



REFLECTOR

PO BOX 663
HALIFAX NS
B3J 2T3

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club web site is www.halifax-arc.org



2008 is the HARC's 75th Anniversary Year



HARC Club Station phone number - 490-6421

See the HARC Web site at: <http://www.halifax-arc.org>

Our executive and committees.

Position Name & Call Sign	Phone #	E-Mail
President - Bill Elliott, VE1MR	865-8567	ve1mr@rac.ca
First V.P. - Dave Nimo, VE1NN	462-3945	ve1nn@rac.ca
2nd V.P. - Tom Gaum, VE1BMJ		tgaum2@ns.sympatico.ca
Secretary - Helen MacRae, VE1HMR		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

75th Anniversary Chair - VACANT

Brit Fader Memorial QSL Bureau Manager - Tom Caithness, VE1GTC
477-7081 tom.caithness@ns.sympatico.ca

EMO Coordinator - Dave George, VE1AJP	466-8723	dgeorge@dal.ca
Reflector editor - Lynn Bowser, VE1ENT	865-8567	ve1ent@rac.ca
Reflector Dist. - Howard Dickson, VE1DHD	823-2024	dh dickson@hfx.eastlink.ca
Membership - Howard Dickson, VE1DHD	823-2024	dh dickson@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
EMO Trailer coordinator - David Musgrave, VE1EDA	435-4333	ve1eda@rac.ca
2008 Flea market Chair - Fraser MacDougall VE1WO	865-4198	ve1wo@rac.ca
Field Day coordinator - VACANT		
Safety Officer - Terry Bigelow, VE1TRB		ve1trb@eastlink.ca
RAC Atlantic Dir. (acting) - Len, VE9MY (506) 847-5656		lmorgan@nbnet.nb.ca
NSARA Director - Scott Wood, VE1QD	823-2761	ve1qd@rac.ca
Assistant Director of RAC for HRM Scott Wood, VE1QD,	823-2761	ve1qd@rac.ca

The **regular Monthly Meeting** of the Halifax Amateur Radio Club will take place Wednesday, January 16, 2008 at 1930 hours (7:30 PM) in the new club rooms in the **Saint Andrews Recreation Center**. Directions to the St. Andrews Center are on page 2.

The evening's program will be **HARC at 75: Anticipating Our Future**, presented by Scott, VE1QD and Murray, VE1MMD. They will discuss a recently launched process to consider what future for our Club the membership wishes to embrace. This is part of our preparations for the August Anniversary Hamfest.

Guests are welcome

The HARC Reflector is also available on the web, a little after the paper copy (photos in colour) courtesy of Rob Ewert, VE1KS, by connecting to www.halifax-arc.org

Wilson's Law: *As soon as you find a product that you really like, they will stop making it.*

Take-15 Net Controllers

NOTE: There have been some changes.

This will be the rotation.

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.

Jan.	13	Chris	VA1CDB
Jan.	20	Win	VE1WIN
Jan.	27	Emil	VE1ESP
Feb.	3	Herb	VE1HX
Feb.	10	Charles	VE1MCR
Feb.	17	Doug	VE1LDL
Feb.	24	Pierre	VE1PTR



Puzzler - Do you know?

If you had a piece of test equipment called a TDR, what would you have and what would you use it for?



Answer is on page 10

Deadline for submissions to the February Reflector is Saturday, February 9, 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

Breakfast with fellow hams Saturday, February at the Steak & Stein, Young St., Halifax

The NSARA Contest, promoting Amateur Radio in Nova Scotia, is a relaxed event that takes place on the second Sunday in March

End of July – IOTA

August – The 7th International Lighthouse Day is intended to raise the profile of lighthouses, lightvessels and other navigational aids, promoting our maritime heritage.

Contact Helen Archibald, VA1YL, for information about helping with GOTA (Guides on the Air). Helen is the CLARA (Canadian Ladies Amateur Radio Association) coordinator for GOTA for all of Canada.

The decision has been made. We are going to go with full colour on the covers in 2008 and also with four tabbed advertising sheets (eight pages) that will be used to separate major sections in the 2008 book. The breakdown of advertising rates for 2008 will then be:

Prices:

	Regular	Colour	Tabs	Clubs
Back cover	\$750	\$850	—	—
Inside cover	\$450	\$550	—	—
Full page	\$300	—	\$375	\$150
Half page	\$175	—	\$225	\$85
1/4 page	\$125	—	\$150	\$65
Buss. Card	\$90	—	\$110	\$45

Please be sure to let Scott know who you are planning to approach with respect to advertising BEFORE you talk with them, just to make sure that he or someone else has not already made the ask.

Thanks & 73 Howard

Tech support: Your password is the small letter "a" as in apple, a capital letter V as in Victor, and the number 7

Customer: Is that 7 in capital letters?



DIRECTIONS to the HARC
at the St. Andrews Center

The driveway is located a very short distance past the intersection of Bayers Road outbound and Romans Avenue. You must be in the right hand lane on **Bayers Rd outbound** when you cross Romans Ave. If you see the Bayers Rd. Shopping Center directly to your left you have come too far!!

If you come in the from the highway toward Bayers Road inbound you have some choices.

