

Message from the London Amateur Radio Club



Promoting Amateur Radio in London
And surrounding area since 1920

November 8, 2009

Next Meeting Topic

L.A.R.C. Executive

President

Doug Elliott, VA3DAE

Vice-President

Pat Ross, VE3CNX

Past President

Doug Tompkins, VE3IDT

Treasurer

Brian Bouckley, VA3ATB

Secretary

Ruth Dahl, VE3RBO

Director, Flea Market

Ann Rundle, VA3EOR

Director, Membership

John Visser, VA3MSV

Director

David Lambert, VE3KGK

Non-Voting

Director, ARES & CANWARN

Brett Gilbank, VE3ZBG

Appointments

LARC Repeater Coordinator

Brad Seward, VE3NRJ

Repeater

Operator/Programmer

David Young, VE3EAY

Field Day Coordinator

Pat Ross, VE3CNX

Webmaster

Doug Elliott, VA3DAE

Newsletter Editor

John Visser, VA3MSV

Auditor

William Clothier, VE3BCU

Don't go to St. Jude's Church for the next meeting.

The meeting will be on Thursday November 12, but at a **different place**, and a **different time**. We will be the guests of London Hydro, and will meet at their building at Horton and Talbot. You should aim to **arrive no later than 5:30 PM**, so we can fit in these activities:

- vehicle parking, with some in visitors lot, some in the gate 2 lot (a map can be found on second last page of this newsletter)
- individual sign in at the security desk
- meeting start at 6:00 sharp with a tour of the London Hydro Control Room
- proceed to Director's Boardroom for a bite to eat
- presentation on the new Smart Meters, which promises to be a very interesting topic for radio people.

Dr. David Toth, VE3GYQ, Named President Emeritus



Dr. Dave Toth, VE3GYQ is a past executive of LARC (1980's era) and owner of VE3TTT and VE3SUE repeaters.

Dr. David Toth, VE3GYQ, was named President Emeritus of TAPR at its fall board of directors meeting held in conjunction with the 28th DCC in Chicago, Illinois on September 24th. Dr. Toth served as President from 2005 to 2009. Dr. Toth also served as a member of the board of directors from 1987 to 1993 and again starting in 2004. He continues to serve as a director.

Next Meeting is Where and When?

Reminder of the next monthly Club meeting on November 12, 2009 at 5:30pm

All meetings are normally located at St. Judes Anglican Church, 1537 Adelaide Street North at Fanshawe Park Road East in London, Ontario.

The meetings are **normally** held on the second Thursday of the month at 7:30 pm EST during the months of September to June (no meetings July and August).

Next Meeting will be December 10, 2009. This meeting will be the annual Christmas Potluck Dinner.

Area Repeaters

LARC Repeaters

London

VA3LON 147.060 + 114.8Hz

VE3MGI 145.390 - 114.8Hz

SORT Repeaters

London

VE3TTT 147.180 + 114.8Hz

ULR Link repeater
"SORT" System

VE3SUE 444.400 + 114.8 Hz

ULR link repeater "SORT"
System, IRLP

Ipperwash

VE3TCB 146.940 - 123.0 Hz

Linked to VE3SUE

Grand Bend

VE3RGB 146.750 + 123.0 Hz

VE3SRT 442.050 + 123.0 Hz

Linked to VE3SUE

Goderich

VE3OBC 146.910 - 123.0 Hz

Whitechurch

VE3WWD 443.075 + 123.0 Hz

Other Area Repeaters

London

VA3SIX 53.470 - 114.8 Hz

VE3OME 145.450 - 114.8 Hz

CANWARN

Stratfordville

VE3DPL 146.655 - 131.8 Hz

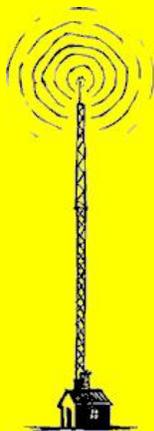
St. Thomas

VE3STR 147.330 + 114.8 Hz

Echolink Node: 72886

VE3STR 443.825 + 114.8 Hz

IRLP Node: 2482



If you have a repeater that should be listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

L.A.R.C. Executive Appreciation to L.S.A.R.C.

The executive of the London Amateur Radio Club would like to thank the members of the former London Seniors Amateur Radio Club for their kind donation. The money will be put toward the operation of the club and the promotion of the amateur radio hobby.

Membership Certificates

The Club has created membership certificates for its current members. You can see your own certificate at the following link.

<http://www.larc.ca/member-list.htm>

Simply click on your surname and it will bring up a PDF of your certificate suitable for printing.

Flaunt Your Face – Show Your Shack

In our hobby it's not always easy to put a face to all the fellow hams you talk to on the air. To help us all figure who's who, LARC invites its members to submit digital photos of yourself and/or your shack to be published on the membership page of our website. Purely voluntary of course, and if you prefer you can submit just one (depending on whether you think your face or your shack is more presentable).

How will it work? On the membership page, we'll attach your own picture where your first name appears, and the picture of your shack to your callsign. See the entry for Doug Elliott, VA3DAE for an example.

How do you submit your pictures?

Just email them to the LARC site webmaster address, which is: webmaster@larc.ca

Nets



Daily

Trans Provincial Net
7.055 MHz 7:00 am – 5:00 pm

Sunday

Swap Net
7.055 MHz LSB 12:00 pm
ARES Ontario Net
7.153 MHz 1:00 pm
7.055 MHz 3:00 pm
3.742 MHz 7:15 pm
IRLP Reflector 9005 8:00 pm

Monday

LARC 2m Net
No Net currently due to repeater repairs

Wednesday

ARES Net
145.450 + VE3OME 7:30 pm
ARES Ontario Net
IRLP Reflector 9005 8:00 pm

Thursday

PROCOMM Net
147.180 + VE3TTT 8:00 pm
444.400 + VE3SUE 8:00 pm

Friday

Tech Net
147.180 + VE3TTT 8:00 pm
444.400 + VE3SUE 8:00 pm

Saturday

VE3TTT 2m Net
147.180 + VE3TTT 7:30 pm
444.400 + VE3SUE 7:30 pm
146.940 - VE3TCB 7:30 pm
442.300 + VE3TCB 7:30 pm
447.050 - VE3SRT 7:30 pm
447.075 - VE3BHR 7:30 pm

If you have a Net that should be listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

52nd JOTA



52nd On the Air
Sur les Ondes
JAMBOREE On the
13th Sur Internet
17-18 October / Octobre, 2009

What is Jamboree-on-the-Air (JOTA)?

The JOTA is an annual event in which Scouts and Guides all over the world speak to each other by means of amateur radio contacts. Scouting experiences are exchanged and ideas are shared, via the radio waves.

When Scouts want to meet young people from another country they usually think of attending a World Jamboree or another international gathering. But few people realize that each year about half-a-million Scouts and Guides "get together" over the airwaves for the annual Jamboree-on-

the-Air (JOTA). Modern communication technology offers Scouts the exciting opportunity to make friends in other countries without even leaving home.....

Since 1958 when the first jamboree-on-the-Air was held, thousands of Scouts and Guides have "met" each other through this event. Not only is it fun to talk to Scouts from other parts of the world but it provides also a chance to find out about other countries and about Scouting elsewhere. Many contacts made during the JOTA have resulted in penpals and links between scout troops that have lasted for many years.

With no restrictions on age, on the number that can participate and at little or no expense, the JOTA provides an opportunity for Scouts and Guides to contact each other by amateur radio. The radio stations are operated by licensed amateur radio operators. Many Scouts and leaders hold licenses and have their own stations, but the majority participates in the JOTA through stations operated by local radio clubs and individual radio amateurs. Today some operators even use television or computer linked communications.

Date and duration of the event

The world-wide Jamboree-On-The-Air is organized to coincide with the third **full** weekend of October each year. The event starts at 00.00 hours local time on the Saturday and concludes 48 hours later at 24.00 hours local time on the Sunday. Each station can choose its own operating hours within this period.

Now a report from Ruth Dahl, VE3RBO

As usual we had a great time with the Scouts during JOTA (Jamboree On The Air). The Scouts and Cubs get to do quite a few things for the day. From a Treasure Hunt, a craft, to JOTI (Jamboree On The Internet) and then of course JOTA which is where we came in. Our set up consisted of 2 HF stations one was 20M with Mike Doncaster, VE3NLP and the other was 40M with Dave Lambert, VE3KGG, we had IRLP with Doug Elliott, VA3DAE and APRS with John Visser, VA3MSV. Our president Doug Elliott did a wonderful presentation all about Amateur Radio. We had antennas outside, they of course were in the trees thanks to our resident tree climber Mike Watts, VE3ACW and one of the young Scouts who decided that he should follow Mike up the tree to try and help out. So we had one of the oldest and one of the youngest people up a tree. We were also helped with pictures by Al Bernier, VE3LOD and Paul Frasier, VE3PFN.

Upcoming Events TAPR Selects New Officers

Thu., Nov 12, 2009

L.A.R.C. Meeting – Topic – The Smart Meters presented by London Hydro at their own location.

Thu., Dec. 10, 2009

L.A.R.C. Meeting – Annual Christmas Potluck Dinner

Thu., Jan. 14, 2010

L.A.R.C. Meeting – Topic to be determined

Sat., Feb. 6, 2010

[Big Event 32 - Flea Market and Hamfest](#)

Niagara Peninsula Amateur Radio Club
Merriton Community Centre, 7 Park Ave., St. Catharines, Ontario

Thu., Feb. 11, 2010

L.A.R.C. Meeting – Topic to be determined

Thu., Mar. 11, 2010

L.A.R.C. Meeting – Topic to be determined

Sun., Jun. 6, 2010

[Central Ontario Hamfest & Fleamarket](#)

GARC & KWARC

Waterloo Regional Police Association,
R.R. 2, 1128 Rife Rd. North Dumfries
Township. Beside Hwy 401, between
exits 268 & 275. Lat: 43° 20' 51.20" N,
Long: 80° 24' 58.89" W



October 15, 2009

At the recent ARRL and TAPR Digital Communications Conference (DCC) in Chicago, the TAPR Board of Directors of selected a new slate of officers and named Dr. David Toth, VE3GYQ, President Emeritus of TAPR. Dr. Toth served as TAPR President from 2005-2009 and as a member of the Board from 1987-1993 and

2004 to present. The new TAPR officers are: Steve Bible, N7HPR, President; Scott Cowling, WA2DFI, Vice President; Tom Holmes, N8ZM, Treasurer; and Stan Horzepa, WA1LOU, Secretary. TAPR recently elected three new members to their Board of Directors: Scott Cowling, WA2DFI; John Koster, W9DDD, and Mark Thompson, WB9QZB. -- *Thanks to Stan Horzepa, WA1LOU, for the information*

Three People Killed While Erecting Antenna

A little safety message for the L.A.R.C. Newsletter readers. If you are putting an antenna up, PLEASE be careful.

