



REFLECTOR

PO BOX 663
HALIFAX NS
B3J 2T3

October 2008 Volume 69 Number 9

club web site is www.halifax-arc.org



Happy Hallowe'en Club Elections will be in November



HARC Club Station phone number - 490-6421

Executive

President - Bill Elliott, VE1MR	865-8567	ve1mr@rac.ca
First V.P. - Murray MacDonald, VE1MMD	876-0661	twomacds@ns.sympatico.ca
2nd V.P. - Tom Gaum, VE1BMJ	445-8103	tgaum2@ns.sympatico.ca
Secretary - Helen MacRae, VE1HMR	422-7119	ve1hmr@rac.ca
Treasurer - Fraser MacDougall VE1WO	865-4198	ve1wo@rac.ca
Director-at-Large: - Doug LeBlanc, VE1LDL	465-4665	leblanc@accesscable.net
Club Station Mgr. - Brian Allan, VE1AZV	489-4656	basailor@eastlink.ca
Past President - Bob Swinwood, VE1PQ	860-4454	bob_swinwood@hotmail.com

Committees/Offices/Prime Contacts

Government liaison - Murray MacDonald, VE1MMD	876-0661	twomacds@ns.sympatico.ca
75th Anniversary Chair - Bill Elliott, VE1MR	865-8567	ve1mr@rac.ca
QSL Bureau Mgr - Tom Caithness, VE1GTC	477-7081	tom.caithness@ns.sympatico.ca
EMO Coordinator - Dave George, VE1AJP	466-8723	dgeorge@dal.ca
EMO Trailer coordinator - David Musgrave, VE1EDA	435-4333	ve1eda@rac.ca
Reflector editor - Lynn Bowser, VE1ENT	865-8567	ve1ent@rac.ca
Reflector Dist. - Howard Dickson, VE1DHD	823-2024	dhickson@hfx.eastlink.ca
Membership - Howard Dickson, VE1DHD	823-2024	dhickson@hfx.eastlink.ca
Web page - Rob Ewert, VE1KS,	826-1705	ewertr@hfx.eastlink.ca
Basic ham course - Barry Diggins, VE1TRI	861-3719	ve1tri@rac.ca
2009 Flea market Chair - VACANT		
Field Day coordinator - VACANT		
Safety Officer - VACANT		
NSARA Director - VACANT		
Honorary Legal Counsel - Paul Radford, VE1ARH		

Non Club Contacts

RAC Atlantic Director - Len Morgan, VE9MY	(506) 847-5656	lmorgan@nbnet.nb.ca
RAC Section Manager - Jim Langille, VE1JBL	(902) 667-1485	ve1jbl@ns.sympatico.ca
RAC Assistant Director for HRM Scott Wood, VE1QD,	823-2761	ve1qd@rac.ca

Take-15 Net Controllers

NOTE: There have been some changes.

If you cannot take the net on your particular evening get in touch with one of the others and trade places with them. If I have left any one off the list, **or you want to join**, please let Bill Elliott, VE1MR, know.

Oct. 12	Chris	VA1CDB
Oct. 19	Charles	VE1MCR
Oct. 26	Doug	VE1LDL
Nov. 2	Pierre	VE1PTR
Nov. 9	Win	VE1WIN
Nov. 16	Chris	VA1CDB
Nov. 23	Charles	VE1MCR



Puzzler - Do you know?

What is the smallest country in the world and what is its prefix?

Answer is on page 8

Law of Probability:
The probability of being watched is directly proportional to the stupidity of your act.



The **regular Monthly Meeting** of the Halifax Amateur Radio Club will take place Wednesday, October 15, 2008 at 1930 hours (7:30 PM) in the club rooms in the **Saint Andrews Recreation Center**.

The evening's program: Fred Archibald, VE1FA, will present his talk on "antique radios" (which he gave at the 75th celebration).

Guests are welcome

NOTICE OF MOTION

The club has been asked if we would host the RAC Annual General Meeting in 2010. The following motion was presented at the HARC September general meeting: "That HARC host the RAC AGM in 2010". In order to make an informed decision, the motion was deferred until the October meeting so that details regarding RAC's requirements & expectations for such an event could be discovered.

Deadline for submissions to the November Reflector is Saturday, November 8, 2008

GENERAL INFORMATION



Sunday evenings:
EMO Net: at 7:30 PM on 147.270 +
TAKE-15 NET at 8:30 PM on
147.270 + (VE1PSR/VHF)

CLUB REPEATERS:
VE1PSR/VHF - 147.270 MHz +
VE1PSR/UHF - 444.350 MHz +
VE1PSR/6M - 53.550 MHz -
access tone 151.4 Hz
VE1HNS - 146.940 MHz -

PACKET:
VE1NSD 145.050 MHz LAN NODE

Events for Your Calendar

October 18, 2008 (Saturday)
Greenwood A.R.C. Fleamarket from
10 AM til 1:00PM
See the GARC Home Page
<http://greenwoodarc.or>

October 18 –Jamboree on the Air –
Doug, VE1LDL and Sam, VE1YVN,
are planning to bring ham radio to
the scouts at Camp Harris and would
be pleased to have other hams come
help. Contact Doug or Sam.

December 17 – Christmas

Dinner – The club Christ-
mas Dinner will be held on
December 17th, 2008 at the
Steak and Stein, Young
Street, Halifax.



