

Commanding Officer
U.S. Coast Guard
National Maritime Center
Martinsburg, WV 25404

Deck and Engineering Guide for the Administration of Merchant Marine Examinations

August 2014

This publication provides guidance to the public and to National Maritime Center (NMC) Evaluators and Exam Administrators.

A mariner seeking an original national endorsement or raise of grade based on training or service started on or after March 24, 2014, will be examined under the requirements of the final rule published by the Coast Guard on December 24, 2013, (78 FR 77796). Those examinations are set forth in this guide.

A mariner seeking an original national endorsement or raise of grade based on training or service started before March 24, 2014, will be examined under the regulations and policy in effect before that date unless they have specifically requested to examine for their endorsement under the final rule published by the Coast Guard on December 24, 2013, (78 FR 77796). Mariners examining under the previous regulations and policy will be guided by the **Guide for Administration of Merchant Marine Examinations (Deck & Engineering Guide)** dated June 2011 (MCP-MA-NMC2-03(08))

From: J. P. Novotny, Capt, USCG
Commanding Officer CG-NMC

To: DISTRIBUTION

Subj: DECK AND ENGINEERING GUIDE FOR THE ADMINISTRATION OF MERCHANT MARINE EXAMINATIONS

Ref: Code of Federal Regulations Title 46, Chapter 1, Subchapter B

PURPOSE. To provide guidance to National Maritime Center (NMC) evaluators and personnel who monitor merchant mariners in the exam room of the Regional Examination Centers (REC). NMC evaluators shall use this guide to determine which examination modules are to be administered for a given endorsement and what training may be approved in lieu of an examination module.

DISCUSSION. The Examination Structure Sheets (ESS) contained in this guide establish the examination requirements for each officer and rating endorsement issued by the U.S. Coast Guard. Consult the ESS for unique directions, order of examination modules and guidance on courses accepted in lieu of an examination module.

ACTION. Commanding officers of units with marine safety responsibilities should bring this guide to the attention of the maritime industry with interests in marine personnel issues and to institutions that offer U.S. Coast Guard approved training.

PROCUREMENT INFORMATION. Distribution is provided by electronic means for local reproduction internally on: CGPortal:NMC:Mission Management System and externally on the NMC website at: www.uscg.mil/nmc.

PROCEDURE. The ESS contained in this guide are effective beginning in March 2014 and contain guidance on the examinations required for compliance with the regulations published on December 24, 2013 (78 FR 77796).

- a. A mariner seeking an original national endorsement or raise of grade based on training or service started on or after March 24, 2014, will be examined under the requirements of the final rule published by the Coast Guard on December 24, 2013, (78 FR 77796). Those examinations are set forth in this guide.
- b. A mariner seeking an original national endorsement or raise of grade based on training or service started before March 24, 2014, will be examined under the regulations and policy in effect before that date unless they have specifically requested to examine for their endorsement under the final rule published by the Coast Guard on December 24, 2013, (78 FR 77796). Mariners examining under the previous regulations and policy will be guided by the **Guide for Administration of Merchant Marine Examinations (Deck & Engineering Guide)** dated June 2011 (MCP-MA-NMC2-03(08))

DISCLAIMER. This document is intended to provide operational requirements for Coast Guard personnel and is not intended to nor does it impose legally binding requirements on any party outside the Coast Guard.

COMMENTS. Comments can be made to Commanding Officer, National Maritime Center 100 Forbes Drive, Martinsburg, WV 25404, IASKNMC@uscg.mil, or (888)-IASKNMC.

Record of Changes

Version	Change	Date
1.0	New Edition	25 August 2014

Table of Contents

1. Introduction	Page 5
1.1 General Information	Page 6
1.1.1 Examination Structure Sheets	Page 6
1.1.2 Evaluations	Page 6
1.2 Instructions	Page 7-9
1.2.1 Examination Administration	Page 7
1.2.2 Materials Allowed in the Examination Room	Page 8
1.2.3 Challenges and Comments	Page 9
1.3 Examination Policies	Page 10-12
1.3.1 Retest Policy	Page 10
1.3.2 Renewal Exercise	Page 11
1.3.3 Orally Assisted Examinations	Page 11
1.3.4 Traveling Examination Teams	Page 12
2. Deck Examinations	Page 13-40
2.1 Deck Officer Endorsements	Page 13-35
2.1.1 Oceans or Near Coastal Endorsements	Page 13-21
2.1.2 Great Lakes and Inland Endorsements	Page 22-28
2.1.3 River Endorsements	Page 29-31
2.1.4 Additional Officer Endorsements	Page 32
2.1.5 Towing Vessel Endorsements	Page 33-34
2.1.6 Mobile Offshore Drilling Unit Endorsements	Page 35
2.2 Deck Rating Endorsements	Page 36-37
2.3 Renewal Endorsements	Page 38-40
3. Engine Examinations	Page 41-52
3.1 Unlimited Engineering Officer Endorsements	Page 41-43
3.1.1 First Assistant Engineer	Page 41-42
3.1.2 Third Assistant Engineer	Page 42-43
3.1.3 Renewal Exercises	Page 43
3.2 Limited Engineering Officer Endorsements	Page 43-49
3.2.1 Chief Engineer-Limited	Page 43-44
3.2.2 Assistant Engineer-Limited	Page 44-45
3.2.3 Designated Duty Engineer-Unlimited	Page 46
3.2.4 Designated Duty Engineer-1000/4000 HP	Page 47
3.2.5 OSV-Chief Engineer	Page 47
3.2.6 OSV-Assistant Engineer	Page 48
3.2.7 UFIV-Chief Engineer	Page 48
3.2.8 UFIV-Assistant Engineer	Page 48
3.2.9 Renewal Exercises	Page 49
3.3 MODU Engineering Officer Endorsements	Page 50
3.3.1 Chief Engineer	Page 50
3.3.2 Assistant Engineer	Page 50
3.3.3 Renewal Exercise	Page 50
3.4 Engine Rating Endorsements (QMED)	Page 51-52
3.4.1 QMED Endorsements	Page 51-52
3.4.2 Renewal Exercise	Page 52

Introduction

Title 46 Code of Federal Regulations Part 10 authorizes the Coast Guard to conduct a Professional Examination for original issue, raise in grade, increase in scope, and renewal of endorsements. The examination follows a determination by the Coast Guard that the applicant's training, practical demonstrations, and experience are satisfactory and that the applicant is eligible in all other respects. The purpose of this guide is to help identify the appropriate examination and provide guidance for the uniform administration of examinations.

If you need further information or assistance with respect to these Exam Structure Sheets, or if you have suggestions for improvements to this guide, please contact the USCG National Maritime Center at:

POC: Mariner Information Call Center

E-mail: IASKNMC@uscg.mil

Phone: 1-888-IASKNMC

1.1 General Information

1.1.1 Examination Structure Sheets

The content of each examination incorporating the use of one or more modules, and the instruction for assigning modules is detailed in each individual Examination Structure Sheet (ESS). There is an ESS for each officer and rating endorsement that sets forth the required examination modules. In an instance where particular modules are not required, further instructions are provided on the individual ESS. Each module is graded independently unless otherwise indicated. Unless additional references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 11.910, 11.920, 11.950, 12.405, 12.407(b)(3), 12.505, and 13.121(e) as appropriate.

1.1.2 Evaluations

1. When an applicant requires examining for multiple officer or rating endorsements, the following method for assigning modules will be employed:

- a) Compare all modules from each of the applicable ESS
- b) Modules duplicated only need to be administered once
- c) All other modules for both officer and/or rating endorsements are required

2. IAW 46 CFR 11.903, unless specifically noted on the individual ESS, an examination is required in all cases in which an applicant has applied for:

- a) A change in tonnage category: Tonnage Categories are defined in 46 CFR 10.107 and 46 CFR 11.410(a) as:
 - Unlimited Tonnage
 - Less than 1600 GRT
 - Less than 500 GRT
 - Less than 200 GRT

See 46 CFR 10.232(i) for tonnage equivalencies.

b) “Raise of Grade”: IAW 46 CFR 10.107 is defined as “an increase in the level of authority and responsibility associated with an officer or rating endorsement”. IAW 46 CFR 10.231 (d)(3)(i) “When the Coast Guard finds an applicant's experience and training for raise of grade is satisfactory, and the applicant is eligible in all other respects, the Coast Guard will authorize a professional examination”.

3. “Increase in Scope”: IAW 46 CFR 10.107, is defined as “additional authority added to an existing credential, such as adding a new route or increasing the authorized horsepower or tonnage”.

Examinations required to increase the scope of an existing officer endorsement are listed on each individual ESS for the specific endorsement.

Courses approved in lieu of examination are not permitted for officer endorsements where tonnage exceeds 200 GRT EXCEPT to increase the scope of a national deck officer endorsement for less than 1,600 GRT from near coastal to oceans. Courses approved in lieu of examination are not permitted for engineering officer endorsements greater than 4000 horsepower.