At approximately 8:40 PM on Monday, October 12, a man, woman and their 15 year old son were killed while trying to erect a 50 foot vertical antenna at the home of the man's mother, Barbara Tenn, KJ4KFF, in Palm Bay, Florida. The deceased were not licensed amateurs.

"It happened in an instant," Palm Bay Fire Marshal Mike Couture said in a statement. "It is an unfortunate set of circumstances that led to the most tragic result."

According to police reports, Melville Braham, 55, Anna Braham, 49, and their 15 year old son Anthony were putting up an antenna -- Tenn's second -- at night when they lost control of the antenna and it crashed into nearby overhead power lines. The impact sent 13,000 volts of electricity through the pole the three were holding. A family friend, a 17 year old boy, was on the roof at the time of the accident. He and the couple's daughter, who was in the house at the time, were not injured.

The mother was pronounced dead at the scene. When paramedics arrived, the father and son were not breathing; rescue crews immediately tried to resuscitate them. They were transported to a hospital where they later died.

Neighbor Jim Vallindingham told television station WFTV that he called 911 when he saw the fire in the back yard and then he ran over: "I had no idea it was electrical until we got over there and saw the three people laying on the ground. So I called 911 a second time to tell them there were casualties. You know, there were people on the ground. So [the 911 operator] told me that's electric, you back away don't touch anything."

Couture said that night was not the best time to be attempting to put up an antenna. "It wasn't the best time, meaning it was night time. Obviously, in darkness, and trying to do something like this and not being keenly aware of where the power line is in the backyard, [was not a good idea]," he said.

Neighbors said that Tenn, an ARRL member, used Amateur Radio to talk with her family in Jamaica. -- *Thanks to WFTV and Central Florida News 13 for the information*

If you have an upcoming event that you would like to have listed here, please forward the information to John Visser, VA3MSV at va3msv@hotmail.com and I'll add it to the list.

Ham Radio was mentioned in a computer magazine

COMPUTERWORLD

Mobile & Wireless

Want to bone up on wireless tech? Try ham radio

Abundant spectrum resources and an engaged research community are drawing wireless experimenters back into a hobby that many had forgotten.

John Edwards

October 29, 2009 ([Computerworld](#))

John D. Hays, an IT manager in Edmonds, Wash., devotes most of his spare time these days to helping develop a communications system that's designed to integrate portable two-way radios with the global telephone network. The project's goal is to create a failure-proof voice communications infrastructure that can immediately connect first responders with the outside world.

"Individuals with radios in the field could interconnect with the telephone system even when their cell phones are shut down by an emergency," he says. This would be useful in all manner of disasters, from natural to man-made.

Hays claims his research efforts wouldn't be possible if he wasn't a licensed amateur radio operator -- or "ham," the term he and his fellow hobbyists use to describe themselves. He says ham radio gives him "space and a choice of spectrum [in which] to experiment." He also values the hobby's largely self-policing regulatory structure and close-knit user community. "There are many others who would share your passion and provide [a] great opportunity for brainstorming and support," says Hays, whose ham call sign is K7VE.

For IT professionals, ham radio can foster skills that are translatable into real-world wireless and wired networking applications.

Hays says his hobby and profession have long been intertwined. His experimentation with TCP/IP over AX.25 (a ham-oriented data link layer protocol) on the radio in the late '70s and '80s "helped me understand the inner workings of networking protocols and the use of wireless transports," he says. "From this, I was able to write some widely read and popular internal papers on subjects such as TCP/IP over Ethernet versus token passing ring topology."

Ham radio at a glance

- Number of U.S. amateur radio licenses: 650,000
- Number first licensed in the past four years: 100,000
- Number estimated to be licensed in 2009: 25,000 to 30,000

Source: American Radio Relay League, Newington, Conn.

More recently, Hays used his ham knowledge to implement several RF-networked warehouse management systems. "My knowledge of radio transmission, combined with networking [skills], optimized the placement of base stations and mobile units," he says.

Reviving innovation

Decades ago, amateur radio operators were on the forefront of scores of technological innovations, including television, digital communications, solid-state design and cellular networks. The hobby's roots trace back to radio pioneers such as Guglielmo Marconi and FM-inventor Edwin Armstrong.

But in recent years, as many potential new hams were attracted to computers, the Internet and other technologies that they could explore without passing a licensing exam, some veteran hams worried that ham radio was at risk of gradually sliding into stagnation and was perhaps even on the road toward technological irrelevance. Over time, many old-timers worried, experimenters would gradually be replaced by hams more focused on the hobby's operational aspects, such as restoring antique radios and providing communications services for community parades and other charity events.

Other hams, however, believed that the hobby was actually entering a new era of innovation, one driven by the same type of people lured away from ham radio by advancing digital technologies. They reasoned that a streamlined licensing system, capped by the FCC's elimination of Morse code testing two years ago, would, over time, revitalize the hobby. This would happen by attracting technically skilled innovators who were interested in more than merely tapping a telegraph key.

Whatever the reason, a budding corps of innovators is now working to restore at least some of ham radio's past glory, focusing on projects ranging from satellite

construction to power-line communications to testing long-range Wi-Fi links. "Ham radio provides the broadest and most powerful wireless communications capability available to any private citizen anywhere in the world," says Allen Pitts, a spokesman for the [American Radio Relay League](#) (ARRL), a national association of ham radio operators based in Newington, Conn.

Major pluses: Free radio spectrum, big transmitters and more Amateur radio license classes

A look at the exams ham radio enthusiasts must pass to earn the following licenses:

- **Technician:** 35-question multiple-choice exam for full operating privileges on all ham bands above 30 MHz and limited privileges in portions of HF amateur bands.
- **General:** 35-question multiple-choice exam for privileges on all ham bands above 30 MHz and most HF amateur frequencies.
- **Amateur Extra:** 50-question multiple-choice exam for all ham operating privileges.

For experimenters, ham radio's strongest drawing card is megahertz upon megahertz of lightly used (sometimes virtually unused) radio spectrum at [key locations](#) in the LF, HF, VHF, UHF and SHF bands and beyond. Unlike their commercial counterparts, hams are free to use any of these frequencies for experimental purposes without any government authorization other than the ham license itself. "Don't underestimate the value of these frequencies -- they could fetch hundreds of millions of dollars if sold," says Hays, who views the bands as a "national resource," useful for both experimental and disaster-related communications activities.

Beyond gaining access to enough radio spectrum space to conduct their experiments in relative peace and privacy, hams can also legally use transmitters with power levels of up to 1.5 kilowatts. "That's comparable to a small AM broadcast station," Pitts says. A high-power transmitter comes in handy for applications like bouncing a radio signal off of Venus (as a group of German hams did earlier this year) or for skipping signals off of the ionosphere to communicate with someone on the other side of the world without the help of the Internet.

Technician exam sample question

What is meant by receiver front-end overload?

- **A.** Too much voltage from the power supply
- **B.** Too much current from the power supply
- **C.** Interference caused by strong signals from a nearby source
- **D.** Interference caused by turning the volume up too high

Correct answer: C

Although radio amateurs have long battled local governments and homeowners' associations over the right to erect antennas in their yards, a recent FCC ruling now requires planning authorities to "reasonably accommodate" a ham's need to erect the large antennas that are useful for satellite communications, radio astronomy and other types of weak-signal radio applications, as well as long-distance terrestrial communications.

Testing, testing

Yet aspiring hams still face the challenge of passing one or more written tests, depending on the class of license they are seeking. Those exams cover both technical and regulatory subjects. The entry-level Technician-class license, which provides access to nearly all VHF and higher frequencies, requires applicants to pass a 35-question, multiple-choice test. "While not difficult, it does require several hours of reading and study," Pitts says. "This initial test is designed to be sure that new licensees understand the service, can operate competently without causing disruption to others, and have a basic knowledge of the rules and capabilities of ham radio."

Two higher-level licenses -- General and Amateur Extra -- require applicants to demonstrate progressively greater knowledge and understanding of technical and regulatory issues in exchange for access to more frequencies.

The downside to using ham frequencies for wireless experimentation include an FCC rule prohibiting encryption that hides the meaning of a transmission, bandwidth limits on some modes and frequencies, and the hobby's strictly noncommercial nature. "No pecuniary benefit can arise out of communication you are engaged [in] on the air," says Hays, who believes that the advantages far outweigh the drawbacks.

Skill building

Experimenters are using ham radio as a way to pioneer an array of new technologies as well as to refine many existing products and services. One popular activity, Pitts says, is [testing Wi-Fi's distance boundaries](#). "A number of consumer-grade wireless network routers share frequencies with amateur radio," he says. "With an amateur radio license, you can legally couple amplifiers to these routers and, with gain antennas, extend their range to cover several miles or more." Pitts notes that hams have used these techniques to create experimental high-speed wireless networks that encompass entire cities.

Meanwhile, at the U.S. Naval Academy, [midshipmen hams](#) are in the process of sending a series of small communications satellites into orbit with the help of NASA. The project's goal is to develop a low-cost orbital platform for flying various types of scientific instruments into space.

