



THE VOICE OF AMATEUR RADIO IN MISSISSAUGA

COMMUNICATOR



VE3MIS/VE3RCX

Vol 8.4

December 9, 2004

From the Gavel - President's Message



As you probably guessed I had a severe case of writer's block last month. That, coupled with an unbelievable work schedule resulted in not very much being said? Well the work schedule is the same, but I have been doing a lot of thinking and work towards ham related things.

The first thing that I want to bring to everyone's attention is that after almost two years of fruitless work, we have secured a gentleman's agreement with the owner of some space for use as a Club Station. It is a decent amount of space, some 20 by 30 feet or so would be my guess, more than adequate for a station, storage and even a meeting place at a pinch. This is the good news, the bad news if you will, is that the space will require some work, not from a monetary sense as the owner will provide us the materials required, but from a physical labour sense. This means that we will need labourers, carpenters, drywallers, etc. I would like to see everyone who is able in the club come out and give a hand at getting the space ready. We are not trying to go overboard here. We just want a simple space that everyone can use anytime, and the emphasis is on everyone using the space. Initially, there will be a group of 5 or 6 people who will have codes to enter the location while we are getting it ready. After that, we will work out the logistics of "easy access". The first thing to remember is we have to get it ready, without spending a lot of money.

The second thing that has been happening is a push to get packet radio going in a big way for ARES message passing. To work out all of the processes a working group has been formed, as a joint effort between the Mississauga and Peel Clubs. Along with processes, the working group will be developing recommendations on the "standard" go kit from a packet point of view, and what should be included. There will be recommendations around digipeaters, nodes, and other infrastructure. These will not only benefit ARES but will trickle down to the everyday operations with digital special interest group getting our Mississauga nodes operational. We can now even put a digital station or two in the Club Station, and a second node for that matter.

The third thing you may or may not know is the club has just acquired a presentation projector, so that on General and Activity Night meetings, PowerPoint and other computer created presentations can be presented without having to resort to borrowing a unit or even worse using a 13 inch television to show a video. This was always an all time low on my mind, no guest speaker and a video on a screen no one could see, except maybe the first half of the first row, well never again.

And as a final note, an effort to start doing some Club Activity nights, we are preparing to have a "Build an Aluminum J Pole". I built one last year and it is currently serving as the IRLP link antenna, and has been working very well. So I encourage you to participate and that will encourage us to get other Activity Nights planned. That, after all, is what HAM Radio is all about, hands on stuff.

Well, as you can see, even if The Gavel suffers from writer's block, it certainly doesn't mean that the Club isn't still hard at work trying to make thing even better for all of our members. It seems that we never have shortage of things to work on even when there isn't enough time.

And as it is almost Christmas, maybe some of you will find something for your hobby under the tree, an ARRL handbook, a radio, or an antenna tuner, and if not, maybe you'll treat you self to something on sale at the "candy store", (AKA Radio World). In any case, let me wish a very Merry Christmas, and a Happy New Year, to all of you and your families. Be safe, be happy, be healthy and see you all next year, with a lot more fun to be had by all.

Robin (VE3VVS)

This Month

2. Commentary
3. a. Minutes of General Meeting #05
b. Station For Sale
4. Minutes of General Meeting #06
5. Minutes of Executive Meeting #06
6. ARRL DX News
7. RAC News
8. Solar Tutorial
9. Club Calendar for 2004-2005/ Hamfests
10. RAC Application Form

Sunday Brunch

Sunday brunches are held on the first Sunday of each month. Time is 9:30AM at **The Pickle Barrel** located at Erin Mills Town Centre located at Eglinton and Erin Mills Parkway. All are welcome to come out and have an opportunity to chat in an informal setting..

Sunday Brunch January 2, 2005

Club Nets

2 Metre Tuesday Night Phone Net

Join in on the chatter starting at 8:30PM every Tuesday on the club repeater. Hosted by various net controllers. Contact our VHF Net Manager, **Reg (VA3JQA)** if interested in becoming a net controller. 145.430MHz Tone 103.5 Minus (-) offset

75 Metre Sunday Night Net

Starts at 8:30PM every Sunday. Hosted by various net controllers. Contact our HF Net Manager, Michael (**VE3TKI**), if interested in becoming a net controller.



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Commentary...



We, in this club, are very fortunate indeed. I've commented quite often on the club's steady membership, compared to many other clubs where membership is declining. We have over the years, been able to attract younger members who have a variety of different skills. That is good and it is even better when they come forth to offer their talents to either start a SIG (Special Interest Group), help on the executive, or are handy with tools.

As Robin noted in his piece, we have finally found a location for the club radio station. There is a washroom, and a storage area in addition to the huge open space, but we have a lot to do before it becomes usable. The really good thing is that it is at no cost to the club except for some of our time. There is no rent, or hidden fees, but is the result of one of our members just happening to mention to one of his clients that we were looking for space for the club station.

The first step is to come up with a plan, so I will be drawing up some proposals over the next little while to that end. Once that has been done, we will have to clean up the space, remove debris from the floor, install ceiling tiles, build some walls, add doors, finish and then install the antenna tower(s), antennas, radio gear and connect it all up.

This will something to "tie the bond" so to speak. It's always fun when you get a group of people together to work on a common goal. As I said earlier, our members have a diverse background with many different skills and disciplines and in order for this to come to a successful conclusion will require that many of us come together. I know we are up to the challenge.

