

MARINE SAFETY MANUAL

CHAPTER 5: EXAMINATIONS FOR U.S. MERCHANT MARINERS

A. Examinations	5-1
1. Examination Guides.....	5-1
2. Exceptions To Examination Requirements	5-1
a. Regulatory Exceptions.....	5-1
b. Removal Of Limitations	5-1
3. Standard Modules.....	5-1
4. Local Examinations	5-2
a. Number Of Questions	5-2
b. Question Selection.....	5-2
c. Modification Of Standard Modules	5-2
d. Local Knowledge For Pilot's Examinations	5-2
e. Chart Sketch.....	5-2
f. Grading Of Nonstandard Examinations	5-3
(1) Practical navigation (licenses not more than 100 gross tons) - 70%	5-3
(2) Practical navigation (licenses over 100 gross tons) - 90%	5-3
(3) Rules of the Road - 90%	5-3
(4) All other deck and engineering subjects - 70%	5-3
5. Orally Assisted Examinations.....	5-3
a. Standard Modules.....	5-3
b. Reading Of Questions.....	5-3
c. Recording Of Answers.....	5-3
d. Renewal Of Licenses	5-4
6. Obtaining Examinations For Remote Testing	5-4
7. Conduct In The Examination Room.....	5-4
8. Testing Materials.....	5-4
9. Calculators	5-4
10. Time Limits	5-4
11. Answer Sheets.....	5-4
12. Examination Questions	5-4
a. Module Errors.....	5-4

b.	Discussion With Applicants	5-5
c.	Comments	5-5
d.	Protests	5-5
e.	Failing Modules By One Or Two Questions.....	5-5
f.	Processing Protests And Comments.....	5-5
13.	Practical Examinations	5-6
a.	Lifeboatman	5-6
b.	Signaling	5-6
c.	Able Seaman (Knot Tying)	5-6
14.	Examination Scheduling For Academies	5-6
15.	Examination Failures	5-6
a.	Completion Of Examination	5-6
b.	License And MMD Reexamination Policy.....	5-7
16.	Examinations For Coast Guard Military And Civilian Personnel.....	5-7
17.	Requests By Foreign Governments To Examine Individuals.....	5-7
18.	Examinations Monitored For Another REC	5-7
B.	Custody And Security.....	5-8
1.	Responsibility	5-8
2.	Stowage	5-8
3.	Receipt of Printed Modules	5-8
4.	Examination Log.....	5-8
5.	Compromises	5-9
6.	Destruction Of Examination Materials	5-9

CHAPTER 5: EXAMINATIONS FOR U.S. MERCHANT MARINERS

A. Examinations.

When an applicant's experience and training meet the requirements of the regulations, and they are eligible in all other respects, they must be examined if required by the regulations.

1. Examination Guides.

The content of each deck examination including unlicensed examinations, is found in Commandant Publication P16721.35, Guide for Administration of Merchant Marine Deck Examinations (Deck Guide). Commandant Publication P16721. 47, Guide for Administration of Merchant Marine Engineering Examinations (Engine Guide) contains similar information about the engineering examinations. Both guides provide information about the number of modules in the examination, grading procedures, and special instructions necessary to administer the examination.

2. Exceptions To Examination Requirements.

An applicant is not required to be tested in the following situations:

a. Regulatory Exceptions.

The licenses specified in 46 CFR 10.903(b) do not require an examination. In addition to these, the holder of a license issued under Subchapter B of the regulations revised in 1987, as master or mate of vessels of 500 gross tons, is not required to test for an increase in scope to 1600 gross tons on the same route. However, applicants holding a master 500 gross tons license received prior to the 1987 revisions, who have not taken the master 500/1600 gross tons exam, and apply to raise their license to master 1600 gross tons, must take the appropriate exam. A master or mate licensed for vessels of less than 200 gross tons on any rivers route may have the tonnage limitation increased up to 200 gross tons (same route) based on service only.

b. Removal Of Limitations.