1/ Take Exit 0; turn right on to Dutch Village Rd; go to the lights and turn left onto Mumford Rd; turn left onto Romans Ave.; turn left onto Bayers Rd and get in the right lane and then right into the driveway of the Recreation Center.

2/ Go straight in Bayers Rd (inbound); just before the Halifax Shopping Center turn right onto Vaughan Avenue and follow it to Romans Avenue, turn right onto Romans Avenue; go right along Romans to Bayers Road turn left onto Bayers Rd and get in the right lane and then right into the driveway of the Recreation Center.

3/ Coming from Bedford or the McKay Bridge? Follow Connaught Ave to Bayers Rd.; turn and go outbound on Bayers Rd. in the right lane and turn right into the driveway of the Recreation Center.

Hopefully you will have no trouble getting there – we will try to have someone monitoring 147.270 + for anyone who gets into difficulty.

Are you up to date with your HARC membership dues?

Yearly rates are as follows:

Full = \$25 Associate = \$15
Family (2 members) = \$35 + \$10 for each additional family member at same address (only 1 newsletter)

Visit the NSARA web site at...
<http://users.eastlink.ca/~bdeathe/NSARA/>

Hello everyone,

The transistor is 60 years old today! (Dec.15) Below is an article from Forbes magazine that describes the early development of the transistor. If you are interested in seeing what early transistors looked like, check out the following website. It has a lot of excellent photos of early experimental and production transistors.
<http://users.arczip.com/rmcgarra2/index.html>

Fortunately, transistors have been more useful than were forecast in the Oct 1948 issue of QST, which stated "It doesn't appear that there will be much use made of Transistors in amateur work, unless it is in portable and/or compact audio amplifiers. The noise figure is said to be poor, compared to that obtainable with vacuum tubes, and this fact may limit the usefulness in some amateur applications. These clever little devices are well worth keeping an eye on."

73 Al, VO1NO / VE3

http://www.forbes.com/2007/12/15/transister-creation-anniversary-oped-cx_fa_1215transistor_print.html

Commentary – The Transistor's Birthday

Fred Allen 12.15.07, 10:30 AM ET

Sixty years ago, on Dec. 16, 1947, three physicists at Bell Laboratories in Murray Hill, N.J., built the world's first transistor. William Shockley, John Bardeen and William Brattain had been looking for a semiconductor amplifier to take the place of the vacuum tubes that made radios and other electronics so impossibly bulky, hot and power hungry. They were so instantly certain they'd found their answer that they didn't speak a word of it to anyone for six months, until they could experiment further and apply for patents.

Then on June 30, 1948, they held a press conference in New York City. They showed the world not only a big model of a transistor but also a

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PRESIDENT'S MESSAGE

Happy New Year, this is an exciting year for the club; the celebration of the 75th Anniversary. Details will soon be available on the club web site and events and happenings will be posted in the newsletter as well. Some of the speakers at meetings will also be seeking input and providing information on the club's past, present and future. This will be a great year to be involved with the club, you can help in many ways by participating in the usual events as well as celebration events.

The new club facilities also gives great opportunity for participation, whether operating, socializing, building, teaching, or learning new modes of operation. Hopefully you will all be able to take advantage of the new facilities and contribute to the activities of the club.

Some of the other major events will be the publication of a special anniversary edition of the Maritime Provinces Callbook and the awarding of the first Brit Fader Scholarship. More information will be available soon on the scholarship. This information will be posted on the club web site. If you know of an Amateur who may be eligible for this scholarship, let them know about it.

73 - Bill, VE1MR

At the last meeting I was asked what the criteria was for Life Membership. Normally life membership is conferred on those members who have made a consistent contribution to the club over a period of time. I would need to go back into the records to be sure of the names of all previous life members, but there were 3 to start with and over time 2 became silent keys, and then we elected 2 more. Since then one more has become a silent key and we currently have 2 life members.

Mel Lever, VE1VX and Don Bower, VE1AMC.

Below is what is in the club by-laws.

Life Member: any person meeting Full Member requirements who has made a major contribution to the Halifax Amateur Radio Club. Approval of such membership is by Special Resolution. Life membership is not to exceed 10% of the total membership.

Notice of Motion

Motion: A special resolution was proposed at the November general meeting to grant Barry Manuel, VE1JRG Life Membership in recognition of the support he has given this club over many years. Not only has he contributed to the club financially but has supported the inclusion of Amateur Radio in EMO venues. He has also supported inclusion of Amateur Radio in EMO consultation processes. He has recognized the value of Amateur Radio in situations of disaster and emergency and has actively supported, promoted and publicised it in a variety of ways.

Notice of Motion

Motion: A special resolution was proposed at the November general meeting to grant Bob Burns, VE1VCK Life Membership in recognition of many years of dedicated work in managing the VE1/VE0 incoming QSL Bureau on behalf of the club. Bob took on the job when it had a large deficit and also serviced the VE9 and VY2 call areas. He successfully negotiated the spin off of the VE9/VY2 incoming QSL Bureau with the Moncton Area ARC and has also since worked the deficit down until it was gone. Bob also put many years of dedicated effort into the local packet network and ran the local packet BBS for the club during this time.

73 - Bill, VE1MR

The Transistor's Birthday

(Continued from page 2)

TV and a radio with transistors in place of the tubes. Nobody was talking about anything like computers yet, but it was a first look at the future we all live in. The world's response? The New York Times ran an item at the bottom of its "News of Radio" column on page 46.