Shirley & I received an early Christmas gift on December 2. Our daughter, Jennifer, gave birth to a handsome little fellow named Connor. We have already babysat once so far and all went well. It's very relaxing to have a little one sleeping on ones shoulder. He's a little brother for Colin. We are really enjoying our roles as grandparents. It's a very rewarding job!

I want to note here that Alex (VE3MA) and Dave (VA3DFH) are slowly assuming the role of webmaster(s) for the club. This is one of the key components to attracting new members and is therefore an important function. Thanks guys for stepping forward. To Art (VE3SQG), who has been our only webmaster for 7 or 8 years, or is it longer, I want to convey our most sincere gratitude and thanks for a job well done, for his dedication and for his time.

To all our members, regardless of your religious beliefs, may you all enjoy the Christmas season and on behalf of the club executive, may I wish you all a happy, healthy and prosperous 2005. See you in 2005!

73 de Tony (VA3QC)

Mississauga Amateur Radio Club Directors and Managers PO Box 2003, Square One Post Office, Mississauga, Ont., L5B 3C6 Website: www.marc.on.ca Email: ve3mis@rac.ca

Directors

| | | | | | | | |
|------------------------------------|---------------|--------|--------------|-------------------------------------|-------------------|--------|--------------|
| President..... | Robin Stubbs | VE3VVS | 905-826-6753 | 1 st Vice President..... | John Duffy | VE3DRZ | 905-822-4661 |
| 2 nd Vice President.... | Bob Giddy | VE3IAB | 905-625-6846 | Treasurer | William Bressette | VE3WPJ | |
| Secretary..... | Lorne Jackson | VE3CXT | 905-858-8594 | Past President | Lorne Jackson | VE3CXT | 905-858-8594 |

Managers

| | | | | | | | |
|------------------------|------------------|--------|--|-------------------------|------------------|--------|--|
| Membership | John Kenzie | VE3WJK | | Education | Earle Laycock | VE3XEL | |
| Ed. Asst (Theory) ...: | Bob Hawkins | VE3AGC | | Ed. Asst (Theory): | Alan Barolet | VA3AWB | |
| Ed. Asst (CW) | Frank Lamb | VE3HTX | | Ed. Asst (CW) | Tony Champion | VA3QC | |
| Repeater Mgr..... | Michael Brickell | VE3TKI | | Repeater Asst 1.....: | Art Sinclair | VE3SQG | |
| Repeater Asst 2 | Asim Zaidi | VE3XAP | | VHF Net | Reg Vertolli | VA3JQA | |
| HF Net..... | Michael Brickell | VE3TKI | | Public Service.....: | Bob Boyer | VE3XBB | |
| Club Station..... | Rick Brown | VE3IMG | | Club Station Asst.....: | Bob Giddy | VE3IAB | |
| House | John Duffy | VE3DRZ | | Contests..... | Rick Brown | VE3IMG | |
| Contest Asst 1 | Alex Malikov | VA3UA | | Contests Asst 2.....: | Asim Zaidi | VE3XAP | |
| Newsletter | Tony Champion | VA3QC | | Special Events | Bob Boyer | VE3XBB | |
| Special Events Asst : | Bob Giddy | VE3IAB | | QSL | Michael Brickell | VE3TKI | |
| Field Day..... | Michael Brickell | VE3TKI | | Field Day Asst 1 | Tony Champion | VA3QC | |
| Field Day Asst 2.....: | Jody Levine | VE3ION | | Field Day Asst 3 | John Duffy | VE3DRZ | |
| Field Day Asst 4.....: | Tom Godden | VE3TWG | | FSV Mgr..... | Robin Stubbs | VE3VVS | |
| Programmes | Brian Jay | VA3BLJ | | Programmes Asst 1...: | Bob Giddy | VE3IAB | |
| Programmes Asst 2.: | Bob Boyer | VE3XBB | | Webmaster (1) | Alex Malikov | VE3MA | |
| | | | | Webmaster (2).....: | Dave Harford | VA3DFH | |

Public Service Events/ARES

| | | | | | | | |
|-------------------|------------------|--------|--|--------------------|---------------|--------|--|
| Emerg Coord | Sean Conlin | VA3MED | | Emerg Asst 1 | Art Sinclair | VE3SQG | |
| Emerg Asst 2..... | Michael Brickell | VE3TKI | | Emerg Asst 3 | Lorne Jackson | VE3CXT | |
| Emerg Asst 4..... | Bob Boyer | VE3XBB | | Emerg Asst 5 | Robin Stubbs | VE3VVS | |
| Emerg Asst 6..... | John Duffy | VE3DRZ | | | | | |

Audit Committee

| | | | | | | | |
|-----------------|-------------|--|--|-----------------|---------------|--------|--|
| Auditor 1 | OPEN | | | Auditor 2 | Bill Dmytrasz | VE3DNY | |
|-----------------|-------------|--|--|-----------------|---------------|--------|--|



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Minutes of General Meeting #05

Date: November 11, 2004

Location: 3535 South Common Court, Mississauga

Time: 7:30PM

Officers Present:

| | | |
|-------------------|--------|--------------------------------|
| Robin Stubbs | VE3VVS | President |
| Bob Giddy | VE3IAB | 2nd Vice President |
| Lorne Jackson | VE3CXT | Secretary |
| William Bressette | VE3WPJ | Treasurer |
| John Duffy | VE3DRZ | 1 st Vice President |

Attendance:

- o 33 including visitors

Opening Business – Robin (VE3VVS)

- o Opened the meeting by welcoming everyone.
- o Robin mentioned that the MARC mugs were available for \$10.00 each.

