



The Communicator

Voice of the Mississauga Amateur Radio Club

We are Amateur Radio in Mississauga

March 11, 2004

Vol. 6-7



Category 1 Affiliation

From the Gavel - President's Message



With Ham-Ex™ 2004 fast approaching, things will be in a flurry making sure that everything is planned for and ready to go. I'm sure that everyone who can go is looking forward to it and having the chance to spend some money on something that you have been looking for, or perhaps on something that just is cool. There is still the thrill of not only acquiring the treasure, but also the skill on sneaking it home and putting in the shack and making it appear as though it's always been there.

Ham-Ex™ though is not just any old flea market, as I'm sure you have heard many times before. It is truly a unique event in these parts: flea market, seminars and banquet, all to make the daylong event something to look forward to.

This year we are going to add a couple of new things. We will have our FSV up there to show off in all its glory. We are going to try and have 2 Special Events Stations set up, one on 20 metres and one on 40 meters ... so be sure to come and try your hand at operating and help rack up those contacts.

And while on the subject of helping out (you just knew that little transition was coming didn't you?), I know everyone comes out and helps, but please let us know ahead of time. Organization is the key to success. The key to organization is a good schedule, and you can help us make a good schedule by letting us know how you want to help out. By the time you read this, there will be less than two weeks. That is not much time to schedule everyone, let alone ensuring that the banquet caterer has enough time to prepare food for everyone. You are going to the banquet aren't you?

Aside from Ham-Ex™, what else has been developing? Our IRLP has been up and running for awhile now. I'm sure that some of you out there have given it a try. If you haven't, don't be shy. Give it a whirl. The more we use it, the more we get to be known in other communities. There are other technological advances brewing afoot. Our HSMM group is just starting up. Soon we will have a few nodes running and some standards developed so that we can demonstrate the technology to all. Our goal here is to peak your curiosity, so that you can think up new ideas as to how this will help the club as a whole and ultimately you, the individual amateur.

After all one of the things amateur radio has always been about is the challenge of getting new things going. And you know, it doesn't have to always be new. Occasionally reviving something that has been around for a while can present and generate renewed interest. Take packet for instance. This is enjoying a resurgence with hams who are dusting off those old TNC's and starting up local packet net.

So even if HF conditions are not the best, we still have a lot going on. So make sure that March 20th is circled on that calendar. Set aside a few dollars to pick up something, and put down your name to help out, and we will all have a great time. See you all there...

Robin (VE3VVS)

Ham-Ex™ is 9 days away!!
Sign up, buy tickets – Support YOUR club!!

ATTEND - \$6.00 Entrance fee
Doors open at 9:00AM

This Month

2. **Commentary**
3. **General Meeting #10 Minutes**
4. **General Meeting #11 Minutes**
5. **Executive Meeting #06 Minutes**
6. **A Chilling Possibility**
7. **News from Here and There**
9. **Maximum Usable Frequency- March 2004**
10. **Club Calendar 2003-2004**

Sunday Brunch

Sunday brunches are held on the first Sunday of each month. Time is 9:30AM at **The Golden Griddle** located at 6400 Millcreek Drive (905)542-9964. Millcreek Drive is located 1 block north of Battleford and off Erin Mills Parkway. The restaurant is on the east side of Erin Mills Parkway. All are welcome to come out and have an opportunity to chat in an informal setting..

Sunday Brunch April 4, 2004

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 Managers, **Reg (VA3JQA) or Morgan (VA3NZE)**, 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...



What is it that makes our club different from so many others? After thinking about this for some time, I think I've come up with one strong possible reason. Our members are enthusiastic.

One of our fellow members, **Sohail (VE3ITU)** took it upon himself to hold a ham course last summer. He advertised in the building he resides and also in other locations around his neighbourhood. He was particularly interested in attracting younger members of the community, teenagers, who he rightfully sees as the ones who will ensure the survival of our hobby. Was he successful?? You bet. He had a class of 13 or so if I'm not mistaken and our club benefited by having at least 4 new members join up this past fall. A number were high school students. Others who took their course with Sohail (VE3ITU), went on to obtain their cw endorsement and are taking an active, progressive role in our club. For example **William (VE3BJP)** and **Dave (VA3BHF)** are heading up a new SIG on HMSS in addition to taking pro-active roles in other club activities.

Our youngest member at age 11, is **Steve (VA3IMG)**. He is the son of Rick (VE3IMG) and he will, like his dad I'm sure, become an active contender. There is a proposal out there that the club start a youth net, so we'll see where that goes. If amateur radio is to survive, it must attract our youth to the hobby. That would imply that we older and oldest folks have to be receptive to new and different ideas, and can't allow ourselves to get stuck in the "we've always done it this way" rut.

We have 2 new members, **Reg (VA3JQA)** and **Morgan (VA3NZE)** step into the breach and volunteer to handle the 2 metre net managers job co-jointly after Brad (VA3ZRT) had to give up the position due to family and business commitments. This is wonderful. They are both eager to see the Tuesday night net grow and just last night (Mar 9), we had a new voice handling the microphone. **Chris (VA3INV)** did his first stint running the show and he did an excellent job. I remember my first nets (both HF and 2 Metre) very clearly. I was nervous and somewhat tongue-tied, but managed to muddle through and everyone was patient and understanding, which helped immensely. Of course the next ones were easier and now I have a great time doing both. My point is that once baptized one can relax and just let it flow along. Reg (VA3JQA) and Morgan (VA3NZE) have some fresh ideas that they will develop over time.