1.2 Instructions

1.2.1 Examination Administration

When administering an original examination, re-examination, retests, or renewal for any officer or rating endorsement:

1. Unless the applicant is participating in a comprehensive program as defined in 46 CFR 11.201 and specifically authorized in the program approval, examinations may only be administered after all other regulatory requirements have been met.
2. IAW 46 CFR 10.209 (c) “Applications are valid for 12 months from the date that the Coast Guard approves the application.
3. Approved to Test Letter Period of Validity: When an application is approved, an “Approved to Test” letter (ATT) is issued specifying the required Examination. Approved to Test Letters are valid for a period of one year from the date of issuance, all examination requirements must be completed within the period of validity
4. 90 Day Examination Cycle: The interval within the ATT period of validity, (one year from date of issuance), in which all examination requirements, including retests, must be completed. **Examination requirements must be completed within the concurrent 90 day examination cycle AND the ATT letter period of validity (one year from date of issuance).** With the administration of the first module of an examination, the cycle commences. Scores from prior examination cycles will not be carried over to subsequent examination cycles.
5. It is recommended that applicants make appointments for all exams. Mariners who have not made appointments may be allowed to examine based on available resources as determined by the REC. Appointments can be made on line using the NMC website or by contacting the call center.
6. Modules will be administered in the order chosen by the mariner at the time their appointment is made. If no order is selected, the modules will be administered as listed on the ESS for the specific endorsement.
7. All examination fees must be paid prior to commencing the first module.
8. At the discretion of the REC, mariners may start their examination on any business day the REC is open provided the following requirements are met:
 - a. Prior to commencing the first module, the mariner will be required to read and acknowledge by signature the Rules of the Examination Room. The complete list of rules can be found on the NMC website at www.uscg.mil/nmc.
 - b. All modules comprising an examination must be completed on consecutive days within the same business week. If the REC is closed due to inclement weather, mid-week federal holidays, building emergencies, etc. examinations will resume on the next business day
 - c. The mariner must complete a minimum of two modules a day. Additional modules may be taken, time permitting.
 - d. The mariner must complete each module within three and a half hours. Time to score the module and the submission of a Challenge/Comment Sheet is in addition to the three and a half hour time limit.
9. All modules of an examination must be completed before any retests of failed modules are attempted.
10. If a mariner is approved for multiple endorsements, all modules for each endorsement must be completed before commencing modules for additional endorsements.
11. Where the ESS indicates two modules labeled as Part I and Part II, they are to be scored independently of each other.

1.2.2 Materials Allowed in the Examination Room

Required illustrations will be included with each individual printed module.

The REC will provide the following reference materials in the examination room:

Engine examinations: ONLY 46 CFR Parts 1-199 and 33 CFR Parts 1-199

Deck examinations: No references may be used for any **RULES of the ROAD** module.

For all other deck modules **ONLY** the following printed references are allowed:

Publication	Stock Number
Chart 12221TR – Chesapeake Bay (Training)	7642-01-401-4083
Chart 12354TR – Long Island Sound (Training)	7642-01-400-7619
Chart 13205TR – Block Island Sound (Training)	7642-01-400-7618
Great Circle Tracking Chart WOXZC5270	7642-01-400-9540
Great Circle Tracking Chart WOXZC5274	7642-01-400-9543
Publication No. 102 – International Code of Signals	7642-01-400-8462
Light List Volume V – Mississippi River System (current edition)	7642-01-401-1120
Maneuvering Board WOBZP 5090	7642-01-400-9445
Plotting Sheet VPO SX001 – Universal	7642-01-400-9344
Plotting Sheet WOBZP 923 (17° - 24°)	7642-01-400-9447
Plotting Sheet WOBZP 924 (23° - 30°)	7642-01-400-9453
Publication No. 229 – Volume 2, latitudes 15°- 30°	7642-01-400-9225
Publication No. 117 – Radio Navigational Aids	7642-01-401-0071
Ship’s Code Card, Form WS TA B-O-7	
CIM 16616.6A, Chemical Data Guide	
Flood Control and Navigation Maps of the Mississippi River, Cairo, IL to the Gulf of Mexico	
Reprints from the Light Lists and Coast Pilots	COMDTPUB P16721.38
Reprints from the Tide Tables and Tidal Current Tables	COMDTPUB P16721.46
Stability Data Reference Book	COMDTPUB P16721.31
1981 or Training Nautical Almanac	GPO SN 040-000-00418-1
The American Practical Navigator, Volume II – 1981 Edition (Bowditch)	HO PUB No.9
Operating Manual DEEP DRILLER (MODU exams)	COMDTPUB P16721.29
Operating Manual COASTAL DRILLER (MODU exams)	COMDTPUB P16721.30
Manual for loading the M/V GRAND HAVEN (Great Lakes exams)	COMDTPUB P16721.32
33 CFR Parts 1-199	
46 CFR Parts 1-199	
49 CFR Parts 100-177	

Mariners are permitted to bring the following in the exam room:

1. Star Finder – 2102-D including instructions for use
2. Plotting tools – dividers, triangles, nautical slide rule
3. A non-programmable calculator - Specialty navigation calculators are NOT permitted. Electronic communication devices of any type are NOT permitted to be used during an examination for their calculator function.

1.2.3 Challenges and Comments

Comments:

As a means of Quality Assurance, the Coast Guard offers a Challenge/Comment process for mariners to request a review of questions. If a mariner feels a question could be improved, the Coast Guard values written feedback via a Challenge/Comment Sheet. Comments will not affect a mariner's score, but are valuable and will be used to improve the quality of questions on future examinations.

Challenge/Comment Sheets will be supplied by the examiner and may be found on the NMC website at www.uscg.mil/nmc.

Challenges:

If a mariner believes there is an inherent problem with a question that prevents it from being answered correctly, and has failed the module by a single question, the mariner will be allowed to review the module and submit a Challenge/Comment Sheet. The mariner may challenge up to two questions. No references, other than those allowed in the exam room, may be utilized by the mariner for the purpose of substantiating a challenge. The mariner must state in writing all the details regarding the discrepancy with the question, provide the reasons for the challenge, all calculations, and what is believed to be the correct answer. Once the mariner has reviewed his or her answer sheet and leaves the exam room for ANY REASON before submitting their challenges, the challenges will not be accepted.

Examination Challenges are reviewed at the National Maritime Center. Challenge Determination Letters are forwarded to the Regional Exam Center and the results are provided to the mariner.

The following references apply to Requests for Reconsideration and Appeal of a Challenge Determination:

46 CFR 1.01-15 Organization; Districts; National Maritime Center

46 CFR 1.03-15 General

46 CFR 1.03-40 Appeals from decisions or actions of the National Maritime Center

46 CFR 10.237 Right of appeal

Initially, a mariner may request reconsideration of the challenge determination. The reconsideration request should clearly state the specifics to be reconsidered. The request for reconsideration should be made in writing and submitted no later than 30 days after the date of the challenge determination letter. The reconsideration request can be made via the REC or via the NMC Customer Service Center. Further direction for the mariner is provided at the bottom of the Challenge Determination Letter. If a mariner disagrees with the reconsideration decision, he or she may make a formal appeal to the Director of Inspection and Compliance within 30 days of the date of the reconsideration letter.

1.3 Examination Policies

1.3.1 Retest Policy

Modules used for any previous examination shall not be used for any retest.

46 CFR 10.107 defines the following:

“Officer endorsement: means an annotation on an MMC that allows a mariner to serve in the capacities listed in § 10.109 of this part”.

“Rating endorsement: is an annotation on an MMC that allows a mariner to serve in those capacities set out in § 10.109 of this part”.

Examination Retest Policy for Officer Endorsements

IAW 46 CFR 11.217 Examination procedures and denial of officer endorsements.

“(a) The examination fee set out in Table §10.219 (a) of this subchapter must be paid before the applicant may take the first examination section. If an applicant fails three or more sections of the examination, a complete re-examination must be taken. On the subsequent exam, if the applicant again fails three or more sections, at least 3 months must elapse before another complete examination is attempted, and a new examination fee is required. If an applicant fails one or two sections of an examination, the applicant may be retested twice on these sections during the next 3 months. If the applicant does not successfully complete these sections within the 3-month period, a complete re-examination must be taken at least 3 months from the date of the last retest, and a new examination fee is required. The 3-month retest period may be extended by the Coast Guard if the applicant presents evidence documenting sea time that prevented the taking of a retest during the 3-month period. The retest period may not be extended beyond 7 months from the initial examination. All examinations and retests must be completed within 1 year of approval for examination.

(b) If the Coast Guard refuses to grant an applicant the endorsement applied for due to the applicant’s failure to pass a required examination, the Coast Guard will provide the applicant with a written statement setting forth the portions of the examination that must be retaken and the date by which the examination must be completed.”

Examination Retest Policy for Rating Endorsements

IAW 46 CFR 12.205 Examination procedures and denial of rating and STCW endorsements.

“(a) The examination fee set out in Table §10.219 (a) of this subchapter must be paid before the applicant may take the first section of the examination.

(b) Upon receipt of an application for a rating endorsement, the Coast Guard will give any required examination as soon as practicable after determining that the applicant is otherwise qualified for the endorsement.

(c) An applicant for a rating endorsement who has been duly examined and failed the examination may seek reexamination at any time after the initial examination. However, an applicant who fails an examination for the third time must wait 90 days before re-testing. All examinations and retests must be completed within 1 year of approval for examination”.

1.3.2 Renewal Exercise

Requirements for renewal. 46 CFR 10.227(e)(1)(ii) permits an applicant to meet the professional requirements for renewal by passing a comprehensive, open-book exercise covering the general subject matter contained in the appropriate sections of subpart (I) .

A Renewal Exercise is an open book examination which may consist of multiple modules issued to the mariner by the Regional Exam Centers. The completion of a renewal exercise, including retests, must meet the ninety day examination cycle noted in 1.2.1.d. above. Therefore, it is recommended that a completed exercise be returned to the Regional Exam Center for scoring within thirty days in order to allow time for retests, if needed. In no case will a renewal exercise or retest be accepted if returned, based on the postmark date, more than ninety days from the original mailing date.

Where an applicant holds multiple endorsements with significant common subject matter, the renewal exercise will be issued for the endorsement that contains the most comprehensive subject matter listed in the appropriate subject matter table which is generally considered to be the superior endorsement. Where an applicant holds multiple disparate endorsements such as engine and deck they would be issued the renewal exercise for each endorsement.

A holder of a Document of Continuity may obtain a properly endorsed, valid MMC at any time by satisfying the requirements for renewal and will be issued renewal exercise(s) in accordance with the information herein.