ARES – Sean (VA3MED)

The SET debriefing meeting was held with Vic Henderson (VE3FOX) and George Duffield (VE3WJK)
 PAPG will be meeting to establish a working relationship between the Mississauga and Peel ARES groups

Ham-Ex™

April 9, 2005 is the date to mark on your calendar.
 Still looking for managers and others to sign up

Repeater Usage

Everyone is reminded that they must identify whenever they key up their microphone. This is the law.
 Everyone is reminded to also allow the courtesy tone to sound before keying up.

New Business

John (VE3DRZ) noted that the poppy on the club website was a nice gesture in honour of those who served
 Packet Group SIG will be headed up by William (VE3WPJ), Robin (VE3VVS) and Dave (VA3BHF)
 Earle (VE3XEL) is looking for elmers to pair up with his students.

50/50 Draw

Jeff (VA3WXM) won \$22.50 which he donated to the club.

Speaker/Activity.

Steve Canney gave an interesting talk on the use of beacons and the CFRX shortwave station.

Adjournment

The meeting adjourned around 9ish give or take some unknown quantity of time
 Next meeting – November 25, 2004
 A.J. Champion (VA3QC) – Documentation Manager
 November 28, 2004

VE3PG - Complete Ham Station for Sale

The following items comprise a complete HF Ham Radio Station and are for immediate disposal as one complete lot. All items are in really fine shape and have been well looked after:



- Kenwood 570S (HF all band +6M) inc Kenwood PS-30 Power Supply
- Kenwood AT-180 Antenna selector and tuner plus SWR meter
- Heathkit HD-15 Phone Patch
- Heathkit SB-614 Station Monitor
- Hammond Loudspeaker
- Custom Central Control Unit (in Hammond Case)
- MFJ 1278 Multi-mode Data Controller
- ICOM IC-2100 2m transceiver
- Foot switch for 'press-to-talk'
- Automatic (Iambic) morse key with paddles
- Regular 'brass pounder' key
- Cushcraft A5 vertical 5-band antenna (no ground radials reqd.)
- Plus some optional items which will be at no charge to the purchaser of the package:

Sturdy but attractive equipment mounting shelf unit and power bar
 Selector sw for mic/packet /patch into rig
 Most Manuals

- Oak desk (screws apart for moving)
- TUNEABLE 2m rig (Yaesu FT-221) that needs 2 new audio output transistors,
- Self-contained power supply. Great looking rig.
- Isopole "lumped constant" 40m and 80m indoor antennas
- 10m dipole (needs no radials)
- Misc coax cables

All items can be viewed at 35 Parkside drive in Guelph. Call 519-829-1810

or:
peegee@sympatico.ca

Price: \$1,800.00 negotiable



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Minutes of General Meeting #06

Date: November 25, 2004

Location: 3535 South Common Court, Mississauga

Time: 7:30PM

Officers Present:

| | | |
|-------------------|--------|--------------------------------|
| Robin Stubbs | VE3VVS | President |
| Bob Giddy | VE3IAB | 2nd Vice President |
| Lorne Jackson | VE3CXT | Secretary |
| William Bressette | VE3WPJ | Treasurer |
| John Duffy | VE3DRZ | 1 st Vice President |

Attendance:

- o 34 including visitors

Opening Business – Robin (VE3VVS)

- o Opened the meeting by welcoming everyone.
- o Robin mentioned that the MARC mugs were available for \$10.00 each.
- o Reminded all that the next meeting is the annual Christmas pot luck get together
- o Offered the club's thanks and gratitude to Jeff (VA3WXM) for his donation of 4 radios for use in emergencies and also for his generous donation of \$100.00 to the club for any suitable use. The radios will be stored in the FSV.

Ham-Ex™

April 9, 2005 is the date to mark on your calendar.
Still looking for managers and others to sign up

Education

Earle (VE3XEL) still needs one more elmer to partner up with a student
Congratulations to Dave (VA3DFH) and Dave (VE3HEH) on obtaining their callsigns

New Business

A motion for the club executive be allowed to go out and purchase an LCD projector for no more than \$1,000.00 plus applicable taxes was put forward by Art (VE3SQG). Michael (VE3TKI) seconded the motion. A vote by a show of hands was unanimous with no nays or abstentions. The motion therefore was carried and a projector will be purchased shortly.

A new LCD projector is required as many of our guest speakers need one in order to make their presentations to the group. In the past we have been able to borrow one, but that is no longer possible.

John (VE3DRZ) put forth an idea for revamping the 50/50 draw. The way it would work is the following:

1/3 to the winner each week

1/3 to the club each week

1/3 to a building pot

A new deck of cards is used and the object is for the weekly winner to try and pull the ace of spades from the deck. If the card is not the ace of spades it is discarded. This continues each week until someone pulls the ace of spades.

50/50 Draw

Art (VE3SQG) won \$40.00 which he donated to the club.

Speaker/Activity.

Bob (VE3XB) showed a video on packet radio which was quite informative..

