled even at the last minute. This is a subscription-based service but personally I find it very useful. Their website can be found here: http://www.dailydx.com/

In speaking about propagation, we are right in the middle of Sporadic-E (Es) season. This is where highly ionized E-layer "clouds" appear out of nowhere, hence Sporadic-E, and is one of the major propagation modes for 6-meter signals. There are also variations of Sporadic-E such as TEP or Trans-Equatorial Propagation, where highly ionized charged clouds appear above the geomagnetic equator creating multi-hop Es which propagates 6-meter signals across the equator. The southern hemisphere is now in its autumn while we in the northern hemisphere are in the springtime. These conditions can produce some fantastic openings on 6-meters as I will describe below.

It was Sunday, May 11, and I was busy cleaning up the yard after the long winter. Around 3 PM local time I came inside for a break and turned on one of my DX spotting programs. The southeastern portion of the USA was filled with 6-meter spots indication a large Sporadic-E opening. Immediately I switched on the radio and had the beam pointing south. Nothing heard! 30 minutes later I started to hear faint signals as the Es opening started to shift northward. Soon I

had a pile-up of stations from Florida, Georgia, and the Carolinas. After making quite a few contacts, I noticed there were spots of some Argentinean stations being reported indicating a TEP opening to southern South America. Soon I was contacting Brazil, Argentina, Uruguay, and Chile all on 6-meters! These countries were all-time new ones for me on this band. Let's just say that my yard work was left for another day!

If you have 6-meter capability, you can work wonders with simple antennas during a Sporadic-E opening. One guy in Georgia who was coming in to me a true S-7 was using a dipole mounted in his attic! This mode of propagation has everything to do with "being at the right place at the right time". Sporadic-E and TEP can pop up any time but they usually appear in the late afternoons and early evenings. They can also last for a few hours or a few days, so you MUST be constantly monitoring the propagation. An excellent website to monitor VHF propagation and real-time spots can be found at:

http://www.dxmaps.com/spots/map.php

Summertime conditions also bring along temperature inversions which can lead to tropospheric ducting or Tropo. This is a VHF/UHF atmospheric propagation mode where the signals are refracted inside the duct created by the inversion. Although fairly rare in our northern latitudes, this condition can literally create a pipeline to the DX station. Tropo can last for a few seconds to a few hours, so it is even more important to keep an eye on the propagation conditions.

On HF, I had a lucky chance to work Monk Apollo on Mount Athos a few weeks ago. Mount Athos is a separately governed monastery on a peninsula in northern Greece and thus is a separate DXCC entity. Monk Apollo is the ONLY ham operator on Mount Athos and is the only one allowed to use the station according to the rules of the monastery. So all this makes him quite a rare catch. I had worked him after a bulletin came in from "The Daily DX" stating that he was currently on the air. The Daily DX is a very nice website to help catch the rare ones – you should give it a try.

There are still a number of DX operations scheduled for June, July, and August but as I had mentioned because this is the last edition of the Marcogram for this season, some operations will come up at the last minute during these months so be sure to check out the DX (Continued Page 7)

bulletins and also please be sure to always follow the DX Code of Conduct, http://www.dx-code.org/

DX OPERATIONS

7QNL – Malawi will be activated by PA3FYM from May 18 to Jun 10. He will operate on 80 to 10 meters, CW, and SSB. He will also operate in the CQ WPX CW contest. QSL via PA1AW. Check out his website at: http://www.malawihf.org/

E51 – South Cook Islands will be activated by JA8VE as E51AVE, JA1KJW as E51KJW, JA1JQY as JA1JQY, JA3MCA as E51MCA from May 22 to May 31. They will be on Raratonga Island and will operate on 160 to 10 meters CW, SSB, RTTY. QSL OK via JARL Buro or direct.

ZD8Z – Ascension Island will be activated by N6TJ on the HF bands from May 26 to June 3.

A35JP/p – Tonga will be QRV from May 31, to June 8, on 80 to 6 meters CW and SSB. Check out their website at: http://blog.goo.ne.jp/rqv

OJ0W – Market Reef will be activated by OH3WS from June 2, to June 7 on the HF bands, mainly CW and some SSB. QSL via OH3WS.

ZA – Albania will be QRV by a group of Belgian operators from June 5, to June 15 on 80 to 6 meters, SSB, PSK, RTTY. OSL via ON4ANN.

4K9Z – Azerbaijan will be QRV by N6GQ on the HF bands from June 20, to June 25. QSL via LOTW.

SV5 – Dodecanese will be activated holiday style on HF by OK6DJ as SV5/OK6DJ from Rhodes from July 1, to July 7. QSL via OK6DJ.