General exam sample question

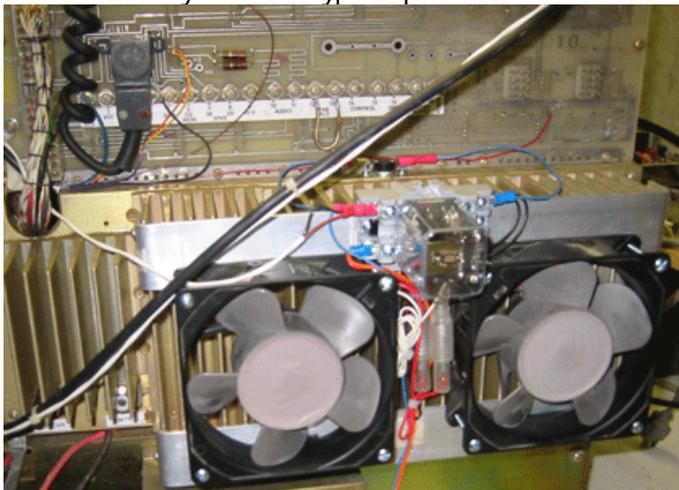
What signal(s) would be found at the output of a properly adjusted balanced modulator?

- A. Both upper and lower sidebands
- B. Either upper or lower sideband, but not both
- C. Both upper and lower sidebands and the carrier
- D. The modulating signal and the unmodulated carrier

Correct answer: **A**

Richard Campbell, an associate professor of computer and electrical engineering at Portland State University in Oregon, says ham radio helps him turn theoretical concepts into reality. Campbell, licensed as KK7B, is currently working on projects that are designed to add digital communications capabilities to the national power grid and to create remote sensors for use with ocean wave power generators. "Amateur radio serves as the testbed for new ideas I like to play around with before looking for commercial applications," he says. "Much of what I am experimenting with at the moment will likely end up in low-power wireless networks, such as the smart grid."

Over the years, many hams have parlayed their radio experimentation into lucrative and even distinguished professional careers. Joe Taylor, licensed as K1JT, says the years he spent tinkering with radios led him into his current post as a Princeton University physics professor. "My practical knowledge of RF techniques, built up over years of enthusiastic pursuit of many amateur radio goals, turned out to be very useful when choosing and designing specialized equipment for unique studies of pulsars and other astrophysical objects," he says. In 1993, Taylor was awarded the Nobel Prize in Physics for the co-discovery of a new type of pulsar.



A homebrew cooling system on the back of a (former) FARA repeater, devised by ham Peter Simpson. Courtesy: Peter Simpson

No formal training needed

As it has since its earliest days, the hobby also continues to attract experimenters without any formal electronics training. Many of these people "homebrew" their own radios and accessories, building equipment from components obtained commercially, collected through purchases or trades with fellow homebrewers or even painstakingly crafted by hand.

Bill Meara, a diplomat stationed at the U.S. embassy in Rome, experiments with bare-bones radio technologies. "I am tinkering with one of the simplest possible high-frequency radio transceivers -- it uses just one transistor," he says. The single sliver of silicon serves as both a transmitter and receiver. "In an age in which we use chips with millions of transistors inside, I kind of like the idea of going minimalist," he says.

Meara, who hosts SolderSmoke, a podcast targeted at electronics hobbyists, recently wrote a book on his life as a radio experimenter. He feels that ham radio gives amateur researchers like himself easy access to professional-level support resources, ranging from technical discussion groups to international meetings.

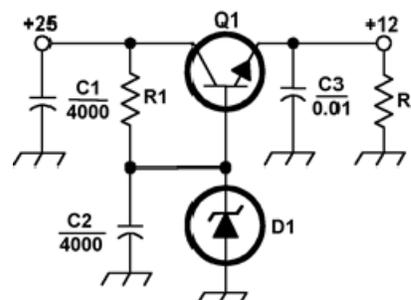
On the flip side, the hobby provides science and engineering professionals with an opportunity to test ideas in a low-key environment. "It offers [them] the chance to legally play with some of the most cutting-edge technologies available today... without any of the pressure that may come with professional, on-the-job experimentation," Meara says.

Looking ahead

Amateur radio isn't likely to ever recapture the grip it held on the technology industry from the 1950s through the 1970s, when it seemed that virtually everyone in electronics design and the technical end of radio held a ham license. For his part, Campbell feels that even a modest return to ham radio's experimental roots would be a good thing. "We just celebrated the 40th anniversary of Apollo 11; maybe the past isn't such a bad place to think about."

Extra exam sample question

What is the purpose of Q1 in the circuit shown in the figure below?
A. It provides negative feedback to improve regulation
B. It provides a constant load for the voltage source
C. It increases the current-handling capability of the regulator
D. It provides D1 with current



(Correct answer: C)

Meara believes that radio experimenters need to take a second look at ham radio and consider the changes it's undergoing. "Some of the most important discoveries in radio came from ham radio home laboratories," he says.

"There is no reason this tradition can't be continued into our new age of wireless."

John Edwards, a freelance technology writer located near Phoenix, has been a ham since 1976. His call sign is W6JE.

RAC Bulletin 2009-035E - New Executive Announced.

2009-11-03

During a RAC Board of Directors' teleconference meeting held by the Nomination Committee Chair Bj Madsen, VE5FX, on October 29th, 2009, the following new members of the Executive were elected:

- Geoff Bawden, VE4BAW - President
- Paul Burggraaf, VO1PRB - Secretary
- Margaret Tidman, VA3VXN - Treasurer

These individuals will assume their respective responsibilities on January 1, 2010.

Subsequent to the October 29th meeting, the following Directors and Officers submitted their resignations:

- Bob Cooke, VE3DBD (former President) - effective October 31, 2009
- Geoff Smith, VA3GS (former Ontario South Director) - effective November 1, 2009
- Noë Marcil, VE2BR (former Quebec Director) - effective November 1st, 2009

The remaining positions on the executive will be unchanged as the current officers were acclaimed.

First Vice-President Ian MacFarquhar, VE9IM, pursuant to the RAC By-laws, will assume the duties of President until December 31st, 2009.

The Board and Executive extend their most sincere thanks to Geoff and Noë for their past service to RAC and wish them all the very best in their future endeavours.

The Board also extends its thanks to Bob Cooke for the time he has devoted to RAC as a past Director, Past Vice-President of Field Services and as President during rather challenging times. Bob's involvement with RAC began in the early 1990s as an Assistant Director. He was elected as Ontario South Director in 2001 and served in that capacity until January 2005. Bob was subsequently elected as Vice President, Field Services in January 2006 and served in that role until February 2009 when he was asked by the Board to assume the responsibilities of President of RAC. The dedication and commitment of volunteers like Bob, Geoff, Noë, and many others, result in Canadian Amateurs having a voice which is heard locally, provincially, nationally and internationally, and they are to be congratulated for their outstanding contributions.

G. Linda Friars, VE9GLF
Corporate Secretary - Radio Amateurs of Canada

New Advances In EmComm Featured On The BBC

October 30 2009

Recent developments in emergency broadband communications is the topic of a BBC interview with Mike Outmesguine KG6NHH. Outmesguine is the president and founder of TransStellar, Inc., a successful technology services company with an emphasis on wireless mobility and energy information systems.

The BBC news item says that KG6NHH has demonstrated an easy way to produce what it calls a "Network Relief Kit." This is described as an ultra portable method of connecting to the internet from almost any location in the world.

The system works by contacting one of three satellites orbiting the earth to get an internet connection. The

receiver can then be plugged in, using Ethernet cables, to a standard router, VoIP phone or similar devices.

The BBC says that In 2003-2004 the equipment cost some \$40,000 but these days the whole kit, Now, thanks to advances in technology the entire kit can be carried in a back-pack with its cost down to around \$3,000 including the solar panel. Connectivity is said to be fast enough to watch videos on YouTube.

You can read the full BBC report at <http://news.bbc.co.uk/1/hi/technology/8318156.stm> The BBC Digital Planet radio interview with Mike Outmesguine, KG6NHH, is at <http://www.bbc.co.uk/programmes/p00412hz> (BBC)

Emerging Technology: Communications In A Shrimps Eye

October 30 2009

From the technology page comes the story of the remarkable eyes of a marine crustacean could inspire the next generation of DVD, CD players and possibly telecommunications gear. This, according to a new study

from the University of Bristol published in Nature Photonics.

The mantis shrimps used in the study are found on the Great Barrier Reef in Australia and have the most complex vision systems known to science. They can see

in twelve colors while humans see in only three. Also, it can distinguish between different forms of polarized light.

Special light-sensitive cells in mantis shrimp eyes act as quarter wave plates which can rotate the plane of the polarization of a light wave as it travels through it. This capability makes it possible for mantis shrimps to convert linearly polarized light to circularly polarized light and vice versa.

Manmade quarter-wave plates perform this essential function in CD and DVD players and in circular polarizing filters for cameras. However, these artificial devices only tend to work well for one color of light while the natural mechanism in the mantis shrimp's eyes works almost perfectly across the whole visible spectrum from near-ultra violet to infra-red.

Dr. Nicholas Roberts is the lead author of the Nature Photonics paper. He says that the work of his team reveals for the first time the unique design and mechanism of the quarter-wave plate in the mantis shrimp's eye. He describes it as exceptional and out performing anything we humans have so far been able to create.

Canada's Ham Community To Commemorate The 2010 Winter Olympics

October 23 2009

Ham radio will be a part of the 2010 Olympics.

The upcoming Olympic games in Canada will be celebrated on the ham bands. This with word that members of the Vancouver Olympics Amateur Radio Group will be activating three special event stations to promote and commemorate the Vancouver Winter Olympic and Paralympic Games to be held in February and March of 2010.

The special activity is already under way and will continue through March 2010. Operations will be on all bands and modes with the first station VG7V on the air from October 1st through November 30th. Then comes VG7W from December 1st of this year through January 31st of 2010. The final call will be VG7G taking to the

Radio St. Helena Day - November 14th

October 23 2009

If you like to listen out for rare shortwave stations then this is for you.

Radio St. Helena Day will be on Saturday 14th of November 2009. This rare station is located on the Island of St Helena which lies in the South Atlantic off the coast of Angola.

