# DEPARTMENT OF HOMELAND SECURITY

### **Coast Guard**

46 CFR Parts 10, 11, 12, and 15 [Docket No. USCG-2004-17914]

RIN 1625-AA16

Implementation of the 1995 Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to amend its regulations to fully incorporate the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW Convention), as well as the Seafarer's Training, Certification and Watchkeeping Code (STCW Code) in the requirements for the credentialing of United States merchant mariners as found in 46 CFR Parts 10, 11, 12, and 15. The changes proposed incorporate lessons learned from implementation of the STCW Convention and STCW Code through the interim rule and attempt to clarify those regulations that have generated confusion in the past.

**DATES:** Comments and related material must either be submitted to our online docket via *http://www.regulations.gov* on or before February 16, 2010 or reach the Docket Management Facility by that date. Comments sent to the Office of Management and Budget (OMB) on collection of information must reach OMB on or before February 16, 2010.

ADDRESSES: You may submit comments identified by Coast Guard docket number USCG-2004-17914 using any one of the following methods:

(1) Federal eRulemaking Portal: http://www.regulations.gov.

(2) Fax: 202–493–2251.

(3) Mail: Docket Management Facility (M–30), U.S. Department of Transportation, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

(4) Hand Delivery: Same as mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–366–9329.

To avoid duplication, please use only one of these methods. See the "Public Participation and Request for Comments" portion of the SUPPLEMENTARY INFORMATION section

**SUPPLEMENTARY INFORMATION** section below for instructions on submitting comments.

Collection of Information Comments: If you have comments on the collection of information discussed in section VII.D of this NPRM, you must also send comments to the Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget (OMB). To ensure that your comments to OIRA are received on time, the preferred methods of receipt are by e-mail to oira submission@omb.eop.gov (include the docket number and "Attention: Desk Officer for Coast Guard, DHS" in the subject line of the e-mail) or fax at 202-395-6566. An alternate, though slower, method is by U.S. mail to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, Attn: Desk Officer, U.S. Coast Guard.

Viewing incorporation by reference material: You may inspect the material proposed for incorporation by reference at room 1210, U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593–0001 between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays. The telephone number is 202–372–1401. Copies of the material are available as indicated in the "Incorporation by Reference" section of this preamble.

FOR FURTHER INFORMATION CONTACT: If you have questions on this notice of proposed rulemaking (NPRM), call or email Mark Gould, Maritime Personnel Qualifications Division, U. S. Coast Guard, telephone 202–372–1409, e-mail Mark.C.Gould@uscg.mil. If you have questions on viewing or submitting material to the docket, call Renee V. Wright, Program Manager, Docket Operations, telephone 202–366–9826.

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# I. Public Participation and Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted, without change, to http:// www.regulations.gov, and will include any personal information you have provided.

### A. Submitting Comments

If you submit a comment, please include the docket number for this rulemaking (USCG-2004-17914), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail or hand delivery, but please use only one of these means. We recommend that you include your name and a mailing address, an e-mail address, or a phone number in the body of your document so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to http://www.regulations.gov, in the "Document Type" drop down menu, select "Proposed Rules" and insert "USCG-2004-17914" as the "Keyword." If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 81/2 by 11 inches, suitable for copying and electronic filing. If you submit them by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope.

We will consider all comments and material received during the comment period and may change this proposed rule based on your comments.

#### B. Viewing Comments and Documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to http://www.regulations.gov, in the "Document Type" drop down menu, select "Proposed Rules" and insert "USCG-2004-17914" as the "Keyword." If you do not have access to the Internet, you may view the docket online by visiting the Docket Management Facility in Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. We have an agreement with the Department of Transportation to use the Docket Management Facility.

# C. Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor

union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008 issue of the Federal Register (73 FR 3316).

### **D. Public Meeting**

We plan to hold public meetings. We will announce the dates and locations of these meetings in a later Federal Register notice.

II. Abbreviations A/B Able Seaman ARPA Automatic Radar Plotting Aid BCO Ballast Control Operator BRM Bridge Resource Management BS Barge Supervisor BSTBasic Safety Training CFR Code of Federal Regulations COI Certificate of Inspection COLREGS International Regulations for Preventing Collisions at Sea CPR Cardio-Pulmonary Resuscitation DC Damage Control DDE Designated Duty Engineer DE Designated Examiner Dangerous Liquid DOT Department of Transportation EEZ.