Adjournment

The meeting adjourned at 9:00PM

Next meeting – December 9, 2004 – POT LUCK SUPPER

A.J. Champion (VA3QC) – Documentation Manager

November 28, 2004



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Minutes of Executive Meeting #06

Date: December 2, 2004

Location: Lorne's (VE3CXT) magnificent manor

Time: 7:30PM

Attendees:

| | | | | | |
|-------------------|--------|--------------------|------------------|--------|--------------|
| Robin Stubbs | VE3VVS | President | Art Sinclair | VE3SQG | Webmeister |
| Lorne Jackson | VE3CXT | Secretary | Tony Champion | VA3QC | Doc/News Mgr |
| John Duffy | VE3DRZ | 1 st VP | Michael Brickell | VE3TKI | Repeater Mgr |
| Bob Giddy | VE3IAB | 2nd VP | Asim Zaidi | VE3XAP | |
| William Bressette | VE3WPJ | Treasurer | Jeff Stewart | VA3WXM | |
| Earle Laycock | VE3XEL | Education | Reg Vertolli | VA3JQA | |
| Sean Conlin | VA3MED | ARES/PSG | Dave Harford | VA3DFH | |
| Bob Boyer | VE3XBB | PSG | Alex Malikov | VE3MA | |
| Brian Jay | VA3BLJ | Programmes | | | |

Club Station

- Robin (VE3VVS) and Michael (VE3TKI) met with "Gerry" the owner of a building that has space available to house the club station. This space is on an upper floor and is quite large which is ours to use. We can install our tower(s) etc with out any problems. We are NOT permitted to install masts etc on the roof though as there is a concern that we can cause leaks.
- A "gentlemen's agreement" has been struck whereby our arrangements are on a verbal basis with the understanding that if ever we should have to vacate the premises, we would be given plenty of time to make the necessary arrangements to do so.
- This agreement also includes us (the club) to clean up the space and to install some ceiling tiles (provided by the owner) and to build whatever partitions we may want to have. The owner will provide materials, we provide the manpower. This means that we will need a number of members to come out and lend their talents to the project.
- We will have outside, secure access to the station on a 24/7 basis and initially there will be 5 or 6 people who will have the necessary codes to enter the building.

Kenwood TS-50

- The transceiver is in the "shop" once again for repairs. This is the third time. The club has already invested \$300.00 on repairs and there now is an additional \$250.00 in parts required. Kenwood has agreed to absorb the labour costs.
- Reg (VA3JQA) will check eham and other swap sites to see what the radio and the matching antenna tuner are selling for. The response will determine whether we proceed with the repairs.
- William (VE3WPJ) will get the original invoice to Michael (VE3TKI).

LCD Projector

- Michael (VE3TKI) and Tony (VA3QC) went to Advanced Presentations Products to compare "gently used" LCD projectors that they are putting on sale. After comparing a SVGA and an XGA projector, we both came to the conclusion that for our needs, the XGA is the more suitable of the 2. The regular sale price of this item is \$1,300.00 + taxes, but our cost would be \$1,299.00 + taxes and they need an answer by Friday, December 3, at the latest.
- After discussing this at length this evening, it was decided that we would proceed to buy this unit, even though it is more than the \$1,000.00 + taxes the membership authorized at the last general meeting.
- An amendment will be presented to the membership at the next meeting on December 9 for authorization to purchase the LCD projector for \$1,299.00 + taxes. If the motion does not pass, then several of those present at this executive meeting have stated they would make up the difference.
- This needed to be acted on very quickly as the items were advertised in the local papers and these items would be sold on a first come, first serve basis

Affiliation

- The benefits of affiliation with the City of Mississauga were discussed and it was decided that there really is no advantage for the club in being affiliated with the city at this time. Therefore we will not be proceeding to renew our affiliation.

Webmaster Position

- There was a lot of time spent reviewing the requirements and what the general consensus was as to how the website should look etc. After the open discussion, it was decided that it should be kept simple and that the look needn't change too much.
- Alex (VE3MA) and Dave (VA3DFH) have agreed to take on the role of webmeister(s) jointly.



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- Alex (VE3MA) gave the assembled marauding horde an overview of what he and Dave (VA3DFH) thought would be some improvements and changes to the existing site. During the course of this review, certain items were deleted and others added. You can see their proposal at: <http://www.am.ca/marc/>
- The executive are appreciative of both Alex (VE3MA) and Dave (VA3DFH) for stepping forward to take on this important function for the club and also to Art (VE3SQG) for his continued input during the transition.

Education

- The annual pizza and **BEER** night (well ok, I'm kidding about the **BEER**, but I got your attention didn't I!?) The date is January 25, 2005 at the Meals On Wheels location on Dunwin Drive.
- Earle (VE3XEL) indicated that it would be nice to purchase flowers for Jean Riggs of the Red Cross/Meals On Wheels. The executive concurred.
- Earle (VE3XEL) reminded all that when leaving the Meal On Wheels location that it is imperative that we take our garbage with us, not to leave it there in their garbage.

