

Explore the Magic of Radio!

Earn your Amateur
Radio license!

Make friends around the world!



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Exotic Locations

For more information
contact
Al Penney at 847-0554
or at
alphonsepenney@gmail.com

Introduction to
Amateur Radio
Chapter 1

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Objective

- Learn about the Radio Regulations structure.
- Learn about the Basic Qualification and exam procedure.
- Discuss study skills.

Radio Regulations - International

- Radio communications regulated at international level by the **International Telecommunications Union (ITU)**.
- Created as International Telegraph Union in 1865.
- Became specialized agency of United Nations in 1947.
- All sovereign nations have right to be represented and have opinion considered when new regulations or changes proposed.

International Telecommunications Union



- The ITU:
 - coordinates the shared global use of the radio spectrum;
 - promotes international cooperation in assigning satellite orbits;
 - works to improve telecommunication infrastructure in the developing world; and
 - assists in the development and coordination of worldwide technical standards.

Radio Regulation in Canada

- **Radiocommunication Act** gives Minister of Industry the authority to implement these international regulations, modified as necessary for Canadian requirements.
- **Industry Canada (IC)** is responsible for administering the Radiocommunication Act.

Industry Canada

- IC makes regulations that directly affect Amateur Radio.
- Responsible on a day-to-day basis for:
 - Operator testing;
 - Issuing callsigns;
 - Responding to interference complaints; and
 - Any and all operational issues.

Amateur Radio

- Defined as a Service under both Canadian and ITU regulations.
- Amateurs do not have access to the rule-making process however.
- All conflicts and concerns resolved through recognized third parties.

Amateur Radio Societies

- **International Amateur Radio Union (IARU)**
 - Since 1925, the watchdog and spokesperson for the world Amateur Radio community.
- **Radio Amateurs of/du Canada (RAC)**
 - National Amateur Radio society of Canada.
 - Represents the interests of Amateur Radio in Canada.
 - 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.



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Canadian Amateur Radio Advisory Board

- A non profit consultative group consisting of members of the Radio Amateurs of Canada (RAC) and the Spectrum Management Operations Branch of Industry Canada (IC).
- Function is to provide a consultative forum between Canadian radio amateurs and IC.
- Agreed-upon action is not binding on either the RAC or IC.

Classes of Certificates

- Since 2005, two classes of certificates;
 - **Basic Certificate**
 - **Advanced Certificate**
- Pass mark for Basic exam is **70%**.
- A mark **of 80%** or more is an **Honours Pass** and grants extra privileges.
- Morse Code qualification is voluntary.

Basic Qualification

- First step – all that many need.
- Following privileges:
 - Access to all bands above 30 MHz
 - Max transmitter power of 250 watts input
 - May build/operate commercial kits
- Honours pass gives access to bands below 30 MHz.
- 5 wpm Morse Certificate also gives access to bands below 30 MHz.

Advanced Qualification

- Emphasis is on technical subjects.
- Extra privileges:
 - Can build and operate transmitters;
 - Can operate repeaters and automated stations;
 - Can use higher power; and
 - Can sponsor club stations,
- This course is for the Basic Qualification only.

Eligibility

- No age or nationality restrictions.
- Must provide Photo ID to write the exam.
- Exam available in English or French.
- Oral examination is possible.
- NO EXEMPTIONS to writing the exam.

The Exam!

- 100 question multiple choice exam.
- Pass mark 70%, Honours Pass 80%.
- **ENTIRE QUESTION BANK** is available on the Industry Canada website!
 - http://www.ic.gc.ca/eic/site/025.nsf/eng/h_00043.html
- IC website has a practice exam generator
 - http://www.ic.gc.ca/eic/site/025.nsf/eng/h_00040.html

Canadian Amateur Prefixes

- **CY0 Sable Is**
- **CY9 St-Paul Is**
- **VA1 Nova Scotia**
- **VA2 Quebec**
- **VA3 Ontario**
- **VA4 Manitoba**
- **VA5 Saskatchewan**
- **VA6 Alberta**
- **VA7 British Columbia**
- **VE0 Stations at sea**
- **VE1 Nova Scotia**
- **VE2 Quebec**
- **VE3 Ontario**
- **VE4 Manitoba**
- **VE5 Saskatchewan**
- **VE6 Alberta**
- **VE7 British Columbia**
- **VE8 Northwest Territories**
- **VE9 New Brunswick**
- **VO1 Newfoundland**
- **VO2 Labrador**
- **VY0 Nunavut**
- **VY1 Yukon VY2 Prince Edward Is**
- **VY9 Government of Canada**



VY1

VE8

VYØ

VEØ

International waters

VA7
VE7

VA6
VE6

VA5
VE5

VA4
VE4

VA3
VE3

VA2
VE2

VO2

VO1

CY9

St. Paul Island

VY2

VE9

VA1
VE1

CYØ

Sable Island

VY9
Government
of Canada

Study Skills

- Select a suitable study location.
- Schedule time to study. Take breaks as necessary.
- Read the material before class.
- Review the material the day after class, and again a week later.
- Do the practice questions – they are the ones on the exam!
- Research the topics – use the Internet, YouTube, libraries etc. Remember that US regulations are not the same as Canadian however!

Study Skills

- Take notes in class.
- Don't fall behind!
- Don't get psyched out by math!
- Ask questions in class!
- Some of the material is pure memorization – make flash cards to study with.
- Participate in the HARC meetings – you will pick up a lot of background knowledge.

Resources

- PowerPoint presentations and links to YouTube videos available at HARC website.
- Coax Publications website has material to assist students – need your invoice number.
- Industry Canada website has question bank and practice exam generator.
- Members of HARC are ready, willing and able to assist you!

Questions?