It sounded like a gimmick, and just too good to be true. The historian Robert Friedel quotes a Bell Labs engineer as saying, "The transistor in 1949 didn't seem like anything very revolutionary to me. It just seemed like another one of those crummy jobs that required one hell of a lot of overtime and a lot of guff from my wife." Only 20% of them worked. They were hard to manufacture. They required the design of new kinds of circuits. Even if they could eventually, theoretically, replace the vacuum tube, the tube worked well enough. How could they be worth the trouble?

But the technology kept improving. It got its first consumer application in December 1952 in a hearing aid, where it replaced one of three tubes and lowered battery costs. Then it took off. By 1954 the transistor was in 97% of hearing aids and sales of the devices were up 50%. That year the first transistor radio came out. It cost \$49.95, the equivalent of \$380 today. Still, as of 1955, a total of just 4 million transistors had been manufactured. That many vacuum tubes were produced every two days.

Revolutions can take time. We think of the information revolution as having changed our world in an instant. But it took two later breakthroughs, each a full decade apart, before the transistor could even begin its ascent to the pinnacle of its capability--so far.

Between 1958 and 1959 two men working independently, Jack Kilby at Texas Instruments and Robert Noyce at Fairchild Semiconductor, figured out how to combine a sequence of

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Passed along by Dave George, Dec./07

Associated Press

PORTLAND, Ore. (AP) -- With communications down in much of the state smacked by the recent storm, state emergency officials are calling ham radio operators heroes.

When even state police had difficulty reaching some of their own troops, ham radio worked, setting up networks so emergency officials could communicate and relaying lists of supplies needed in stricken areas. A network of at least 60 volunteer amateur radio operators working along the coast and inland helped keep crucial systems such as 911 calls, American Red Cross and hospital services connected.

Amateur radio works on a set of radio frequencies above the AM broadcast band. Operators use their own equipment to communicate with other operators, using different equipment and frequencies than emergency responders. Sometimes it takes creativity and a lot of leg work, such as setting up a new link on the top of a mountain when no other options are available.

Steve Sanders, a spokesman for District One of the Amateur Radio Emergency Service, said the storm was a "poster child" for what his group does.

James, VE6SRV

Hi Folks, I guess Winlink saved the day in Oregon. See below.

-David, VE1AJP

An Update from Oregon Posted by: "Tony VE6MVP" Dec 6, 2007
Greetings from soggy Oregon.

I just wanted to give everyone here an update from what is going on here in Oregon in regards to Winlink. About 2 years ago several of the ARES people in Oregon started working with Winlink and by the fall of 2005 we had several Telpac Gateways in operation 24/7. Over the course of the next 24 months additional Telpac Gateways were installed and in October of this year the first PMBO was operational in Salem. During our November SET we put the new system to use and it performed well. Then on December 1-3 the Pacific Northwest was hit by three storms back to back and by this past Monday morning a number of Oregon counties and the state of Oregon Office of Emergency Management were activated. OEM was also activated and when we arrived early that morning there were several Winlink messages for us. Over the course of the next 4 days the Winlink system performed perfectly. In fact the only means of communications for several counties was the Winlink system.

If I had a roof top to stand on I would tell everyone that Winlink is a perfect system for Emergency services. In addition to the operation on Emergency services I also operate a PMBO for MARS and this system works equally as well.

I wish the developers lived locally as I would take them all out for the biggest, fattest, and juiciest stake I could find and thank them. I would also like to thank the Winlink community for making this possible.

Dean Davis, N7XG, EC, Marion County ARES

AEC, State of Oregon Office of Emergency Management

Oregon Assistant Section Manager

MARS operator AAR0QB

Editor's Note: Thanks to Neil, VE1YZ, our EMO Coordinator for HRM Barry Manuel, Ham Radio Advisory Committee members and others willing to commit time, energy and resources to furthering the vision of helping in times of peril or disaster we used Winlink in addition to tradition radio communication during our November Emergency exercise.

The Transistor's Birthday

(Continued from page 3)

transistors on a single wafer of silicon crystal. Now true miniaturization and mass production would begin to be possible.

Then at the end of the 1960s the microprocessor, the computer on a chip, was invented. It leapt another order-of-magnitude hurdle in the miniaturization and interconnecting of transistors. It was put on the market by Intel in 1971. That opened the floodgates--more than 20 years after the birth of the transistor. Thanks to the microprocessor, by the mid-1970s the idea of a personal computer, almost undreamed of a few years before, was becoming familiar, even if very few

people had one yet.

Today a single advanced microprocessor can contain 1.7 billion transistors, and the transistors can be as small as 200 billionths of a meter. The numbers become dizzying. Gordon Moore, who quantified the effect of all those devices with his Moore's Law, estimates that every year "we make on the order of 10^{17} transistors. That's a one followed by 17 zeros. ... We make about one transistor for every ant on earth these days--every year."

There's something satisfying about being able to trace back that truly ubiquitous, transformative technology, which we carry with us everywhere in numerous places on, and

sometimes inside, our bodies. It runs almost everything in our lives that isn't strictly mechanical --to trace all that back to three men in a research office in 1947. It would be even more satisfying if those three men could have possibly envisioned what would grow out of their work.