New Business

- **The great J-Pole antenna building project.** Michael (VE3TKI) et al are in the process of cutting, drilling and tapping bits and pieces of metal with the aim of building a quantity of J-Pole antennas. It is planned that for the 2nd meeting in January, an antenna building bee will take place. All those who wish to get in on the fun are asked to pay \$20.00 up front which covers the cost of materials and also provides a small stipend to the club coffers. An email will be sent by Michael (VE3TKI) to the membership stating the above and requesting that those interested pay at the next general meeting on December 9.
- **Name badges.** Dave (VA3DFH) is investigating new name badges for the club. After a brief discussion, it was decided that he would follow up on badges that would cost in the order of \$10.00. They will be made of gravoply, have a black background with white lettering and use the club's round logo on the left side. Stay tuned for further news breaking information as it becomes available.
- **Donation by Jeff (VA3WXM).** Jeff very generously donated four handheld radios to the club recently to be used in the ARES group. He also turned over a cheque to the club in the amount of \$100.00 to be put into the general revenue account of the club. The executive, on behalf of all the club membership, thanked Jeff for his generosity.
- **Insurance.** Bob (VE3XBB) will be checking out the RAC insurance scheme that is available to clubs. He will report back at the next executive meeting.

Adjournment

The meeting adjourned at 9:40 PM

Next meeting will be January 6, 2005 at Art's (VE3SQG) cozy retreat

Prepared by: Tony Champion (VA3QC)

December 5, 2004

ARLD048 DX news

From ARRL Headquarters

Newington CT December 2, 2004

This week's bulletin was made possible with information provided by K3ZM, QRZ DX, the OPDX Bulletin, The Daily DX, 425DXnews, DXNL, WA7BNM and Contest Corral from QST. Thanks to all.

FIJI, 3D2. Steve, G0UIH is QRV as 3D2FI from various islands until December 11. QSL to home call.

VIETNAM, 3W. JA7GAX will be QRV as 3W2GAX from Ho Chi Minh, Con Son, IOTA AS-130, and Phu Quoc, IOTA AS-128, while here from December 7 to 28. QSL to home call.

KUWAIT, 9K. Murtada, 9K2MU has been active on 160 meters around 0300z. QSL direct via WA4JTK.

THE GAMBIA, C5. Henryk, SM0JHF is QRV as C56JHF for about 10 days. Of late, he has been active on 30 meters around 0015z and 80 meters using CW around 2130z. QSL via operator's instructions.

JUAN FERNANDEZ ISLAND, CE0. Eliazar, CE0ZIS is QRV from here for about 10 days. QSL via operator's instructions.

AFGHANISTAN YA7X - Rene, DL2JRM, will be active as YA7X from Afghanistan between December 7, 2004 and January 5, 2005. QSL via DL1JJI. [Tnx DL2JRM]

DOMINICAN REPUBLIC, HI. Mike, HI3/GW3UOF is QRV on all bands until December 12. QSL direct.

JAPAN, JA. Special event station 8N0SON is QRV during the Special Olympics World Winter Games in Nagano until March 5, 2005. QSL via JF0JYR.

MONGOLIA, JT. Timur, JT1BE has been QRV using RTTY on 20 meters around 0130z. QSL direct.

ANTARCTICA. Mike, KC4AAA is QRV from the South Pole and has been active on 20 meters SSB from 0040 to 0200z. QSL via K1IED.

SUDAN, ST. Hugo, ST2YJ has been QRV on 30 meters around 1700z. QSL via LA4YW.

CONGO, TN. Baldur, DJ6SI will be QRV as TN6X from December 4 to 12. He will be active on all bands using CW. QSL to home call.

CANADA, VE. Special event station VC9COAL is QRV until December 31. QSL via VE9WGS.

ANDAMAN AND NICOBAR ISLANDS, VU. Team members from the National Institute of Amateur Radio, NIAR, are QRV as VU4RBI and VU4NRO from Andaman. This is not a major DXpedition. Activity will be limited to a few bands using CW and SSB, depending on propagation. QSL via operators' instructions.

MONTSERRAT, VP2M. Amateurs Mike, N9NS, Pete, N0FW, Charlie, W6KK and John, N7CQQ are QRV as VP2MNS, VP2MW, VP2MKK and VP2MQQ, respectively. Activity is on 160 to 6 meters, including 60 meters. They will participate in the ARRL 160-Meter contest and the upcoming ARRL 10-Meter contest as VP2MW. QSL all calls via W8QID.

Please see December QST, page 85, and the ARRL and WA7BNM contest websites for details.



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RAC News and News From Here and There

Website: <http://www.rac.ca>

Ontario South Region Directors website: <http://www.qsl.net/ve3bdb/director.html>

RAC Canada Winter Contest Dec. 18 2004

In December each year, the Radio Amateurs of Canada (RAC) sponsors the Canada Winter Contest. Amateurs all over the world are invited to participate. Contest Period: 0000 UTC to 2359 UTC on December 18, 2004. Full details and rules can be found online at: www.rac.ca/downloads/canwin2004.pdf

(RAC News Service)

Santa Claus Net Dec. 19-23 2004

Once again this year, jolly old Saint Nick will be present on the amateur bands to answer letters from children across Ontario, and perhaps beyond. The 40 metre net will be on the **TPN frequency, 7.055 mhz, on December 19th, 2004 at 1:00 pm**. In addition, three segments are scheduled on the **80 metre band, on December 21st, 22nd, and 23rd. The frequency will be 3.760 mhz +/- QRM, at 5:00 pm each day**. Anyone wishing to send letters to Santa may do so by either of two means, e-mail or snail mail.

The e-mail address is santaclausradio@rogers.com and the snail mail address is:

Santa Claus Workshop, c/o Gordon Mitchell, 41 Hamilton Ave., Brantford, ON N3S 7A1

Please round up as many letters and requests as possible, as Santa wants to have a good turnout.