The station normally provides a local radio service to the island and has a range of about 100 km. But once a year it broadcasts internationally on Shortwave at 11.092.5 MHz on upper sideband with its famed Party On-The-Air program.

Exactly why the mantis shrimp needs such exquisite sensitivity to circularly polarized light isn't clear. However, polarization vision is used by animals for secret communication that avoids the attention of other animals, especially predators. It could also assist in the finding and catching of prey by improving the clarity of images underwater. If this mechanism in the mantis shrimp provides an evolutionary advantage, it could help scientists create better optical devices in the future using liquid crystals that have been chemically engineered to mimic the properties of the cells in the mantis shrimp's eye.

This would not be the first time humans have looked to the natural world for new ideas. In another bit of research the lobster's compound eye recently inspired the design of an X-ray detector for an astronomical telescope.

This new research into the amazing vision capabilities of the mantis shrimp and how it might one day improve communications in the human world was conducted at the University of Bristol's School of Biological Sciences in collaboration with colleagues the University of Queensland in Australia. (Adapted from Science OnLine)

airwaves on February 1st and continuing through March 31st 2010.

The Vancouver Olympics Amateur Radio Group says that it will be consolidating all contacts and intends to post them electronically to the ARRL's Logbook to the World. In addition, commemorative paper QSL cards for those who want them will be available at the conclusion of the events in April 2010. Cards received via the QSL Bureau will be returned the same way.

In addition to the commemorative operation radio amateurs will also be handling many of the logistics for the games. Word is that most of this will be short range communications on the 1.3 meter or 220 MHz band using FM and numerous local repeaters. (OPDX)

This years operation will begin at 20:00 UTC and conclude at 01:00 UTC with the last 90 minutes beaming toward North America, Central America and the Caribbean. A special QSL card will be available to confirm reception reports.

To get a QSL from Radio St. Helena, you must send a written and verifiable reception report by Air Mail and include sufficient return postage to Radio St. Helena, P.O. Box 93, Jamestown, St. Helena, STHL 1ZZ, South Atlantic Ocean. Mark your envelope via Air Mail via United Kingdom & Ascension

For those not aware, Saint Helena was named after St Helena of Constantinople.

RAC Bulletin 2009-034E - Canadian Experiments at 500 kHz authorized.

2009-10-30

After months of negotiations between RAC and Industry Canada over the details of the licence applications and reporting conditions, the first two licences granted to Canadians for experiments at 504 – 509 kHz in preparation for WRC-12 have been issued by Industry Canada ([see RAC Bulletin 2008-29](#)).

Jack Leahy, VE1ZZ, has been assigned call sign VX9PSO in the Developmental Service for his experimental transmissions. Joe Craig, VO1NA, has been assigned call

sign VX9MRC. Both of these stations have been on the air already, with VX9PSO having been reported at 504.6 kHz and VX9MRC at 507.77 kHz. Signal reports can be addressed to the operators at their call book addresses.

Two more authorizations, in Ontario and British Columbia, are expected soon.

Richard Ferch, VE3KI

Vice President, Regulatory Affairs - Radio Amateurs of Canada

RAC Bulletin 2009-032E - Military radiolocation system to operate on 70 cm.

2009-10-07

Military radiolocation system to operate on 70 cm.

As described in Schedule I of RBR-4, amateur usage of the 430-450 MHz (70 cm) band is on a no-protection, non-interference basis. Amateurs may not cause interference to nor be protected from interference from stations licensed in other services operating in that band. The same is true in the United States, and amateur operations on this band in a number of areas of the United States have power limits imposed on them in order to avoid interference to radiolocation services operated by the US military.

Industry Canada has informed RAC that it has authorized the Department of National Defence to use a digital system called Enhanced Position Location Reporting System (EPLRS) on these frequencies. The EPLRS system consists of mobile, fixed, transportable and airborne stations that use 5 MHz-wide spread spectrum channels to provide strategic telemetry information for military

platforms. This authorization is on a no-protection, non-interference basis, which means that no new restrictions will be imposed on Canadian amateur operations in this band as a result.

Industry Canada has informed RAC that there is a slight potential for interference to amateur radio systems, typically in the form of a minor audible clicking noise. If Canadian amateurs encounter such interference, they are requested to report it to RAC at <regulatory @ rac.ca>. The information reported should include the geographical location, date, time, frequency and mode being used by the amateur station, and a description of the interference.

Questions or concerns regarding the planned implementation of EPLRS may be sent to <regulatory @ rac.ca>.

Richard Ferch, VE3KI

Vice President, Regulatory Affairs - Radio Amateurs of Canada

U.S. and Foreign Hams Not Exempt From Bill 118

By Peter West

October 25, 2009

Seems the three-year exemption from Ontario's Bill 118 granted amateurs holding a valid radio operator's certificate only applies to Canadian amateurs. The government exemption applies to operators holding radio certificates issued under the Radiocommunications Act (Canada). This means foreign amateurs including hams from the U.S. are not exempt from immediate prosecution under Ontario's distracted driving legislation.

3 Responses to "U.S. and foreign hams not exempt from Bill 118"

1. On October 25, 2009, Brian Dixon Says:

So Ontario now wants to over-ride international agreements as well!

RIC-3 – Information on the Amateur Radio Service

5. Reciprocal Operating Agreements and Arrangements

5.1 Convention between Canada and the United States of America

The operation of amateur radio service equipment and stations in the territory of the other country is covered in Treaty Series 1952 No. 7 — Operation of Certain Radio Equipment or Stations, Convention between Canada and the United States of America.

Visiting amateurs are not required to register or receive a permit before operating their amateur radio stations.

Each amateur station shall indicate at least once during each contact with another station its geographical location as nearly as possible by city and state or city and province.

The amateur station shall be operated in accordance with the laws and regulations of the country in which the station is temporarily located.

Canadian amateurs operating in the U.S. have the same privileges as they have in Canada, limited by U.S. band edges and mode restrictions in accordance with the Code of Federal Regulations (CFR), Title 47, Chapter I (FCC), Part 97, Amateur Radio Service.

U.S. amateurs operating in Canada must abide by the Radiocommunication Regulations and

Radiocommunication Information Circular 2, Standards for the Operation of Radio Stations in the Amateur Radio Service RIC-2). Those who are qualified to send and receive Morse code at a speed of at least 5 w.p.m. may operate in accordance with privileges accorded to holders of the Amateur Radio Operator Certificate with Basic, Morse code and Advanced Qualifications. U.S. amateurs who are not qualified to send and receive Morse code may operate in accordance with privileges accorded to holders of the Amateur Radio Operator Certificate with Basic Qualification.

NB: The amateur station shall be operated in accordance with the laws and regulations of the country in which the station is temporarily located.

Country.... not Province.

This gets more crazy all the time!

73,
Brian
VE3BHD

2. On October 26, 2009, Tim VE3UO Says:

U.S. and foreign amateurs can still operate their equipment while visiting Canada.. but now apparently not while driving a vehicle.

3. On October 26, 2009 Dave Says:

Regulatory Information Manager for ARRL notified and replied with thanks for this (confirmed) info and will do follow-up as well and notify their members about not being exempt for 3 years.

Ontario hams reacting to Bill 118

By Peter West

October 25, 2009

Bill, VE3MEW, among other amateurs in Ontario is looking for help from other hams to convince the Ontario Ministry of Transportation to adopt similar wording as used in Manitoba to exempt the use of two way radios from the distracted driving legislation. Bill's research has found that Quebec, Nova Scotia and Newfoundland/Labrador did not mention any other electronic device other than cell phones and their legislation is designed to control only the use of a cell phone in a vehicle. Bill can be reached at wgcarew@pipcom.com

Here's a link to the Manitoba information:

<http://web2.gov.mb.ca/laws/statutes/2009/c00609e.php>

5 Responses to "Ontario hams reacting to Bill 118"

1. On October 27, 2009, Richard Appleyard Says:

Bill 118 does a disservice to amateurs as a whole for as I know ham radio operators to date have never been involved in a motor vehicle incident with other vehicles and pedestrians the same goes with other 2-way radio service sections..with dynamic noise cancelling mikes there is no need to have the mike up close. the only time I use the autopatch while mobile is when I am stuck on one of the great parking lots or I request another ham on home base to bring up the patch and dial the number. rac has to be more vigorous in the defense of amateur mobile ops and get the minister of transport to review the legislation in force in other provinces regarding ham radio mobiles. I was stopped yesterday Oct 26th and warned about using my radio and Bill 118 if this is the case my mobile will be coming out

2. On October 28, 2009, Bruce Robertson Says:

I've posted an opinion piece on this issue at my blog: <http://ve9qrp.blogspot.com/2009/10/ontario-bill-118-musings.html>

(Because blogspot doesn't provide trackback, I've provided the link instead.)

3. On October 28, 2009, Dave Robinson Says:

I will not purchase or install anything foreign to my radio. My radio works very well now all by itself. I don't have the funds available for "any" unnecessary expenses "of any kind" thanks to an "x-wife". Therefore if I am not allowed to use my radio it will be removed from the vehicle and I will not be able to volunteer for CanWarn or ARES. Since the radio is not in the vehicle but collecting dust on the shelf I might as well give it back to the owner and surrender my privileges obtained by examination.

4. On October 29, 2009, Wayne Davies Says:

If the "Hands Free" operation law to all amateur and private mobile 2-way transmitters while driving, is not exempted by the Ontario Government, then it's time we make the Ontario Government stand up and abide by their very own traffic laws, that they have placed on us. Make them go "Hands Free" as well, with no exemptions. Think about it. They say to us, the technology is out there, so use it, and begin using "Hands Free" equipment, if you're going to use a 2-way transmitter while driving.