But that was no more possible than it is for us to see today what nanotechnology and whatever grows out of it will bring us 60 years from now. The only thing we can be sure of us is that the revolution isn't over. Hard as it is to fathom, it's only just begun.

"Life is a coin.

*You can spend it any way you wish,
but you can only spend it once."*

Safety Corner January 2008

By Terry, VE1TRB

Abrasion chemical burns, and allergic reactions

Ref: <http://kerflop.com/2006/11/02/chemical-burn/>



Taking a break from the RF stuff; I got an email from a club member regarding children using abrasive cleaning pads. These are the pads that have a green scouring pad on one side, and a yellow or white sponge type material on the other. These cleaning pads may be more harmful to those with sensitive skin than expected. The above reference explains the concerns a parent had with her son using a particular product. The child ended up with some very painful marks where this product came in contact with his skin. It's difficult to tell if the marks were from rubbing or just plain touching, but along with a lot of extra information in this reference, the bottom line is, if you have children, grand children, or others in your household that have sensitive skin, or skin that can be easily broken, they should take care when using these products. Chances are they can be used safely by anyone, if the proper precautions are taken.

There are various types of gloves available, some with specific uses. Some gloves are made of acrylic, vinyl, PVC or various other materials that will suit your needs. There are people that are sensitive to the materials some of these gloves are made from, so you may need to choose a material that not only suits the job, but a material that can be used without any adverse reactions.



Batteries in pockets.

Back in the summer, a club member got a quick but potentially dangerous reminder on the need to ensure the contacts on batteries are not bridged. He mentioned he had put an HT battery pack in his pocket and eventually noticed it getting warm. Fortunately, there was no damage or injury as a result but serves as a good reminder that batteries should never be put into a pocket or other place containing metal. It appears that a coin went across the battery pack terminals and shorted it out.

REMEMBER SAFETY IS EVERYONE'S BUSINESS

If you have any comments or questions that you would like to see addressed in this column, please feel free to send me an email at ve1trb@eastlink.ca.

And always wear protective gloves when cutting jalapeno peppers. -ed.

From the ARRL Letter, Vol. 26, No. 46 Four 3 kHz channels at 5 MHz are being granted to Irish amateurs, according to the Irish Radio Transmitters Society (IRTS), Ireland's IARU Member-Society. The frequencies are centered on 5.280, 5.290, 5.400 & 5.405 MHz (the suppressed-carrier frequency for USB is 1.5 kHz lower.) The facility will be available for an initial trial period of a year; individual application is required. Power allowed will be 23 dBW (200 W) to an antenna with not more than 0 dBd gain. Some or all of these channels are also in use in the UK, Iceland, Finland, Norway, Canada & the US. The first variations of licenses could be issued at the end of November or early December. Permission for a 5 MHz beacon has been granted; a call sign and frequency are in the works.

Our New Ham Radio Operators

The Basic Amateur Radio Certification course was conducted this fall. This resulted in seven new hams being graduated in December. Our congratulations to the following individuals:



Kim Aaboe	Basic +	VE1KIM
Jason Burgess	Basic +	VA1JSN
Dave Charbonneau	Basic	VE1DDC
Alan MacRae	Basic	VE1ABM
Sean Murphy	Basic +	VA1SFM
Bob Stewart	Basic +	VA1RGS
James Warburton	Basic +	VE1OES

Four of the basic plus marks were more than 90%! Well, OMs we welcome you to the world of ham radio and look forward to your participation in our Club.

I will take this opportunity to inform everyone that Barry Diggins, VE1TRI, has taken over coordinating the Basic Radio Course. My thanks to all the instructors, examiners and others who helped me during my tenure in this job...and good luck, Barry.

K. Scott Wood, VE1QD
Retiring Coordinator Basic Radio Course

Self-Study Radio Certification Course

HARC does not run a formal amateur radio certification course during the winter. However, we do organize a self-study group and provide candidates with an orientation session, e-mail access to our expert teaching staff and other support. Many individuals are able to prepare themselves for the exam in this way. If, on the other hand, self-study proves too difficult a path, we invite them to join the formal class next fall.

An orientation session will be conducted by Scott Wood, VE1QD, and me from 7:00 – 9:30 pm on Thursday, 24 January at our Club location. At that time, learning materials will be available for new candidates. If you know of any people who are interested in obtaining certification, please refer them to the announcement on the HARC website or have them contact me directly.

Barry Diggins, VE1TRI
Coordinator Basic Radio Course

In the 60s, people took acid to make the world weird. Now the world is weird and people take Prozac to make it normal.

Halifax Amateur Radio Club Minutes of the Monthly General Meeting

Wednesday, November 21, 2007

President Bill (VE1MR) called the meeting to order at 1937 with 55 members in attendance.

Silent Keys: There were no silent keys to report:

Guests / Visitors: There were no guests present.

Executive in attendance:

Bill Elliott (VE1MR) President; Dick Grantham (VE1AI) 1st Vice-President; Tom Caithness (VE1GTC) 2nd Vice-President; Murray MacDonald (VE1MMD) Secretary; Fraser Mac Dougall (VE1WO) Treasurer; Doug Leblanc (VE1LDL) Director-at-Large; Brian Allan (VE1AZV), Station Manager and Bob Swinwood (VE1PQ) Past President.