1.3.3 Orally Assisted Examinations

46 CFR 10.107 defines the following:

“Orally Assisted Examination: means an examination as described in 46 CFR, part 11, subpart I of this subchapter administered orally and documented by a Coast Guard examiner.”

Orally assisted examinations may only be administered at the REC by a Coast Guard Examiner.

Orally assisted examinations are permitted for certain officer and rating endorsements as per the following:

46 CFR 11.201 (j) Allows oral examinations for officer endorsements of less than 200 GRT or for officer endorsements on Uninspected Fishing Industry Vessels. Each officer endorsement based on an orally assisted examination is limited to the specific route and type of vessel upon which the applicant obtained the majority of service.

The following references allow oral examinations for rating endorsements:

46 CFR 12.405 Examination and demonstration of ability for able seaman endorsements

46 CFR 12.407 General requirements for lifeboatman endorsements

46 CFR 12.409 General requirements for lifeboatman-limited endorsements

46 CFR 12.505 Examination requirements for QMED in the rating of oiler, fireman/watertender, junior engineer, pumpman/machinist, or electrician/refrigerating engineer

1.3.4 Traveling Examination Teams

The Coast Guard supports the use of Traveling Examination Teams (TET) in an effort to provide qualified mariners, located in regions of considerable distance from an REC, the ability to take required examinations without having to travel.

The requirements and procedures for requesting a TET are outlined in the Marine Safety Manual Volume III Chapter 6. Due to current administrative processes the National Maritime Center desires at least 20 days notice of a request for TET support.

Unless otherwise approved in advance, all retests will be done at a Regional Examination Center.

2.0 Deck Examinations

2.1 Deck Officer Endorsements

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 11.910 as appropriate.

2.1.1 Oceans or Near Coastal Endorsements

2.1.1.1 Unlimited Tonnage

<u>Master/Chief Mate- Oceans or Near Coastal</u>	<u>ONC01</u>
<u>Second Mate/Third Mate- Oceans or Near Coastal</u>	<u>ONC02</u>

2.1.1.2 Limited Tonnage: Less Than 500-1600 GRT

<u>Master- Oceans or Near Coastal</u>	<u>ONC03</u>
<u>Mate- Oceans or Near Coastal</u>	<u>ONC04</u>

2.1.1.3 Limited Tonnage; Less Than 200 GRT

<u>Master/Mate- Oceans or Near Coastal- Less than 200 GRT</u>	<u>ONC05</u>
<u>Master- Near Coastal- Less than 100GRT</u>	<u>ONC06</u>
<u>Operator Uninspected Passenger Vessel- Near Coastal</u>	<u>ONC07</u>

2.1.1.4 Uninspected Fishing Industry Vessels

<u>Master- Oceans or Near Coastal</u>	<u>UFV01</u>
<u>Mate- Oceans or Near Coastal</u>	<u>UFV02</u>

2.1.1.5 Offshore Supply Vessels

<u>Master/Chief Mate- Oceans or Near Coastal</u>	<u>OSV01</u>
<u>Mate- Oceans or Near Coastal</u>	<u>OSV02</u>

2.1.1.1 Unlimited Tonnage

Master/Chief Mate Oceans or Near Coastal of Unlimited Tonnage

Exam Code: ONC01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q101- Deck General Part I	50	70
Q102- Deck General Part II	50	70
Q103- Deck Safety	70	70
Q104- Deck Safety: Stability Problems	15	70
Q105- Navigation General: Near Coastal	70	70
Q106- Navigation General: Oceans	70	70
Q107- Navigation Problems: Chart Plot	10	90
Q108- Navigation Problems: Near Coastal	10	90
Q109- Navigation Problems: Oceans	15	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q109-Navigation Problems: Oceans

* **Raise of Grade:** IAW 46 CFR 11.903(c)(1) Applicants Raising Grade from Chief Mate to Master may do so without further examination

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q106- Navigation General: Oceans	70	70
Q109- Navigation Problems: Oceans	15	80

Second Mate/Third Mate Oceans or Near Coastal of Unlimited Tonnage

Exam Code: ONC02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q111- Deck General	70	70
Q112- Deck Safety	70	70
Q113- Navigation General: Near Coastal	70	70
Q114- Navigation General: Oceans	70	70
Q115- Navigation Problems: Chart Plot	15	87
Q116- Navigation Problems: Near Coastal	10	90
Q117- Navigation Problems: Oceans	15	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q117-Navigation Problems: Oceans

* U.S.C.G approved courses may not be used in lieu of any of these modules

* **Raise of Grade:** IAW 46 CFR 11.903(c)(4) Applicants Raising Grade from Third Mate to Second Mate may do so without further examination

* **Increase in Scope:** Applicants Increasing Scope from Mate Less than 500-1600 GRT to Third Mate on the same route may do so without further examination

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q114- Navigation General: Oceans	70	70
Q117- Navigation Problems: Oceans	15	80

2.1.1.2 Limited Tonnage: Less than 500-1600 Gross Registered Tons

Master Oceans or Near Coastal of Less than 500-1600 Gross Registered Tons Exam Code: ONC03

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q120- Deck General	70	70
Q121- Deck Safety	70	70
Q122- Deck Safety: Stability Problems	10	70
Q123- Navigation General: Near Coastal	70	70
Q124- Navigation General: Oceans	70	70
Q125- Navigation Problems: Chart Plot	10	90
Q126- Navigation Problems: Near Coastal	10	90
Q127- Navigation Problems: Oceans	15	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q127-Navigation Problems: Oceans

* U.S.C.G approved courses may not be used in lieu of any of these modules where a full examination is required

* **Increase in Scope:** From Master Less than 500 GRT to Master Less than 1600 GRT on the same route may do so without further examination

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q124- Navigation General: Oceans	70	70
Q127- Navigation Problems: Oceans	15	80

* IAW 46 CFR 11.412(b), Applicants who have met the examination requirements for Chief Mate of Unlimited Tonnage can add an endorsement as Master Less than 1600 GRT on the same route without further examination

* IAW 46 CFR 11.412(b), Applicants who meet the requirements for Second Mate of Unlimited Tonnage can add an endorsement as Master Less than 1600 GRT on the same route by taking the following modules

Module Name	Number of Questions	Passing Score
Q130- Navigation and Deck General/Safety	70	70
Q131- Deck Safety: Stability Problems	10	70

* **Raise of Grade:** IAW 46 CFR 11.418(b), Applicants Raising Grade from Master/Mate Pilot of Towing Vessels, regardless of the tonnage, to Master Less than 500 GRT on the same route by taking only the following modules

Module Name	Number of Questions	Passing Score
Q132- Deck General/Safety	70	70
Q133- Deck Safety: Stability Problems	10	70
Q134- Navigation Problems: Near Coastal	10	90
Q135- Navigation Problems: Oceans	15	80

* Near Coastal routes do not take Q135-Navigation Problems: Oceans

**Mate Oceans or Near Coastal of Less than 500-1600 Gross Registered Tons
Exam Code: ONC04**

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q136- Deck General	70	70
Q137- Deck Safety	70	70
Q138- Navigation General: Near Coastal	70	70
Q139- Navigation General: Oceans	70	70
Q140- Navigation Problems: Chart Plot	15	87
Q141- Navigation Problems: Near Coastal	10	90
Q142- Navigation Problems: Oceans	15	80

- * Navigation General module will be either Near Coastal or Oceans depending on route requested
- * Near Coastal routes do not take Q142-Navigation Problems: Oceans
- * U.S.C.G approved courses may not be used in lieu of any of these modules where a full examination is required
- * **Increase in Scope:** From Mate Less than 500 GRT to Mate Less than 1600 GRT may do so without further examination
- * **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q139- Navigation General: Oceans	70	70
Q142- Navigation Problems: Oceans	15	80

2.1.1.3 Limited Tonnage: Less than 200 Gross Registered Tons

Master Oceans or Near Coastal of Less than 200 Gross Registered Tons

Mate Oceans or Near Coastal of Less than 200 Gross Registered Tons

Exam Code: ONC05

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q150- Deck General	50	70
Q151- Deck Safety	50	70
Q152- Navigation General: Oceans or Near Coastal	50	70
Q153- Navigation Problems: Chart Plot	10	90
Q154- Navigation Problems: Oceans	10	80

* Near Coastal routes do not take Q154-Navigation Problems: Oceans

* **Raise of Grade:** IAW 46 CFR 11.903(c)(3), Applicants Raising Grade from Mate Less than 200 GRT to Master Less than 200 GRT on the same route may do so without further examination

* **Increase in Scope:** From Near Coastal to Oceans, the following module is required

Module Name	Number of Questions	Passing Score
Q154- Navigation Problems: Oceans	10	80

* **Increase in Scope:** From Master/Mate Less than 200 GRT Great Lakes and Inland to Master/Mate Less than 200 GRT Near Coastal take the following modules

Module Name	Number of Questions	Passing Score
Q150- Deck General	50	70
Q152- Navigation General: Oceans or Near Coastal	50	70

* If the applicant has a COLREGS limitation on their current credential the following module is also required.