Now here's a Good Example of why they shouldn't be left exempt from their own Ontario Bill 118, "Hands Free" legislation:

A single police officer driving in a squad car, which has a cursor computer, multi-channel 2-way transceiver, a mobile "on/off" repeater setup within the vehicle, also uses a cell phone for private communications to station, and heaven knows elsewhere, operates sirens and lights when needed, maybe even be required to write on a writing pad while driving on Ontario's roadways, and has one hot souped up cursor under their backsides to boot. These are the conditions the single, lone officer in a squad vehicle has to work with every day, even if they are feeling out of sorts on any one given day they are working, from the party they maybe attended the night before, who knows. We all have our down days, and headaches. These conditions are far more distracting, and dangerous on Ontario's roadways, than any amateur 2-way mobile radio station would ever be in, yet the Ontario Government seems to feel fit to exempt them completely in Bill 118. The danger factor here multiplies greatly, while in

a speed chase, pursuing someone, in another fast speeding vehicle.

If we are not exempted in Bill 118, THEN!!, we the common public of Ontario, should force the Ontario Government to also become "Hands Free" with all their government vehicles (with None excluded). By doing this, we end up having all the public's support all across Ontario, and maybe across Canada, instead of having them on our backs as enemies, wanting us to drive with "Hands Free" radio equipment. One thing I will say is, that we amateurs will be in the lime light of the news media, if this happens, and the common public will be quickly reminded on who we are, and what we have provided in services for them, absolutely "FREE" of charge in the past. It will make the public sit up and take notice to our wishes, and cause, for a change, where the Government of Ontario is plugging their ears to our requests for exemption.

I say, ... What's good for the gander, is also just as good for the goose, and the Ontario Government should be the ones out there, leading the way, and not exempting themselves from their own traffic laws. They have given us excuses in saying they want us to go totally "hands Free", saying we as amateurs pose a great threat to others using the roadways, by operating a 2-way transmitter, with the type of "PTT" microphone we are using today. I wonder what excuses they will provide us (John & Jane Doe public), in remaining exempt in Bill 118 themselves, when their mobile transmitters operate in the very same manner as our do, right now. Basically, there is no excuse to remain exempt for them, and should be made to comply with their own traffic laws in Bill 118. We just say back to them, "The technology is there, so use it", in the very same manner as they bluntly told us. Instead of asking for an exemption in Bill 118, we should be demanding the Ontario Government comply to their own demands, and become "Hands Free" themselves, with everyone of their government vehicles. I'm sure the common public still has a bit of a nasty taste regarding this new bill, and will agree on this issue quite readily, and make a big huge stink about it to their MPP's, and Queen's Park. They're pushing us, so why not push twice as hard right back,

each time they push us backwards. In this manner, we have all the public on our side, and not theirs. It's a thought worth thinking about, and setting up, seeing they are refusing to listen to our requests.

73 Wayne va3grp

5. On October 29, 2009, Wayne Davies Says:

You know, after I have re-read my comments above, I find myself seeing an equal rights issue, between those who operate 2-way and Amateur radio equipment, and the Ontario Government and their same usage of 2-way radio transmitters, in both vhf and uhf bands in mobile vehicles in the province of Ontario.

The way I feel about it, is that no Government should impose any law on others, that they themselves are not willing to abide by themselves. The Ontario Government, being the law makers, should in fact be the first to abide by the same rules and regulations they make for others, but in this case, they feel they're above reproach, and the law doesn't apply to them. This is seen in cases where the Police at times are seen breaking laws we have to abide by and seem to get away with it, specially traffic laws. Speeding when not in a police chase, or travelling with their lights and siren active. If they are not called upon to arrive at a specified place in a hurry, then their speeds should remain the same as all other drivers using the roadways. Being in a curser, or dressed in a uniform, doesn't give them the right to drive over the posted speed limits, at anytime, unless it's an emergency of some sort, but they do, and they get away with it.

Maybe this is an equal rights issue, and maybe a lawyer should be asked if it is such. Police fire and ambulance vehicles, have the same type of transmitters we have, but working on other freqs. They are exempt in Bill 118, so...why are we not exempt as well? Again I say, what's good for the big Goose, and also right for the little ganders.

Any comments to my column?

73 Wayne va3grp

VE3QRP blog & Bill 118

By Peter West
October 28, 2009

Bruce, VE3QRP, — nice call Bruce but you'll never be able to operate QRO with a straight face 😊— has a very thoughtful post on Bill 118 and amateur radio use at this blog here [VE3QRP](#).

Right now, in Canada, some provinces are totally exempting the use of amateur radio from their distracted driving Bills and others, most notably Ontario, are going to make hands-free in all moving vehicles where the driver operates a two-way radio mandatory. And, as I've said before: Hands-free isn't the end of amateur radio mobile as we know it. It's relatively easy to do. The question comes down to more of: Is it necessary to make provincial roadways safer?

I hate to be harsh here but let's not waste time beating our chests claiming "our rights" and "they" can't do this to us. They can and they have.

In those provinces where amateurs have made convincing arguments (often to sympathetic ears in government), exemptions have been forthcoming. In Ontario, based on results, we didn't find friends in high places when we needed them. I'm not blaming anyone here (and in fact if there's any responsibility it may well be mine as I live in Ontario and aside from the fact I volunteered to be on the RAC executive this year I could have done more to connect with my local MPP long before I needed him or her to help me now).

The fact that the provincial laws are all over the map may help us in the long run. The fight to exempt amateur radio from the distracted driving legislation isn't

over yet in my opinion. I'd like to see the amateurs in especially Ontario get together and work towards a permanent exemption. As Bruce, VE3QRP, points out in his blog that might not be easy and any exemption must be based more on scientific fact (which we may or may not be able to gather) rather than opinion and angry, hurt outbursts from a few. Let's work together.

6 Responses to "VE3QRP blog & Bill 118"

1. October 28, 2009, Joseph Verdirame VE3LNU Says:

Hi Peter (and Bruce):

I have to say that I agree with the conclusions Bruce VE3QRP reaches in his very thoughtful blog entry for October 28. While I am just as unhappy as the next guy that we have not received a permanent exemption, I believe that public scrutiny on ALL forms of driver distraction will increase as time goes on.

The cell phone ban hit the news BIG TIME this past weekend, with the October 26 implementation date approaching. I don't know how many hams have taken a good look around over the past two days while they were happily driving and operating their exempt mobile radios: just yesterday some pedestrians were giving me some very disapproving looks as I slowly drove by, holding a PTT microphone. Any ham who thinks the Ontario government is "the enemy" had better give themselves a shake! Now that the rest of them can't text or talk on their cellphone while driving (my wife included), what makes us think they will be happy with our exemption? This is a rising tide, my friends! The truth is, most people just don't care what we're doing - to them, we still look distracted with one hand on the wheel and the other holding a microphone.

So by all means, let's not roll over and play dead just yet. But let's also go into this with our eyes wide open. As Bruce says, ultimately the solution will be effective hands free technology for hams, just like for everyone else. And while we're at it, let's call a spade a spade: the amateur radio manufacturers may have been asleep at the switch (just a wee bit) over the past few years, because the technology is there if we really want hands free mobile transceivers.

In the meantime, once I get a cable fixed in the next day or so, I'll be operating mobile exclusively with a Heil headset, exemption or no exemption. This way, at least, the disapproving looks will be replaced with looks of amusement. 😊

73 and good luck, folks.

Joe, VE3LNU

2. October 28, 2009, Brian Dixon Says:

So who has it right? This was posted on the ARES web site yesterday.

OCTOBER 28, 2009.

*** News Bulletin *** Bill 118 *** Exemption ***

Bill 118 Definitions Two-Way Radio***

The following section 14 has been added to the Ontario Regulations of the Highway Traffic Act related to the Distracted Driving Bill 118.

Section 14 Subsection 1:

A person may drive a motor vehicle on a highway while pressing a button on a hand-held wireless communication device to make, answer or end a cell phone call or to transmit or receive voice communication on a two-way radio if the device is placed securely in or mounted to the motor vehicle so that it does not move while the vehicle is in motion and the driver can see it at a glance and easily reach it without adjusting his or her driving position.

Section 14 Subsection 2:

A person may drive a motor vehicle on a highway while pressing a button on a device that is worn on his or her head or hung over or placed inside his or her ear or is attached to his or her clothing and is linked to a hand-held wireless communications device to make, answer or end a cell phone call or to transmit or receive voice communication on a two-way radio or a hand microphone or portable radio

Clarification: Ontario Highway Traffic Act-O.REG.366/09.

Section 13(1) until January 1, 2013. Drivers who hold a valid Radio Operator Certificate issued under the Radiocommunication Act (Canada) may drive a motor vehicle on a highway while holding or using a two-way radio.

In simple terms this final draft of Section 14(1) under Ontario Regulation 366/09 permits an exemption for operators using two-way radio equipment safely installed in a vehicle and activated by the use of a PTT (push to talk) microphone.

Section 14(2) extends this exemption for the use of a portable radio in a vehicle when activated by using a PTT (push to talk) microphone.

Maybe some of the letters HAVE had an impact.

73,
Brian
VE3BHD

3. October 28, 2009, Joseph Verdirame VE3LNU Says:

Hi Peter,

Just a few more comments to add in reference to my post about receiving disapproving stares from pedestrians: many may quite rightly ask, "Why should I care?" A fair point. However, let's remember that most of us would care very much indeed if one of those disapproving pedestrians pulled out his or her cell phone to call police and report a "distracted driver". At best, it would make you late for dinner. At worst, you could find yourself in court trying to explain the exemption to a judge. Science fiction? On the contrary, I believe this is a very real possibility in an age when everyone (and their dog) owns a cell phone and very few people like to mind their own beeswax.



I believe we will see the day, very soon, when calling police to report a distracted driver will become just as common (and popular) as reporting an impaired driver. I can remember the days, as a child, when most people laughed at the idea of drinking and driving. Not so today – an impaired driver is ‘public enemy number one’. I suspect that our cultural norms will soon add the distracted driver to that list of public enemies. And though we may vehemently believe we do not fit into that category, remember: perception is reality.

I believe these are compelling reasons which should motivate us to find good hands free solutions, instead of fighting the rising tide. Society is evolving and, like it or not, we will be transported along with it.