(Gord Mitchell, VE3GIN)

Canadian Space weather forecasts on the Internet

Stéphane Burgoyne VE2OWL, has brought to our attention an interesting web site set up by the Canadian Government to provide current "Space Weather" reports and forecasts which may be useful to radio amateurs using both HF and VHF bands.

Have a look at:

http://www.spaceweather.gc.ca/myservlet/geomag_CLF/main_e.jsp

You can click on the "current space weather" and "latest forecast" buttons for more info.

(Thanks to VE2OWL)

Special Event Station VC9COAL

Authority has been granted to Wade Smith to use the special event call sign VC9COAL to commemorate the 100th anniversary of the naming of Minto, New Brunswick for the arrival of the railroad in 1904. The station will be on the air from December 1 to December 31, 2004. A special QSL card will be available for any contact or SWL Report. QSL via VE9WGS direct with return postage or via the bureau. No e-qsls will be available.

Complete details can be found online by visiting:

www.qsl.net/ve9wgs/vc9coal.html

Ontario Swap Shop

Looking for that special piece of radio gear to finish off your ham Station? Do you have extra radio gear you'd like to turn into some cash? Well the place to visit is the 'Ontario Swap Shop' held every Sunday at 12 noon on 7055 kHz and 7:00pm on 3755 kHz. Nick

VE3NJG and Ken VE3YK host the hour long program and all amateurs are invited. The Swap Shop list is posted every Monday on the Trans Provincial Net website, [Ontario Swap Shop Listings](#), the swap shop list can also be found on packet by calling up VE3DID (Nick VE3NJG)

History Channel program to explore the annals, impact of radio

On Friday, December 10, at 1 PM and 7 PM EST/PST, The History Channel will air a history of radio, "Radio: Out of Thin Air," as part of its "Modern Marvels" series. According to The History Channel, the hour long program will examine "the long life of the radio" and how its introduction "changed life in America nearly overnight."

(Submitted by John Dilks, K2TQN ARRL News)

NASA predicts early solar minimum.

On Oct. 11th and 12th 2004, there were no sunspots, a sign that the solar minimum is coming, and it's coming sooner than expected says NASA. The average solar cycle is about 11 years, but its length can vary from as little as 9 to as much as 14 years. Scientists working at NASA's Marshall Space Flight Center have examined data from the last 8 solar cycles and discovered that solar Min follows the first spotless day after solar Max by 34 months. The most recent solar maximum was in late 2000. The first spotless day after that was Jan 28, 2004. So, using Hathaway and Wilson's simple rule, solar minimum should arrive in late 2006. That's about a year earlier than previously thought.

The next solar maximum might come early, too, Solar activity intensifies rapidly after solar minimum. In recent cycles, Solar Max has followed Solar Min by 4 years. That would make the next maximum around 2010.

For the full story, visit the NASA web site at:

http://science.nasa.gov/headlines/y2004/18oct_solarminimum.htm?list_475816

Radio propagation affected by cracks in Earth's Magnetic Shield

The earth's magnetosphere acts as a shield that protects us from solar storms. But, according to new observations from NASA's IMAGE spacecraft and the joint NASA/European Space Agency Cluster satellites, cracks sometimes develop in Earth's magnetosphere and remain open for hours. This allows the solar wind through to affect HF propagation.

In the journal Nature Harald Frey of the University of California, Berkeley, says "The house deflects most of the storm, but the couch is ruined. Similarly, our magnetic shield takes the brunt of space storms, but some energy slips through its cracks, sometimes enough to cause problems with satellites, radio communication, and power systems."

In recent observations, the Imager for Magnetopause to Aurora Global Exploration (IMAGE) satellite revealed an area almost the size of California in the arctic upper atmosphere where a 75-megawatt "proton aurora" flared for hours. A stream of solar wind ions bombarded our atmosphere in precisely the same region where IMAGE saw the proton aurora.

(Thanks to NASA Press Release)



Solar Tutorial from Paul Harden NA5N, Feb, 2001

Solar flares can cause disruptions to HF communications. When a solar flare occurs, there is an immediate release of speed-of-light energy. Depending on the size of the flare, this energy can stretch from 10MHz through the spectrum to x-rays and gamma rays. Although 100-300MHz to x-rays is more typical. This can cause various forms of disruption to HF *and* VHF communications, but the good news is it lasts ONLY for the duration of the flare event ... usually 30 minutes or less. And the enhanced x-ray radiation, which is ionizing radiation, will enhance the ionization of the E and F layers, meaning they will become more reflective to HF signals below the maximum usable frequency (MUF). How much ionizing radiation we get each day from the sun is called the "solar flux," and it measured several places around the globe at 2880 MHz.