Morse Code Training

Free club-sponsored individual CW
training. Contact Gary, VE1RGB via
ve1rgb@rac.ca for details

TEACHER: Why are you late?
WEBSTER: Because of the sign.
TEACHER: What sign.
WEBSTER: The one that says,
"School Ahead, Go Slow."



From the ARRL Letter, Vol. 22, No. 45
In October 1988, a Russian Amateur
Radio team led by Sergej Samburov,
RV3DR, and Larry Agabekov,
UA6HZ/N2WW, launched and de-
ployed the first amateur station on
the space station Mir. During the
AMSAT-NA symposium the follow-
ing month, Leo Labutin, UA3CR
(SK), communicated with cosmonaut
Musa Manorov, U2MIR, aboard Mir.

Amateur Radio communication from
the ISS began on November 13,
2000, when Expedition 1 crew mem-
bers Sergei Krikalev, U5MIR, & Bill
Shepherd, KD5GSL, spoke with
R3K, the Energia amateur station in
Russia, and with NN1SS, the ISS
ground station at Goddard Space
Flight Center in Maryland. The suc-
cessful deployment and use of the
ARISS gear marked the first perma-
nent Amateur Radio station in space.

Christmas Dinner

The club Christmas Dinner will
be held on December 17th, 2008.
It will be at the Steak and Stein,
Young Street, Halifax 6 PM for
6:30 PM. There will be a special
menu to chose from as last year.
Please let Tom Gaum, VE1BMJ,
know how many in your party.

tgaum2@ns.synpatico.ca



**Basic Amateur Radio License
Course**

Classes for the 2008 instructed
licensing course started Thursday
evening September 18, 7:30 PM, in
the classroom of the club station.
There will be one full Saturday
class per month.

All members of the Halifax
Amateur Radio Club who know of
prospective students and potential
hams are asked to refer them to the
dates, times and place of the
course. More complete information
is under the *ham class* link on the
HARC web site.

Any licensed amateur who
would like to be a mentor or elmer
please give your name and how you
can be contacted to Barry Diggins
VE1TRI. This would be to assist
any student in the class.

Amateur Radio is *alive and well* !

Club Access

Those wishing access to the club
facilities please contact Brian,
VE1AZV. He will check you out
on the gear, assign a computer
password and put your name on a
list at the front desk. When the
building is normally open you will
be able to go to the front desk and
ask to be let into the club facilities.
This is a temporary measure until
we get the door access pad in-
stalled. Hopefully these may be in-
stalled in the near future.

Greenwood A.R.C. Fleamarket

(with BBQ, door prizes & raffle)
Date: 18 OCT 2008 (Saturday)
Time: 10:00AM – 1:00PM
(Open 08:00AM To Sellers)
Place: Greenwood Community Cen-
tre, Church Street, Greenwood, N. S.
Cost: Admission \$3.00.
Tables Free To Sellers
To Book Tables or Info Contact:
Burt, VE1AMA,
Email ve1ama@rac.ca
home phone: 902-847-7073
Eric, VE1CFY
Email: ve1cfy@rac.ca
home phone: 902-765-4468
GPS Coordinates: N44° 58.512'
W064° 55.612'
Talk In: VE1WN 147.240+
GARC Home Page
<http://greenwoodarc.o>

HARC75 Golf Shirts & Hats

Some HARC 75th golf shirts, ball
caps and lanyards are still available.

HARC75th Shirts available:
10 – XL; 16 – Large; 7 – Medium;
1 – men's small, no pocket
3 – ladies small, no pocket.
34 – Lanyards
67 – Caps



The ARRL Letter, Vol. 27, No. 21
May 30, 2008

First ARRL Book Published in China

The first of several ARRL books has
been translated and published by
Posts and Telecommunications Press
(PTPress) of Beijing, People's Re-
public of China. "Getting Started
with Ham Radio" by QST Editor
Steve Ford, WB8IMY, was available
for purchase in China in June. Other
ARRL books to be translated and
published in the PRC include "The
ARRL Handbook," "ARRL Antenna
Book," "Experimental Methods in
RF Design," "Understanding Basic
Electronics" and "Ham Radio on the
Move." "Getting Started with Ham
Radio" was translated and adapted
for its Chinese audience by Zhang
Hong, BG1FPX.

PRESIDENT'S MESSAGE

Alas, I am afraid summer is over and fall is in full swing with lower temperatures. At least we can look forward to the leaves turning brilliant colours. Hopefully you have most of your outside work done. Now it is time to think of what tasks you can do for the club. While the nominating committee is looking for people to fill executive positions they will also take the names of those wishing to serve on committees and pass those on to the new executive.

In particular the club needs several committee chairs and the sooner they are in place the easier their job will be. Committee chairs are important positions since they often lead a team of members to accomplish tasks both large and small.

A couple of important committees are for the flea market and Field Day. Another spot open is NSARA representative - not a particularly difficult task but it does help if you can make the NSARA meetings.

One of the most important vacancies we currently have is the Safety Officer. This position needs to be filled; otherwise we put our members at risk when we are doing any thing that could be hazardous.