Joe VE3LNU

4. October 28, 2009, Peter West Says:

We’ve too had problems understanding the wording of the definitions but the chief staffer for MoT said in reply to a direct question that it means you can push a button to activate a hands-free communication. It does not mean you can hold a push-to-talk microphone after the exemption period ends.

5. October 28, 2009, dave Says:

the politicians need english and grammar lessons!

6. October 29, 2009, Bruce Robertson Says:

Thanks for posting this reply.

Ontario was probably premature in lumping two-way radio in with all sorts of other distracted activities. I suspect they did so on the basis that *any* glancing away from the road increases danger, but I think the NSC response in the USA is more measured. We are right to base our opposition on the apparent lack of specific research, as noted in the NSC letter to the ARRL. But once we do so, we have to be willing to die by that sword in the coming years should the research show that two-way radios are significantly distracting.

If I’m right that we’re going down that path one way or another, then what I want to see are news reports that highlight how hams are inventing new approaches to ensure that two-way mobile communication is safe. The story we want to tell is, “we pioneered the technology that makes cellphones work, now we’re pioneering technology to make mobile communications safe.”

How about a ‘Canadian Amateur’ ‘Technophile’ competition that focuses on this issue? Perhaps announce the competition in an issue that includes an analysis of the law by a lawyer, so that people can design solutions that aren’t based on their faulty understanding (or, worse, perceived loopholes), but will stand the test of law.

(And about my call, I only use it QRP and on the satellites. Otherwise, I’m VE9QR 😊
73

As the dust settles on Bill 118

By Peter West
October 19, 2009

Seems some hams have just woken up to the ramifications of Bill 118 (Ontario’s distracted driving legislation) and the fact that in three-years time all mobile operators of two-way radios will have to find a way to use their equipment in a hands-free mode. RAC along with representatives from other affected groups including the Toronto FM Society, Ontario Road Rally Sport Association and several hard-working individuals have been making formal and informal presentations to Ontario government staffers and politicians for almost a year now. We have attended numerous meetings, sent tons of emails, placed and answered scores of telephone calls. There’s a lot of hard work and time been given to Bill 118 by these groups and individuals and we should be acknowledging their efforts.

So welcome to these new voices and I’d (VE3HG) like to offer some response to all the comments and emails.

For example (and I’m responding to what I’ve read leaving out names to protect the guilty):

- Bill 118 does not limit anyone from operating a two-way radio while driving a vehicle in the province of Ontario
- This isn’t the end of ham radio as we know it

- RAC never was in negotiations with the Ontario Ministry of Transportation. It’s silly to think so. We were one of a several dozen stakeholders who the government invited to comment on Bill 118 which we did with vigor and frequency but remember, we were the least financially significant group in the room (Remember \$ talk) by a long shot
- IMHO a legal challenge to Bill 118 isn’t going to happen unless somebody’s got an extra \$50K to \$100K
- Even then, the province has the right to pass highway safety legislation (like seat belts) and Bill 118 is it
- IC has so little interest in amateur radio that they don’t even track licenses let alone call a provincial government to defend its use
- Someone (not me) should form a committee of concerned Ontario hams and create an action plan*
- Finally, some emails have suggested that RAC could have done a better job. For that I personally apologize and I pledge to do a better job with your help in the future.

Peter – VE3HG

* As a former vice-president of a national public relations company which launched these sort of lobbying campaigns all the time, here's where I'd start:

The 10-Point Plan:

1. *Research and create a document showing where similar legislation stands in all other provinces and states. The intent here is to create a position statement that clearly shows why amateur radio should be granted an exemption from Bill 118. If we can't do this, then nothing else matters;*
2. *Continue to liaise with the ARRL and other ham radio groups like ARES and CANWARN to share materials and info;*
3. *Identify and contact all other organizations that have used amateur radio and solicit written letters of support for the continuing use of amateur radio signed by the head of these groups, associations and organizations;*
4. *Create a lobbying plan of action and activate by contacting all MPPs in person. Email isn't good enough;*
5. *Maintain and continue contact with Ministry of Transport staffers with intent to show them scientific info designed to change their minds;*
6. *Identify and work with other affected commercial stakeholders to find common ground and purpose in this effort;*
7. *Talk to the current government and the loyal opposition and prepare them both (so whichever is in power in three years) to grant a permanent exemption to all users of two-way radios (my reasoning being that at the end of three years the politicians can say they've saved X number of lives and BTW those two-way radio folks aren't part of the problem so they're exempt.);*
8. *Continue to publicize the community-service work being done by hams around the world, in Canada and across Ontario so that "hobby communications" isn't deemed frivolous and banned outright;*
9. *Continue to do daily or weekly updates to the RAC Blog like this one 🗣️ to keep everyone in the conversation loop;*

10. *Don't say anything in public or via email that you wouldn't want your grandmother to read or hear*
🙄

3 Responses to "As the dust settles on Bill 118"

1. October 20, 2009, Brian Dixon Says:

I'd be willing to help. I'm sure there must be others who are concerned as well.

The comments regarding the commercial users is interesting. I wonder if commercial radios would still be 'certified' or 'type approved' if modified for 'hands free'. And who would be authorized to make the changes. Seems to me that deviation/modulation could be altered considerably causing all sorts of problems. Let's see...maybe \$200 for the 'hands free' thingy...then perhaps another \$250 + for an authorized person to make the modification. Close to \$500 or more for every taxi cab, trucker etc.

And of course Industry Canada would have to approve of any 'attachments' or changes to an already 'type approved' commercial radio. And how long will it take to get all THAT done?

I wonder if the +*^&%\$ people at MTO have thought about this.

Still no reply from my MPP or from the Minister of Industry Canada.

2. October 21, 2009, David VE3UZ Says:

To: Peter VE3HG,
cc: all

Let me say Peter, you have done an excellent job with the Bill 118 actions. Congratulations and a big thank you for your efforts. As you point out, it's not the end of mobile Amateur Radio. A couple suggestions include using a throat mic, or a boom mic, both of which are already on the market. There is still a possibility for reconsideration, but I don't believe Big Brother will change.

David VE3UZ

3. October 27, 2009, richard appleyard Says:

if radio amateurs of canada is not going to defend mobile operations then why bother having a canadian national club maybe we should requesting the arrl to step in and assist but then again the arrl first line of responsibility is towards our american brothers and sister hams. sort of being left out in left field as they say and left to drive. sorry rac but we hams need someone with backbone to stand-up to all levels of government.

Bill 118 explained

By Peter West
October 15, 2009

Thanks to a return telephone call from Ontario's Ministry of Transport staff person who is in charge of working on Bill 118 we've got a better understanding of the definitions released this week in regards to Bill 118 Ontario's distracted driving legislation. Seems the intent

of section 14 is to allow the use of push-to-talk buttons and other controlling devices while banning the holding of a microphone while driving. This ban will come into effect in three years to allow for the introduction of hands-free technology when it comes to two-way radios.

7 Responses to "Bill 118 explained"

1. October 15, 2009, [Bill 118 – How do you look at it? « VA3QV's Weblog](#) Says:

[...] now if you check out the RAC Blog we get told one thing and if you check out the ARES Ontario Website we get told [...]

2. October 16, 2009, Brian Dixon Says:

Mr. Bradley's bunch just seem to make things more confusing all the time.

From the regulations:

Time-limited exemption for amateur radio operators

13. (1) Until January 1, 2013, drivers who hold a valid radio operator certificate issued under the Radiocommunication Act (Canada) may drive a motor vehicle on a highway while holding or using a two-way radio.

But they define a 'two way radio' as:

"two-way radio" means a wireless communication device, consisting of a main receiver unit and a separate hand-held microphone, that is operated by a push-to-talk function on a set frequency and that allows for voice communication but not for the transmission and receipt of voice communication at the same time. ("radio bidirectionnelle")

On a set frequency? Do we all go back to crystal control?

And what police officer will know if it's 'set' or not? The police officer who likely knows absolutely nothing about amateur gear? I have an HT that could be mistaken for a cell phone too.

This gets worse all the time.

I still argue that they have no jurisdiction at all. It's Industry Canada.

Just look at the definitions in the Radio Communications Act.

Time will tell. Still have not heard back from my MPP.

3. October 16, 2009, dave robinson Says:

i anticipate a legal challenge sometime after Jan. 1, 2013. we "are" governed by "Industry Canada" and not by any currently seated provincial governing body. if this takes place i will willing forward funding towards this endeavour. i hope everyone in Ontario does! RAC and DARF need be more insistent and verbal with government or they serve us no purpose. Manitoba exempts amateur radio operators from their distracted driving law. Federally in USA the safety powers that govern the USA have stated "after investigations" that amateur radio operators need not be restricted in their use of their equipment in a mobile setting, but, should utilize safe practices when doing so. We as amateurs govern ourselves for the most part and as such are as a whole a safe group. If "we" had a problem with driving and talking we would have addressed this long ago. and there is no need for Bill 118 as there are already laws on the books regarding distracted driving circumstances.

my apologies for keeping this post verbally civilized.

4. October 16, 2009, dave robinson Says:

so please explain the difference between holding a microphone and holding a ptt switch re section 14, as they see it? a microphone or ptt switch is just that, you are holding something in your hand. section 14 clearly states "microphone" in the wording. quote-permits an exemption for operators using two-way radio equipment safely installed in a vehicle and activated by the use of a ptt microphone - . a microphone is a ptt switch!

5. October 18, 2009, Brian Dixon Says:

For those of you who feel the 'jurisdiction' issue won't fly...take a look at this:

R v. Forbes, decided in the Ontario Provincial Court (Criminal Division) on June 8, 1981, Judge K.A. Langdon (unreported). The case involved an amateur (ham) radio operator who was accused of violating a City of Mississauga by-law which was designed to control interference in residential areas. The judge dismissed the case and stated that regulation of the emissions from radio stations was exclusively within the legislative competence of the federal government. (See esp. at p. 4)

This is from the IC web site

73 and keep the pressure up.