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

* **Increase in Scope:** From Master Near Coastal Less than 100 GRT to Master/Mate Near Coastal Less than 200 GRT take the following module

Module Name	Number of Questions	Passing Score
Q156- Navigation and Deck General/Safety	50	70

* **Increase in Scope:** From Master Near Coastal Less than 100 GRT to Master Oceans Less than 200 GRT take the following modules

Module Name	Number of Questions	Passing Score
Q156- Navigation and Deck General/Safety	50	70
Q157- Navigation Problems: Oceans	10	80

* **Raise of Grade:** IAW 46 CFR 11.425(b), Applicants Raising Grade from Operator Uninspected Passenger Vessel Near Coastal to Mate Oceans Less than 200 GRT, take the following modules

Module Name	Number of Questions	Passing Score
Q158- Navigation and Deck General/Safety	70	70
Q159- Navigation Problems: Oceans	10	80

* **Raise of Grade:** IAW 46 CFR 11.427(b), Applicants Raising Grade from Operator Uninspected Passenger Vessel Near Coastal to Mate Near Coastal Less than 200 GRT take the following module

Module Name	Number of Questions	Passing Score
Q158- Navigation and Deck General/Safety	70	70

**Master Near Coastal of Less than 100 Gross Registered Tons
Exam Code: ONC06**

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q160- Deck General	50	70
Q161- Deck Safety	50	70
Q162- Navigation General: Near Coastal	50	70
Q163- Navigation Problems: Chart Plot	10	90

* **Increase in Scope:** From Master Less than 100 GRT Great Lakes and Inland to Master Less than 100 GRT Near Coastal take the following modules

Module Name	Number of Questions	Passing Score
Q160- Deck General	50	70
Q162- Navigation General: Near Coastal	50	70

* If the applicant has a COLREGS limitation on their current credential, the following module is also required

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

* **Raise of Grade:** From Operator Uninspected Passenger Vessel Near Coastal to Master Near Coastal Less than 100 GRT take the following module

Module Name	Number of Questions	Passing Score
Q165- Navigation and Deck General/Safety	50	70

Operator Uninspected Passenger Vessel Near Coastal

Exam Code: ONC07

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q170- Deck General/Safety	50	70
Q171- Navigation General: Near Coastal	50	70
Q172- Navigation Problems: Chart Plot	10	90

* **Increase in Scope:** From Operator Uninspected Passenger Vessel Great Lakes and Inland to Operator Uninspected Passenger Vessel Near Coastal take the following modules

Module Name	Number of Questions	Passing Score
Q170- Deck General/Safety	50	70
Q171- Navigation General: Near Coastal	50	70

* If the applicant has a COLREGS limitation on their current credential, the following module is also required

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

2.1.1.4 Uninspected Fishing Industry Vessels

Master Oceans or Near Coastal- Uninspected Fishing Industry Vessels

Exam Code: UFV01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q180- Deck General	50	70
Q181- Deck Safety	50	70
Q182- Navigation General: Near Coastal	50	70
Q183- Navigation General: Oceans	50	70
Q184- Navigation Problems: Chart Plot	10	90
Q185- Navigation Problems: Near Coastal	10	90
Q186- Navigation Problems: Oceans	10	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q186-Navigation Problems: Oceans

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q183- Navigation General: Oceans	70	70
Q186- Navigation Problems: Oceans	15	80

Mate Oceans or Near Coastal- Uninspected Fishing Industry Vessels

Exam Code: UFV02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q188- Deck General	50	70
Q189- Deck Safety	50	70
Q190- Navigation General: Near Coastal	50	70
Q191- Navigation General: Oceans	50	70
Q192- Navigation Problems: Chart Plot	15	87
Q193- Navigation Problems: Near Coastal	10	90
Q194- Navigation Problems: Oceans	10	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q194-Navigation Problems: Oceans

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q191- Navigation General: Oceans	70	70
Q194- Navigation Problems: Oceans	15	80

2.1.1.5 Offshore Supply Vessels

Master/Chief Mate Oceans or Near Coastal- Offshore Supply Vessels

Exam Code: OSV01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q200- Deck General	70	70
Q201- Deck Safety	70	70
Q202- Deck Safety: Stability Problems	10	70
Q203- Navigation General: Near Coastal	70	70
Q204- Navigation General: Oceans	70	70
Q205- Navigation Problems: Chart Plot	10	90
Q206- Navigation Problems: Near Coastal	10	90
Q207- Navigation Problems: Oceans	15	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q207-Navigation Problems: Oceans

* **Raise of Grade:** Applicants Raising Grade from Chief Mate OSV to Master OSV may do so without further examination

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q204- Navigation General: Oceans	70	70
Q207- Navigation Problems: Oceans	15	80

Mate Oceans or Near Coastal- Offshore Supply Vessels

Exam Code: OSV02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q209- Deck General	70	70
Q210- Deck Safety	70	70
Q211- Navigation General: Near Coastal	70	70
Q212- Navigation General: Oceans	70	70
Q213- Navigation Problems: Chart Plot	15	87
Q214- Navigation Problems: Near Coastal	10	90
Q215- Navigation Problems: Oceans	15	80

* Navigation General module will be either Near Coastal or Oceans depending on route requested

* Near Coastal routes do not take Q215-Navigation Problems: Oceans

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q212- Navigation General: Oceans	70	70
Q215- Navigation Problems: Oceans	15	80

2.1.2 Great Lakes and Inland Endorsements

2.1.2.1 Unlimited Tonnage

<u>Master- Great Lakes and Inland</u>	<u>GLI01</u>
<u>Mate- Great Lakes and Inland</u>	<u>GLI02</u>

2.1.2.2 Limited Tonnage: Less Than 500-1600 GRT

<u>Master- Great Lakes and Inland</u>	<u>GLI03</u>
<u>Mate- Great Lakes and Inland</u>	<u>GLI04</u>

2.1.2.3 Limited Tonnage; Less Than 200 GRT

<u>Master/Mate- Great Lakes and Inland - Less than 200 GRT</u>	<u>GLI05</u>
<u>Master- Great Lakes and Inland - Less than 100GRT</u>	<u>GLI06</u>
<u>Operator Uninspected Passenger Vessel- Great Lakes and Inland</u>	<u>GLI07</u>
<u>Limited Operator Uninspected Passenger Vessel</u>	<u>GLI08</u>

<u>2.1.2.4 First Class Pilot</u>	<u>FCP01</u>
---	--------------

Great Lakes and Inland Endorsements

IAW 46 CFR 11.430 Endorsements for the Great Lakes and inland waters

(d) “Because these officer endorsements authorize service on waters seaward of the International Regulations for Preventing Collisions at Sea (COLREGS) demarcation lines, as defined in 33 CFR part 80, the applicant must complete an examination on the COLREGS or the endorsement will exclude such waters.”

2.1.2.1 Unlimited Tonnage

Master Great Lakes and Inland of Unlimited Tonnage

Exam Code: GLI01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q302- Deck General	70	70
Q303- Deck Safety	70	70
Q304- Navigation General: Great Lakes and Inland	70	70
Q305- Navigation Problems: Chart Plot	10	90
Q306- Great Lakes Topics	25	70

* Inland routes do not take Q306-Great Lakes Topics

* For Great Lakes and Inland routes Rules of the Road module will be Inland and International

* For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module. Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC.

* **Increase in Scope:** From Inland to Great Lakes and Inland the following modules are required

Module Name	Number of Questions	Passing Score
Q306- Great Lakes Topics	25	70

* If the applicant has a COLREGS limitation on their current credential, the following module is also required

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

Mate Great Lakes and Inland of Unlimited Tonnage

Exam Code: GLI02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q308- Deck General	70	70
Q309- Deck Safety	70	70
Q310- Navigation General: Great Lakes and Inland	70	70
Q311- Navigation Problems: Chart Plot	15	87
Q312- Great Lakes Topics	25	70

* Inland routes do not take Q312-Great Lakes Topics

* For Great Lakes and Inland routes Rules of the Road module will be Inland and International

* For Inland routes Rules of the Road, module will be Inland and International unless the applicant requests the Inland module.

Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC

* **Increase in Scope:** From Inland to Great Lakes and Inland the following modules are required

Module Name	Number of Questions	Passing Score
Q312- Great Lakes Topics	25	70

* If the applicant has a COLREGS limitation on their current credential, the following module is also required

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

2.1.2.2 Limited Tonnage: Less than 500-1600 Gross Registered Tons

Master Great Lakes and Inland of Less than 500-1600 Gross Registered Tons

Exam Code: GLI03

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q320- Deck General	70	70
Q321- Deck Safety	70	70
Q322- Navigation General: Great Lakes and Inland	70	70
Q323- Navigation Problems: Chart Plot	10	90
Q324- Great Lakes Topics	25	70

* Inland routes do not take Q324-Great Lakes Topics

* For Great Lakes and Inland routes Rules of the Road module will be Inland and International

* For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module. Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC

* **Increase in Scope:** From Master Less than 500 GRT to Master Less than 1600 GRT may do so without further examination

* **Increase in Scope:** From Inland to Great Lakes and Inland the following modules are required

Module Name	Number of Questions	Passing Score
Q324- Great Lakes Topics	25	70

* If the applicant has a COLREGS limitation on their current credential, the following module is also required.

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

* **Raise of Grade:** IAW 46 CFR 11.446(b) Applicants Raising Grade from Master/Mate Pilot of Towing Vessels, regardless of the tonnage, to Master Less than 500 GRT on the same route take only the following module

Module Name	Number of Questions	Passing Score
Q326- Navigation and Deck General/Safety	70	70

**Mate Great Lakes and Inland of Less than 500-1600 Gross Registered Tons
Exam Code: GLI04**

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q327- Deck General	70	70
Q328- Deck Safety	70	70
Q329- Navigation General: Great Lakes and Inland	70	70
Q330- Navigation Problems: Chart Plot	15	87
Q331- Great Lakes Topics	25	70

- * Inland routes do not take Q331-Great Lakes Topics
- * For Great Lakes and Inland routes Rules of the Road module will be Inland and International
- * For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module. Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC
- * **Increase in Scope:** From Less than 500 GRT to Less than 1600 GRT may do so without further examination
- * **Increase in Scope:** From Inland to Great Lakes and Inland the following module is required

Module Name	Number of Questions	Passing Score
Q331- Great Lakes Topics	25	70

- * If the applicant has a COLREGS limitation on their current credential, the following module is also required.

