

# How to Get Your FCC General Radiotelephone Operator License at Home

The Federal Communications Commission (FCC) administers licenses for ship, aircraft, and international fixed public radio communication stations. The FCC mandates that individuals hold a General Radiotelephone Operators license in order to...

Part 1 of 2:

## Understanding the License



1.

**Read about who needs the license.** The FCC Website offers a good explanation of what types of positions require the license.<sup>[2]</sup>

1. The General Radiotelephone Operators (PG or GROL) license is required for jobs such as operating and maintaining radio equipment on a vessel or aircraft.<sup>[3]</sup>
2. **Understand the general qualifications.** In addition to passing the licensing exam, individuals need to be able to receive and send spoken messages in English. Additionally, they must be a legal resident of the United States or legally eligible for employment in the country.<sup>[4]</sup>
  1. Once the license is obtained, it is good for life and does not need to be renewed.

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FCC Federal Communications Commission

Commercial Radio Operator License Program

Search the FCC:

Examinations

To obtain an FCC commercial operator license, an applicant must submit an original Proof of Passing Certificate issued by a Commercial Operator License Examination Manager (COLEM), or have the application filed electronically by the COLEM, demonstrating that the applicant has passed the required written and/or telegraphy elements, as illustrated in the table below.

Type of License	Written Elements						Telegraphy Elements		
	1	3	6	7	7R	8	9	1	2
Radiotelegraph Operator License	✓		✓					✓	✓
General Radiotelephone Operator License	✓	✓							
Marine Radio Operator Permit	✓								
GMDSS Radio Operator's License	✓			✓					
Restricted GMDSS Radio Operator's License	✓					✓			
GMDSS Radio Maintainer's License	✓	✓					✓		
Ship Radar Endorsement						✓			

Written Examination Elements

[Note: From time to time, the Commission may change the number of questions to be included in the examination for a particular element and/or the number of answers needed to pass the examination. The Commission will issue a public notice or take other action to inform the public of any such change.]

3.

**Learn the exam specifics.** To obtain a PG or GROL license, you must first pass a written exam comprising two elements.

1. Element 1 of the exam includes questions about basic radio law and operating practice for maritime radio operators. The exam comprises 24 questions, and passing requires answering at least 18 of them correctly.<sup>[5]</sup>
2. Element 3 of the written exam contains 100 questions, of which at least 75 must be answered correctly. This exam focuses on general radiotelephone information, such as the electronic fundamentals of the equipment and techniques for adjusting, repairing and maintaining it. Some of the categories for this exam include operating procedures, radio wave propagation, radio practice, electrical principles, circuit components, practical circuits, signals and emissions, and antennas and feed lines.<sup>[6]</sup>
3. If you have decided to also obtain the radar endorsement for working on marine vessels, you will have to pass Element 8, Ship Radar Techniques.
4. Element 8 contains 50 questions, of which 38 must be answered correctly in order to pass. The questions focus on theory and practice of using radar for marine navigation purposes.

Part 2 of 2:

## Preparing for and Passing the Exam

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FCC Federal Communications Commission

Commercial Radio Operator License Program

Search the FCC:

Commercial Radio Operator License Program

FCC rules require that licensees of ship, aircraft, and international fixed public radiocommunication stations permit only persons holding the appropriate FCC-issued [commercial operator license](#) to perform specified transmitter operation, maintenance and repair duties. To obtain a new or upgraded FCC commercial operator license, you must pass an [examination](#) administered by one of the [Commercial Operator License Examination Managers \(COLEMs\)](#).

- Who Needs A Commercial Operator License?
- License Types
- Obtaining a License
- Licensing Examinations
- Examination Question Pools
- Testing Managers and Fees
- Terms of License
- Additional Licensee Information

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Last reviewed/updated on 6/22/2013.

Releases

6/25/2009  
PUBLIC NOTICE (DA 09-1417)  
**WTR Approves New Commercial Operator License Examination (COLE) Question Pools for Elements 1, 3 and 8**  
[all](#) - [Word](#)

3/26/2009  
PUBLIC NOTICE (DA 09-472)  
**WTR Solicits Assistance in Updating Commercial Operator License Examination (COLE) Question Pools for Elements 1, 3, and 8**  
[all](#) - [Word](#)

3/24/2009  
PUBLIC NOTICE (DA 09-464)

1.

**Download the study materials.** The FCC offers everything you need to prepare for the exam. The FCC uses only the questions present in the question pools on its exams.

1. On the Examinations page of the FCC Website, scroll down to the bottom of the page and click on "Examination Questions Pool."
  2. Download the materials for Element 1 and Element 3. (Include Element 8 if you've decided to pursue the radar endorsement as well.)
2. **Study the questions carefully until you've mastered all aspects.** If possible, have someone quiz you verbally on the questions.
1. It is not recommended that you look for additional outside information for studying purposes. Only questions from the Question Pool will be used on the exam.

Areas A3 and A4. The exam consists of questions from the following categories: radio system theory, amplifiers, power sources, troubleshooting, digital theory, and GMDSS equipment and regulations. To pass, an examinee must correctly answer at least 38 out of 50 questions.

**Telegraphy Examination Elements**

Element 1 - 16 code groups per minute.  
Element 2 - 20 words per minute.

Telegraphy exams may consist of both transmitting and receiving tests or just a receiving test. Although the FCC rules provide that passing a telegraphy receiving examination is adequate proof of an examinee's ability to both send and receive telegraphy, a COLEM may nonetheless include a sending segment in a telegraphy examination. Examinees must copy by ear and, if subject to a sending test, send by hand plain text and code groups in the International Morse code using all the letters of the alphabet, numerals 0-9, period, comma, question mark, slant mark, and prosigns AR, BT, and SK. Examinees must copy and send at the required speeds for one continuous minute without making any errors. Each test lasts approximately five minutes. The failing of any code test automatically terminates the examination. Code speeds are computed using five letters per word or code group. Punctuation symbols and numbers count as two letters each.

**Question Pools and Study Guides**

Examination question pools, with answers, are available for downloading here. The question pools can also be purchased through the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, S.W., Room CY-8402, Washington, DC 20554, telephone (202) 488-3350 or (800) 378-3160, facsimile (202) 488-5963 or via e-mail at [fcclic@redb.com](mailto:fcclic@redb.com). The FCC does not certify schools or review study materials, and the FCC does not recommend any particular school or publication.

**Examination Procedures**

Use of reference materials in commercial operator license examinations is not permitted. Do not bring any books, papers, notes, study guides, or other unauthorized aids or devices to an examination.

- Examination Questions Pool
- Testing Managers, Locations, Schedules, and Fees

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Last reviewed/updated on 5/7/2013.

3. 

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**Locate an authorized COLEM to administer your test.** While the FCC administers and awards the PG licenses, it does not administer the exams required to obtain them. Rather, the FCC authorizes several Commercial Operator License Examination Managers (COLEMs) to conduct the exams nationwide.<sup>[7]</sup>

1. The FCC offers a list of authorized COLEMS on its Website, along with their respective fees. To access this, go to the Examinations page and select "Testing Managers, Locations, Schedules, and Fees."<sup>[8]</sup>
2. Once you have decided which COLEM you will use for your exam, contact them to check when the next scheduled exam is and how to register.
3. Many COLEMs offer online testing, in addition to in person exams. This may be beneficial to you if there are no testing facilities in your area.<sup>[9]</sup>
4. In some cases, if you pass the exam, the COLEM will electronically file your application for you. Otherwise, they will give you a Proof of Passing Certificate (PPC) that needs to be included with your license application.

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