On a different topic we are planning repairs to the repeater building at Cowie Hill. There is a work party tentatively scheduled for Saturday October 25. We will be looking for a few people with building experience but if you know how to swing a hammer we can use you. We will also need a few people who have done roof shingling - it is a small roof and should only take a couple of hours. I think the complete repair job should be done on Saturday. Essentially the job consists of replacing some sheathing, insulation and putting siding on the building as well as doing the roof. If anyone wants to be foreman-planner let me know.

73 - Bill, VE1MR

HARC Membership:

It is time again for the Club to begin thinking about the 2009 Executive Committee composition.

On behalf of the Nominating Committee this year (other members are Dick, VE1AI & Scott, VE1QD) I would like to take this opportunity to invite you to consider how you might serve the Club in 2009. There are a number of Committee Chairs that will need to be filled, but that will be taken care of by the new Executive early in the New Year. However, if you have a desire to serve as one of the Committee Chairs, or as a member of one of the Club committees, I would be pleased to hear from you and I will pass your name on to the new Executive. Just let me know.

However, my main concern at this time is to ask each member if they would like to let their name stand for one of the Club Executive positions. Below I include an outline of the responsibilities of each of these positions. If you have not been on the Executive before, you might consider the Member-at-Large position as it offers members an opportunity to serve on the Executive Committee and gain experience at the same time.

So if you would like the Nominating Committee to consider you for any of the following Executive positions please email me –

dhdickson@eastlink.ca

– as soon as possible. My committee will be meeting within the next couple of weeks to begin putting together a suggested slate of Club Officers for 2009. I hope to hear from many of you in the next week. **REMEMBER** – this is your Club and you can not expect the same people to continue to take on these major roles year after year. Please consider how you might assist in 2009.

73. Howard – VE1DHD, Nominating Committee Chair

Descriptions for Board (executive) Positions**President**

Duties:

- Presides over all Club functions (unless delegated to another member).
- Chairs all Club meetings.
- Signs cheques for approved expenses. Requires co-signing by the Treasurer or Secretary. (Refer to By-laws)
- Executes contracts, deeds, bills of exchange and other instruments on behalf of the Club. Requires co-signing by the Secretary. (Refer to by-laws)
- Invites addition agenda items from the floor at the start of meetings. Invite adoption of agenda prior to business being conducted.
- Following approval of minutes, signs and dates the minutes indicating approval has been received.
- Represents the Club at various functions or ensures that a delegate is present. (This could include invited functions, those in which the Club has a vested interest, or those for which the Club would like to express support.)

(Continued on page 4)

"My husband said it was him or the cat ... I miss him sometimes."

Here is the chart showing who is trained in fall protection as requested. I'm sure a number of those trained are looking forward to a chance in using their training some time. Without practice, a person will loose their interest, and all have agreed to participate in exchange for training. I would recommend this list be printed in the Reflector so those needing tower/antenna work will know who to call.

Terry R. Bigelow, VE1TRB

FALL PROTECTION TRAINING

This is a list of people available for work above ground; Mar 19 2008

Name	Callsign	Fall Protection Expiry	Experienced	Has Own gear	Work on Roof
Gary Bartlett	VE1RGB	Nov 2008	Y	Y	Y
Pat Kavanaugh	VE1PHK	Nov 2008	Y	Y	Y
Pierre Romard	VE1PTR	Nov 2008	Y		Y
Bob Burns	VE1VCK	Nov 2008	Y	Y	Y
Phil Bentley	VE1PB	Nov 2008	Y		Y
Neil Hughes	VE1YZ	Nov 2008	Y	Y	Y
Bob Petitpas	VE1RHP	Nov 2008	Y		Y
Terry Bigelow	VE1TRB	Nov 2008	Y	Y	Y
Wayne Harasimovitch	VE1WPH	Mar 2011	Y	Y	Y
Shelly Smith	VA1CAT	Mar 2011			
Tom Cohoon	VE1TA	Mar 2011	Y		Y
Tim Smith	VE1VVW	Mar 2011			
Dave A. Charbonneau	VE1DDC	Mar 2011	Y	Y	Y
Sheldon Page	VE1SJP	Mar 2011	N	N	Y
Colleen Prentice	VE1PIE	Mar 2011	N	N	Y

From the ARRL Letter, Vol. 27, No. 38, September 26, 2008

DX Engineering Acquires Comtek Systems: On September 24, DX Engineering <<http://www.dxengineering.com/>> announced it had acquired North Carolina-based Comtek Systems <<http://www.comteksystems.com/>> Comtek's manufacturing and customer service operations will move to DX Engineering's Akron, Ohio facility. "Comtek's products are highly regarded among Amateur Radio operators," said DX Engineering president Paul Sergi, NO8D. "The addition of these products to our popular line of antennas enhances our ability to supply complete, high quality, directional antenna systems. It's a win-win for DX Engineering and Comtek Systems customers." James Miller, K4SQR, principal of Comtek Systems concurred: "DX Engineering will continue the tradition of top quality products and customer satisfaction that we have provided for years. DX Engineering and Comtek Systems have complementary product lines and the synergy created by combining the two companies will bring many benefits to the Amateur Radio fraternity."

(Continued from page 3)

First Vice President / Technical Committee

Duties:

- Chairs the Technical Committee.
- In the absence of the President, performs the duties of the President.