Regrets: There were no regrets received.

Minutes of the October 17, 2007 monthly general meeting: It was moved by Bruce (VE1MLW) and seconded by Peter (VE1PJW) that the minutes of the October 17, 2007 meeting, as printed in the November 2007 edition of the Reflector, be adopted. Motion was carried.

Executive Reports:

Treasurer's report: Fraser (VE1WO) reported that the income for October was \$1,907.87 and that expenses were \$1,793.47. The bank balance at the end of October was \$10,714.75. It was moved by Doug (VE1LDL) and seconded by Win (VE1WIN) that the Treasurer's Report be accepted. Motion was carried.

Secretary's report: Murray (VE1MMD) reported that the official opening for the Club facilities is scheduled for Wednesday, November 28th at 7.30 p.m. He extended, on behalf of the executive, an invitation to all members, their families and their guests to attend, and to join in recognizing a number of those who have assisted with the acquisition and improvements to our new facilities. In-

itations have gone out to a number of people in the community and all are invited to join with them as they tour our facilities, view the displays and operate from the Club station. Cake and light refreshments will be served. Anyone interested in assisting at the opening are encouraged to contact Murray.

He reported that Industry Canada has released new antenna siting and approval procedures, which has the aim of ensuring greater community consultation and continued deployment of radio communication systems across Canada. He advised that he has a copy of the procedures and anyone wishing to see them can see him. A copy can also be viewed on the following web site:

<http://strategis.gc.ca/spectrum>.

Murray advised members to keep an eye on their vehicles, as there have been reports of minor damage to vehicles parked on site.

President's report: Bill (VE1MR) advised that he had nothing to report.

1st Vice President's report: Dick (VE1AI) reported that the tower, the H.F. beam, the two metre beam and the dual band vertical had been installed and all are working wonderfully. He stated that it was possible to hit the Springhill Repeater using five (5) watts. He thanked Terry (VE1TRB) for his work in refurbishing the H.F. beam.

2nd Vice President's report: Tom (VE1GTC) reported that he has been in contact with representatives of Seaside FM to ascertain if one of their staff would be available to attend the January meeting to give a short presentation on their operation. He advised that the door prize for the evening was a soldering iron and a de-soldering tool.

Station Manager's report: Brian (VE1AZV) thanked all who had assisted with the move to the St. Andrews site. He advised that the tower had been installed and at no cost to the Club. Brian thanked all who assisted in any way in the installation of the tower. He thanked

Murray (VE1MMD) for heading up the negotiating process with the required officials that resulted in the improvements to the facilities and the installation of the tower being put back on track, and for being instrumental in the cost being borne by others and not the Club. He also thanked Dick (VE1AI) for his professional expertise and help in obtaining the required tower section, the legs and the dual band vertical.

He reported that the electrical work would be finished, and that the thermostats and the Internet would be installed prior to the official opening on the 28th.

Brian invited input from Club members as to their needs and requirements in making the facilities one of, if not the best in Canada. He reviewed plans for opening on Saturday mornings whereby members and their guests could come in for a visit, operate if they wished, pick up their QSL cards or simply just spend time with other members over a cup of coffee.

Member at Large: Doug (VE1LDL) advised that he and Sam (VE1YVN) set up and operated a JOTA station at Camp Harris on Saturday, October 20th. He thanked Sam for all his assistance. The members present thanked both Doug and Sam for their efforts.

Past President: Bob (VE1PQ) advised that he had nothing to report.

Committee reports:

Membership: Howard (VE1DHD) reported that with the addition of a number of new associate members combined with a number of those who had paid their 2008 dues, the total for 2007/2008 now stood at one hundred and seventy-two (172) members.

Howard advised that he had a draft list of hams for the 2008 call book and invited those present to review the list to ensure that their information was correct. He also advised those present that they could add their phone number if they

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Minutes (Continued from page 6)
wished, it was optional.

Search and Rescue: Dave (VE1AJP) reported that the new logistics vehicle had arrived. Once finished, it will provide features second to none including an eighteen (18)-seat kitchen. He reported on the recent EMO exercise and indicated that a number of problems were identified, and subsequently the reasons for the problems have been identified.

Dave reported that all twelve (12) GPS radios are now on site and are working well providing real time tracking, which will prove a great aid in the future.

EMO: Howard (VE1DHD) also reported on the recent exercise. He advised that the intent of the exercise was to test three (3) things. 1) The use of portable Pac Link stations in conjunction with the one hard wired at the EOC. 2) The sending of messages using Pac Link and voice and 3) the sending of information using slow scan TV. A number of hiccups were observed but have been solved.

75th Anniversary: Bill (VE1MR) reported that there was a meeting held the previous night. He had nothing to report at the time but advised members to check the Club web site and the December Reflector for information.

Field Day: Dick (VE1AI) reported that the scores have recently been published and VE1FO did quite well. HARC placed 1st in our class in Canada, 3rd in North America in our class and 2nd in Canada for top score. He reported that we had made a record number of contacts and as a result enjoyed great success.

Basic Course: Scott (VE1QD) advised that the basic course was proceeding well and that a number of students would be taking their exam within two (2) to three (3) weeks.

