



Welcome to the Wonderful World of Amateur Radio

DO YOU?

- enjoy the thought of communicating with people around the world without the use of phones or the Internet?
- like experimenting with electronics?
- like interfacing radio transmitters with your computer?
- want to serve your community at social events or during serious emergency situations?
- want to talk to astronauts in the International Space Station?
- look forward to developing new relationships and learning what is going on around world through the airwaves?

If you answered maybe or yes to any one or a few of these questions, then Amateur Radio may be for you!

WHAT IS AMATEUR RADIO?

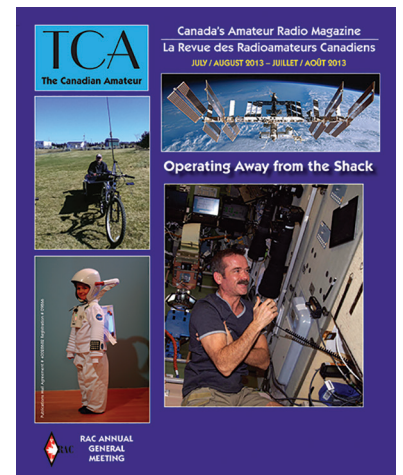
It is a form of communication; a hobby; a community service.

It could be a teacher in Nova Scotia making friends over the radio with another Radio Amateur in New Zealand; an Alberta teenager using her computer to upload a chess move through her radio which is retrieved by a fellow chess fan in Florida via an Amateur Radio space satellite; or a truck driver in Manitoba contacting Radio Amateurs in a hundred countries during a single weekend contest.

Many Radio Amateurs serve their communities by providing communications at community events or in support of organizations dealing with emergencies. The Amateur Radio Emergency Service sponsored by RAC brings together Radio Amateurs to develop the special skills needed to serve these organizations. This unique mix of fun, convenience and public service is what distinguishes Amateur Radio.

People get involved in Amateur Radio (sometimes called Ham Radio) for many reasons, but they all have in common a basic knowledge of radio technology, regulations and operating principles. All have passed an examination leading to an authorization to operate on the "Amateur Bands". These frequency bands are reserved for use by Radio Amateurs at intervals from just above the AM broadcast band all the way up through the microwave frequencies.

Even though Amateur Radio conversations may be heard around the world by anyone with a suitable radio receiver, given the right frequency and propagation conditions, Amateur Radio is basically two-way communication between Radio Amateurs.



The appeal of Amateur Radio is the ability to communicate across the country, around the globe, and even with astronauts on space missions. Many Radio Amateurs build and experiment with radio.

Computer hobbyists find digital modes to be a low-cost way to expand their ability to communicate. Those with a competitive streak enjoy contests where the object is to see how many Radio Amateurs they can contact in a fixed time period. Some like the convenience of a technology giving them portable communication. Others use it to open the door to new friendships over the air, or through participation in an Amateur Radio club. Many combine Amateur Radio with the Internet in various ways.

How are Amateur Radio operators “authorized” in Canada?

Amateur Radio in Canada is regulated by a federal government department, Industry Canada (recently renamed Innovation Science and Economic Development Canada). A step-by-step guide on becoming an Amateur can be found on their website at: http://www.ic.gc.ca/eic/site/icgc.nsf/eng/h_07048.html#ic-subnav-2

The first level of authorization is the Amateur Radio Operator Certificate with the Basic Qualification. Passing (70%) a multiple choice exam of 100 questions will provide you with your own call sign and allow you to operate on all Amateur Radio frequencies above 30 MHz. These are most often used for relatively short-range radio to radio communications that can be extended to greater distances using “repeaters” operated by other Radio Amateurs.

The next level of authorization allows Radio Amateurs to use all of the Amateur frequency bands including those allowing direct communications with other Radio Amateurs over much greater distances.

There are two ways to achieve these greater operating privileges: by passing the Basic exam and also by demonstrating the ability to send and receive Morse Code at 5 words per minute or by scoring a higher mark on the Basic exam. The “Basic with Honours” qualification is awarded to persons who get 80% or higher on the 100-question, multiple choice exam. Today the majority of candidates who pass the Basic exam achieve Honours and are able to use all Amateur Radio bands immediately.

The Advanced Qualification added to your Basic Qualification will allow you build and operate your own transmitting equipment, sponsor a club station, run higher power and operate your own repeater station. To earn this qualification requires passing a 50-question multiple choice examination on radio theory.



The examinations may be taken in any order but station operating privileges require a Basic Qualification. Candidates for the examination for Basic, Morse Code or Advanced qualifications are examined by an accredited examiner.

Radio Amateurs of Canada

Radio Amateurs of Canada is a national organization representing the interests of Amateur Radio all across Canada. Speaking on behalf of Canadian Radio Amateurs, RAC provides liaison with government agencies and carries the Amateur voice about regulatory and spectrum issues to the discussion table with government and industry leaders, nationally and internationally. With its headquarters in Ottawa, RAC is the Canadian voting member society of the International Amateur Radio Union (IARU). For more information please visit <http://wp.rac.ca>.

Amateurs and Clubs

There are many advantages to joining an Amateur Radio club. Clubs are a great resource and can help ease the transition by pointing you in the right direction: purchasing and setting up the right equipment; helping to explain the

terminology; and providing a much-needed social network. For a list of Canadian Amateur Radio clubs please visit: <http://wp.rac.ca/clubs/>

Here are some helpful links which have some additional information you need to get started in Amateur Radio:

Amateur Radio Operator Certificates

Frequently Asked Questions

http://www.ic.gc.ca/eic/site/025.nsf/eng/h_00006.html

Amateur Certification – Fact Sheet

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01862.html>

Prescott-Russell Amateur Radio Club

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