Second Vice President / Program Committee

Duties:

- Chairs the Program Committee
- In the absence of the 1st Vice President, performs the duties of that office.
- Ensures that speakers, presenters or other entertainment is provided for the monthly general meetings.
- Ensures that any speaker / presenter is properly introduced and thanked.
- Obtains a thank you gift for speakers / presenters.
- Ensure that door prizes are obtained for all monthly general meetings.
- Ensure that all members are met, welcomed, and have signed into all meetings.
- Ensures that a member has been delegated to sell the 50/50 tickets and to provide all attendees with a ticket for the door prize.
- Obtains refreshments for the monthly and annual meetings.
- Co-ordinate with the social committee.

Treasurer

Duties:

- Receives and banks all Club money
- Makes disbursements of Club funds as approved by the budget or Board (executive).
- Signs cheques for approved disbursements.
- Orders cheques as necessary.
- In the absence of the Secretary, signs contracts, deeds, bills of exchange, and other instruments and documents.
- Keeps adequate and accurate financial records of all transactions.

(Continued on page 5)

Is it me, or do buffalo wings taste like chicken?

(Continued from page 4)

- Provides a statement of finances at each general and Board meeting.
- Prepares and submits an audited annual financial statement.
- Prepares a proposed budget with the input of the Finance and Budget committee and the Board (executive).
- Review Club investments on a regular basis and make necessary recommendations to the Board. (executive)

Secretary

Duties:

- Takes, prepares and distributes minutes at the Board, annual, general and extraordinary meetings.
- Prepares agendas for meetings with input from the executive and the membership.
- Distribute the agendas within seven (7) days of the meeting ensuring hard copies are available for those attending the day of the meeting.
- Maintain the Club files in a timely and orderly manner.
- Open, distribute and respond to correspondence in a timely manner.
- Hold the Club official seal and affix the seal to such documents as directed by the Executive or by law.
- Has signing authority for Club cheques for approved expenses. (See by-laws)

- Is required to execute contracts, deeds, bills of exchange, and other instruments and documents on behalf of the Club.

Station Manager / Club Station Committee

Duties:

- Sits as a member or chair of the Station Committee.
- Must hold an "advanced" endorsement on his current amateur radio license.
- Is responsible for the physical status of the club facilities.
- Ensures that defects at the club facilities are identified and repairs are carried out.
- Ensures that the Club premises are kept tidy and clean at all times.
- Ensures that the Club has adequate equipment to carry out its. mandate.

Three members of HARC received **recognition** at the September HARC Monthly Meeting for their long service as **volunteers at the Rona MS Bike Tour:**

Presentations were made by Jess MacNeil, Manager, Development, of the MS Society Atlantic Division.

I should also give them an award for putting up with me all these years!

Rick VE1RGG



David Musgrave VE1EDA 5 Year Recognition (keychain) - 2008 was David's 6th year



Rod Padmore VE1BSK 10 Year Lifer Award



Doug Leblanc VE1LDL 5 Year Recognition (keychain) - 2008 was Doug's 8th year

- Ensures that the Club has an adequate antenna system to allow the Club to carry out its' mandate.
- Maintains a current inventory of all Club assets.
- Maintains "sign-out" register for all borrowed Club equipment.
- Is responsible for managing all "bookings" of the Club facilities.
- Co-ordinates with the Special Events committee to ensure that adequate equipment is available for them.

Director-at-Large

Duties:

- Assists other Board members as required.
- Carries out special projects as assigned by the President or Board (executive)

Answer to Puzzler on page 1

There is going to be a lot of controversy about this one and it has a lot to do with definitions. According to Bruce VE5RC, the world's smallest sovereign nation is SMOM - the Sovereign Military Order of Malta - they rent nine buildings, comprising two blocks inside the Vatican ... their only income is stamps and coin collectors ... I think they are all that's left of the Knights of Malta. Their amateur radio prefix is 1A0

This is not to be confused with the island of Malta (9H1) which is a whole different country. The amateur prefix for it is HV



Halifax Amateur Radio Club Minutes of the General Meeting September 17 2008

Welcome: President Bill Elliott, VE1MR, called the meeting to order at 1937 hours.

Silent keys: None.

Approval of the Agenda:

Motion: THAT the agenda be accepted as distributed, amended to correct point 12.4 changing "elect" to "appoint" an auditor.

Moved by Doug, VE1LDL, seconded by Dave, VE1DDC. Carried.

Guests/visitors: -.

Visitors included Ms. Jess MacNeil, Development Manager for the Multiple Sclerosis Society, .John, VE1HLR, who moved to the province recently from Ontario; Ron, VE1RAL and his wife Marion. who have moved to Halifax from England. Marion will be registering for the basic amateur radio course. A fifth visitor to the club was Greg, VE1GRE, who resides in Mount Uniacke.

Minutes: Doug VE1LDL clarified that while he had obtained the signs for the Field Day, it had been Bill, VE1MR who got the hard hats required for safety. The minutes will be clarified for that point.

Motion: THAT the minutes of the June 4th regular meeting be accepted as published in the September Reflector with the clarification as noted. Moved by David, VE1EDA, seconded by Don, VE1DTR. Motion carried.

Presentation of MS Bike Tour Volunteer Recognitions.