Brian
VE3BHD

6. October 19, 2009, Wayne Davies Says:

It should be noted, that if Ontario does get away in totally enforcing the "Hands Free" ruling of Bill 118, when the final deadline arrives 3 yrs, from now, the affect may ripple straight across Canada, where other Provinces that have exempted, and allowed the use of mobile Amateur Radio mikes, as they are today, may have those exemptions rescinded, by provinces now exempting them. Other provinces may take a second look at both Ontario's Bill 118, and their own, and figure that if Ontario can do it, and have their new law stick in the courts, we can do the same thing, and rescind that exemption to a "Hands Free" law, such as Ontario is now imposing. What Ontario does, and gets away with, will end up affecting all amateurs nationwide across Canada in the coming future, if an exemption with Ontario is not reached, for Amateurs using existing mobile mikes in Ontario.

Another point. Why doesn't the Ontario government not include themselves in this Bill 118, with all government vehicles on the road today (Fire Ambulance, Road/Hwy vehicles, and police to name a few that they operate)? A single police officer, alone in their vehicle, has to operate a computer, siren, lights, and transmitter within his or her squad car while driving on Ontario's roadways, each an every day they work, even during high speed chases. Tell me, how less dangerous are they, than us? In fact, they're far more dangerous than us on the roads. They have lots of distractions. Specially during a high speed chase. They can't stop in a high-speed chase to change

freqs., work the computer, operate and listen to their transmitter, while listening to the high, loud pitch of a siren, and bright over-head flashing lights flashing in their eyes in busy, moving traffic, without being a complete danger to themselves, and others on and off the roadways. This distracts their driving abilities more so than ours do.

With this new law, we in Ontario, will have to pull over to the side of the road to make changes to our transmitters operations if needed, because we will no longer have the key/button pads to make those changes through our mike cords. The mike cords and the mikes being used now, allow the driver/radio operator, to make changes quickly, by raising the mike high enough so they don't have to take our eyes far off the road while making those changes. Many can do it by sense of touch, without having to look at the mike at all. It will be far more dangerous for us to try and make changes to our transmitters from the face plate, while driving. In most cases, it can't be done safely, the LCD screens have numbers far too small to read for alot of operators, so pulling off the road is a must, in order to make freq. changes, and mode changes, without causing an accident. It will be even more complex and dangerous for those operating multi transmitters within their vehicles while driving.

I have said it before, and I'll say it again here, we amateurs all across Canada should be standing together as one large body, and going after the Ontario Government to have things remain as they are now, and have them exempt us from Bill 118. What affects Ontario's mobile operators, will surely affect operators all across Canada in the years ahead, if we don't act now, and nip it in the bud!!! 73

7. October 22, 2009 dave robinson Says:

here is another possibility.....

what the province wants me to do is use my radio in my opinion to transmit illegally. here is the scenario, the province wants me to connect a hands free device of some kind which there is many possibilities, i only refer to the Bluetooth kind here. it is an "unlicensed" radio system connected to my "federally licensed" and "federally regulated" radio to activate it. point #1 i believe this contradicts industry Canada regulations. point #2 i thru the level obtained of my amateur licence status am not permitted to have care/control (ownership) of a "repeater". using the Bluetooth system makes my radio a "repeater". therefore the province is forcing me to "federally" operate illegally and to "provincially" operate legally under this scenario.

Even IC swept up in Bill 118

By Peter West
October 23, 2009

Despite the assertions of some hams that amateur radio mobile operation in Ontario is exempt from provincial legislation since we are federally licensed comes this information from a very recent meeting between Radio Amateurs of Canada officials and officials with Industry Canada. Seems even inspectors working for Industry Canada must comply with the provincial legislation because they too are subject to the Ontario Highway Traffic Act when they drive on public roads in Ontario.

While all amateur radio operators should support safer driving legislation such as Bill 118, we contend that the proper, responsible use of mobile amateur radio two-way radio transceivers does not contribute to distracted driving. And, we believe that given the support of amateur radio operators across Canada we can provide compelling data that supports our contention. And, further this initiative must come from those of us who truly care about amateur radio and safe mobile operation. It is not the responsibility of one ham who writes a blog 😊.... It's not the responsibility of Radio Amateurs of Canada which is merely (and I use this term not to minimize RAC's effect but to bring attention to RAC's limited resources) a small group of volunteers. It's the responsibility of every single one of us who cares

about amateur radio and our ability to provide communications services to our local communities and to freely enjoy our hobby.

Now is the time for those of you who do care about amateur radio to ban together. Amateur radio has long been referred to by some as the secret brotherhood (and increasingly over the years a sisterhood as well). We are everywhere but to the public we remain largely unknown. Our achievements and sometimes moments of heroic service have gone unacknowledged. We have remained modest and quiet for too long.

We have a compelling story to tell. We need to begin to tell it to all who will listen. Who will join us in this campaign for change?

2 Responses to "Even IC swept up in Bill 118"

1. October 23, 2009, Brian Dixon Says:

I'm willing to help. BTW it appears that Spectrum Management Officers ARE exempt. Looks like Mr. Bradley didn't want to fight with them. He'd lose.

2. October 23, 2009, Brian Dixon Says:

Ah...took another look. They're exempt from 'display screens'.

Still no word from my MPP (it's been two weeks now) or a reply from the Minister of Industry.

Bill 118 precautions

By Peter West
October 21, 2009

Within the next few days police in Ontario will begin to pull over drivers they see texting or talking on cellular telephones. It is entirely likely that some amateur radio operators, who are legally exempt from Bill 118, will be stopped if they are seen to be operating their mobile radio equipment.

In order to prevent any unnecessary delay, amateurs in Ontario should consider carrying a copy of their Certificate of Proficiency plus a copy of the exemptions section of Bill 118. ([Here's a link.](#))

While such stops maybe annoying, the ability to produce these documents quickly would likely prove helpful.

If you are stopped by police for operating your two-way radio equipment RAC would very much like to hear from you. We will be keeping a record of any such stops for possible future use in our ongoing talks with government officials.

Any information can be forwarded to ve3hg@rac.ca

3 Responses to "Bill 118 precautions"

1. October 21, 2009 Brian Dixon Says:

Doing what you suggest is a good idea. However, it may not save your bacon anyway. This story from eham will give you an idea of what we're in for it we don't get this thing overturned.

NYC Ham Ticketed for Using 'Cell Phone' (Really a Ham Radio):

from Joe, W2JLH on December 8, 2005

Website:

<http://www.wb2hww.com/viewtopic.php?p=131&sid=7177ab750e453915e417f44c8ae440b7#131>

View comments about this article!

GUILTY GUILTY!

Back on May 12 2005 I received a "cell phone in use" ticket on 23rd Street and FDR Drive Manhattan. The Hearing was today and the judge found me guilty.

How it unfolded:

I am so angry I feel violated and I feel every Amateur Radio Operator recieved a ticket today.

The officer swore in and explained that "he saw me using a cell phone, pulled me over and explained that I cannot use a cell phone while driving". The judge asked If I wanted to speak I said "Your honor, after the officer stopped and explained that he was going to give me a ticket for "cell phone in use" I told the officer that this was not a cell phone it is an amateur radio" I explained to the judge that I was a licensed amateur radio operator and handed him my original license and also pointed out that my license plate was

an amateur radio license plate. I also presented a written letter from KC2CBA Tom Golero which was notarized and explained that at the time of the incident I was talking to him on amateur radio like we do every morning.

The judge did not buy it and I told him, "your honor with all do respect NYC TRAFFIC LAW TITLE 7 ARTICLE 33 1225C (B) DEFINES A "MOBILE TELEPHONE AS ONE CONNECTED TO A PUBLIC SWITCH". Amateur radio is not connected to a public switch it's Radio to Radio.

Then he opened his law book read it but still was in doubt. He asked me to describe the radio and how I was using it. I described the Mobile radio and made it clear that it was a microphone with a cord held in front of my mouth. THAT WAS ENOUGH FOR HIM TO HEAR AND HE SAID I WAS GUILTY because I held it in close proximity to my ear.

We all got a ticket today.

I will appeal. I contacted George Tranos ARRL Section Manager NYC/LI and informed him. Unfortunately he was not there so I left a message and my number.

I might need all the help I can get for this guys.

Lets Make Noise!

Joe W2JLH

2. October 22, 2009, dave robinson Says:

i need point out that section 13 (1) states quote... valid radio operator certificate issued under the radio communications act (canada). this means that our good friends visiting from united states of america do not have this exemption and will be ticketed immediately.

3. October 25, 2009, Dan Martin Says:

Simply pull out of all public service activities until this law gets amended. Harsh as it may seem, and maybe it will not have any effect, but the time has come to take a stand. If the legislative bodies don't want us using our gear while mobile, then there goes storm watching in the midwest, volunteer activities, a.r.e.s , no emerg services back-up drills, etc.

Do the emergency service personnel get any special safety training in mobile radio use? Of course not, yet they can supposedly endanger everyone.

We regret to inform you that in order to comply with this bill we must cease any and all involvement with your activities.

Wild fires, tornadoes, natural disaster, terrorist attack, Sorry can't help. Don't know how to operate my rig while mobile. Don't even have one due to the law. Have a secure day!

Bill 118 definitions

By Peter West
October 13, 2009

Just when we thought Bill 118 was a dead issue [comes the details of the definitions and exemptions](#). In section 14 we find this curious exemption:

Exemption for pressing buttons

14. (1) A person may drive a motor vehicle on a highway while pressing a button on a hand-held wireless communication device to make, answer or end a cell phone call or to transmit or receive voice communication on a two-way radio if the device is placed securely in or mounted to the motor vehicle so that it does not move while the vehicle is in motion and the driver can see it at a quick glance and easily reach it without adjusting his or her driving position.

(2) A person may drive a motor vehicle on a highway while pressing a button on a device that is worn on his or her head or hung over or placed inside his or her ear or is attached to his or her clothing and is linked to a hand-held wireless communication device to make, answer or end a cell phone call or to transmit or receive voice communication on a two-way radio or a hand microphone or portable radio.

Needless to say an email was sent this morning to ministry staff asking for clarification. Sure reads like a typical vhf/uhf installation with microphone attached. Part 2 reads like a handie-talkie with an external microphone with a clip on the back to affix it to the operator's clothing.