Exclusive Economic Zone

**ERM** Engine Room Resource Management FCC Federal Communications Commission

F.H. Food Handler FR Federal Register

GMDSS Global Maritime Distress and Safety System

GRT Gross Register Tons GT Gross Tonnage

HP Horsepower

IMDG The International Maritime Dangerous Goods Code

IMO International Maritime Organization IR Interim Rule

IRFA Initial Regulatory Flexibility Act ISM International Safety Management Code ISO International Organization for Standardization

ISPS International Ship and Port Facility Security

ITB Integrated Tug Barge

International Tonnage Convention on Tonnage Measurement of Ships, 1969 KUP Knowledge, Understanding, and

Proficiency kW Kilowatts

LG Liquefied Gas

MARAD Maritime Administration MARPOL 73/78 International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978

MERPAC Merchant Marine Personnel Advisory Committee

MMC Merchant Mariner Credential MMD Merchant Mariner Document MODUs Mobile Offshore Drilling Units NAVSAC Navigation Safety Advisory Committee

NDR National Driver Register

NMC U.S. Coast Guard National Maritime Center

NEPA National Environment Policy Act of 1969

NPRM Notice of Proposed Rulemaking NVIC Navigation and Vessel Inspection Circular

OCMI Officer in Charge, Marine Inspection OICEW Officer in Charge of an Engineering Watch

OICNW Officer in Charge of a Navigation Watch

OIM Offshore Installation Manager OIRA Office of Information and Regulatory Affairs

OMB Office of Management and Budget OSVs Offshore Supply Vessels OUPV Operator of an Uninspected

Passenger Vehicle PIC Person in Charge

PMS Preventive Maintenance System Proficiency in Survival Craft

QMED Qualified Member of the **Engineering Department** 

Quality Standard Systems Regional Examination Center RFA Regulatory Flexibility Act

RFPEW Ratings Forming Part of an Engineering Watch RFPNW Ratings Forming Part of a

Navigation Watch SHIP Seafarers' Health Improvement

Program SOLAS The International Convention for

the Safety of Life at Sea (1974) STCW Code Seafarer's Training,

Certification and Watchkeeping Code STCW Convention International

Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978, as amended

STCW-F International Convention on Standards of Training, Certification, and Watchkeeping for Fishing Vessel Personnel TOAR Towing Officer's Assessment Record

TRB Training Record Book TSA Transportation Security

Administration

TSAC Towing Safety Advisory Committee UPVs Uninspected Passenger Vessels UTV Uninspected Towing Vessels

VSO Vessel Security Officer

# III. Background

The Coast Guard published an interim rule (IR) on June 26, 1997 (62 FR 34505), making changes to the regulations governing the credentialing of merchant mariners. A complete discussion of the background for the IR is found in the preamble to the IR (62 FR 34506). These changes were necessary to implement amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended (the STCW Convention), which the International Maritime Organization (IMO) adopted in 1995, and which entered into force on February 1, 1997. The 1997 IR ensured that U.S. merchant mariner credentials would meet International Maritime Organization (IMO) standards, thereby reducing the possibility that U.S. ships could be detained in a foreign port for non-compliance.

The Coast Guard proposes to update the changes made by the 1997 IR through experience gained during the implementation of that rule. This proposed rule will also incorporate all

effective amendments to the STCW Convention and Code up to and including the publication date of this proposed rule. The Coast Guard determined, as a result of comments from the public and federal advisory committees (the Merchant Marine Personnel Advisory Committee and the Towing Safety Advisory Committee), that more information, including more detailed regulation text, was required for the regulated public. We have identified a number of issues with the current regulations:

(1) There are several areas as outlined in the Table of Changes pertaining to the requirements a mariner must meet in order to obtain a credential, that need clarification and/or additional

information;

(2) The Coast Guard conducted an independent evaluation of the credentialing program and found that, although the program was giving the STCW Convention full and complete effect, there were a number of areas that should be clarified, as outlined in the Table of Changes.

(3) In addition, we made several technical changes throughout parts 10, 11, 12, and 15 of 46 CFR, including the renumbering of part 12 to bring the numbering of the sections in line with the numbering in the other parts of

subchapter B of title 46.