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90

2.1.2.3 Limited Tonnage: Less than 200 Gross Registered Tons

Master or Mate Great Lakes and Inland of Less than 200 Gross Registered Tons

Exam Code: GLI05

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q340- Deck General	50	70
Q341- Deck Safety	50	70
Q342- Navigation General: Great Lakes and Inland	50	70
Q343- Navigation Problems: Chart Plot	10	90

* For Great Lakes and Inland routes Rules of the Road module will be Inland and International

* For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module.

Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC

* **Raise of Grade:** IAW 46 CFR 11.903(c)(5), Applicants Raising Grade from Mate to Master on the same route may do so without further examination

* **Raise of Grade:** From Master Less than 100 GRT to Master or Mate Less than 200 GRT Great Lakes and Inland take only the following

Module Name	Number of Questions	Passing Score
Q345- Navigation and Deck General/Safety	50	70

* **Raise of Grade:** IAW 46 CFR 11.454(d), Applicants Raising Grade from Operator Uninspected Passenger Vessel to Mate Less than 200GRT Great Lakes and Inland take only the following

Module Name	Number of Questions	Passing Score
Q346- Navigation and Deck General/Safety	70	70

Master Great Lakes and Inland of Less than 100 Gross Registered Tons

Exam Code: GLI06

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q347- Deck General	50	70
Q348- Deck Safety	50	70
Q349- Navigation General: Great Lakes and Inland	50	70
Q350- Navigation Problems: Chart Plot	10	90

* For Great Lakes and Inland routes Rules of the Road module will be Inland and International

* For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module.

Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC

* **Raise of Grade** from Operator Uninspected Passenger Vessel to Master Less than 100 GRT Great Lakes and Inland take only the following

Module Name	Number of Questions	Passing Score
Q352- Navigation and Deck General/Safety	50	70

Operator Uninspected Passenger Vessel Great Lakes and Inland Exam Code: GLI07

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q356- Deck General/Safety	50	70
Q357- Navigation General: Great Lakes and Inland	50	70
Q358- Navigation Problems: Chart Plot	10	90

- * For Great Lakes and Inland routes Rules of the Road module will be Inland and International
- * For Inland routes Rules of the Road module will be Inland and International unless the applicant requests the Inland module. Inland Rules of the Road modules will result in a geographic COLREGS limitation on the applicants MMC

Limited Operator Uninspected Passenger Vessel Exam Code: GLI08

Module Name	Number of Questions	Passing Score
Q301- Rules of the Road: Inland	50	80
Q360- Deck General/Safety	50	70
Q361- Navigation General	20	70

- * See Coast Guard Policy Letter 10-04 : Restricted Endorsements for Merchant Mariner Credentials (MMC) as Operator Of Uninspected Passenger Vessels (OUPV) for additional information on this endorsement.

2.1.2.4 First Class Pilot

Exam Code: FCP01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q300- Rules of the Road: Inland	50	90
Q370- Deck General/Safety	50	70
Q371- Navigation General	70	70
Q372- Navigation Problems: Chart Plot	10	90
Q373- Navigation Problems: Chart Plot	10	90
Q374- Local Knowledge	Determined by the CG Sector for local area and desired route. Contact REC for details.	
Q375- Chart Sketch		

- * Rules of the Road module will either be Inland and International or Inland Rules depending on the route requested
- * IAW 46 CFR 11.707(a) Applicants requesting officer endorsement as First Class Pilot, except those noted below, MUST take all modules
- * IAW 46 CFR 11.707(b) Applicants requesting an extension of route or holding an MMC endorsement as Master or Mate authorized to serve on vessels of over 1600 GRT are ONLY required to take the Local Knowledge and Chart Sketch modules for the requested route
- * Applicants take one chart plot module. Applicants requesting a river route take module Q373, all others take module Q372

2.1.3 River Endorsements

2.1.3.1 Unlimited Tonnage

[Master- Rivers](#) [RVR01](#)

2.1.3.2 Limited Tonnage: Less Than 500-1600 GRT

[Master- Rivers](#) [RVR02](#)

[Mate- Rivers](#) [RVR03](#)

2.1.3.3 Limited Tonnage; Less Than 200 GRT

[Master/Mate- Rivers - Less than 200 GRT](#) [RVR04](#)

[Master- Rivers - Less than 100GRT](#) [RVR05](#)

2.1.3.1 Unlimited Tonnage

Master Rivers of Unlimited Tonnage

Exam Code: RVR01

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q380- Deck General	50	70
Q381- Deck Safety	50	70
Q382- Navigation General: Rivers	50	70
Q383- Navigation Problems: Chart Plot	10	90

2.1.3.2 Limited Tonnage: Less than 500-1600 Gross Registered Tons

Master Rivers of Less than 500-1600 Gross Registered Tons

Exam Code: RVR02

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q386- Deck General	50	70
Q387- Deck Safety	50	70
Q388- Navigation General: Rivers	50	70
Q389- Navigation Problems: Chart Plot	10	90

* **Increase in Scope:** From Master Less than 500 GRT to Master Less than 1600 GRT may do so without further examination

Mate Rivers of Less than 500-1600 Gross Registered Tons

Exam Code: RVR03

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q391- Deck General/Safety	70	70
Q392- Navigation General: Rivers	50	70
Q393- Navigation Problems: Chart Plot	10	90

* **Increase in Scope:** From Mate Less than 500 GRT to Mate Less than 1600 GRT may do so without further examination

2.1.3.3 Limited Tonnage: Less than 200 Gross Registered Tons

Master or Mate Rivers of Less than 200 Gross Registered Tons

Exam Code: RVR04

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q396- Deck General/Safety	70	70
Q397- Navigation General: Rivers	50	70
Q398- Navigation Problems: Chart Plot	10	90

* **Raise in Grade:** IAW 46 CFR 11.903(c)(5), Applicants Raising Grade from Mate to Master on the same route may do so without further examination * **Raise in Grade:** From Master Less than 100 GRT Rivers to Master or Mate Less than 200GRT Rivers take only the following

Module Name	Number of Questions	Passing Score
Q400- Navigation and Deck General/Safety	50	70

Master Rivers of Less than 100 Gross Registered Tons

Exam Code: RVR05

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q401- Deck General/Safety	70	70
Q402- Navigation General: Rivers	50	70
Q403- Navigation Problems: Chart Plot	10	90

2.1.4 Additional Officer Endorsements

Auxiliary Sail AXS01
Assistance Towing AT01

Auxiliary Sail Endorsement- Master/Mate/Operator Less than 200 Gross Registered Tons **Exam Code: AXS01**

Module Name	Number of Questions	Passing Score
Q460- Auxiliary Sail	20	70

* IAW 46 CFR 11.401(d), A master or mate on vessels of 200 GRT or more, and a master or mate on vessels under 200 GRT, may be endorsed for sail or auxiliary sail as appropriate

Assistance Towing Endorsement- Any Deck Officer Endorsement **Exam Code: AT01**

Module Name	Number of Questions	Passing Score
Q461- Assistance Towing	20	70

* IAW 46 CFR 11.482(a), Holders of MMC officer and OUPV endorsements must have an assistance towing endorsement to engage in assistance towing. Holders of endorsements as master or mate (pilot) of towing vessels or master or mate endorsements authorizing service on inspected vessels of 200 GRT or more do not need the assistance towing endorsement.

2.1.5 Towing Vessel Endorsements

2.1.5.1 Oceans or Near Coastal

[Master/Mate \(Pilot\)/Apprentice Mate \(Steersman\)](#)

TV01

2.1.5.2 Great Lakes and Inland

[Master/Mate \(Pilot\)/Apprentice Mate \(Steersman\)](#)

TV02

2.1.5.3 Western Rivers

[Master/Mate \(Pilot\)/Apprentice Mate \(Steersman\)](#)

TV03

2.1.5.1 Oceans or Near Coastal Endorsements

Master of Towing Vessels

Mate (Pilot) of Towing Vessels

Apprentice Mate (Steersman)

Exam Code: TV01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q410- Deck General	70	70
Q411- Deck Safety	70	70
Q412- Navigation General: Near Coastal	50	70
Q413- Navigation General: Oceans	50	70
Q414- Navigation Problems: Chart Plot	10	90
Q415- Navigation Problems: Near Coastal	10	90
Q416- Navigation Problems: Oceans	10	80

* Navigation General module will be either Oceans or Near Coastal depending on route requested

* Near Coastal endorsement options do not take Q416 Navigation Problems: Oceans

* **Increase in Scope:** From Near Coastal to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q413- Navigation General: Oceans	50	70
Q416- Navigation Problems: Oceans	10	80

* **Increase in Scope:** From Great Lakes and Inland to Near Coastal the following modules are required

Module Name	Number of Questions	Passing Score
Q412- Navigation General: Near Coastal	50	70
Q415- Navigation Problems: Near Coastal	10	90

* **Increase in Scope:** From Great Lakes and Inland to Oceans the following modules are required

Module Name	Number of Questions	Passing Score
Q413- Navigation General: Oceans	50	70
Q415- Navigation Problems: Near Coastal	10	90
Q416- Navigation Problems: Oceans	10	80

* **Increase in Scope:** From Western Rivers must take the full exam for Oceans or Near Coastal Routes

2.1.5.2 Great Lakes and Inland Endorsements

Master of Towing Vessels
Mate (Pilot) of Towing Vessels
Apprentice Mate (Steersman)
Exam Code: TV02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q418- Deck General	70	70
Q419- Deck Safety	70	70
Q420- Navigation General: Great Lakes and Inland	50	70
Q421- Navigation Problems: Chart Plot	10	90

* **Increase in Scope:** From Western Rivers to Great Lakes and Inland the following modules are required

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q420- Navigation General: Great Lakes and Inland	50	70
Q421- Navigation Problems: Chart Plot	10	90

2.1.5.3 Western Rivers Endorsements

Master of Towing Vessels
Mate (Pilot) of Towing Vessels
Apprentice Mate (Steersman)
Exam Code: TV03