4 Responses to "Bill 118 definitions"

1. October 13, 2009, Joseph Verdirame Says:

Hi Peter,

Thanks for highlighting this part of the regulation. It really does seem that the MTO are trying to accommodate the operators of two-way radios as much as possible, while still maintaining the 'spirit' of hands-free communication, i.e. you shouldn't actually be able to see a driver holding a microphone or HT in his/her hand. The exemptions do seem to provide plenty of options for mobile operators, with just a little tinkering and imagination.

I look forward to reading about any light you can shed on the subject through further investigation; in the meantime, this certainly does seem encouraging. Whether or not we get a permanent exemption after Jan. 1, 2013, I think most people could work with this

reg even as it is currently written; we should not be discouraged.

73
Joe, VE3LNU

2. October 13, 2009, Brian Dixon Says:

This is not over yet. I have written a letter to my MPP to point a few things out. They may be starting to realize they have no authority over 'hand mics' anyway. The definition of terms in the Radio Communications Act is very clear:

From the Radio Communications Act:

1993, c. 40, s. 23

"radio apparatus"

*appareil radio+

"radio apparatus" means a device or combination of devices intended for, or capable of being used for, radiocommunication;"

This makes it pretty clear that the Microphone is part of the 'apparatus'.

They can't dictate our use of 'hand mics' any more than they can tell CFRB to move from 1010 to 1060 and reduce power to 5 KW!

RAC needs to take them to court with a 'constitutional challenge' to Bill 118.

I've written to RAC as well along with a copy of my letter. I've not heard back as yet. I'm looking forward to hearing from RAC's legal council.

Anyone interested in my letter can contact me thru RAC email.

3. October 14, 2009, [Oh yes they can..... « VA3QV's Weblog](#) Says:

[...] By va3qv As I make this comment I would ask that you head over to the RAC Blog and check out THIS ARTICLE and then carefully read the article and its comments and then just to refresh your mind read the [...]

4. October 15, 2009, Warren Paulson Says:

"while pressing a button on a device that... is attached to his or her clothing and is linked to a hand-held wireless communication device to... transmit or receive voice communication on a two-way radio or a hand microphone or portable radio."

Seems to me if we duct tape our mic cords to our shirts while driving, we're good to go...

VE3FYN

MEMBERSHIP INVITATION

-- Membership application and dues are currently requested.

Our term of membership runs from October 1 to September 30 of the following year. Each and every year it is increasingly more difficult to get Amateurs to commit to membership in their local club due to the alternate functions we are asked to fund.

*The **London Amateur Radio Club** has a long history of providing technical support, social support and repeater facilities. Public service efforts are currently provided by a club affiliation with Amateur Radio Emergency Services (**ARES**) and **Radio Amateurs of Canada (RAC)**.*

Your Directors work tirelessly to provide meeting topics that are informative and entertaining, events that are timely (Christmas meeting, field day, bus trip) and participate in events that display and promote Amateur Radio in the community.

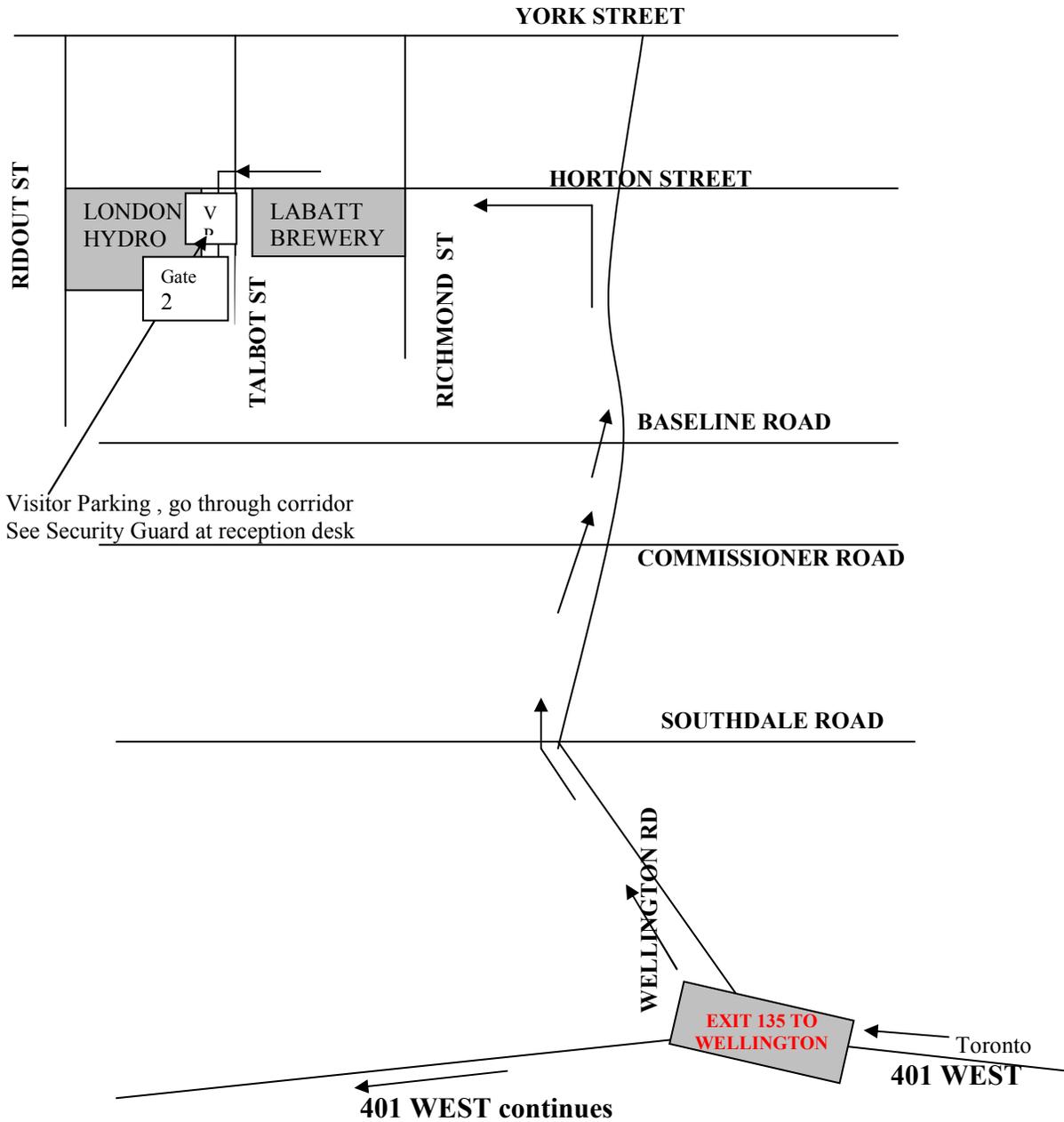
To be effective in its pursuits, the Club needs the support of the local Amateur fraternity through membership.

While we obtain financial support from our Annual Flea Market, we require membership support to fund such things as meeting hall rent, repeater sites rent and maintenance, web site fees, membership cards and liability insurance. For what it's worth, none of these things are getting any cheaper.

The cost of membership has not changed for a number of years and even in the face of increased cost, we would like to keep it that way.

With more than 1000 'hams' in the London area, it's inconceivable that less than 10% support a pastime about which most of us are passionate.

PLEASE, make a choice and do your part to keep the **London Amateur Radio Club** alive and well by purchasing your membership at our next meeting (or by mail – details on our web site). The cost is still only \$25.00 (single) or \$30.00 (family residing at the same address).



London Hydro
111 Horton St.
Tel: (519) 661-5800

TORONTO TO LONDON HYDRO MAP



| | |
|--|--|
| Office Use Only | |
| <input type="checkbox"/> Paid _____ | |
| <input type="checkbox"/> Cash <input type="checkbox"/> Chq | |
| Membership Card | |
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| Sticker | |
| <input type="checkbox"/> Needed <input type="checkbox"/> Rec'd | |

**LONDON AMATEUR RADIO CLUB INC.
MEMBERSHIP APPLICATION**

PLEASE PRINT

SINGLE MEMBERSHIP: \$25.00 RENEWAL
 FAMILY MEMBERSHIP: \$30.00 NEW MEMBER

| | | | |
|------------|--|--------------|--|
| Member # 1 | Last Name | First Name | Call Sign |
| | _____ | _____ | _____ |
| | RAC Member? | RAC Member # | ARES Volunteer? Email Address |
| | <input type="checkbox"/> No <input type="checkbox"/> Yes | _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No _____ |

| | | | |
|------------|--|--------------|--|
| Member # 2 | Last Name | First Name | Call Sign |
| | _____ | _____ | _____ |
| | RAC Member? | RAC Member # | ARES Volunteer? Email Address |
| | <input type="checkbox"/> No <input type="checkbox"/> Yes | _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No _____ |

| | | | |
|------------|--|--------------|--|
| Member # 3 | Last Name | First Name | Call Sign |
| | _____ | _____ | _____ |
| | RAC Member? | RAC Member # | ARES Volunteer? Email Address |
| | <input type="checkbox"/> No <input type="checkbox"/> Yes | _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No _____ |

| | | | |
|------------|--|--------------|--|
| Member # 4 | Last Name | First Name | Call Sign |
| | _____ | _____ | _____ |
| | RAC Member? | RAC Member # | ARES Volunteer? Email Address |
| | <input type="checkbox"/> No <input type="checkbox"/> Yes | _____ | <input type="checkbox"/> Yes <input type="checkbox"/> No _____ |

Address: _____

_____ Street/P.O. Box

_____ City/Town _____ Province _____ Postal Code

_____ Phone Number

Date: _____

*All information requested should be completed - this will be used for the club's membership database only.
All LARC membership information is held in strict confidence.*

Please make cheque payable to: **London Amateur Radio Club Inc.**

Mailing Address: London Amateur Radio Club
c/o Membership Director, VA3MSV
P.O. Box 82, Station B
London, Ontario, N6A 4V3