For example, right now the solar flux is in the 160-165 range. 10M is usually open when the solar flux is ABOUT 150 or more. A very ROUGH right hand rule. During the active sun, like now, it is not unusual to see the solar flux exceed 200, for very good conditions. Likewise, during the quiet sun (a few years from now), the solar flux will be around 60-90. That is insufficient for 10M or 15M to be open. Also when a large flare occurs, the complex magnetic field surrounding the flare will cause millions of tons of solar mass to be lifted off the sun's surface and propelled out into space via this magnetic field. This is called a coronal mass ejection (CME). New data shows that a CME actually precedes about 30% of the flares. None-the-less, this mass is flung out into space as a "shockwave" and rides along with the solar wind at speeds of 450-1000 km/sec. (Normal solar wind is about 350 km/s). When this CME shockwave approaches earth, it exerts a strong pressure on our magnetic field, compressing it and causing it to wiggle like jello (trademark of somebody) for many hours. While wiggling, it generates huge electrical currents that flows between the poles and causes large noise generation on HF. The effects of this are USUALLY noted below about 10MHz, and has little effect on 20M and above. Such a "geomagnetic storm" can last from a couple of hours to over a day, depending on the size of the flare and it's shockwave, and how directly the shockwave strikes the earth. This shockwave takes 2-3 days (55 hours average) to reach the earth following the flare. It is important to realize that the shockwaves from many flares are propelled out into interplanetary space away from the earth, so not every flare will effect the earth or cause a geomagnetic storm. The trajectory has to be right.

The variations in our magnetic field are measured (in terms of "nano-Tesla's" or nT) every 3 hours by several observatories around the planet. This 3-hour measurement is called the "K-index." K values of 1, 2 or 3 indicate quiet to unsettled conditions. K=4 is minor storming, and K of 7, 8 or 9 is severe storming. The K-indices are averaged over the UTC day to form the daily index, called the A-index. Realize that the current K-index is for the past 3 hours, while the current A-index was YESTERDAY's average. The K-index is obviously more useful for an estimate of CURRENT HF conditions.

The current solar flux, K-index, solar wind parameters and the sun's x-ray output are in neat graphical form at: (updated every minute)

www.sec.noaa.gov/today.html

They are also shown in a neat "instrument" type of display at:

www.sec.noaa.gov/SWN/

And a neat chart showing the current and past 3 months of solar flux, sunspot numbers and A-indices is at: (updated daily)

www.dxlc.com/solar

For FYBO, the A-index is forecasted to be 5-7, or fairly quiet conditions, with the K index predicted to be 1 or 2. And since there's been no flare activity today or Thursday, there is no shockwave on its way to earth to trigger a geomagnetic storm on Saturday. Remember, it takes 2-3 days for the shockwave to reach us, so a large flare would have had to occur yesterday to bother us this weekend. If a HUGE flare would to occur Friday, we'd be back at work Monday before the effects of it were felt. So to see what conditions are likely for the weekend on 40M, see if the sun had a large flare on Wednesday or Thursday.

The maximum usable frequency (MUF) right now over the US is 32-36 MHz, so 10M should be open during daylight hours. However, once the sun sets, the ionizing radiation from the sun stops above our head. All those free electrons stripped off by the ionizing process very quickly recombine with their host oxygen atoms. This very quickly lowers the MUF to about 24 MHz right at sundown, and to 18-20 MHz by late evening. This is why 10M will very quickly "die" as soon as the sun goes down and 15M will continue to provide good skip propagations for several hours sometimes following sundown. And since right now in the solar cycle the MUF seldom falls below 16-18MHz, 20M is open virtually 24-hours a day, as is 30M, 40M and 80M. Although, skip propagation on 40 and 80M does not normally occur during daylight hours.

So ... right now in our 11-year solar cycle (2001)

10M is a "daylight" only band; freak openings after dark

15M is a daylight band and into the evening hours

17M tends to be open until midnight, sometimes 24 hours

20M is generally open 24 hours a day

30M is generally open 24 hours a day

40M local "ground wave" propagation daytime hours, high noise

skip propagation and lower noise mid-afternoon to sunRISE

80M local "ground wave" propagation daytime hours, high noise

skip propagation and lower noise sunDOWN to sun sunRISE

FYBO CONTEST STRATEGY

For FYBO, or any contest, here's a few strategic points many operators try to follow:

1. Always start on the higher bands and work downward. That is, start out on 10M and work it if its open, then to 15M, then 20M. The reason is to work as many stations as you can while the bands are open during daylight hours. Furthermore, the skip distances will vary by band, so 10-15M will often give you contacts 3000km away, while 20M will be 1000-1500 km skips, thus allowing you to cover more of the country geographically.
2. Around sundown, work 10, 15 or 20M for "grey line" propagation. This is where your signals tends to follow the shadow of the earth at sundown, and thus, often work stations north-and-south instead of the usual east-west circuits. Allows you to possibly work into areas you'll never hear during other times. A good way to pick up a few new SPC's you'll miss otherwise.
3. How far your signals bounce to depends on the "take off angle" of your antenna. Dipoles have a high take-off angle, and the first skip zone will be a few hundred miles or more, while a vertical has a low angle of radiation and the first skip zone can be 1000 miles or more. Therefore, many operators will erect a dipole AND a vertical to work different geographical areas of the country on the same band by taking advantage of the different take-off angles.
4. 40M is often a good band to get on around mid to late afternoon. Before sundown, you are communicating primarily by ground wave, and thus you will QSO with stations in the surrounding states ... VERY difficult to do on the higher bands in the day because of the long skip distances that occur. Then as it approaches sundown, the propagation on 40M changes from ground wave to sky wave (skip) propagation for working farther distances.

For FYBO, I do #4 ... not only for the cool, nifty propagation characteristics described, but because you will usually experience the lowest operating temperature at or after sundown to pick up another multiplier point or two before the contest ends.