Module Name	Number of Questions	Passing Score
Q300- Rules of the Road: Inland	50	90
Q423- Deck General	50	70
Q424- Deck Safety	50	70
Q425- Navigation General: Western Rivers	50	70
Q426- Navigation Problems: Chart Plot	10	90

* Adding Western Rivers Route to Oceans or Near Coastal, or Great Lakes and Inland endorsements require only the following modules:

Module Name	Number of Questions	Passing Score
Q425- Navigation General: Western Rivers	50	70
Q426- Navigation Problems: Chart Plot	10	90

2.1.6 Mobile Offshore Drilling Unit Endorsements

Offshore Installation Manager	MODU01
Barge Supervisor	MODU02
Ballast Control Operator	MODU03

Offshore Installation Manager (OIM)

Exam Code: MODU01

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q430- OIM: Deck General/Safety	50	70
Q431- OIM: Unrestricted	50	70
Q432- OIM: Surface Units Underway	50	70
Q433- OIM: Surface Units On Location	50	70
Q434- OIM: Bottom Bearing Units Underway	50	70
Q435- OIM: Bottom Bearing Units On Location	50	70

* Applicants for Surface Units On Location or Bottom Bearing Units On Location do not take Q100- Rules of the Road Inland and International

* All Applicants take Q430 Deck General/Safety

* Applicants take the OIM module Q430-Q435 depending on the endorsement requested

* **Increase in Scope:** From any limited OIM endorsement to OIM Unrestricted by taking the following module

Module Name	Number of Questions	Passing Score
Q431- OIM: Unrestricted	50	70

* IAW 46 CFR 11.903 (c)(2) mariners with an existing endorsement as Master of Unlimited Tonnage Oceans or Near Coastal, who meet the professional requirements, may add an endorsement for OIM, Barge Supervisor or Ballast Control Operator without testing.

Barge Supervisor

Exam Code: MODU02

Module Name	Number of Questions	Passing Score
Q100- Rules of the Road: Inland and International	50	90
Q437- Barge Supervisor: Deck General/Safety	50	70
Q438- Barge Supervisor MODU Operations	50	70

Ballast Control Operator

Exam Code: MODU03

Module Name	Number of Questions	Passing Score
Q440- Ballast Control Operator: Deck General/Safety	50	70
Q441- Ballast Control Operator MODU Operations	50	70

2.2 Deck Rating Endorsements

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 12.405, 12.407(b)(3), and 13.121(e) as appropriate.

2.2.1 Lifeboatman

Lifeboatman LB01

Lifeboatman Limited LB02

2.2.2 Able Seaman

Unlimited/Limited/Special/OSV/Sail/Fishing Industry AB01

Marlinespike Seamanship Demonstration AB02

2.2.3 Tankerman

Assistant Dangerous Liquids TK01

Assistant Liquefied Gas TK02

2.2.1 Lifeboatman

Lifeboatman

Exam Code: LB01

Module Name	Number of Questions	Passing Score
Q445- Lifeboatman	50	70

Lifeboatman Limited

Exam Code: LB02

Module Name	Number of Questions	Passing Score
Q447- Lifeboatman Limited	50	70

2.2.2 Able Seaman

Able Seaman Unlimited

Able Seaman Limited

Able Seaman Special

Able Seaman OSV

Able Seaman Sail

Able Seaman Fishing Industry

Exam Code: AB01

Module Name	Number of Questions	Passing Score
Q450- Navigation and Rules of the Road	50	70
Q451- Deck General/Safety	50	70

* Applicants can raise the category of any Able Seaman endorsement without further examination upon meeting the appropriate professional requirements.

Marlinespike Seamanship - Demonstration

Exam Code: AB02

Knot, Bend, Splice, Hitch	Requirement	Time Limit
Eye Splice with bitter end whipped	One of these items must be successfully demonstrated	15 minutes
Short Splice with whipped ends		
Bowline	Each of these items must be successfully demonstrated	15 minutes
Square Knot		
Clove Hitch		
Sheet Bend		
French Bowline		
Running Bowline		
Bowline on a Bight		
Cat's Paw		
Figure Eight		
Carrick Bend		
Round Turn and Two Half Hitches		
Rolling Hitch		
Stopper Hitch		
Timber Hitch		
Stage Hitch		
Barrel Hitch		
Fisherman's Bend		
Double Becket Bend	A combination of any six of these items must be successfully demonstrated	

* IAW 46 CFR 12.405(c), The applicant must provide evidence, to the satisfaction of the Coast Guard, of the knowledge of principal knots, bends, splices, and hitches in common use by actually making them.

* The demonstration can be completed at a Regional Exam Center or via a USCG approved course

* In order to successfully demonstrate the knowledge requirement the applicant MUST

* Successfully demonstrate ONE of the TWO splices within 15 minutes

AND

* Successfully demonstrate the four required AND six additional knots, hitches, or bends within 15 minutes

2.2.3 Tankerman

Tankerman Assistant Dangerous Liquids

Exam Code: TK01

Module Name	Number of Questions	Passing Score
Q456- Tankerman Assistant Dangerous Liquids	50	70

Tankerman Assistant Liquefied Gas

Exam Code: TK02

Module Name	Number of Questions	Passing Score
Q457- Tankerman Assistant Liquefied Gas	50	70

* Applicants approved to test for both endorsements must take both modules

2.3 Deck Renewal Endorsements

Renewal Open Book Exercise- Any Deck Endorsement

* IAW 46 CFR 10.227(e)(1)(ii) Applicants who do not have sea service or refresher training take Rules of the Road Renewal Open Book Exercise and the Renewal Open Book Exercise.

* IAW 46 CFR 10.227(e)(1)(iv) Applicants renewing with closely related service take only the Rules of the Road Renewal Open Book Exercise.

* Renewal examinations are open book exercises issued to the mariner by the Regional Exam Centers. It is recommended that completed exercises be returned to the Regional Exam Center for scoring within thirty days in order to assure the examination cycle, including retakes, is completed within ninety days. In no case will a renewal exercise be accepted if returned, based on the postmark date, more than 90 days from the original mailing date

2.3.1 Deck Officer Endorsement Renewal

Master or Mate- Oceans or Near Coastal	RNW01
Uninspected Fishing Vessels	RNW02
Offshore Supply Vessels	RNW03
Master or Mate- Great Lakes and Inland	RNW04
Master or Mate- Rivers	RNW05
Towing Vessels	RNW06
Mobile Offshore Drilling Units	RNW07

2.3.2 Deck Rating Endorsement Renewal

Renewal Deck Rating Endorsements.....	RNW08
---	-----------------------

Renewal Master or Mate Oceans or Near Coastal Exam Code: RNW01

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q110- Master/Chief Mate of Unlimited Tonnage Renewal Open Book Exercise	50	90
Q118- Second/Third Mate of Unlimited Tonnage Renewal Open Book Exercise	50	90
Q128- Master LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q143- Mate LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q155- Master/Mate LT 200 GRT Renewal Open Book Exercise	50	90
Q164- Master LT 100 GRT Renewal Open Book Exercise	50	90
Q173- Operator Uninspected Passenger Vessel Renewal Open Book Exercise	50	90

Renewal Uninspected Fishing Industry Vessel Oceans or Near Coastal

Exam Code: RNW02

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q187- Master Uninspected Fishing Industry Vessel Renewal Open Book Exercise	50	90
Q195- Mate Uninspected Fishing Industry Vessel Renewal Open Book Exercise	50	90

Renewal Offshore Supply Vessel Oceans or Near Coastal

Exam Code: RNW03

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q208- Master/Chief Mate Offshore Supply Vessel Renewal Open Book Exercise	50	90
Q216- Mate Offshore Supply Vessel Renewal Open Book Exercise	50	90

Renewal Master or Mate Great Lakes and Inland

Exam Code: RNW04

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q476- Rules of the Road: Inland Renewal Open Book Exercise	50	90
Q477- Rules of the Road: Inland Limited Operator Uninspected Passenger Vessel Renewal Open Book Exercise	50	90
Q307- Master of Unlimited Tonnage Renewal Open Book Exercise	50	90
Q313- Mate of Unlimited Tonnage Renewal Open Book Exercise	50	90
Q325- Master LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q332- Mate LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q344- Master/Mate LT 200 GRT Renewal Open Book Exercise	50	90
Q351- Master LT 100 GRT Renewal Open Book Exercise	50	90
Q359- Operator Uninspected Passenger Vessel Renewal Open Book Exercise	50	90
Q362- Limited Operator UPV Renewal Open Book Exercise	50	90
Q376- First Class Pilot Renewal Open Book Exercise	50	90

* Rules of the Road module will either be Inland and International or Inland Rules depending on the endorsement

Renewal Master or Mate Rivers

Exam Code: RNW05

Module Name	Number of Questions	Passing Score
Q476- Rules of the Road: Inland Renewal Open Book Exercise	50	90
Q384- Master of Unlimited Tonnage Renewal Open Book Exercise	50	90
Q390- Master LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q394- Mate LT 500-1600 GRT Renewal Open Book Exercise	50	90
Q399- Master/Mate LT 200 GRT Renewal Open Book Exercise	50	90
Q404- Master LT 100 GRT Renewal Open Book Exercise	50	90

Renewal Master, Mate Pilot, Apprentice Mate Steersmen Towing Vessels

Exam Code: RNW06

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q476- Rules of the Road: Inland Renewal OB Exercise	50	90
Q417- TV Oceans or Near Coastal Renewal Open Book Exercise	50	90
Q422- TV Great Lakes and Inland Renewal Open Book Exercise	50	90
Q427- TV Western Rivers Renewal Open Book Exercise	50	90

* Rules of the Road module will either be Inland and International or Inland Rules depending on the route

Renewal Mobile Offshore Drilling Units

Exam Code: RNW07

Module Name	Number of Questions	Passing Score
Q475- Rules of the Road: Inland and International Renewal Open Book Exercise	50	90
Q436- Offshore Installation Manager Renewal Open Book Exercise	50	90
Q439- Barge Supervisor Renewal Open Book Exercise	50	90
Q442- Ballast Control Officer Renewal Open Book Exercise	50	90

2.3.2 Deck Rating Endorsement Renewal

RNW08

Renewal Deck Rating Endorsements

Exam Code: RNW08

Module Name	Number of Questions	Passing Score
Q446- Lifeboatman Renewal Open Book Exercise	50	90
Q448- Lifeboatman Limited Renewal Open Book Exercise	50	90
Q452- Able Seaman Renewal Open Book Exercise	50	90

3.0 ENGINE EXAMINATIONS

3.1 Unlimited Engineering Officer Endorsements

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 11.950 as appropriate.