A license with a special limitation imposed by an OCMI may not require an examination for removal of the limitation. No further examination is required if the original examination was of sufficient scope and depth for the change. In special cases involving the lifting of limitations, where the Commandant's evaluation is desired, the request submitted to the National Maritime Center should contain all information pertinent to the current limitation, including the license file from the issuing office, if available. If the license file is not available, the reason for the limitation shall be obtained from the issuing office and stated in the request.

3. Standard Modules.

There are over 1,000 modules supporting the deck exams and over 200 in support of the engineering exams. These modules are centrally stored on computer and downloaded at the REC when needed. They are periodically replaced, with some modules replaced each month. Modules that are used extensively, such as the Rules of the Road modules and those used for lower level licenses, are replaced more frequently. If an applicant requires a module, but it can not be downloaded in time, contact the Examination Administration Branch at the National Maritime Center. The module will be forwarded by a suitable medium, including FAX, E-Mail or overnight mail, to meet the examination date. If frequent or continuous problems with downloading are experienced, assistance

must be sought through the system specialists, Commandant (G-MRI) at (202) 267-0790.

4. Local Examinations.

While the standard modules meet the requirements for most examinations, some situations require examinations prepared for local conditions. In these situations, the following guidelines apply:

a. Number Of Questions.

The number of questions in a locally prepared examination should not exceed the number of questions in a standard exam for a comparable license. If possible, the total number of questions should be such that the passing grade equates to an exact number of correctly answered questions.

b. Question Selections.

The examiner shall select questions based on the following factors:

- (1) Suitability of the individual questions for the license; and
- (2) Overall coverage of the subject.

c. Modification Of Standard Modules.

Often, a standard examination module may be modified to serve as a locally prepared examination by deleting questions that do not apply to the testing situation.

d. Local Knowledge For Pilot's Examinations.

RECs testing applicants for pilotage routes shall develop a module titled "Local Knowledge". If the route includes areas outside the zone of the parent MIO/MSO, the cognizant OCMI shall be consulted for local information about the area within that zone. The questions included in the local knowledge module may include anything particular to the pilotage route. Typical subjects for testing in local knowledge include: traffic separation and advisory schemes, weather, route description, currents, tides, prominent landmarks, geography, bottom configuration, local communications, availability and capability of tugboats, etc. This list is not all inclusive and not all of the above will apply to each route. For grading purposes, this is a practical navigation module (see Para 5.A.4.f.).

e. Chart Sketch.

(1) RECs must develop standards for the chart sketch required of pilotage applicants. These standards may include, but are not limited to the symbols required, depth information, horizontal and vertical clearances, types of aids to be shown, courses and distances, shoals, reefs, and other underwater hazards, grading procedures, etc. In grading a chart sketch any information shown that would hazard a vessel is grounds for failure. For example, if a narrow channel runs 304 degrees true for 1.8 nautical miles and the applicant shows the channel at 314 degrees true, this is cause for failure. Omission of minor or inshore aids not directly affecting the route are minor errors. While each minor error is usually not sufficient grounds for failure, an accumulation of them indicates a general unfamiliarity with the route. Each REC must set the standards for the various pilotage routes within their zone(s).

(2) Whenever possible, provide applicants with the outlined paper to be used in the

chart sketch. If there are no local resources to print these outlines, the applicant may trace them from a chart while in the exam room. Applicants will not be permitted to bring an outline with them since pin-pricks, faint markings, incidental markings, folds, etc. could provide clues to the information required to be drawn on the sketch.

f. Grading Of Nonstandard Examinations.

The passing grades for nonstandard examinations should be similar to the passing grades for the standard examinations. The passing grades for the standard examinations are:

- (1) Practical navigation (licenses not more than 100 gross tons) - 70%.
- (2) Practical navigation (licenses over 100 gross tons) - 90%.
- (3) Rules of the Road - 90%.
- (4) All other deck and engineering subjects - 70%.

5. Orally Assisted Examinations.

Orally assisted examinations are permitted by 46 CFR 10.205(i). Applicants should attempt the standard written examination initially. If they demonstrate difficulty in reading, they may test with an orally assisted examination. This is a time consuming process. Encourage applicants to test with the standard modules and advise them of the limitations to be placed on the license. The following procedures shall be followed in administering an orally assisted examination. **Only the OCMI/REC is authorized to administer an orally assisted examination.**

a. Standard Modules.