Christmas Dinner: Howard (VE1DHD) advised that the Christmas Dinner would be held on December 19th at the Halifax Steak and Stein commencing at 6.00 p.m. for food service at 7.00 p.m. He reported

that attendees could either select from one of the four choices offered to Club members at \$21.00 including tax and gratuity or from the menu, at menu prices. Further information may be found on the Club website. Howard requested that those planning on attending to please let him know so that he may be able to inform the restaurant.

Old Business: There was no old business requiring attention.

New Business:

Notice of Motion: It was moved by Fraser (VE1WO) and seconded by Win (VE1WIN) to spend up to \$595.00 for the purchase of legs and a # 9 section of Trylon tower to be able to erect a 56' heavy duty Trylon tower at the St. Andrews site. Motion carried. (Note -This notice had been printed in the November issue of the Reflector and had been in the approved 2007 budget.)

Notice of Motion: It was moved by Fraser (VE1WO) and seconded by Doug (VE1LDL) to spend up to \$1700.00 to lease the spaces for the 75th Anniversary functions. Motion carried. (Note -This notice had been printed in the November issue of the Reflector and had been in the approved 2007 budget.)

Notice of Motion: Murray (VE1MMD) gave notice that at the annual meeting he would be introducing a special resolution amending Policy #7.4 concerning purchases made following the end of the fiscal year and prior to the approval of the next year's budget.

Notice of Motion: Dave Nimmo (VE1NN) gave notice that at the January meeting, he will be introducing a special resolution granting Bob Burns (VE1VCK) life membership status.

Notice of Motion: Dave George (VE1AJP) gave notice that at the January meeting, he will be introducing a special resolution granting Barry Manuel (VE1JRG) life membership status.

Howard (VE1DHD) requested an outline of the criteria used in the awarding of life memberships. Bill (VE1MR) to provide.

Reports / Announcements: There were no reports or announcements.

50/50: Wayne (VE1TTT) won the 50/50 draw in the amount of \$37.50.

Door Prize: Jim (VE1JIM) won the soldering iron and de-soldering tool.

It was moved by Dave (VE1NN) that the meeting be adjourned.
Meeting adjourned at 2022.

Respectfully submitted,
Murray Mac Donald, VE1MMD,
Secretary 2007, H.A.R.C.

From The ARRL Letter, Vol. 26, # 47

November 30, 2007

The ninth edition of The ARRL Operating Manual for Radio Amateurs is now available for purchase. According to ARRL Publications Manager and QST Editor Steve Ford, WB8IMY, "This flagship book has had a most extensive update. About 80 percent of the book was completely rewritten." If you're an active ham radio operator, you probably have a story about your first radio contact. Many hams remember that experience even more than their first license examination. That's because operating is fun and exciting! This edition is the most complete book about Amateur Radio operating. It was written to help guide hams, both expert and novice, through the dozens of ways amateurs communicate with each other. It also contains reference information that every ham needs. The Operating Manual includes such topics as VHF/UHF -- FM, Repeaters, Digital Voice and Data, SSB and CW; Emergency Communications; Traffic Handling; DXing; Contesting; HF Digital Communications; Image Communications; Amateur Satellites; FCC Rules and how they affect Amateur Radio operators; Operating Awards, and References, including a call sign prefix list, antenna bearing maps, abbreviations and much more.

RAC's web site is at www.rac.ca

From the Mail Bag



The following is a list of new hams and their calls from Shelburne County. These are all new as of this summer (2007):

- VE1WLR William Reashore, Barrington Passage
- VE1WLC Wayne Chetwynd, Lockeport
- VE1DRL Daryl Lyon, Rockland (Sable River)
- VE1JIL Janet Lyon, Rockland (Sable River)
- VE1TBM Dean Mackenzie, Lockeport
- VE1KCP Kevin Parks, East Jordan
- VE1TML Leo Williams, Lockeport



They took an amateur radio course sponsored by the Shelburne County Amateur Radio Club.

73 and all of the best, Don, VE1AMC

On behalf of the HARC, "Welcome, all of you, to Amateur Radio!" -ed.

All, The Truro Amateur Radio Club will be holding a Basic Amateur Radio course starting on November 15, 2007 at a cost of \$75.00. If you know of anyone wanting their licence have them contact Peter, VE1PJS at 893-8359 or Gerry at 895-0136.

Hal

Hello, As a +12 yr member of HRSAR I speak from my heart: We need bingo players and IF you should know anyone who may be interested would you mind sharing this message and the attachments, please.

For several years this bingo has been our bread and butter thus enabling us to make capitol purchases that benefit our entire community. This past summer we had to change locations and for some reason our numbers have dropped significantly. Hence, my message which I hope is being fanned out by my fellow team mates.

Incidentally, HRSAR team members are all volunteers who purchase their own equipment, pay for individual training, volunteer at the bingos, provide public educational programs and of course time, energy, and commitment to searches as needed.

Curious about HRSAR?
Visit: www.hrsar.ca

Thank you for reading this.
Deborah

Here's the note Fred & Helen sent to congratulate the rest of their Bon Portage 2007 IOTA team and give our official standing. -Lynn

Well, the IOTA Contest Adjudication Report arrived yesterday! Good news and bad news! Good: We're #16 overall and #1 in North America, with twice the score of the next closest (the Fogo gang)!