Jess MacNeil, Development Manager for the Multiple Sclerosis Society, noted that Rick, VE1RGG has been with the MS Bike Tour since 1993 and through Rick, HARC members have provided emergency communications. These efforts include the provision of 12 service vehicles, provision of a repeater through David, VE1EDA for the MS Bike Tour as well as providing services for the MS Walk. The Walk requires only 1 vehicle along with amateurs assigned to the rest stations. Jess spoke of the society's 14 member staff and expressed

thanks to volunteers through who so much has been accomplished. In the spirit of volunteerism, the MS society wants to enhance their recognition of long standing service volunteers. Jess presented Doug VE1LDL, and David, VE1EDA with MS 5 year keychains, noting 2008 was actually the 8th year for Doug and the 6th for David. Rod, VE1BSK, was presented with a plaque recognizing his 10 years of volunteer service to the Society's MS Bike Tour. Ms. MacNeil expressed thanks on behalf of the Society for HARC members' outstanding contribution.

REPORTS

Treasurer:

Bill, VE1MR, presented the Treasurer's report to Augs 30th, as Fraser, VE1WO, was out of province. Call book sales represented \$8,101.00 of the total income of \$15,569.68. Expenses totalled \$25,056.09 and the balance was \$17,105.47. See the attached report for details. Outstanding cheques at that date totalled \$7000. When the 75th branded product inventory assests will reduce the deficit of \$3000

Motion THAT the Treasurer's report be accepted.

Moved by Bruce, VE1MLW. Seconded by Doug, VE1UY

Secretary:

Helen, VE1HMR reported an inventory of anniversary shirts (10 XL, 16 L, 7 M, 1 men's small with no pocket, 3 women's 3 women's small -no pocket. Lanyards and caps are available for sale as are two HARC crests..

President:

Bill, VE1MR, called a work party for Saturday afternoon at 1300 to work on the satellite antenna. Several hours will be required from dropping of the tower to its resetting. .

1st Vice-President:

Property Tax: Murray, VE1MMD, advised members that the Municipality deferred our request for property tax assistance until 2009 as it has done with many other organiza-

tions.

HARC Trailer Project: The tower and the trailer will be ordered tomorrow. The winch is in hand; Fraser, VE1WO, is meeting with the supplier (in the USA), who has agreed to mount the tower and add equipment needed to do so. The manufacturer quotes a 4 week tower-delivery date; once on site, the trailer will be outfitted and shipped to Halifax within another 4 weeks.

Community: Murray reported that Councillor Patrick Murphy placed an article about HARC in his letter to the community.

2nd Vice-President: Tom, VE1BMJ reported that the Christmas Dinner will be held Dec. 17th (6 pm for 6:30), at the Halifax Steak and Stein. At present, the seasonal menu is being firmed up. Tom would like members to forward suggestions for upcoming club programs. The possibility of booking a club outing to the Radio Canada's International site outside Amherst (major antenna structures with multitude of patterns) will be explored. Staffers are known to be pleased to give tours but the logistics of having staff come to Halifax is slim. A request will be forwarded from the club. Tonight's door prize is a large bottle of mixed nuts.

Director at large: No Report

Station Manager: Brian, VE1AZV reported that the Saturday morning coffee socials continue. As per VE1MR's report (above) there will be a work party this coming Saturday. Brian noted that one radio is out for repair. The topic of antenna switches will be brought forward later on.

Past President:

Bob, VE1PQ, asked that executive members seated at the business table stand, after which he remarked that all members should have a HARC75 golf shirt as worn by executive members,

Committee reports:

HARC75 – Bill gave a brief overview of the success of HARC anniversary

(Continued on page 7)

Minutes (Continued from page 6)

celebrations. Several members stated that the events compared favourably with other major radio events and that feedback has been largely positive. Scott, VE1QD remarked that Dave Sumner and Dave Goodwin, both of whom have attended many such events were impressed favourably. David, VE1AJP, stated that the Far Side of Amateur Radio program exceeded his expectations for that initial venture and that evaluations indicate amateurs are very interested in new technology. With the future "wide open", we need to locate folks who can talk about the topics.

Membership: Howard Dickson, VE1DHD, reported 143 total membership, with 121 full, 18 associated and 4 life members.

Callbook: Howard Dickson, VE1DHD, stated that he has a number on hand this evening. He ranks the callbook as the nicest published to date, noting the tabbed pages are great. Despite the higher print costs due to the coloured covers and addition of tabbed pages, advertising fees have almost covered that output. Durham Radio (see inside cover full page) contacted Howard today to say they are very, very pleased with both their advertisement and the book.

Basic Course – Barry, VE1TRI, stated he has received a lot of interest in the upcoming course thanks to radio announcements, public service announcements, advertising on the internet, email exchanges and word of mouth. Of 10 potential students, from a variety of backgrounds, five are women. Hopefully all will register tomorrow. All instructors are in

place and Barry invited club members to consider mentoring and he will connect students and mentors. Club facilities for Saturdays have been booked with Brian.

EMO: David George, VE1AJP reported a quiet summer, although there had been a "wild goose chase" for a reportedly downed aircraft in Spryfield, where someone thought they'd seen smoke.

Search and Rescue: David, VE1AJP reported another incident involved two 14 year old boys cycling behind the Burger King in Burnside, who didn't realize they were cycling away from the city rather than in towards home. Teams also responded to the search outside Italy Cross for the gentleman who died of a heart attack while berry picking. David described the logistics of conducting a search entailing increasingly large circular reaches out from the last point seen and said this man was found just outside the big circle of primary concentration. A fourth callout was for a missing 9 year old, a resident of Lake Front Road, who was successfully found near Cole Harbour.