The other side of this equation is we old(er) folks who have been around for a while have to listen to our new members carefully. We have to listen to what they are saying to us with respect and with open minds. The dreaded "we've never done that before" or "we've always done it this way before" should be banned from our vocabularies. That kind of thinking will trap our club into the same fate as is befalling so many other clubs; a lack of new, young people and hence a decline in the hobby and inactivity of yet another club in that particular community. Coming from the English community in Quebec City, I have watched the decline and eventually loss of many of the English institutions there because the English youth of my generation, and those that followed, emigrated out of the city and province leaving only the older generation, which is slowly dying off. This is an analogy not meant to be a political statement.

New ideas from eager new amateurs need to be discussed and debated openly, honestly and respectfully if our club is to hold on to them as members. Honest debate is good and some ideas will be rejected and others accepted, but no matter what, it is important that ideas are not dismissed out of hand.

When I started this I had no idea where it was going to end up, but I think what's been written is important to keep in mind.

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	Jeff Stewart	VA3WXM	905-814-5882
Secretary	Tony Champion	VA3QC	905-828-4004	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	
VHF Net Asst.....:	Morgan Jones	VA3NZE					
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 :	OPEN			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	VE3TGW		Canwarn	OPEN		
Programmes.....:	Gerry Doran	VE3DOR		Programmes Asst 1 ..:	Bob Giddy	VE3IAB	
Programmes Asst 2.:	Bob Boyer	VE3XBB		Webmaster.....:	Art Sinclair	VE3SQG	

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 #10

Date: February 12, 2004

Location: 3535 South Common Court, Mississauga

Time: 7:30PM

Officers Present:

Robin Stubbs	VE3VVS	President
Bob Giddy	VE3IAB	2nd Vice President
Jeff Stewart	VA3WXM	Treasurer
Tony Champion	VA3QC	Secretary
Lorne Jackson	VE3CXT	Past President

Absent: John Duffy VE3DRZ 1st Vice President

Attendance:

- o 35 including visitors

Opening Business – Robin (VE3VVS)

- o Opened the meeting by introducing the executive and welcomed visitors.
- o Introduced Lorne (VE3CXT), Art (VE3SQG) and Michael (VE3TKI) as club ambassadors for those who are visitors, or new to the club. The purpose is to welcome those who are visitors in the hopes that they may feel more comfortable and to help foster good will with hope that they may join up.
- o It was mentioned that there had been some activity on 12 Metres and also Fred (VE3DVG) had a contact via IRLP over our repeater.
- o Turned the floor over to Art (VE3SQG) who announced that he had obtained a copy of a 1927 issue of the London Free Press, which was all about radio. It was given to Earle for safekeeping.

Constitution Revisions

- o Michael (VE3TKI) talked about the changes that were being proposed to the club constitution.
- o A discussion ensued from a question raised by Reg (VE3JQA) concerning the proposal that the executive have the right to review and revoke life memberships. Reg (VE3JQA) pointed out that a life member, once named, should be a member for life. Consequently, the committee reviewing the constitution will re-consider this particular change and will re-present the proposals for a second time at the next general meeting on February 26.
- o Bob (VE3AGC) noted that as a Canadian club we should be using the RAC recommendations for revoking errant or unsavory characters from the club's roster. He was assured that, yes, the club is using the RAC and not the ARRL for reference language.

HAM-EX™

- o Planning is well underway.
- o Banquet tickets are on sale. Early bird special is \$18.00. After March 1, price will be \$20.00
- o Raffle tickets are on sale: 1 for \$2.00 – 3 for \$5.00. Grand prize is \$1,000.00 from Radioworld.
- o Need to have volunteers sign up for the various sections.

2 Metre Net Manager

- o Brad (VA3ZRT), due to the pressures and demands of a new job etc, has requested that someone take over the 2 metre net managers job. Reg (VE3JQA) and Morgan (VA3NZE).

HSMM

- o William (VE3WPJ) is interested in setting up a SIG to research and experiment with High Speed MultiMedia. A meeting will be held shortly for those who are interested.

Public Service - Bob (VE3XBB)

- o No report.

Station/Contest Group – Rick (VE3IMG)

- o No report

Education – Earle (VE3XEL)

- o Several members passed their 5WPM cw endorsement namely:
 - Vernon Crawford (VA3CRF)
 - Dave Stubbs (VA3BHF)
 - Jaroslav Bajor (VA3CVN)
- o Congratulations to all

ARES(Amateur Radio Emergency Services)–Sean (VA3MED)

- o Sean (VA3MED) and Michael Brickell (VE3TKI) met with the assistant fire chief of the City of Mississauga and Kirk Grey, of the City's Communication Department to open the lines of communications. The meeting was quite positive and it appears as though the ARES group is well thought of and that we could be of beneficial use to the fire department in the event of an emergency.

Other Business

- o The Peel Club will possibly be holding an advanced class depending on the interest shown.

50/50 Draw

- o Bob (VE3XBB) won \$15.00 which he donated to the club.

Presentation

- o Steve (VE3SNP) of Radioworld gave an entertaining talk and showed some of the new "toys" that Radioworld are flogging to the unsuspecting masses, particularly our YL's. He gave out some trade secrets on how to obtain and bring into the house new gear without raising our YL's suspicions. The previous is said in jest, but he did show us some pretty neat stuff.