3.1.1 First Assistant Engineer

Original-Raise of Grade **Exam Code**
First Assistant Engineer, Steam-Motor-Gas Turbine Plants 1AE01

Increase in Scope **Exam Code**
First Assistant Engineer, Steam Plants 1AE02
First Assistant Engineer, Motor Plants 1AE03
First Assistant Engineer, Gas Turbine Plants 1AE04

Steam-Motor-Gas Turbine Plants

Original-Raise of Grade

Exam Code: 1AE01

Module Name	Number of Questions	Passing Score
Q511- General Subjects I	70	70
Q512- General Subjects II	70	70
Q513- Steam Plants	70	70
Q514- Motor Plants	70	70
Q515- Gas Turbine Plants	70	70
Q516- Engineering Safety & Environmental Protection	70	70
Q517- Electrical, Electronic, & Control Engineering	70	70

* An applicant who applies for an Original Chief Engineer-Unlimited endorsement based on military service, or experience under a foreign endorsement, shall be administered the examination modules listed above.

*IAW 46 CFR 11.903(c)(6) Applicants raising grade from First Assistant to Chief Engineer-Unlimited may do so without further examination.

Steam Plants

Increase in Scope

Exam Code: 1AE02

Module Name	Number of Questions	Passing Score
Q513- Steam Plants	70	70

* Increase in Scope: From Motor and/or Gas Turbine to Steam, Motor, and/or Gas Turbine Plants.

Motor Plants

Increase in Scope

Exam Code: 1AE03

Module Name	Number of Questions	Passing Score
Q514- Motor Plants	70	70

* Increase in Scope: From Steam and/or Gas Turbine to Motor, Steam, and/or Gas Turbine Plants.

**Gas Turbine Plants
Increase in Scope
Exam Code: 1AE04**

Module Name	Number of Questions	Passing Score
Q515- Gas Turbine Plants	70	70

* Increase in Scope: From Steam and/or Motor to Gas Turbine, Steam, and/or Motor Plants.

3.1.2 Third Assistant Engineer

Original-Raise of Grade **Exam Code**
[Third Assistant Engineer, Steam-Motor-Gas Turbine Plants](#) [3AE01](#)

Increase in Scope **Exam Code**
[Third Assistant Engineer, Steam Plants](#) [3AE02](#)
[Third Assistant Engineer, Motor Plants](#) [3AE03](#)
[Third Assistant Engineer, Gas Turbine Plants](#) [3AE04](#)

**Steam-Motor-Gas Turbine Plants
Original-Raise of Grade
Exam Code: 3AE01**

Module Name	Number of Questions	Passing Score
Q531- Motor Plants I	70	70
Q532- Motor Plants II	70	70
Q533- Gas Turbine Plants	70	70
Q534- Engineering Safety & Environmental Protection	70	70
Q535- General Subjects	70	70
Q536- Electrical, Electronic, & Control Engineering	70	70
Q537- Steam Plants I	70	70
Q538- Steam Plants II	70	70

* An applicant who applies for an Original Second Assistant Engineer-Unlimited endorsement based on military service, or experience under a foreign endorsement, shall be administered the examination modules listed above.

*IAW 46 CFR 11.903(c)(9) Applicants raising grade from Third Assistant to Second Assistant Engineer-Unlimited may do so without further examination.

**Steam Plants
Increase in Scope
Exam Code: 3AE02**

Module Name	Number of Questions	Passing Score
Q537- Steam Plants I	70	70
Q538- Steam Plants II	70	70

* Increase in Scope: From Motor and/or Gas Turbine to Steam, Motor, and/or Gas Turbine Plants.

**Motor Plants
Increase in Scope
Exam Code: 3AE03**

Module Name	Number of Questions	Passing Score
Q531- Motor Plants I	70	70
Q532- Motor Plants II	70	70

* Increase in Scope: From Steam and/or Gas Turbine to Motor, Steam, and/or Gas Turbine Plants.

**Gas Turbine Plants
Increase in Scope
Exam Code: 3AE04**

Module Name	Number of Questions	Passing Score
Q533- Gas Turbine Plants	70	70

* Increase in Scope: From Steam and/or Motor to Gas Turbine, Steam, and/or Motor Plants.

3.1.3 Unlimited Engineering Officer Renewal Exercises

Renewal Open Book Exercise

* Renewal exercises are open book exercises issued to the mariner by the Regional Exam Centers. It is recommended that completed exercises be returned to the Regional Exam Center for scoring within thirty days in order to assure the examination cycle, including retakes, is completed within ninety days. In no case will a renewal exercise be accepted if returned, based on the postmark date, more than 90 days from the original mailing date

Renewal	Exam Code
Steam Plants	REX01
Motor Plants	REX02
Gas Turbine Plants	REX03

* A mariner submitting an application for renewal must take the renewal modules associated with each mode of propulsion being renewed.

**Steam Plants
Renewal
Exam Code: REX01**

Module Name	Number of Questions	Passing Score
Q590- Steam Plants Renewal Exercise	70	90

**Motor Plants
Renewal
Exam Code: REX02**

Module Name	Number of Questions	Passing Score
Q591- Motor Plants Renewal Exercise	70	90

**Gas Turbine Plants
Renewal
Exam Code: REX03**

Module Name	Number of Questions	Passing Score
Q592- Gas Turbine Plants Renewal Exercise	70	90

3.2 Limited Engineering Officer Endorsements

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 11.950 as appropriate.

3.2.1 Chief Engineer-Limited

Original-Raise of Grade **Exam Code**
Chief Engineer-Limited, Steam-Motor-Gas Turbine Plants CEL01

Increase in Scope **Exam Code**
Chief Engineer-Limited, Steam Plants CEL02
Chief Engineer-Limited, Motor Plants CEL03
Chief Engineer-Limited, Gas Turbine Plants CEL04

Steam-Motor-Gas Turbine Plants

Original-Raise of Grade

Exam Code: CEL01

Module Name	Number of Questions	Passing Score
Q601- General Subjects	70	70
Q602 – Motor Plants	70	70
Q603- Engineering Safety & Environmental Protection	70	70
Q604- Electrical, Electronic, & Control Engineering	70	70
Q605- Steam Plants	70	70
Q606 - Gas Turbine Plants	70	70

* Raise of Grade from Assistant Engineer-Limited to Chief Engineer-Limited.

Steam Plants

Increase in Scope

Exam Code: CEL02

Module Name	Number of Questions	Passing Score
Q605- Steam Plants	70	70

* Increase in Scope: From Motor and/or Gas Turbine to Steam, Motor, and/or Gas Turbine Plants.

Motor Plants

Increase in Scope

Exam Code: CEL03

Module Name	Number of Questions	Passing Score
Q602 – Motor Plants	70	70

* Increase in Scope: From Steam and/or Gas Turbine to Motor, Steam, and/or Gas Turbine Plants.

Gas Turbine Plants
Increase in Scope
Exam Code: CEL04

Module Name	Number of Questions	Passing Score
Q606 - Gas Turbine Plants	70	70

* Increase in Scope: From Steam and/or Motor to Gas Turbine, Steam, and/or Motor Plants.

3.2.2 Assistant Engineer-Limited

Original **Exam Code**
Assistant Engineer-Limited, Steam-Motor-Gas Turbine Plants AEL01

Increase in Scope **Exam Code**
Assistant Engineer-Limited, Steam Plants AEL02
Assistant Engineer-Limited, Motor Plants AEL03
Assistant Engineer-Limited, Gas Turbine Plants AEL04

Steam-Motor-Gas Turbine Plants

Original
Exam Code: AEL01

Module Name	Number of Questions	Passing Score
Q610- Motor Plants	70	70
Q611- Steam Plants	70	70
Q612- Gas Turbine Plants	70	70
Q613- General Subjects	70	70
Q614- Engineering Safety & Environmental Protection	70	70
Q615- Electrical, Electronic, & Control Engineering	70	70

Steam Plants
Increase in Scope
Exam Code: AEL02

Module Name	Number of Questions	Passing Score
Q611- Steam Plants	70	70

* Increase in Scope: From Motor and/or Gas Turbine to Steam, Motor, and/or Gas Turbine Plants.

Motor Plants
Increase in Scope
Exam Code: AEL03

Module Name	Number of Questions	Passing Score
Q610- Motor Plants	70	70

* Increase in Scope: From Steam and/or Gas Turbine to Motor, Steam, and/or Gas Turbine Plants.