Candidates will normally be tested with standard examination modules unless a locally prepared module is appropriate.

b. Reading Of Questions.

The examiner shall read the questions to the applicant exactly as they are printed in the module. Read the questions in a normal tone of voice with the proper inflections as indicated by normal usage of the English language. When reading the four possible answers, read each one with the same tone. Do not stress or give any other indication of the correct answer. Questions may be repeated once to ensure understanding by the applicant. Do not discuss the content or meaning of either the questions or the possible answers.

c. Recording Of Answers.

Record the answers on a standard answer sheet. If standard modules are used to test the applicant, a notation to this effect shall be enclosed in the applicant's file. If locally prepared modules are used, the subjects included in the test must be listed in the file as indicated in 46 CFR 10.205(i).

d. Renewal Of Licenses.

Licenses issued as a result of an orally-assisted examination may be renewed through an oral-assisted renewal exercise.

6. Obtaining Examinations For Remote Testing.

RECs/MUs may order large quantities of examinations from the Examinations Administration Branch at the National Maritime Center for remote testing. Allow at

least four weeks for delivery. Individual modules may be provided via FAX, overnight mail, or E-mail if necessary. Modules for testing individual applicants are normally downloaded and reproduced at the REC as required. Precautions should be observed to prevent compromise once the materials are printed. Upon completion of the exam, the materials should be destroyed.

7. Conduct In The Examination Room.

A sample Examination Room Rules sheet can be found in the Deck and Engine Examination Guides. RECs should provide each applicant with this information and any local rules including the operating hours of the examination room. As part of this information, advise the candidate to read the instruction page included in every module.

8. Testing Materials.

The reference materials required and authorized in the examination room are listed in the Deck Guide and the Engine Guide.

9. Calculators.

Applicants may use calculators but not preprinted forms during the examinations. All calculators must meet the following standards:

- a. It must not use pre-programmed strips or chips or any other pre-programmed device which may be inserted into the calculator.
- b. It may not be a permanently-programmed, specialty computer such as a navigation computer. Computers capable of generating trigonometric functions, logs and antilogs, squares, cubes and the roots thereof are acceptable provided they meet all other requirements.
- c. Any manually programmable calculator without simple erasure capability is not permitted.

10. Time Limits.

Refer to Deck and Engine Guides.

11. Answer Sheets.

Refer to Deck and Engine Deck Guides.

12. Examination Questions.

The Examination Administration Branch at the National Maritime Center tries to ensure that all test questions are clear, concise, and understandable. Occasionally errors arise.

a. Module Errors.

RECs/MUs detecting obvious errors in a module should contact the Examinations Administration Branch at the National Maritime Center immediately to resolve the situation.

b. Discussion With Applicants.

Examiners should not discuss the content or quality of a question with a candidate.. If an applicant disputes a question, advise the applicant to select the best possible answer and complete a Comment/Protest Sheet. (A sample Comment/Protest Sheet is shown in the Deck and Engine Exam Guides.) After grading, an applicant often wants to know what questions were marked wrong. Workload permitting, examiners may show applicants incorrectly answered questions. If an applicant disputes the correct answer, advise him/her to complete a Comment/Protest Sheet.. Comments will not be used to change his/her grade; however, if the applicant failed by no more than two questions, a Protest may be filed.

c. Comments.

Applicants' remarks provide valuable input into improving the quality of the questions. Applicants should be encouraged to complete a Comment/Protest Sheet for any question that can be improved. A comment may be submitted at any time in the testing process.

d. Protests.

A comment becomes a protest when all of the following conditions apply:

- (1) The form must be completed before the applicant leaves the examination room;
- (2) The candidate must have a failing grade on the module;
- (3) The comment must be about a question that was answered incorrectly; and
- (4) If credit for a correct answer were given for a question commented upon, it would change the failing grade to a passing grade.

e. Failing Modules By One Or Two Questions.

