



# Beginner's Classroom

Joe Robinson VA3MRF, 4 Hatchet Place, Scarborough,  
Ontario M1B 1C7 (416)297-0449 odfa@rogers.com

This column attempts to explain some aspect of our hobby each month. The subjects may be technical or they may concern such things as DX practices and traditions. Suggestions for topics are always welcome.

## BEGINNER'S CLASSROOM FOR DECEMBER 2009

### EVER CONSIDERED AMATEUR RADIO?

Many of our members/subscribers/readers over the years have either been or become amateur radio operators. As you have seen on the masthead of this column I am licensed as VA3MRF. Back in the last millennium (1969 to be exact) I operated as WN3MRF and WA3MRF when I lived near Philadelphia, PA, and after coming to Canada I was gently urged by Steve Canney to obtain my Canadian ham license. Amateur radio has numerous facets – there is HF operation where people can talk between provinces, states and even countries; repeater operation where local (and not so local) hams can keep in contact; contests, emergency communications, TV, CW... the list goes on and on. This month we'll take a look at the basics of becoming an amateur radio operator in Canada, and the basic structure of the hobby throughout North America and the World.

#### Classes of Amateur Licenses in Canada

There are two major classes of amateur licenses in Canada:

1. **Basic Qualification.** The holder of a basic Canadian Amateur license is allowed access to all ham bands above 30 MHz. There are two additional Basic Qualifications: **Basic Qualification with Honours**, which allows access to all amateur bands below 30 MHz (you must score 80% or more in a 100 question exam in order to attain this license), and the **Basic Qualification with Morse Code**, which also allows an operator to use the HF bands below 30 MHz. Note that Morse code is no longer a requirement for any Canadian amateur license.

2. **Advanced Qualification.** The holder of an Advanced Canadian Amateur license is allowed access to all amateur bands in Canada, use 1000 watts maximum transmitter power, can build transmitting equipment, and can use repeaters and remote stations. The advanced license can also come with a Morse code qualification, but is not necessary. It should be noted here that the Morse code speed for either qualification is five words per minute.

#### Classes of Licenses in the United States

1. **Technician Class:** This class of license allows an operator transmitting privileges above 30 MHz, as well as using Morse Code (CW) on the old Novice class bands of 80,

40 and 15 meters. As well, Technician class operators may use 10 meters for voice or CW.

**2. General Class:** The difference between General and Technician class is that the General class license allows one to utilize the HF bands below 30 MHz, except for a few kHz in some bands that are reserved for the Extra Class license. Both the Technician and General Class write a 35-question exam appropriate to their level of operation, and no Morse code is required.

**3. Extra Class:** The Extra Class license allows for operation on all modes in all ham bands. Although there is a 50-question exam on electronics, operations and rules/regulations, there is no longer a Morse code requirement (it used to be a 20 WPM requirement!).

### **How to Study to become a Radio Amateur & Where to Obtain Study Information**

There are many resources on studying for the various radio amateur licenses. These can be found in books, on the Internet, and in classes and materials provided by individuals and ham clubs throughout North America. Some of the more popular and widely used resources include the Canadian Amateur Radio Basic Qualification Study Guide and Hamstudy Basic books, as well as an Advanced Study Guide CD, all produced by the Radio Amateurs of Canada (RAC). In the United States, the American Radio Relay League (ARRL) offers The ARRL Ham Radio License Manual and an online course on studying for a ham license. A short section on these two organizations is given toward the end of this column.

### **Licenses and Call Letters**

In Canada, “stations” are no longer licensed; but rather, operators receive a set of call letters that are unique to them as proof of their being an amateur operator. VE and VA calls are most common, with the number 1 = Nova Scotia, 2 = Quebec, 3 = Ontario, 4 = Manitoba, 5 = Saskatchewan, 6 = Alberta, 7 = British Columbia, 8 = Northwest Territories, and 9 = New Brunswick. Other calls include CY0 = Sable Island, CY9 = St. Paul Island, VO1 = Newfoundland, VO2 = Labrador, VY0 = Nunavut, VY1 = Yukon and VY2 = Prince Edward Island.

In the United States there is a plethora of possibilities for the call sign prefixes, most of them beginning with W, WA, etc., K, KA, etc., N, NA, etc., AH, KH, NH. The full list of USA call sign prefixes is available at the RAC and ARRL websites.

### **Two Great Amateur Radio Organizations in North America**

**RAC – The Radio Amateurs of Canada.** RAC is the official amateur radio organization in Canada, founded in 1993 when the Canadian Radio Relay League merged with the Canadian Amateur Radio Federation. RAC is involved in all facets of Canadian and worldwide amateur radio operations, and puts out a monthly magazine

called **The Canadian Amateur**. For more info on RAC, go to their website at [www.rac.ca](http://www.rac.ca).

**ARRL – The American Radio Relay League**. Founded in 1914, the ARRL has spent the last 95 years getting amateurs involved in everything from emergency communications to contesting to rag-chewing (talking on the radio rather than just exchanging name/location/signal strength). The main publication of the ARRL is **QST**, and their website is located at [www.arrl.org](http://www.arrl.org).

If you have any questions concerning amateur radio or getting started in this wonderful hobby, please send me an e-mail and I'll try to answer all your queries. As well, don't forget to read David Ross' column **QRZ? Ham Radio Corner**, which appears every month in our ODXA columns/articles list. The column is an excellent source of up-to-date amateur information in addition to DXpedition and contest news.

Merry Christmas, Happy Hanukkah, and the best for 2010 to one and all, and to all a good night (of radio enjoyment)!

73, keep smiling and keep listening,  
J O E