Gas Turbine Plants
Increase in Scope
Exam Code: AEL04

Module Name	Number of Questions	Passing Score
Q612- Gas Turbine Plants	70	70

3.2.3 DDE-Unlimited Horsepower

Original-Increase in Scope

[DDE-Unlimited HP, Motor-Gas Turbine Plants](#)

Exam Code

[DDE01](#)

Increase in Scope

[DDE-Unlimited HP, Motor Plants](#)

Exam Code

[DDE02](#)

[DDE-Unlimited HP, Gas Turbine Plants](#)

[DDE03](#)

Motor-Gas Turbine Plants

Original-Increase in Scope

Exam Code: DDE01

Module Name	Number of Questions	Passing Score
Q620- Motor Plants	70	70
Q622 - Gas Turbine Plants	70	70
Q623- Engineering Safety & Environmental Protection	70	70
Q624- General Subjects	70	70
Q625- Electrical, Electronic, & Control Engineering	70	70

* Increase in Scope: From DDE-1000 HP/4000 HP to DDE-Unlimited HP

Motor Plants

Increase in Scope

Exam Code: DDE02

Module Name	Number of Questions	Passing Score
Q620- Motor Plants	70	70

* Increase in Scope: From Gas Turbine to Motor & Gas Turbine Plants.

Gas Turbine Plants

Increase in Scope

Exam Code: DDE03

Module Name	Number of Questions	Passing Score
Q622- Gas Turbine Plants	70	70

* Increase in Scope: From Motor to Gas Turbine & Motor Plants.

3.2.4 DDE- 1000/4000 Horsepower

Original **Exam Code**
DDE-1000/4000 HP, Motor-Gas Turbine Plants DDE04

Increase in Scope **Exam Code**
DDE-1000/4000 HP, Motor Plants DDE05
DDE-1000/4000 HP, Gas Turbine Plants DDE06

Motor-Gas Turbine Plants

Original
Exam Code: DDE04

Module Name	Number of Questions	Passing Score
Q630- Motor Plants	50	70
Q632- Gas Turbine Plants	50	70
Q633- Engineering Safety & Environmental Protection	50	70
Q634- General Subjects	50	70

Motor Plants

Increase in Scope
Exam Code: DDE05

Module Name	Number of Questions	Passing Score
Q630- Motor Plants	50	70

* Increase in Scope: From Gas Turbine to Motor & Gas Turbine Plants.

Gas Turbine Plants

Increase in Scope
Exam Code: DDE06

Module Name	Number of Questions	Passing Score
Q632- Gas Turbine Plants	50	70

* Increase in Scope: From Motor to Gas Turbine & Motor Plants.

3.2.5 OSV-Chief Engineer

Original-Raise of Grade **Exam Code**
Chief Engineer-OSV, Motor Plants OSE01

Original-Raise of Grade
Exam Code: OSE01

Module Name	Number of Questions	Passing Score
Q680 – Motor Plants	70	70
Q682- General Subjects	70	70
Q683- Engineering Safety & Environmental Protection	70	70
Q684- Electrical, Electronic, & Control Engineering	70	70

*Increase in Scope: An applicant increasing in scope from CE, OSV-4000 HP to CE, OSV Unlimited HP may do so without further examination.

*Raise of Grade from Assistant Engineer, OSV to Chief Engineer, OSV.

3.2.6 OSV-Assistant Engineer

Original
[Assistant Engineer-OSV, Motor Plants](#)

Exam Code
[OSE02](#)

Motor Plants
Original
Exam Code: OSE02

Module Name	Number of Questions	Passing Score
Q650- Motor Plants	70	70
Q652- General Subjects	70	70
Q653- Engineering Safety & Environmental Protection	70	70
Q654- Electrical, Electronic, & Control Engineering	70	70

*Increase in Scope: An applicant increasing scope from AE-OSV, 4000 HP to AE-OSV, Unlimited HP may do so without further examination.

3.2.7 UFIV-Chief Engineer

Original-Raise of Grade
[Chief Engineer-UFIV, Motor Plants](#)

Exam Code
[UFIV01](#)

Motor Plants
Original-Raise of Grade
Exam Code: UFIV01

Module Name	Number of Questions	Passing Score
Q694- Motor Plants	50	70
Q696- Engineering Safety & Environmental Protection	50	70
Q697- General Subjects	50	70

* Raise of Grade from Assistant Engineer, UFIV to Chief Engineer, UFIV.

3.2.8 UFIV-Assistant Engineer

Original
[Assistant Engineer-UFIV, Motor Plants](#)

Exam Code
[UFIV02](#)

Motor Plants
Original
Exam Code: UFIV02

Module Name	Number of Questions	Passing Score
Q690- Motor Plants	50	70
Q692- Engineering Safety & Environmental Protection	50	70
Q693- General Subjects	50	70

3.2.9 Limited Engineering Officer Renewal Exercises

* Renewal exercises are open book exercises issued to the mariner by the Regional Exam Centers. It is recommended that completed exercises be returned to the Regional Exam Center for scoring within thirty days in order to assure the examination cycle, including retakes, is completed within ninety days. In no case will a renewal exercise be accepted if returned, based on the postmark date, more than 90 days from the original mailing date

Renewal	Exam Code
Steam Plants	REX04
Motor Plants	REX05
Gas Turbine Plants	REX06

* A mariner submitting an application for renewal must take the renewal modules associated with each mode of propulsion being renewed.

Steam Plants

Renewal

Exam Code: REX04

Module Name	Number of Questions	Passing Score
Q660- Steam Plants Renewal Exercise	70	90

Motor Plants

Renewal

Exam Code: REX05

Module Name	Number of Questions	Passing Score
Q661- Motor Plants Renewal Exercise	70	90

Gas Turbine Plants

Renewal

Exam Code: REX06

Module Name	Number of Questions	Passing Score
Q662- Gas Turbine Plants Renewal Exercise	70	90

3.3 MODU Engineer Officer Endorsements

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 11.950 as appropriate.

3.3.1 MODU-Chief Engineer

Original-Raise of Grade

[MODU-Chief Engineer](#)

Exam Code

[MODE01](#)

**MODU-Chief Engineer
Original-Raise of Grade
Exam Code: MODE01**

Module Name	Number of Questions	Passing Score
Q730- Motor Plants	70	70
Q740- Engineering Safety & Environmental Protection	70	70
Q750- General Subjects	70	70

*Raise of Grade from Assistant Engineer, MODU to Chief Engineer, MODU.

3.3.2 MODU-Assistant Engineer

Original

[MODU-Assistant Engineer](#)

Exam Code

[MODE02](#)

**MODU-Assistant Engineer
Original
Exam Code: MODE02**

Module Name	Number of Questions	Passing Score
Q715- Motor Plants	50	70
Q716- Engineering Safety & Environmental Protection	50	70
Q717- General Subjects	50	70

3.3.3 MODU Renewal Exercise

MODU Engineer

[Renewal](#)

Exam Code

[REX07](#)

**MODU Engineer
Renewal**

* Renewal exercises are open book exercises issued to the mariner by the Regional Exam Centers. It is recommended that completed exercises be returned to the Regional Exam Center for scoring within thirty days in order to assure the examination cycle, including retakes, is completed within ninety days. In no case will a renewal exercise be accepted if returned, based on the postmark date, more than 90 days from the original mailing date.

Exam Code: REX07

Module Name	Number of Questions	Passing Score
Q720- MODU Engineer Renewal Exercise	70	90

3.4 Engine Rating Endorsements (QMED)

Unless additional regulatory references are specifically noted on the ESS, each examination is made up of the required subjects for the particular endorsement found in 46 CFR 12.505 as appropriate.

3.4.1 QMED Endorsements

Endorsement	Exam Code
Junior Engineer	QMED01
Electrician-Refrigerating Engineer	QMED02
Oiler	QMED03
Fireman-Watertender	QMED04
Machinist-Pumpman	QMED05

Increase in Scope	Exam Code
Refrigerating Engineer to Electrician-Refrigerating Engineer	QMED06
Electrician to Electrician-Refrigerating Engineer	QMED07
Pumpman to Machinist-Pumpman	QMED08
Machinist to Machinist-Pumpman	QMED09

Junior Engineer

Exam Code: QMED01

Module Name	Number of Questions	Passing Score
Q800- Junior Engineer, Part I	70	70
Q801- Junior Engineer, Part II	70	70

* An applicant that has successfully completed the modules for Electrician-Refrigerating Engineer, Oiler, and Fireman-Watertender can be issued the Junior Engineer endorsement without testing provided they have met all other service and training requirements.

Electrician-Refrigerating Engineer

Exam Code: QMED02

Module Name	Number of Questions	Passing Score
Q802- Electrician	70	70
Q803- Refrigerating Engineer	70	70

Oiler

Exam Code: QMED03

Module Name	Number of Questions	Passing Score
Q804- Oiler, Part I	70	70
Q805- Oiler, Part II	70	70

Fireman-Watertender

Exam Code: QMED04

Module Name	Number of Questions	Passing Score
Q806- Fireman-Watertender	70	70

Machinist-Pumpman
Exam Code: QMED05

Module Name	Number of Questions	Passing Score
Q807- Machinist	70	70
Q808- Pumpman	70	70

Refrigerating Engineer to Electrician-Refrigerating Engineer
Exam Code: QMED06

Module Name	Number of Questions	Passing Score
Q802- Electrician	70	70

Electrician to Electrician-Refrigerating Engineer
Exam Code: QMED07

Module Name	Number of Questions	Passing Score
Q803- Refrigerating Engineer	70	70

Pumpman to Machinist-Pumpman
Exam Code: QMED08

Module Name	Number of Questions	Passing Score
Q807- Machinist	70	70

Machinist to Machinist-Pumpman
Exam Code: QMED09

Module Name	Number of Questions	Passing Score
Q808- Pumpman	70	70

3.4.2 QMED Renewal Exercise

* Renewal exercises are open book exercises issued to the mariner by the Regional Exam Centers. It is recommended that completed exercises be returned to the Regional Exam Center for scoring within thirty days in order to assure the examination cycle, including retakes, is completed within ninety days. In no case will a renewal exercise be accepted if returned, based on the postmark date, more than 90 days from the original mailing date.

QMED
[Renewal Exercise](#)

Exam Code
REX08

QMED Renewal
Exam Code: REX08

Module Name	Number of Questions	Passing Score
Q810- QMED Renewal Exercise	70	90