Brief Introduction to Becoming an Amateur Radio Operator

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Thank you for your interest in Amateur Radio (commonly called Ham Radio).

Before you can get on the air, you need to be licensed and know the rules to operate legally.

An Amateur Radio license is issued by the FCC, but the exam question pool is written by and administered by fellow ham radio operators. There are three classes of licenses (formerly 5): **Technician, General, & Extra**. (The former two classes are Novice and Advanced). Morse code is no longer required. There is no age limit. US licenses are good for 10 years.



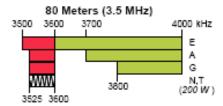
<u>Technician</u>: The Technician class license is the entry-level license of choice for most new ham radio operators. To earn the Technician license requires passing a written examination totaling 35 questions on radio theory, regulations and operating practices. The license gives

access to all Amateur Radio frequencies above 30 megahertz, allowing the ability to communicate locally. It also allows for very limited privileges on the HF (High Frequency or "short wave") bands used for international or long distance communications.



Included in the Tech license is the ability to use Walkie Talkies (known as Handy Talkies or "HT's) for mostly local communication.

<u>General</u>: The General class license grants all the privileges of the Technician class license but also grants broad operating privileges on all Amateur Radio bands. This license opens the door to world-wide communications. Earning the General class license requires passing a 35 question examination. General class licensees must also have passed the Technician exam.



<u>Extra</u>: The Amateur Extra class grants operating privileges on all ham bands. Earning the license is more difficult; it requires passing a thorough 50 question examination. Extra class licensees must also have passed all previous license class written examinations.

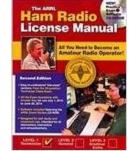
The exams are administered by local volunteer ham radio operators and usually cost \$15. It usually takes between 30-60 minutes to complete the exam.

So what are the questions about?

- The FCC rules and regulations (no cursing, what frequencies you are allowed to operate on, etc.)
- Basic electronics (what is a resister, capacitor, etc. How to calculate watts/voltage/amperage)
- Antenna basics (various types of antennas, how to build your own antenna, etc)
- Safety
- Various forms of communication (Voice, Morse code, texting, data, pictures, TV, etc.)

Getting Started:

a) If you prefer self-study, a great way to get started is to buy or borrow *The ARRL Ham Radio License Manual* published by the American Radio Relay League. There are three versions of the book; one for each license class. Start with the LEVEL 1 Technician book. It contains all the information needed to pass the exam. It uses easy-to-understand wording for the beginner but offers great detail on each topic. It is available at stores and at Amazon.com for around \$25.



b) Find a mentor (known as an "Elmer"). The best way to find mentoring is to attend a local ham radio club meeting. You'll find the Ham's to be very friendly and helpful. To find a local club, visit the ARRL's website at http://www.arrl.org/find-a-club

c) If you prefer group or classroom study, several ham radio clubs offer classes. Visit the ARRL's website at http://www.arrl.org/find-an-amateur-radio-license-class

For more information, visit www.arrl.org and/or feel free to call or email us at:

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References: Amateur Radio Relay League

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