Any applicant failing a module by not more than two questions can review the module and answer sheet before leaving the exam room area. Applicants may then protest any questions answered incorrectly. Provide the applicant with a copy of the answer sheet for review to prevent alteration of the original.

f. Processing Protests And Comments.

The protest(s) and answer sheet(s), CG-5164, should be faxed to the Examinations Administration Branch at the National Maritime Center immediately. Protested questions are reviewed for errors. If the question or answer is wrong, the protest is allowed thus affecting the final grade. A correct answer must be given by the applicant. All work to arrive at mathematical answers must be shown and forwarded for review. A copy of the applicable portions of the chart or plotting sheet should be faxed when plotting accuracy is involved. RECs are notified of the results as soon as possible by fax with telephone follow up whenever possible. If two modules are graded together, then provide both Answer Sheets. Retain comment sheets at the unit until the last working day of the month and then forward them to the Examinations Administration Branch at the National Maritime Center.

13. Practical Examinations.

a. Lifeboatman.

Examination centers with a model lifeboat shall test lifeboatman applicants using the model. Those centers that do not have the model should require applicants to present a letter of certification from a ship's deck officer attesting to their ability to raise and lower a lifeboat and their knowledge of the proper commands and nomenclature for such. The contents of the test are specified in the Deck Guide. A sample letter of certification is included in the Deck Guide.

b. Signaling.

Applicants for ocean or near coastal deck licenses authorizing service on vessels of over 1600 gross tons must pass a practical signaling test. The details of the test are in the Deck Guide. An applicant can complete the signaling portion anytime within one year of passing the written part of the examination. There is no limit to the number of times an applicant may be retested with the flashing light examination. If an applicant continues to fail the signaling exam, he/she may be issued a license limited to 1600 gross tons (46 CFR 10.401(h)). However, this limited license option is not available to maritime academy applicants. Replacement tapes for the examination are available from the Examinations Administration Branch at the National Maritime Center.

c. Able Seaman (Knot Tying).

The details of this part of the AB's examination are contained in the Deck Guide. Because of the specialized knowledge required by the examiner to supervise this part of the examination, RECs/MUs may have to contact a local Coast Guard unit for assistance in training the examiners or testing the applicants. Testing at an REC/MU is the preferred method; however, an alternative is for the candidate to provide a letter of certification from a ship's officer, attesting to the applicant's ability to make the required knots, hitches, and splices. A sample letter of certification is included in the Deck Guide.

14. Examination Scheduling For Academies.

The graduating classes of state and Federal maritime academies may be examined at any time after the first semester of the senior year.

15. Examination Failures.

a. Completion Of Examination.

Applicants should not be stopped from testing even if they fail three or more modules. This ensures that if there is any change to the examination through the protest process or a correction to the exam is necessary, the applicant will not be penalized.

b. License And MMD Reexamination Policy.

Applicants may be reexamined at any time mutually convenient to the examiner and the applicant. There is no minimum waiting period between the first examination and a reexamination. Applicants failing several portions of an examination or those failing one module with an extremely low score should be encouraged to study before attempting a reexamination. The MAXIMUM number of times a module may be taken by any applicant in an exam cycle is THREE. If an upper level license applicant fails only one or two modules, then the individual may be retested twice on the failed module(s) during the next three months. If three or more modules are failed, then a complete reexamination must be taken. If the applicant only fails one or two modules on the second sitting of the exam, then the individual may retest one more time on the failed module(s). However, if the applicant again fails three or more modules on the second sitting, then the individual must wait for a new exam cycle and retest on all topics. See 46 CFR 10.217(a)(1) for amplifying guidance. The specific reexamination policy for all lower level applicants is in 46 CFR 10.217(a)(2).

16. Examinations For Coast Guard Military And Civilian Personnel.

Coast Guard personnel (military or civilian) employed in an REC/MU may apply for a license or MMD. If the district commander approves the applicant's request, notify the Examination Administration Branch at the National Maritime Center of the desired license or MMD endorsement. To avoid any hint of collusion or impropriety, the Examinations Administration Branch at the National Maritime Center will provide a special examination for testing such applicants. The modules in this examination will be one-time editions similar to the standard modules. The applicant may test at any REC/MU including the one where employed.