Adjournment

The meeting adjourned at 9:22PM
A.J. Champion (VA3QC) – Secretary
February 27, 2004

Rev 1.

Michael (VE3TKI) added to note on ARES
Kirk Grey added to note on ARES
VE3SMP corrected to VE3SNP in note on presentation



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Minutes of General Meeting #11

Date: February 26, 2004

Location: 3535 South Common Court, Mississauga

Time: 7:30PM

Officers Absent:

Robin Stubbs	VE3VVS	President
John Duffy	VE3DRZ	1 st Vice President
Lorne Jackson	VE3CXT	Past President

Officers Present:

Bob Giddy	VE3IAB	2nd Vice President
Jeff Stewart	VA3WXM	Treasurer
Tony Champion	VA3QC	Secretary

Attendance:

- o 24 including visitors

Opening Business – Bob (VE3IAB)

- o Opened the meeting by introducing the executive and welcomed visitors.
- o Introduced Lorne (VE3CXT), Art (VE3SQG) and Michael (VE3TKI) as club ambassadors for those who are visitors, or new to the club. The purpose is to welcome those who are visitors in the hopes that they may feel more comfortable and to help foster good will with hope that they may join up.

Constitution Revisions

- o Michael (VE3TKI) presented for the second and final time before calling for a motion, about the changes that were being proposed to the club constitution. He reviewed for those who had not been present at the previous meeting the proposed changes. (See Appendix A attached)
- o A motion was made to accept the changes as outlined by Michael (VE3TKI) by Don (VE3KHN). This was seconded by Sean (VA3MED). A show of hands was requested and the motion was carried unanimously by the assembled unruly mob.

HAM-EXT™

- o Banquet tickets are on sale. Early bird special is \$18.00. After March 1, price will be \$20.00
- o Raffle tickets are on sale: 1 for \$2.00 – 3 for \$5.00. Grand prize is \$1,000.00 from Radioworld.
- o Need to have volunteers sign up for the various sections.

Upcoming Elections

- o Art (VE3SQG) has agreed to head up the nominating committee for the upcoming elections. We are looking for one other person to assist him. Two officers need to be found: Treasurer and

Secretary as the incumbents 2 year term is up. The remaining 3 officers have agreed to stand for election for a second term. If anyone is interested in either of these positions, or would like to run for any of the other 3 positions, please advise Art.

- o Elections will take place at the Annual General Meeting which is held on the second meeting in April.

Public Service - Bob (VE3XBB)

- o No report.

Station/Contest Group – Rick (VE3IMG)

- o No report

Education – Earle (VE3XEL)

- o Congratulations to Matthew Graham (VA3MKG) who passed his 5WPM cw endorsement recently:
- o The last code class of the year will be held on March 9, 2004

ARES (Amateur Radio Emergency Services)–Sean (VA3MED)

- o Sean (VA3MED) Stated that the FSV is still located in Brampton. Apparently the ambulance service is concerned about liability issues with the FSV. Sean is investigating and following up.

Other Business

- o Sohail (VE3ITU) said that he was setting up a YAHOO chat room for Canadian amateurs since the RAC version has been off the air for about 2 years.
- o The Peel Club will possibly be holding an advanced class depending on the interest shown.

50/50 Draw

- o Tony (VA3QC) won \$16.00.

Presentation

- o Sean (VA3MED) gave an instructional demonstration and fielded questions on message handling. This is important to know as we may be called upon, in an emergency, to handle traffic and messages. We therefore need to know the proper procedures.

Adjournment

The meeting adjourned at 8:45PM
A.J. Champion (VA3QC) – Secretary
February 27, 2004



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Executive Meeting #6 Minutes

Date: March 4, 2004

Location: Robin's (VE3VVS) humble abode

Time: 7:37PM

Attendees:

Robin Stubbs	VE3VVS	President
Tony Champion	VA3QC	Secretary
Lorne Jackson	VE3CXT	Past President
John Duffy	VE3DRZ	1 st VP
Bob Giddy	VE3IAB	2nd VP
Jeff Stewart	VA3WXM	Treasurer
Bob Boyer	VE3XBB	Public Service
John Kenzie	VE3WJK	Membership
Michael Brickell	VE3TKI	Repeater Mgr
Art Sinclair	VE3SQG	Webmeister
William Bressette		VE3WPJ
Sean Conlin	VA3MED	ARES
Earle Laycock	VE3XEL	Education
Reg Vertolli	VA3JQA	2M Net Mgr
Morgan Jones	VA3NZE	2M Net Mgr

HAM-EX™

- Someone will contact Louise Sawitzki (VA3CLC) to see whether we can borrow a combo TV/VCR for the club exhibit table.
- Tony (VA3QC) will print a truckload of club brochures which we expect to distribute at Ham-Ex™ to the thousands of visitors who will want to join our merry band of gallivanting and over-exuberant members in the wild activities in which we participate with such gusto.
- Tony (VA3QC) will also send a long-winded note to the members via the yahoogroups with the hopes of generating a wild-free-for-all for members to volunteer, the selling of raffle tickets and the purchase of banquet tickets for the whole darn family, whether they live here or not. It will be wild!

Club/Contest Station

- Several leads are being followed re obtaining a new location for the club station. Membership will be advised as events unfold. The key is to be patient.