Field Day: Howard, VE1DHD reported that HARC scored its second highest score ever for field day. The weather wasn't really bad, the food was good thanks to Tom, VE1GTC, and Murray, VE1MMD, and both site set up and tear down went well. There were no antenna loses, but a set of Vibroplex paddles is missing from inventory. No score placement will be available until results are published.

HARC/CRC: Bill, VE1MR reported that the CRC issue is still holding; he has been unable to meet with the appropriate person who is out of town.

RAC Report – Scott, VE1QD, reported that RAC hosted a session at the Hamfest that was well attended and that excellent discussion took place. Scott said that in order to facilitate participation amongst amateur radio operators with RAC we

should try to talk about RAC at each general meeting. Secondly, that it might be an idea for RAC to recognize those clubs that have high level of participation within their membership. It is very important, Scott pointed out, that Canadian amateurs have the national body to deal with the issues across the country and internationally. Dave Goodwin has asked that HARC host a national convention. If members feel something needs to be attended to, they are invited to contact Scott and he'll pass concerns along to RAC officials.

Flea Market – Bill, VE1MR, spoke on behalf of VE1WO. The flea market was down a bit in table numbers, there were very few walk-ins (sellers), the area was smaller and not as well ventilated as many would like although a four foot rental fan helped and attendance was down to approximately 275 at the door. Overall the equipment was good quality and people left with good purchases. The commercial dealers were well pleased with their reception.

Old business:

Club Access – Brian, VE1AZV, reiterated that the building's front desk staff has a list of people who may have access to the club and may have access upstairs between 0800 - 2200. He has received a note from Jeremy and is awaiting results on final work to be done.

Club Flag – Murray, VE1MMD, remarked that the flag looked very nice on display during the Hamfest. It is currently on display in clubroom where a plaque will be made up for the wall. Murray received a letter from the Hatcher family thanking the club for using their donation in this way.

New Business:

Flea Market: As noted in June, a review of the flea market experience during the Hamfest would help define the direction to be taken. Given that the numbers were down, the executive recommend the following:



Cleaning Tip – Cobwebs: Artfully draped over lampshades reduce the glare from the bulb, thereby creating a romantic atmosphere. If someone points out that the light fixtures need dusting, simply look confused and exclaim "What? And spoil the mood?" (Or just throw glitter on them & call them holiday decorations.)

(Continued on page 8)

(Continued from page 7)

Motion THAT the Down East Flea market be returned to the forum and held during the month of May. Moved by Murray, VE1MMD. Seconded by Bob, VE1PQ.

Discussion: Saturday May 9th or 23rd, 2009 are recommended. HARC75 survey results indicated that attendees thought the flea market itself was good as was the overall week end. Fifty per cent answered the questionnaire. Bob, VE1PQ, commented that we need to bring events together, but that not everything can be combined for a variety of reasons. During discussion at the executive level, Bob advised members that the executive feels the flea market works best in May, whereas the DX Forum does work better during the summer (August) as many who attend come from greater distances. Motion carried.

RAC 2010 – Bill, VE1MR, advised that Dave Goodwin has asked if HARC would host the RAC AGM in 2010. He cautioned that wouldn't want to host such an event too late in the year as members will be preparing for the 2011 Canada Winter Games. Both will require a great deal of detail work.

Motion THAT HARC offer to host the RAC AGM in 2010.

Discussion: In the current TCA, RAC has published their wish to see the annual meeting moved around the country linked with a local ham event. Before confirming our willingness to accept, it will be prudent to learn what the expectations are and bring that insight to the next general meeting. Secondly, it will be important to determine the cost and any funding that might help underwrite the event. Preparing for a national meeting immediately prior to entering preparations for the 2011 Winter Games could an impact on members (fatigue factors).

Motion deferred to October.

Nominating Committee: Murray, VE1MMD, stated that the current Nominating Committee is comprised

of three members, Scott VE1QD, Howard VE1DHD, and Win, VE1WIN. Scott and Howard have agreed to let their names stand. VE1WIN will be contacted to inquire as to his willingness to remain on the committee. A Chairperson needs to be appointed.

Motion: THAT the 3 persons currently serving be nominated for 2008.

Discussion: Howard, VE1DHD, spoke to the issue, stating that nominating committees are put together as being wise people who understand the organizations, its needs and the people who may be nominated. Last year some people complained that not every person was phoned to inquire what they wanted to do. If members wish him to accept the position as Chair, this same process will be followed. When asked if a questionnaire to members seeking their wishes for procedure be drawn up, the response was that this was accomplished in the club survey; however, the survey data is confidential. Members who are interested in serving their club were asked to contact Howard, VE1DHD to advise them of their interest. Dick VE1AI consented to join the committee to ensure a complement of three members. Thus, if VE1WIN consents, there will be four members. So appointed.

Auditor: Murray Alary, VE1ALS consented to serve as Auditor and was duly appointed.

Reports or announcements of general interest:

SAR Donations: David, VE1AJP reminded members that the Search and Rescue group had lost the \$40,000 profit earned for several years by hosting bingos. Recently there was a one day "rubber boot" collection during which \$10,238 and change was raised.