17. Requests By Foreign Governments To Examine Individuals.

If a foreign government requests that such a program be established, the Examination Administration Branch will endeavor to accommodate them based on the request and circumstances. Once a program is established, the following procedures are required:

- a. The foreign government must send a letter on behalf of a named individual to the REC certifying that the service and training requirements of the foreign administration have been met.
- b. When the REC is satisfied with the individual's qualifications, the examination may be scheduled.
- c. Prior to testing, the individual must pay the appropriate user fee.
- d. Individuals successfully completing the examination will receive a U.S. Coast Guard letter attesting to that fact. This letter will not provide Coast Guard certification of competency or authorization to serve in any licensed or unlicensed capacity.

18. Examinations Monitored For Another REC.

Applicants for a pilot's license/endorsement may apply at an REC that does not have testing responsibility for the pilotage area. The applicant should provide all of the required documentation which will be forwarded to the cognizant REC for evaluation. If the cognizant REC does not provide forms with the shore outline, the outlines of the shore area to be used in the chart sketch shall also be forwarded for review. If the

application is approved, the cognizant REC shall provide the local knowledge part of the examination, any other specific information necessary for the applicant or the administering REC, and return either the approved outlines of the shore area or supply the Coast Guard provided forms (where applicable) with the shore outline. After the test is administered, the testing REC shall return the answer sheets for the local knowledge questions and the chart sketches to the cognizant REC for grading. Centrally distributed examinations, such as Rules of the Road, should be graded by the testing unit and the cognizant REC advised of the scores. If the applicant passes the exam, the cognizant REC shall advise the testing REC of the specific wording to be endorsed on the license.

B. Custody And Security.

Compromise of an examination module causes the removal of that module from service and requires a replacement. To reduce the probability of compromise, standard security procedures must be followed at each unit. With the advent of RGEN, electronic security as well as security for printed materials must be considered. Proper security procedures conscientiously executed by all hands are essential. The following procedures shall be followed by all RECs/MUs:

1. Responsibility.

The OCMI shall designate in writing a custodian to oversee the security of all examination materials. Alternates may also be designated. Before assuming this responsibility, the custodian shall inventory all printed exam modules currently held and review the established information systems security procedures.

2. Stowage.

Stow any printed modules held in a lockable container such as a safe, file cabinet, or desk drawer. Keep all modules in a location where unauthorized personnel cannot take a module surreptitiously. At the close of the workday, account for all modules used. Establish a routine and the responsibility for locking all stowage containers.

3. Receipt of Printed Modules.

Upon receipt of printed modules for special situations such as supplying a TET, inventory the contents of the shipment with the forwarding letter. Report any deficiencies to the Examination Administration Branch at the National Maritime Center. Acknowledge receipt of the modules by signing a copy of the U.S. Postal Service Return Receipt postcard and returning it to the Examinations Administration Branch. If the package is received in a damaged condition or with evidence of tampering, notify the Examination Administration Branch.

4. Examination Log.

Prior to using a module for testing, the examiner shall conduct a page check to verify the module is complete, and that it doesn't have unauthorized marks in it. A log of candidates shall also be maintained. At a minimum, the following information shall be included:

- a. Date of examination;
- b. Candidate's name;
- c. Examination title;
- d. Module number;

- e. Examiner's initials to indicate that the modules were returned intact; and
 - f. Candidate's score.
5. Compromises.
A compromise occurs when the possibility exists that a module's contents have been exposed to unauthorized persons. When this occurs, notify the Examinations Administration Branch at the National Maritime Center by phone. Advise the details of the situation and the probability of actual exposure to unauthorized persons. The OCMI shall conduct a local investigation into the circumstances of the case in accordance with the Investigations Manual, COMDTINST M5527.1. Forward a copy of the completed investigation to the Examination Administration Branch.
6. Destruction Of Examination Materials.
Applicants shall turn in all scrap paper, charts, and other working materials used during an examination. Destroy these materials after any pending protests have been resolved. Outdated modules that are replaced shall be discarded and, preferably, recycled.