ARES/Special Events

- Bob (VE3XBB) will send off a certificate of insurance to the powers that be.
- The FSV is still in Brampton until the insurance issue is resolved.
- A new dual band radio was installed at the Red Cross building at Cancross. This replaces one that was damaged and not functioning. The cost of this was borne by the Red Cross.
- There is a revival of packet radio for the purposes of message handling during emergencies. More on this as it unfolds.
- Hospital radios: Lorne (VE3CXT) will contact Glen Trimbell and advise him that an impasse has been reached.

Repeaters/IRLP

- The new UHF repeater is being held ransom in Michael's (VE3TKI) garage. To tune and modify it cost the club \$350.00.
- We are in the process of acquiring a GE Master II VHF repeater. It's advantage is that it's duty cycle is 100W as opposed to the 15W the present repeater is rated at. The cost of this is \$500.00, (\$300 for purchase and \$200.00 for xtals etc).
- It was proposed that we dispose of the existing repeater and possibly the RLC-4 controller as we have no foreseeable need for these items.
- There is some discussion concerning providing the capability of linking our repeater with those of the Peel and Oakville clubs. More on this as it unfolds. Michael (VE3TKI) will follow up.

MARC Ware/Logo

- Alex (VA3UA) has created new look logos for the club. One would be suitable for mugs etc and the other suited for letterhead, jackets etc. These will be presented and recommended to the general membership for their approval.

New Business

- A donation to RAC will be considered depending on how the club budget looks after Ham-Ex.
- The club could use a LCD projector for presentations as we cannot always depend on Art (VE3SQG) to obtain one for us. Consequently the cost of obtaining one it will be added to the next budget. Art (VE3SQG) recommends that we look for one with 3 LCD panels with a minimum of a 150W bulb. With all of us bright lights, that shouldn't be too much of a problem.
- The inactive bank account was discussed. This account has been closed and the funds transferred to the general operating fund.
- VHF Conference in July: Our club will be responsible for doing the talkin. Talkin will also be done on 2M Sideband at the request of the organizers. People are needed to help with the registration. Michael (VE3TKI) will follow up with the organizers as to how many people are required and will provide details as they become known.
- 2 Metre Net Managers: Reg (VA3JQA) and Morgan (VA3NZE) have both agreed to take on the responsibilities of net manager jointly. Thanks guys for stepping forward. It's always nice to get some fresh faces involved. They will try to convince some new voices to take on some net controlling.

Adjournment

- The meeting adjourned at 9:35PM. As there were still 2 minutes left of the 2 hour limit, we decided to do the wave in Robin's living room without breaking anything. This proved to be quite a challenge and more rational reason prevailed. We all jumped up and down at the same time instead – just to test the integrity of his living room floor. Unfortunately, Robin and Janice now watch TV in the basement. The good news is no one was hurt.

Next meeting will be April 1, 2004 (Oh boy this one should be fun!)
Prepared by: A. J. Champion (VA3QC) – Secretary, MARC
March 8, 2004



Is the next Ice Age just around the corner ?

Amateurs in Canada who are busy worrying about where to put up their next big antenna, might be interested in reading a recent NASA story on climate change. The story says that some scientists think the climate of North America and Northern Europe is about to undergo a drastic change, and that we could all be much colder in as little as 20 years from now. If we end up under a mile of ice, that antenna won't work very well!

By disturbing a massive ocean current, melting Arctic sea ice might trigger colder weather in Europe and North America.

March 5, 2004: Global warming could plunge North America and Western Europe into a deep freeze, possibly within only a few decades.

That's the paradoxical scenario gaining credibility among many climate scientists. The thawing of sea ice covering the Arctic could disturb or even halt large currents in the Atlantic Ocean. Without the vast heat that these ocean currents deliver--comparable to the power generation of a million nuclear power plants--Europe's average temperature would likely drop 5 to 10°C (9 to 18°F), and parts of eastern North America would be chilled somewhat less. Such a dip in temperature would be similar to global average temperatures toward the end of the last ice age roughly 20,000 years ago.

Some scientists believe this shift in ocean currents could come surprisingly soon--within as little as 20 years, according to Robert Gagosian, president and director of the Woods Hole Oceanographic Institution. Others doubt it will happen at all. Even so, the Pentagon is taking notice. Andrew Marshall, a veteran Defense Department planner, recently released an unclassified report detailing how a shift in ocean currents in the near future could compromise national security.

"It's difficult to predict what will happen," cautions Donald Cavalieri, a senior scientist at NASA's Goddard Space Flight Center, "because the Arctic and North Atlantic are very complex systems with many interactions between the land, the sea, and the atmosphere. But the facts do suggest that the changes we're seeing in the Arctic could potentially affect currents that warm Western Europe, and that's gotten a lot of people concerned."

Ice is Key

There are several satellites keeping an all-weather watch on ice cover in the Arctic. NASA's Aqua satellite, for instance, carries a Japanese-built sensor called the Advanced Microwave Scanning Radiometer-EOS ("AMSR-E" for short). Using microwaves, rather than visible light, AMSR-E can penetrate clouds and offer uninterrupted surveillance of the ice, even at night, explains Roy Spencer, the instrument's principal investigator at the Global Hydrology and Climate Center in Huntsville, Alabama. Other ice-watching satellites, operated by NASA, NOAA and the Dept. of Defense, use similar technology.