FP – St-Pierre & Miquelon will be activated by KV1J as FP/KV1J fm Miquelon Island from July 7, to July 15, on 80 to 6 meters CW, SSB, RTTY. QSL via KV1J. They have a website at: http://www.kv1j.com/fp/July14.html

VK9C – Cocos Keeling will be QRV by a Japanese group from July 29, to August 2, on 160 to 6 meters SSB, FM, CW, RTTY, PSK31. Their website can be found here: http://vk9.nobody.jp/

VK9X – Christmas Island will be QRV by the same group from VK9C from August 2, to August 8. Again their website is at: http://vk9.nobody.jp/

CONTESTS

Due to the less than ideal propagation conditions on the HF bands during the summertime, there are not many major DX contests scheduled. Remember that in summertime the low bands are open for short periods for us in the Northern Hemisphere and tend to be quite noisy due to thunderstorm activity. Then again the higher bands tend to be open much longer and 20 meters can also be open all night long.

The major contest this year is the IARU World Championship event in July. This year is also the WRTC (World Radiosport Team Championships) which is held during the IARU contest. Considered as the Olympics of radio contesting, 60 stations are set up in one geographic location every four years. The operators are selected from the top contest winners for the past three years and represent the ultimate in contesting talent. They are all given the same antennas, operate with the same 100 watt power level, and are constantly refereed in order to give each station more-or-less the same operating conditions. This leaves only their operator skills in determining the top winners. Each team brings their own radios, logging computers and are set up as a two-operator two-radio team using CW, and SSB. This year the WRTC is held in New England around the Boston area and there are awards for working the various stations on the contest bands from 80 to 10 meters. You can be sure that I will be there to participate in this very enjoyable 24 hour contest.

The other major event for us here in North America is ARRL Field Day which this year is scheduled for the weekend of June 28, and June 29. This is where ham operators set up stations literally in the field for 24 hours running off emergency power and temporary antennas. While considered a contest my many, Field Day is actually an exercise in Ham radio emergency communications. It is also a very social event where clubs all get together and set up their Field Day stations preferably in public spaces to demonstrate to non-hams what Amateur Radio is all about. There are BBQ's, picnics, friendly gatherings, and radio demonstrations of all kinds which makes this a really fun event and is the most popular activity in Ham radio.

This year the MARC and WIARC are getting together again for a joint-club Field Day event to be held in Centennial Park in Beaconsfield. This is the highlight of the year for these two clubs and I hope to see you there!

Remember to check out the contest rules, dates and times on the ARRL or CQ websites. Rules for the smaller contests can be found on the various sponsors' websites. Another very useful resource is to subscribe to the ARRL Contest Update which you can receive via e-mail every two weeks and is available to ARRL members. You can also find third-party contest listings for free on the internet.

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CQ WW DX WPX CW Contest -- CW. May 24, 0000z to May 25, 2359z

ARRL June VHF Contest -- Authorized frequencies above 50 MHz. CW, Phone, Digital.

June 8, 1800z to June 10, 0300z

ARRL Kids Day -- Phone. June 21, 1800z to 2359z

ARRL Field Day -- CW, Phone, Digital. June 28, 1800z to June 29, 2059z

IARU World Championships & WRTC 2014 -- CW, SSB. July 12, 1200z to July 13, 1200z

CQ WW VHF Contest -- VHF 6 and 2 meter bands. CW, Phone, Digital. July 19, 1800z to July 20, 2100z

RSGB IOTA Contest -- CW, SSB. July 26, 1200z to July 27, 1200z

ARRL August UHF Contest -- UHF authorized frequencies above 222 MHz. CW, Phone, Digital.

August 2, 1800z to August 3, 1800z

ARRL 10 GHz & up Round 1 -- Authorized frequencies from 10 GHz to light. CW, Phone, Digital.

August 16, 6 AM local Saturday to August 17, 12 AM local Sunday.

ARRL Rookie Roundup RTTY -- RTTY. August 17, 1800z to 2359z

Those are the lists so far so there is still quite a bit of Ham radio activity to enjoy during the summer months. Please remember to follow the "DX Code of Conduct" when working any DX operation and remember to always listen, listen, and listen FIRST before you transmit. Also remember to read the complete contest rules and make sure that you and your station are all set up and prepared BEFORE the contest starts.

Now that we will be in summertime which brings thunderstorms, PLEASE shut down your station and disconnect all antennas if you hear thunder. It's just not worth risking your life and/or equipment just to snag that "new one" or for those extra contest points. BE SAFE!!

Have an enjoyable summer and go work that DX and have fun on the air. I hope to work you in the next contest and to see you on Field Day!