Take the general guidelines above and compare it with what YOU experience on the bands. The changes in propagation, noise and fading (QSB) are all the result of some amazing physics occurring on our sun, the solar wind, geomagnetic compression, the earth-sun link, and upper atmosphere ionization. And you just thought it was some mere RF going from point A to B!!!



THE COMMUNICATOR



VE3MIS/VE3RCX

Vol 8.4

December 9, 2004

CLUB CALENDAR FOR 2004-2005

2004

December

09 Thursday General Meeting #07 – Annual Christmas Pot Luck gathering
 14 Tuesday Basic Class #10 - Review (note 3)
 18 Thursday Public Service/ARES at RC (Cancross)
 21 Tuesday Basic Class #11 – EXAMINATION (note 3)
 23 Thursday **NO MEETING**

2005

JANUARY

02 Sunday Sunday Breakfast at Pickle Barrel (note 2)
 04 Tuesday Code Class (note 3)
 06 Thursday Executive Meeting #07 at Michael's (VE3TKI)
 11 Tuesday Code Class (note 3)
 13 Thursday General Meeting #08 –
 18 Tuesday Code Class (note 3)
 20 Thursday Public Service/ARES at RC (Cancross)
 25 Tuesday Code Class (note 3) + Pizza Night
 27 Thursday General Meeting #09 –

FEBRUARY

01 Tuesday Code Class (note 3)
 03 Thursday Executive Meeting #08 at Robin's (VE3VVS)
 06 Sunday Sunday Breakfast at Pickle Barrel (note 2)
 08 Tuesday Code Class (note 3)
 10 Thursday General Meeting #10 –
 15 Tuesday Code Class (note 3)
 17 Thursday Public Service/ARES at RC (Cancross)
 22 Tuesday Code Class (note 3)
 24 Thursday General Meeting #11 –

MARCH

01 Tuesday Code Class (note 3)
 03 Thursday Executive Meeting #09 at Earle's (VE3XEL)
 06 Sunday Sunday Breakfast at Pickle Barrel (note 2)
 08 Tuesday Code Class (note 3)- Final Class & Test
 10 Thursday General Meeting #12 –
 17 Thursday Public Service/ARES at RC (Cancross)
 24 Thursday General Meeting #13 –

APRIL

03 Sunday Sunday Breakfast at Pickle Barrel (note 2)
 07 Thursday Executive Meeting #10 at Michaels (VE3TKI)
 14 Thursday General Meeting #14 –
 21 Thursday Public Service/ARES at RC (Cancross)
 28 Thursday General Meeting #15 –

MAY

01 Sunday Sunday Breakfast at Pickle Barrel (note 2)
 05 Thursday Executive Meeting #11 at Lorne's (VE3CXT)
 12 Thursday General Meeting #16 –
 19 Thursday Public Service/ARES at RC (Cancross)
 26 Thursday General Meeting #17 –

JUNE

02 Thursday Executive Meeting #12 at Art's (VE3SQG)
 04-05 Sat-Sun Bread & Honey Festival
 05 Sunday Sunday Breakfast at Vic Johnson Arena at 9:00AM
 09 Thursday General Meeting #18 –
 16 Thursday Public Service/ARES at RC (Cancross)
 23 Thursday General Meeting #19 – Pot Luck End of Season
 25-26 Sat-Sun Field Day 2005

NOTES

1. Meetings start 7:30PM at St. Thomas A Becket Church Hall, 3535 South Common Court unless otherwise noted.
2. Breakfast is at 9:30AM unless otherwise noted.
3. Classes are from 7:00PM - 9:00PM at Meals On Wheels at 2445 Dunwin Drive

Visit our website: <http://www.marc.on.ca> for any updates of the calendar.

Upcoming Hamfests

Big Event 27

The Niagara Peninsula Amateur Radio Club
 Saturday, February 5, 2005
 St Catharines ON

Burlington Spring Flea Market

Burlington Amateur Radio Club
 Saturday, February 26, 2005
 Burlington ON

HAM-EX™ 2005

*Peel Amateur Radio Club /
 Mississauga Amateur Radio Club*
 Saturday, April 9, 2005
 Brampton ON

Whitby Amateur Radio Clubs

#3 Annual Hamfest
 Whitby Amateur Radio Club
 Saturday, April 16, 2005
 Oshawa ON

Durham Region Amateur Radio Hamfest

North Shore ARC and South Pickering ARC
 Saturday, April 23, 2005
 Whitby ON

Annual Spring Hamfest and Fleamarket

The Skywide Amateur Radio Club
 Saturday, May 14, 2005
 Toronto ON



THE COMMUNICATOR



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Mail-in Application Form to Join RAC

New ___ or Renewal ___

Name: _____ Callsign: _____

Address: _____

City/Town: _____ Prov: _____ Postal Code: _____

1-year single at \$39.95 (GST incl.).....: _____

1-year single in NB, NS, NF \$41.43 (HST incl.).....: _____

Each additional Family member at \$20: _____

(Name/Call sign of additional family members _____

Blind membership (no magazine) at \$20.....: _____

(Please provide CNIB registration number) _____

Foreign 1-year single at \$53 (US funds only): _____

Total: \$ _____

VISA/ MasterCard No: _____

Expiry Date: _____

Signature: _____



Mail to:
Radio Amateurs of Canada Inc.
720 Belfast Road, Suite 217
Ottawa, ON
K1G 0Z5