The view from orbit clearly shows a long-term decline in the "perennial" Arctic sea ice (the part that remains frozen during the warm summer months). According to a 2002 paper by Josefino Comiso, a climate scientist at NASA's Goddard Space Flight Center, this year-round ice has been retreating since the beginning of the satellite record in 1978 at an average rate of 9% per decade. Studies looking at more recent data peg the rate at 14% per decade, suggesting that the decline of Arctic sea ice is accelerating.

Some scientists worry that melting Arctic sea ice will dump enough freshwater into the North Atlantic to interfere with sea currents. Some freshwater would come from the ice-melt itself, but the main contributor would be increased rain and snow in the

A Chilling Possibility

region. Retreating ice cover exposes more of the ocean surface, allowing more moisture to evaporate into the atmosphere and leading to more precipitation.

Because saltwater is denser and heavier than freshwater, this "freshening" of the North Atlantic would make the surface layers more buoyant. That's a problem because the surface water needs to sink to drive a primary ocean circulation pattern known as the "Great Ocean Conveyor." Sunken water flows south along the ocean floor toward the equator, while warm surface waters from tropical latitudes flow north to replace the water that sank, thus keeping the Conveyor slowly chugging along. An increase in freshwater could prevent this sinking of North Atlantic surface waters, slowing or stopping this circulation.

AMSR-E is collecting new data that will help scientists evaluate this possibility. For one thing, it provides greatly improved ground resolution over previous all-weather sensors. AMSR-E images reveal smaller cracks and fissures in the ice as it breaks up in the spring. This detail allows scientists to better understand the dynamics of ice break-up, says Cavalieri, a member of the AMSR-E team.

"Other important pieces of the puzzle, like rainfall, sea-surface temperatures, and oceanic winds, are also detected by AMSR-E. Looking at those variables together should help scientists assess the likelihood of a change in the Atlantic currents," adds Spencer.

Deja Vu?

Once considered incredible, the notion that climate can change rapidly is becoming respectable. In a 2003 report, Robert Gagosian cites "rapidly advancing evidence [from, e.g., tree rings and ice cores] that Earth's climate has shifted abruptly and dramatically in the past." For example, as the world warmed at the end of the last ice age about 13,000 years ago, melting ice sheets appear to have triggered a sudden halt in the Conveyor, throwing the world back into a 1,300 year period of ice-age-like conditions called the "Younger Dryas."

Will it happen again? Researchers are scrambling to find out.

On Feb. 13, an expedition set sail from Great Britain to place current-monitoring sensors in the Atlantic Ocean that will check the Gulf Stream for signs of slowing. The voyage is the latest step in a joint US / UK research project called Rapid Climate Change, which began in 2001. Another international project, called SEARCH (Study of Environmental Arctic CHange), kicked off in 2001 with the goal of more carefully assessing changes in Arctic sea ice thickness.

Much depends on how fast the warming of the Arctic occurs, according to computer simulations by Thomas F. Stocker and Andreas Schmittner of the University of Bern. In their models, a faster warming could shut down the major Atlantic current completely, while a slower warming might only slow the current for a few centuries.

And, inevitably, the discussion turns to people. Does human industry play a major role in warming the Arctic? Could we reverse the trend, if we wanted to? Not all scientists agree. Some argue that the changes occurring in the Arctic are consistent with large, slow natural cycles in ocean behavior that are known to science. Others see a greater human component.

"The sea ice thawing is consistent with the warming we've seen in the last century," notes Spencer, but "we don't know how much of that warming is a natural climate fluctuation and what portion is due to manmade greenhouse gases."

If the Great Conveyor Belt suddenly stops, the cause might not matter. Europeans will have other things on their minds--like how to grow crops in snow. Now is the time to find out, while it's merely a chilling possibility.



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News From Here and There

Mar. 6 2004 Amateurs participate in BPL discussions at the ITU in Geneva

(RAC News Service)

At a recent set of meetings at the Radio Bureau of the ITU in Geneva, users of the HF fixed service, and government spectrum administrators from many countries discussed the possible need to protect the fixed service from possible interference from broadband signals carried over outdoor medium and high voltage power lines (BPL).

The fixed service includes point-to-point, and point-to-multipoint, radio stations which are situated at fixed locations, but excludes amateur stations. Typical fixed service users are national defense and public security systems. Radio Amateurs are following these discussions closely, since the fixed service may turn out to be an important ally in our fight to ensure that BPL does not mean the end of amateur radio at HF.

WB7CSL representing the ARRL, and VE3PU representing the IARU, were present at the meetings and took part in the discussions in a working group chaired by VE3PU. For this first set of meetings, a process was put in place to collect characteristics of HF fixed service receivers, which might be appropriate for use in the studies. The protection requirements of the fixed service were discussed, but no conclusion was reached on what level of protection might be necessary to avoid interference from BPL.

Also discussed in the meetings, was the use of the frequency range 135.7-137.8 kHz by the fixed service, and the possibility of interference to such users, if a new LF amateur band is approved at WRC 2007.

As well, fixed service users discussed the review of the use of the range 4-10 MHz which will be undertaken in preparation for a possible change in frequency allocations at WRC 07. HF broadcasters have stated that they need more spectrum, and other users such as the fixed, mobile and amateur services might be affected.

(RAC News Service)

Mar. 5 2004 From RAC HQ Bogus e-mails contain worms!

A new worm is circulating through the e-mail system, and appears to come from a legitimate source such as RAC. Delete it! It does not come from RAC, or any other amateur radio organization. Here is how the e-mail will read (with variations)

From: management@rac.ca

Dear user of e-mail server "Rac.ca",

Your e-mail account will be disabled because of improper using in next three days, if you are still wishing to use it, please, resign your account information.