73, & good DX de George, VE2NGH/VA2EN



FUNcube-2 Launch Set for June 19

Sponsors of the FUNcube Project -- a joint initiative of AMSAT-UK and AMSAT-NL (Netherlands) -- have announced that FUNcube 2 will launch from Russia on June 19. The initial plan of the now 4-year-old project was to design, build, and launch a single spacecraft. As further flight opportunities have become available over the past months, however, the FUNcube Project has expanded. UKube-1 will "host" FUNcube-2 -- actually a set of FUNcube boards that will fly as a sub-system of the 3U UKube-1 CubeSat. Its goals are identical to those of FUNcube-1 -- to support science, technology, engineering, and mathematics (STEM) initiatives now underway in the US, the UK, and elsewhere. The target audience is primary and secondary school students.

"It is believed that, immediately after deployment and activation, UKube-1 will commence transmitting a CW beacon, and that this will be later followed by an AX25, 1k2 BPSK beacon," AMSAT-UK announced on May 7. "Both beacons will be on 145.840 MHz. The FUNcube-2 payload, with its telemetry downlink for educational outreach, is expected to be tested later."

FUNcube-2 will include a 400 mW inverting SSB/CW transponder (435.080-435.060 MHz up/145.930-145.950 MHz down), with a beacon on 145.915 MHz. The UKube-1 satellite, being built by Clyde Space in Glasgow, Scotland, would be the UK Space Agency's first CubeSat, as well as the first satellite built in Scotland.

Believed to be not too far down the road, a FUNcube-3 400 mW transponder-only payload on the pre-cursor QB50P1 CubeSat host is planned for launch "no earlier than the second half of June" on a Dnepr LV vehicle from Russia. Initial beacon signals from the main transceiver are expected to be AX25, 1k2 BPSK packets on 145.815 MHz.

The ARRL Letter, May 15, 2014.

YouKits 3-Band CW QRP



\$189.95 Assembled \$239.95

The EK1B Covers 20/17/15 metres plus RX from 13.9-22 MHz. Features a built-in keyer and backlit display. On the kit version, all surface-mount components are installed and the DDS board is tested and aligned.

YouKits 5-Band SSB HT

The TJ2B MKII covers 60, 40, 20, 17 and 15 metres. Full 5W pep output. Simple operation via one tuning knob plus 4 keys for all functions. Now includes lithium battery pack, radio pouch, speaker mic and 12 Volt power cord.



\$369.95

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Dash cams are all the rage! Continuously records driving and permanently saves video if impact is detected. 1080P HD Recorder 2.7" screen. Built-in GPS position logger on CDR830.



8GB memory card included!

CDR810 \$129.95 CDR830 \$179.95

MFJ-259C Analyzer



HF/VHF & 220 MHz SWR & impedance meters, frequency counter, RF signal generator, SWR analyzer, RF resistance and reactance analyzer, coax analyzer, capacitance & induc-\$339.95 tance meter and more!

4-Band Mini QRP Rig



HB1BMK2 has a host of advanced features not normally found in a set this small. Covers 80-40-30-20 metres. built-in keyer, backlit display & more!

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Dual Band Beam



Lightweight, compact and easy to install and re-assemble. 9.5/11 dB gain. Elements are color coded and install with wing nuts for easy assembly and re-assembly.

\$99.95 each

Kenwood TM-D710G



The TM-D710GA is a full-featured dual-band mobile that also features APRS functionality and has a builtin GPS. \$699.95

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FG01A Antenna Analyzer

Covers 1.8 - 35 MHz and plots both SWR and impedance on the colour display. Very easy to operate. Amazing 14 hours of operating time with the optional 18650 battery pack. (get the battery pack and charger now for only \$29.95!)



Only \$219.95

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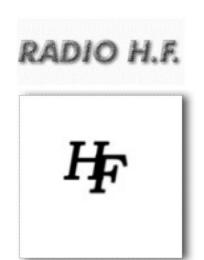
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PUBLICATIONS / PUBLICATIONS

AMERICAN RADIO RELAY LEAGUE (ARRL), ARTSCI, BAYLIN PUBLICATIONS, BILLBOARD (WRTH), CQ, CRB, HIGHTEXT, IBS (PASSPORT), KLINGENFUSS, KRAUSE, LOOMPANICS, NATIONAL RADIO CLUB, RADIO SOCIETY OF GREAT BRITAIN, RADIO AMATEUR CALLBOOK, RADIO AMATEURS DU QUEBEC, SCHIFFER BOOKS, SONORAN, TAB, TIARE

NATURE BOOKS / LIVRES DE LA NATURE

SIBLEY GUIDES, PETERSON FIELD GUIDES, NATIONAL AUDUBON SOCIETY