JOTA: Doug, VE1LDL, advised members that the JOTA will be held at Camp Harris (Mineville Road) on October 18th. He and

Fred, VE1___ will be on site and anyone willing to join them are invited to do so. Sam, VE1YVN, will take his own equipment, Doug will take some HARC equipment and Dick, VE1AI has offered to supply antennas

Door prize draw. – Rob, VE1KS, won the bottle of mixed nuts.

50/50 draw –Tom, VE1BMJ, won \$20 on the 50/50.

There being no further business, the meeting was adjourned at 22:55 hours.

Evening Program – VE1QD presented Ann Santos' Clipperton DX-pedition report.

Respectfully submitted,
Helen MacRae, VE1HMR, Secretary

We know exactly where one cow with Mad-Cow-disease is located among the millions and millions of cows in North America but we haven't got a clue as to where thousands of terrorists are located.

Maybe we should put the Department of Agriculture in charge of defence



HARC has a stock of **Anderson Powerpole connectors** for sale at \$1.25 each (for a red and black connector for one complete end). To make a complete mating pair will require 2 connectors. If you have not already converted all your gear to Powerpole connectors you should consider doing so. Place orders with Tom Caithness, VE1GTC, by E-mail tom.caithness@ns.sympatico.ca

Headquartered in Washington, DC, FAR (the Foundation for Amateur Radio) consists of more than 75 area Amateur Radio Clubs and is devoted to promoting the interests of Amateur Radio and those scientific, literary & educational pursuits that advance the purposes of the Amateur Radio Service.

See ARISS at <http://www.rac.ca/ariss>

Beverage Antenna Update From Al, VO1NO

Hello everyone,

I have had my Beverage antenna farm in operation since Christmas, and just wanted to pass along my impressions.

As you probably know, the Beverage antenna was developed by Harold Beverage while working for RCA in the 1920s. Also known as the "wave antenna", the Beverage is typically a long (at least 1/2 wavelength) and low (~ 2 - 3 meters high) wire. It is fed at one end through a 9:1 matching transformer. If terminated to ground through a non-inductive 470Ω resistor at the far end, the Beverage exhibits directivity towards the resistor. If not terminated, the pattern is bi-directional along its length. Because it offers directivity on the lower frequencies, is very quiet with respect to atmospheric noise, and is cheap, the Beverage is prized as a receiving antenna on 160M and 80M. It is also useful on higher frequency bands. It is not generally used as a transmit antenna because of its poor efficiency.

Last winter I erected 4 Beverages to cover 8 directions (N-S, NE-SW, E-W, and SE-NW) by feeding them at each end. Unfortunately, I didn't have enough RG-59 or RG-6 to reach all the antennas, so I couldn't actually use all directions! Those directions I could receive in worked very well however.

You may be wondering - why use 75Ω cable? Well, primarily because it is inexpensive, works extremely well at these frequencies, and (if you get the right stuff) is very well shielded to prevent signals leaking into the cable. This is important, as the directivity of the antenna system can be negated if signals can get past the shield. I have picked up 1000 foot rolls of doubly-shielded RG-6 at NEARFest for about \$20.00 (US dollars, which was actually about \$19.00

Canadian at the time!). An added advantage of 75 Ω cable is that the connectors are also cheap, and very easy to install in the field - no soldering required! You will also never accidentally connect your Beverage to the radio and transmit into it if the cable has F connectors!

This year I wanted to improve the performance of the system. If one Beverage is good, then two must be better, right? They are indeed, but only if phased correctly. There are two methods to phase Beverage antennas - broadside and echelon. In broadside phasing, the two antennas are parallel and "flush" with each other, and spaced at least 1/2 wavelength to have any noticeable improvement - a full wavelength spacing is even better. Each is fed with equal lengths of coax that go to a signal combiner, with a single length of coax from the combiner to the receiver. The spacing between the two antennas is very important - although you may notice a slight improvement in signal strength using 2 antennas, unless the spacing is more than half a wavelength, the actual pattern doesn't change. For receive antennas, performance is measured in directivity, not gain. A 3 dB improvement in performance is meaningless if all signals are increased by 3 dB! By using a wide spacing (within reason) with broadside phasing, an actual narrowing of the main lobe can be achieved. That will reduce the strength of signals outside the direction you wish to receive in, thereby improving the signal to noise ratio.

The other method of phasing Beverages is echelon. Here, the two antennas are parallel, spaced at approximately 5 meters, but staggered. The stagger distance can be played with - I used 21 meters.

Tech support: *What's on your monitor now, ma'am?*

Customer: *A teddy bear my boyfriend bought for me at the 7-11.*



There are a few different ways to feed the two antennas. I chose the crossfire method used by Tom Rauch W8JI. His method connects the ends of the Beverages to form a large parallelogram if viewed from above. The feedpoint is approximately 1 meter from the leading Beverage. At the corresponding point at the opposite end, the termination resistor (2 x 470 ohms, or 940 ohms) is installed. No ground connection is required. The advantage of this method of feeding the antennas is that they are useable over a wide frequency range. Other methods must use delay cables to achieve the correct phasing, and are therefore limited to a single band. Whatever method of feeding echelon phased Beverages is used, their big advantage is that they offer very good front to back improvements over a single Beverage. All my Beverages are echelon phased.