Not-so-good: we lost 39 Qs and 10 mults (and about 160 k points) to errors --that Contest Robot misses nothing and has no mercy!

I'm surprised at the # of errors, especially after we combed the log so carefully, but most of the errors were the sort that we couldn't have detected. For example: 212, not 12 for his serial; AA4Y, not AA4V; OM0C/IB0, not OM0C/IBO...ouch!

I just checked, and in fact we are #1 outside Europe!

Wish they let us see what Mr. Robot did to the other guys' scores...

73 + Happy New Year!
Fred + Helen

Two Eskimos sitting in a kayak were chilly, so they lit a fire in the craft. Unsurprisingly it sank, proving once again that you can't have your kayak and heat it too.



The following was received from Len Morgan. I got it in my capacity as an Assistant Director of RAC. It is interesting that there is now some change of faces on the Board, including Dave Goodwin as RAC President.

... We really need to encourage people to become members.

Despite the ups and downs of RAC in recent years, I am in no doubt that we need to support and strengthen our national organization. We have a long, long ways to go before we achieve the level of membership in the ARRL(25% of hams in the USA).

73, Scott, VE1QD

----- Forwarded message

From: Len Morgan <morgakl@nb.sympatico.ca>

Subject: FW: [RACBoard] Fw: RAC's Financial Statements for 2006 Sobering

Date sent: Wed, 21 Nov 2007

Hello All.

Hope things are well with all of you. Have been pretty busy with work of late but wanted to give you an update on some things that are happening with in RAC. I hope all of you have seen that Dave Goodwin, our past Atlantic Director has been elected as President starting in Jan. 2008. We also have some new faces on the Board and Executive. Change is always good. We finally have a new office manager, Richard, VE3UNW. Richard and Louis, at the RAC office, are getting things back in shape after a very disorganized year, following Debbie's death.

Our membership stats remain at about 5050 members as of today which I believe is down a bit from this time last year.

I have included a copy of an article that was in the Algoma Amateur Radio Clubs last newsletter. We have permission to print this and circulate.

Any comments would be appreciated.

Thanks, Len

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RAC's Financial Statements for 2006 Sobering By Dave Hayes VE3JX, Editor of The Algoma Amateur, Algoma Amateur Radio Club, Sault Ste Marie, Ontario
USED WITH PERMISSION

This month, we received our Nov./Dec. copy of TCA. On page 55 are RAC's financial statements for the year 2006.

RAC had a deficit of over \$30K; the previous year's deficit was \$7.5K. Membership revenue was about the same for both years, while advertising revenues weakened.

Costs that increased were: office, wages & benefits, rent, RABC dues, QSL bureaus, members services, CARAB, equipment leases & charges, cost of sales & royalties, bank charges, merchant fees & interest.

Expenses that decreased significantly were: annual meeting, committees, executive & directors, IARU fees, magazine production, repairs & maintenance, and YEP.

The "Statement of Changes in Net Assets" shows the net assets balance as going from \$43,280 down to \$13,053. Not a pretty picture.

Membership: Bear in mind that this is for 2006. We will have to wait until next fall to see the audited financial results for this year. However, I am sure that membership numbers have not taken a dramatic upswing; I would wish they have, but reality suggests otherwise.

If anyone is of the opinion that RAC should be financially supporting this or that, whether this or that refers to valuable services such as ARES or not, these financial statements explain why RAC can't afford to do all it would want to. It does not have the resources. Why?

It all boils down to membership numbers. The ARRL recently released their membership as being more than 151K. That translates to

around 25% of U.S. licensees. I have seen dissertations bemoaning the fact that it is not higher. However, the sad truth is that, if we had 25% of licensees in Canada as members of RAC, there would be a party celebration to end all celebrations!

While we don't have up-to-the-minute figures—we only have those from last December—the hard facts are that we don't have even 10% penetration; the figure was 4731 or 8.7%. To put it mildly, that's abysmal!

Notwithstanding, our Ontario North/East Region has the highest percentage in the country, standing at 15.9%. While that is better than the national average, it is still not up to what it should be. Why is it that hams generally do not join RAC?

Excuses: There are many excuses used to justify non-membership, and we've heard them all. Two recent ones are: a distrust of RAC's finances; the claim that it's an "old boys club", meaning that just a few control the organization.

As far as finances go, the current statements tell the story. The executive and Board of Directors have very little money to play with. In fact, they have been cutting costs here, trimming there, such that there is no "fat" left at all. They have, for example, reduced the necessary costs for fulfilling their duties by 1/3. Funds needed by committees has cut by 1/2. RAC has professional people, such as lawyers and engineers who donate their time and expertise to RAC.

Much of Earle's traveling as RAC President, as an example, has been out of his own pocket. We have a lot of dedicated volunteers who are trying to make RAC work on a shoestring budget. There is no wastage here to speak of. In fact, RAC does not have the funds to do everything it wants to do. It all

boils down to membership support, or lack thereof.

Old Boys: Is RAC an "old boys club"? If you look at the ages of many of our officers and volunteers, you can see that there are many "old boys". Earle, our retiring President, is in his mid-seventies, and he has many contemporaries in RAC. However, the term "old boys club" is used to signify a closed group maintaining secretive control of everything, barring outsiders from "interfering". Is that the case with RAC?