For details see the attached file.

Attached file protected with the password for security reasons.

Password is 81777.

Have a good day,

The Rac.ca team <http://www.rac.ca>

REPEAT !! This is not a genuine message from RAC or from their server. Do not open the attachment ! Delete it !!

CLARA and Family HF Contest March 2004

This year's HF Contest, sponsored by the Canadian Ladies Amateur Radio Association (CLARA), will be held over the weekend of March 20th and 21st, 2004. Commencing at 1700Z March 20th and continuing until 1700Z March 21st, 2004. The Contest is open to all CLARA members and their families and also to all Amateurs.

These are suggested frequencies only for easier location of contacts: Call "CQ CLARA".

FREQUENCIES:

- CW 14.033, 21.033, 7.033, 3.688\
- Phone 28.300, 21.225, 14.120, 14.285, 7033, 7.200, 3.750, 3.900

Can work stations once per band/mode. Cross-mode contacts count as phone for both stations.

LOGS: Logs must include the date, time (GMT), mode, call sign of contact, contact name, contact QTH (city, town, etc.) and whether the contact is a CLARA member, family member, non-member YL, or OM. Logs are to be received by the Contest Manager no later than April 24th, 2004 and must include call sign, address and claimed score. Because we are in the age of computerization, electronic logs are encouraged. You can also e-mail your logs to me in Plain Text, MS Word or MS Excel format. For the white cane operators, other arrangements can be made for transmitting your logs. Please contact me, or Helen VA1YL at hfarchibald@ns.sympatico.ca in advance.

SCORING:

- Contact with CLARA member (includes CLARA to CLARA) – 5 points
- Contact with CLARA family member, (OM's, sons, daughters, in-laws, etc.) – 2 points
- Contact with non CLARA member YL – 3 points
- Contact with OM (includes OM to OM) – 1 point

MULTIPLIERS:

- 1 for each Canadian call area (14 possible)
- 1 for each ARRL DX Country contacted if the op was a YL
- No multipliers for DX OM's

Points claimed – (Contact Points) x Multiplier

PRIZES:

- Mini prize draw from all logs submitted
- Trophy – Highest scoring CLARA member
- Certificate – 2nd highest scoring CLARA member
- Certificate – 3rd highest scoring CLARA member
- Certificate – Highest scoring DX YL
- Certificate – Highest scoring OM

Contest Manager:

Paulette Schouten, VE7VPE

c/o VECTOR, 3301 East Pender Street, Vancouver, B.C.
V5K 5J3 Canada

e-mail: ve7vpe@rac.ca



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USA reaches a decision on BPL 2/3/04

The FCC this week released its *Notice of Proposed Rule Making (NPRM)* on Broadband over Power Line (BPL) systems. The 38-page *NPRM* proposes amendments to FCC Part 15 rules to define so-called "access BPL," make rules specific to BPL systems and provide measurement guidelines for BPL devices and systems. It would make no changes to Part 15 emission limits for unintentional radiators, however. ARRL CEO David Sumner, K1ZZ, says that while Part 15's current limits on unintentional radiators on HF may be appropriate for short-duration, narrowband emissions, they are inappropriate for the sort of long-duration, broadband emissions BPL would employ.

FCC Proposes Rules for BPL Systems

NEWINGTON, CT, Feb 25, 2004--The FCC this week released its *Notice of Proposed Rule Making (NPRM)* on Broadband over Power Line (BPL) systems. The 38-page *NPRM*--in ET Dockets 03-104 and 04-37--proposes amendments to FCC Part 15 rules to define so-called "access BPL," make rules specific to BPL systems and provide measurement guidelines for BPL devices and systems. It would make no changes to Part 15 emission limits for unintentional radiators, however. ARRL CEO David Sumner, K1ZZ, says that while Part 15's current limits on unintentional radiators on HF may be appropriate for short-duration, narrowband emissions, they are inappropriate for the sort of long-duration, broadband emissions BPL would employ. He compared short-duration, narrowband emissions at the Part 15 radiated emission limit to a helicopter flying overhead.

"The noise is deafening, but is tolerable because it doesn't happen very often nor last very long," he observed. "To a radio user, having BPL in the neighborhood would be like having the helicopter hovering constantly overhead."

ARRL Lab Manager Ed Hare, W1RFI, offered an example that most hams can relate to. "The limit for an unintentional emitter on HF is 30 uV/m at 30 meters from the source," he said. "If you take a dipole cut for 3.5 MHz and put it in a 30 uV/m field, you'll have a noise reading of S9 plus 16 dB at your transceiver."

Access BPL, a form of carrier current or power line carrier (PLC) communication, would apply RF in the HF to low-VHF range to existing low and medium-voltage exterior power lines to distribute Internet and broadband services. It was the aspect of feeding RF signals into outdoor power lines that initially raised Amateur Radio concerns regarding potential interference. Such carrier current or PLC systems are subject to the FCC's Part 15 rules governing unlicensed devices.

In its proposal, the FCC took a broader view of interference issues. "There is significant disagreement among the commenting parties regarding the interference potential of Access BPL," the *NPRM* declares. "Amateur operators and amateur organizations in general are opposed to Access BPL and advocate emission limits that are lower than the existing Part 15 limits."