Before I explain the operation of the antennas themselves, I need to describe how each direction is selected. In the shack I have a control box with a knob surrounded by 8 LEDs. As the knob is rotated, a direction is selected, and the corresponding LED is illuminated. I have two coax cables running from the control box to two remote switchboxes in the field, and coax running to the receive input on my rig. The switchboxes use relays to switch both the center conductor and braid of the coax to select the proper antenna i.e.: direction. Switching both conductors is important - directivity can be lost if this is not done. As a particular direction is chosen in the shack, the appropriate coax is selected, and the proper control lines energized so as to activate the required relays in the remote switchboxes. Also, 24VDC is applied to the center conductor of the coax that runs to the remote switchbox. More on that in a moment.

If you examine the parallelogram array from above, it becomes apparent

(Continued on page 10)

Beverage Antenna Update (Continued from page 9)

that the feedpoint and termination resistor can be exchanged to "flip" the directivity of the array by 180 degrees. I have taken advantage of this to get two directions from each pair of Beverages. Each end of the array is fed with 75 ohm cable. The antenna feedpoint at each end is connected to a terminating resistor through a relay in a termination box. As described in the previous paragraph, when a particular direction is chosen, the appropriate relays are activated to connect the coax from the proper antenna array to the coax running from the control box. When this happens, 24 VDC is present at the termination box at the end of the antenna. That voltage is used to activate a relay that switches the termination resistor out, and the matching transformer in. Voila - the receiver is now connected to a pair of echelon phased Beverage antennas! Of course, DC blocking capacitors are used in the appropriate locations in the termination boxes and control box.

Unfortunately, the direction 045 (North East - Europe) and 225 (South West - central USA and South Pacific) correspond to the narrowest dimensions of my property, about 320 feet. To improve performance here, I am broadside phasing two pairs of echelon phased Beverages i.e.: I have two sets of echelon phased Beverage pairs, spaced at 300 feet, and fed with equal lengths of coax into a signal combiner - a total of 4 Beverages for these two directions. I can also select just one pair of echelon phased antennas if necessary.

All these wires are suspended from 8-foot lengths of 2" x 2" painted to resist weathering. Shorter lengths of 2" x 2" are driven into the ground, and the main poles attached to them. It is important to get the antennas up at least 8 feet in my case - I live in the country, and animals could easily run into the wires! Beverages are actually very forgiving when it comes to height however - even if laid directly on the ground, the performance can be quite impressive. If you live in the city, you can lay a length of wire laid on the ground alongside the street, and retrieve it the next morning before anyone in the neighbourhood notices - I've done it many times. A word of warning however. If it snows overnight, make sure that you retrieve the wire before the neighbours start to shovel their driveways - don't ask me how I know that!

So how can I describe the performance? Fantastic! Outstanding! You just don't know what DX is on the low bands unless you have a quiet receive antenna. I can't tell you that I've worked 200 countries on 160m in the past few months because I haven't had that much time to get on the air. I will tell you this however - I can hear signals that are totally inaudible on the inverted V and vertical, and I live in a fairly quiet location in the country, with buried electrical lines leading to the house. I really don't know how I ever worked DX on 80m and 160m without Beverages. The directivity of these antennas was very apparent in the CQWW SSB 160m contest on the weekend of 22-24 Feb. I had to constantly switch directions on the Beverages to ensure that I didn't miss anything. If listening on the south Beverage for example, I would sometimes hear a weak signal buried in the noise. Switching to the southwest Beverage and suddenly the station would literally jump out of the noise! With an hour left in the contest I heard a weak signal calling me. Switching to the southwest and west Beverage didn't bring the signal up. Then I realized that it could be coming from the northeast. Sure enough, it was VO1TA, giving me my first VO1 for a new multiplier. With the northeast Beverage online, I discovered that I had been on the same frequency as a Russian station who had been working his own pileup. In short order another multiplier went into the log.

Even though I have phased verticals on 40m, the Beverages are still useful there. I've discovered that there is a long-path opening to Australia on 40m at 2100Z (1600 local time in Ottawa). With the phased verticals I can sometimes detect a signal in the noise. When I switch to the 090 echelon-phased Beverages the noise is gone, and the signal perfectly readable.

Of course, I do have to make some engineering improvements to the system. Much of it was installed when there was a meter of snow on the ground and the temperature was -15C! Just to walk to the back of my property was a major effort! I need to tidy up the coax runs, and install ferrite cores as RF chokes to keep the shields from picking up stray RF. The broadside phasing setup for 045 doesn't always work as well as it should - the phasing of one of the termination boxes may be reversed. I also need to install ground rods, both to help prevent pickup of stray RF, but also as lightning protection. I hope to start work on this soon, as the summer electrical storms have started already. As well, the control box is a bit of a mess as the design changed a few times during construction. During the summer I'll strip it out and tidy it up.

If you want to try Beverages, then you need to get ON4UN's Low Band DXing book. The 4th edition is outstanding - lots and lots of excellent antenna information! You should also check out Tom Rauch's website: <http://www.w8ji.com/> Once again, a ton of useful information. One last source - the Topband Reflector: <http://lists.contesting.com/archives/html/Topband/>

Now that I can hear so much, I have to improve my transmit antennas. I'll let you know about that sometime later!
Hope to hear you on the Lowbands!

73 AI, VO1NO / VE3