No, it is not. My personal experience has been that, when you show a little interest in what's going on in RAC, perhaps offering a positive idea or so, each one of the executive goes into "recruiting mode". They are "old boys" to be sure, and they're tired of carrying the load by themselves. I have had dealings with a number of RAC executive, past & present, and I have not detected any trace of a clique-ish mentality. In fact, it has been quite the opposite.

Therefore, if YOU want to be President, or VP, or a Director, or any other appointed official in RAC, you have a very good chance of fulfilling your dreams. You will have all the help you need from current members in those positions, to reach out and qualify for the job that you want. Bear in mind, there's no salary, no significant prestige, nothing, but the satisfaction that you are doing something worthwhile, benefiting the whole ham community. The above description does not sound like a classic old boys club to me, nor should it to you.

In fact, there may be things that you may disagree with as regards to current RAC policy, or the way things are being run. What do you do? Participate. Have a share in what's going on. RAC is a democratic, volunteer organization, with the member being the most important part of it. If you don't like something, help

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change it. Volunteer. As the over-used saying goes: "Be part of the solution; not part of the problem."

I have been offered several jobs within RAC, but I took on the DEC position since I perceived it to be the most pressing locally. However, I am like every other RAC appointee; I welcome anyone who is after my job.

RAC is a volunteer operation. All representations to Industry Canada and to the ITU, all the Field Organization, the QSL Bureaus, the TCA columnists and other authors; it's all done gratis. We, as members, have to be grateful that so many have such a giving spirit. Oh, they're not perfect, but neither are we.

Support: What can we do to show our support for amateur radio in Canada and its national organization? We can volunteer our services to whatever extent that we can. But, first and foremost, be a member. It's really \$50 well-spent. To not support RAC is to wish for its demise. Then what?

Do you want to be represented by ARRL? Will the Canadian Government really listen to a U.S. organization? Can we depend on the ARRL to fight for our unique privileges as Canadian amateurs? Or, maybe you'd like to be represented by RAQI instead? They'd love the job. However, nothing against RAQI, but it is a provincial organization, and not our province at that.

No, the only course of wisdom is to support our only national organization: the Radio Amateurs of Canada. The more we do, the more RAC will be able to do for us! -jx

[from the November 2007 issue of The Algoma Amateur, newsletter of The Algoma Amateur Radio Club in Sault Ste Marie, Ontario.]

Nanoelectronics News from an article by Marlowe Hood, Agence France-Presse

Scientists have developed solar cells 200 times thinner than the human hair that they believe will power the nanoscale gadgetry of tomorrow. Charles Leiber and colleagues of Harvard U. describe silicon nanowire they devised that can convert light into electrical energy.

Virtually invisible to the naked eye, the nanowire is made of silicon with 3 types of conductivity arranged as layered shells. Incoming light generates electrons in the outer shell which are then swept into the 2nd layer and the inner core along micropores — positively charged "holes" — effectively move in the opposite direction. Thus "the electrically connected core & cladding play the same role as the plus & minus terminals of a battery" Lieber said.



Answer to Puzzler on page 1

A TDR is a Time Domain Reflectometer which is used for checking feedline problems among other things.

Chocolate Christmas

*Twas the night before Christmas and all round my hips
Were Laura Secord candies that sneaked past my lips.
Fudge brownies were stored in the freezer with care,
In hopes that my thighs would forget they were there.*

*While Mama in her girdle and I in chin straps
Had just settled down to sugar-borne naps.
When out in the pantry there arose such a clatter,
I sprang from my bed to see what was the matter.*

*Away to the kitchen I flew like a flash,
Tore open the icebox then threw up the sash.
The marshmallow look of the new-fallen snow
Sent thoughts of a binge to my body below.*



*When what to my wandering eyes should appear:
A marzipan Santa with eight chocolate reindeer!
That huge chunk of candy so luscious and slick
I knew in a second that I'd wind up sick.*

*The sweet-coated Santa, those sugared reindeer,
I closed my eyes tightly but still I could hear;
On Pritzker, on Stillman, on weak one, on TOPS
A Weight Watcher dropout from sugar detox.*

*From the top of the scales to the top of the hall
Now dash away pounds; now dash away all.
Dressed up in Lane Bryant from my head to nightdress
My clothes were all bulging from too much excess.*

*My droll little mouth and my round little belly
They shook when I laughed like a bowl full of jelly.
I spoke not a word but went straight to my work
Ate all of the candy then turned with a jerk.*

*And laying a finger beside my heartburn
Gave a quick nod toward the bedroom I turned.
I eased into bed, to the heavens I cry
If temptation's removed I'll get thin by and by.*

*And I mumbled again as I turned for the night
"In the morning I'll starve... 'til I take that first bite!"*

Space Weather News for Jan. 4, 2008
<http://spaceweather.com>

> Solar physicists have been waiting for the appearance of a reversed-polarity sunspot to signal the start of the next solar cycle. The wait is over. A magnetically reversed, high-latitude sunspot emerged today. This marks the beginning of Solar Cycle 24 and the first step toward a new solar maximum. Intense solar activity won't begin right away. Solar cycles usually take a few years to build from solar minimum (where we are now) to Solar Max (expected in 2011 or 2012). It's a slow journey, but we're on our way!

Visit <http://spaceweather.com> for pictures of the new sunspot and updates.