In a statement attached to the *NPRM*, however, FCC Chairman Michael Powell expressed confidence that the new requirements it spells out balance BPL's potential benefits with concerns of potential interference "by establishing new requirements that will help minimize harmful interference that may occur and guidelines for measurement of radio frequency emissions from carrier current systems."

Still, the *NPRM* concedes, Amateur Radio operations "are likely to present a difficult challenge in the deployment of Access BPL in cases where amateurs use high-gain outdoor antennas that are located near power lines." Noting that power line noise already presents a significant problem for hams, the FCC said, "we therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines."

The *NPRM* goes on to point out that because BPL has the capability to stay clear of specific frequencies, BPL providers can simply "avoid the

use of amateur frequencies when in close proximity to amateur outdoor antennas." The *NPRM* also briefly mentions the possibility of interference to BPL systems from Amateur Radio, an issue ARRL and others raised in their comments on last April's *Notice of Inquiry* on BPL.

The *NPRM* emphasizes that under the proposed rules, operators of Access BPL systems would be responsible for eliminating any harmful interference that may occur. "Furthermore, we believe that the current Part 15 emission limits for carrier current systems in conjunction with certain additional requirements specific to Access BPL operations will be adequate to ensure that existing radio operations are protected against harmful interference from such operations," the FCC said.

The *NPRM* proposes changes to Part 15 that would "facilitate the deployment of Access BPL technology while protecting licensed users of the spectrum." If ultimately adopted as proposed, the *NPRM* would:

- define Access BPL for the purposes of its rules
- maintain the existing Part 15 emission limits for BPL
- require that Access BPL devices employ "adaptive interference-mitigation techniques"
- require that Access BPL providers maintain a database of installation locations and technical information
- adopt specific measurement guidelines for both Access BPL and other carrier current systems to ensure that measurements are made in a consistent manner and provide for repeatable results in determining compliance with its rules.

Sumner suggested that, with licensed services and government users taking up large portions of the HF spectrum, protecting all licensed HF users could prove to be a nightmare for BPL providers. He noted, too, that while the FCC maintains that licensed services must be protected, the proposed rules place the burden of initiating corrective action on the shoulders of the licensed services. "And as a practical matter, the FCC's proposed rules offer no protection at all to mobile and portable stations," he added.

Sumner further stated that ARRL would continue to combat the "misconception" that BPL systems are viable as a "last mile" broadband technology for rural dwellers. "In low-density areas, the economics just don't work," he said. "A potential investor who understands the constraints under which BPL must operate won't touch such an investment."

While conceding "significant concerns" from HF users--including the National Telecommunications and Information Administration, which regulates federal government radio use--and the Federal Emergency Management Administration, the Commission said it believes the *NPRM* adequately addresses interference concerns.

The FCC was unanimous in its approval of the BPL proposal. Commissioner Michael Copps offered a partial dissent that had more to do with competition protections and the potential for cross-subsidization between regulated power companies and unregulated communications businesses, not with interference issues.

The *NPRM* can be viewed on the [FCC](#) Web site and is available in [Microsoft Word format](#), or as an [Adobe PDF](#) file.

More than 5000 comments were filed in the wake of the FCC's *Notice of Inquiry* on BPL. Interested parties may file detailed comments on the *NPRM* via the main FCC's Electronic Comment Filing System ([ECFS](#)). The comment deadline is 45 days after the *NPRM* has been published in *The Federal Register*, and that is not expected to happen for another week or two. The FCC also is accepting brief comments on the *NPRM* via its [ECFS Express](#) page.

Additional information about [BPL and Amateur Radio](#) is on the ARRL Web site. To support the League's efforts in this area, visit the [ARRL's secure BPL Web site](#)



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MAXIMUM USABLE FREQUENCY MARCH 2004

by Jacques d'Avignon, VE3VIA
monitor@rac.ca

The monthly HF propagation forecast chart lists, in MHz, the MUF (Maximum Usable Frequency) for various circuits originating / terminating in Canada. The number in each cell is the frequency that will sustain communications 50% of the time during the forecast period, at a specific time and over that specific circuit.

If you prefer to use the OWF (Optimum Working Frequency) it is in theory, 80% of the MUF for the same period and on the same circuit. Multiply the value in the cell by 0.80 and you have the approximate value of the OWF. But the ALF (Absorption Lowest Frequency) might be higher than the OWF and communications might be impossible to establish on the circuit at that frequency.

If you use a frequency higher than the listed MUF, your chances of establishing and maintaining reliable communications decrease very rapidly. At MUF the chances of establishing a reliable contact or hearing clearly an international broadcaster are only about 50%.

When the ALF is higher than the MUF the table will contain an asterisk (*). This does not mean that communications are impossible but that they are highly improbable, try and use the last listed MUF or below for that specific circuit.

The notation (P) after the name of one of the terminals of a specific circuit denotes that this is a polar circuit and that you should expect poor to unreliable communications on this circuit during geomagnetic disturbances. This notation will not appear in the circuits originating in

the "Nunavut" and "West Arctic" listing, as these two terminals are normally located inside the theoretical auroral zone.

For the purpose of establishing these tables, all the circuits are assumed to be fully reciprocal, thus the listed MUF's can be used for transmission / reception from either end of the circuits. This assumption is not totally correct but the differences in frequencies are minimal.

The District/NVIS (Near Vertical Incidence Skywave) forecast frequency calculated for the six areas of Canada, can be used for local communications within 300 kilometres of the station. To properly use this propagation mode it is essential that an antenna having a maximum radiation angle between 75 and 90 above the horizon be used, such as a half-wave dipole erected no higher than 1/8 to 1/4 wavelength over the ground. Most of the RF energy radiated by such an antenna and on the listed NVIS frequency will be returned to earth within 300 kilometres of your station.

NVIS propagation mode can be very useful for emergency communications when the regular VHF repeaters are out of commission. For more information on this peculiar and interesting propagation mode and its possible uses see "The NVIS Propagation Mode and the Ham" in the "ARRL Antenna Compendium, volume 5."

UTC >>>	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
EASTERN TO																								
District/NVIS	7	6	5	5	4	4	4	4	4	3	3	4	4	6	6	7	7	7	8	8	8	8	8	7
Atlantic Canada	11	9	8	7	6	6	6	5	5	5	5	6	9	11	11	12	12	13	13	13	13	13	13	12
Central Canada	12	10	8	7	7	6	6	5	5	5	5	6	8	9	10	11	11	11	11	11	12	12	12	12
Pacific Canada	17	16	13	11	10	9	8	8	7	7	7	7	9	12	14	15	15	16	16	17	17	17	17	17
Nunavut	12	11	9	9	8	8	7	7	7	6	6	7	9	11	12	13	13	13	14	14	14	14	14	13
Western Arctic	16	15	13	11	10	9	9	8	8	8	8	7	8	10	13	14	15	15	16	16	17	17	17	17
Eastern USA	10	9	7	7	6	6	5	5	5	5	5	5	7	9	10	11	11	11	11	11	11	11	11	11
Western USA	20	19	15	12	11	10	10	9	9	9	9	9	9	11	15	18	19	20	21	21	21	21	21	21
South America	23	20	18	17	16	16	16	15	14	14	13	15	22	25	27	27	27	28	29	29	29	29	29	27
Western Europe	11	11	11	10	10	9	10	10	10	10	11	14	17	18	19	20	20	21	21	20	19	16	14	12
Eastern Europe (P)	11	11	10	10	10	12	12	12	11	11	12	15	18	20	21	21	21	22	22	20	16	14	12	11
North Africa	13	13	13	12	11	11	10	10	*	*	*	13	17	18	19	20	21	21	21	19	17	15	14	14
South Africa	19	16	14	13	12	13	12	*	*	*	*	17	21	23	24	25	25	25	26	26	26	26	22	21
Middle East (P)	14	14	13	13	13	12	12	*	*	*	*	15	18	19	20	21	21	21	19	17	16	16	15	15
Central Asia (P)	14	16	14	14	13	13	13	*	*	*	12	14	16	18	19	20	18	16	15	14	14	14	13	13
India (P)	13	15	14	13	13	*	*	*	*	*	*	14	16	18	19	20	18	17	16	15	15	14	14	14
Indonesia (P)	22	20	18	15	*	*	*	*	11	11	11	10	12	15	18	19	20	20	20	18	14	15	22	22
Australia	23	21	19	16	*	*	*	*	11	11	11	10	11	14	17	19	20	19	17	14	13	16	23	22
China (P)	19	17	15	15	14	14	13	13	13	12	12	13	15	17	19	18	17	16	15	15	15	14	15	18
Japan	21	19	17	15	13	12	12	11	11	11	11	11	12	15	14	14	15	15	15	14	15	21	22	22
South Pacific	26	24	20	16	15	14	14	13	13	13	13	13	13	16	17	15	15	20	26	27	27	27	26	26

ASAPS for Windows is used to prepare these tables.
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CLUB CALENDAR FOR 2003-2004

MARCH

- 07 Sunday Sunday Brunch at Golden Griddle (note 2)
- 11 Thursday General Meeting #12 -
- 18 Thursday Public Service/ARES at RC (Cancross)
- 25 Thursday General Meeting #13 -

APRIL

- 01 Thursday Executive Meeting #07
- 04 Sunday Sunday Brunch at Golden Griddle (note 2)
- 08 Thursday General Meeting #14 – Nomination of Directors
- 15 Thursday Public Service/ARES at RC (Cancross)
- 22 Thursday General Meeting #15-Annual General Meeting + Elections

MAY

- 02 Sunday Sunday brunch at Golden Griddle (note 2)
- 06 Thursday Executive Meeting #08 at Golden Griddle-Executive Turnover Meeting
- 13 Thursday General Meeting #16-Budget Presentation
- 20 Thursday Public Service/ARES at RC (Cancross)
- 27 Thursday General Meeting #17-Budget Approval

JUNE

- 03 Thursday Executive Meeting #09 at Golden Griddle
- 05-06 Sat - Sun Streetsville Founders Bread & Honey Festival
- 06 Sunday Sunday Brunch. 9:00AM at Vic Johnson Arena
- 10 Thursday General Meeting #18-
- 17 Thursday Public Service/ARES at RC (Cancross)
- 24 Thursday General Meeting #19-Season wrap-up Pot Luck Social
- 26-27 Sat – Sun ARRL Field Day

JULY

- 01 Thursday RAC Canada Day Contest
- 04 Sunday Sunday Brunch at Golden Griddle (note 2)

NOTES

1. Meetings start 7:30PM at St. Thomas A Becket Church Hall, 3535 South Common Court unless otherwise noted.
2. Brunch 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 for any updates of the calendar.

Map to Ham-Ex™