On May 20, 2008, the Coast Guard issued an interim rule amending its regulations to implement the vessel security officer training and certification amendments to the STCW Convention and the STCW Code (73 FR 29060). These amendments incorporate the training and qualification requirements for vessel security officers (VSOs) into the requirements for the credentialing of United States merchant mariners. These amendments (73 FR 29060) are not impacted by this proposed rulemaking.

The VSO requirements apply to all vessels subject to the STCW Convention under current regulations. This includes all seagoing vessels, defined in the proposed 46 CFR 10.107 (currently 15.1101) to mean self-propelled vessels that operate beyond the Boundary Line established by 46 CFR part 7, except those vessels which have been determined to be otherwise exempt from the STCW Convention as per 46 CFR 15.103(e) and (f).

On March 16, 2009, the Coast Guard published a final rule titled "Consolidation of Merchant Mariner Qualification Credentials" (74 FR 11196). This final rule streamlined regulations and consolidated four separate credentialing documents into one Merchant Mariner Credential (MMC), and also eliminated redundant

burdens and government processes. As noted in the Table of Changes, some minor changes have been made in this proposed rule that would affect the portions of subchapter B revised by the MMC rulemaking.

# IV. Discussion of Proposed Rule

### A. Overview

This proposed rule is a result of ongoing work to ensure that U.S. mariners comply with the standards set forth in the STCW Convention. During the implementation process for the IR (from 1997 to the present), the Coast Guard recognized a need to make substantial changes to the merchant mariner licensing and documentation credentialing program. Because of these substantial changes, we recognized the necessity of developing a more comprehensive rule, and of providing additional opportunity—through this NPRM—for the public to comment on these changes.

Most seagoing merchant mariners must comply with the requirements of the STCW Convention. STCW requirements reflected in the CFR are not currently organized in a manner that is easy to read and understand. This NPRM seeks to make the requirements for merchant mariners clear and concise, and proposes a scheme that will make both domestic and international requirements easier to understand.

# B. Differences Between This NPRM and the Coast Guard's Current Regulations

This list provides a brief summary of the significant changes proposed in this NPRM. The "Table of Proposed Changes" in part C of this section provides more detailed information and explanation of the changes in the summarized listing below.

# 1. Medical Competency

Would establish clear requirements for attaining competence as a person in charge (PIC) of medical care and as a medical first aid provider.

Would establish that all officers onboard seagoing ships must hold medical first aid competence.

# 2. Medical Standards for Issuance of STCW Endorsements

Would provide requirements on the medical fitness standards for merchant mariners. As part of this effort, a quick-reference table is provided.

Would establish physical abilities expected of merchant mariners.

Would clarify when the medical practitioner must conduct tests demonstrating the merchant mariner's physical ability. Would provide clarification that staff officers and entry level ratings need only demonstrate physical ability when serving on vessels to which the STCW Convention applies.

# 3. Training Schools and Approved Courses

Would update the requirements for the material that must be submitted as part of an application for an approved course or training program.

Would require information that the Coast Guard had previously only requested from course developers for Coast Guard approval of training courses.

Would remove the specific requirements for radar courses, providing the industry more flexibility when developing courses and curriculum.

Would specify the requirement for providers of approved courses and training programs to be compliant with a quality standard systems (QSS). This would clarify that Coast Guard-accepted QSS organizations may accept and monitor training on behalf of the Coast Guard.

# 4. Acceptance of Military Sea Service and Training To Qualify for an STCW Endorsement

Would provide that a member of the military can qualify for an STCW endorsement after meeting the training and service requirements for merchant mariners.

# 5. Basic Safety Training Requirements

Would clarify that the requirement for basic safety training (BST) is no longer considered an STCW endorsement; BST continues to be a manning requirement.

Would add a manning requirement in part 15 for BST that is consistent with STCW Convention requirements.

6. Application of the STCW Convention to Mariners serving on Vessels of Less Than 200 Gross Register Tons (GRT)/ 500 Gross Tonnage (GT)

Would establish requirements for mariners serving on seagoing vessels of less than 200 GRT/500 GT on international voyages, whether they are near-coastal or oceans routes.

# 7. Deck Officer Progression

Would revise the deck officer progression to be consistent with the standards set forth by the STCW Convention.

Would remove the 200 GRT/500 GT-level endorsements.

Would revise service requirements for mariners qualifying for the 1,600 GRT/3,000 GT-level endorsements.

## 8. Engineer Officer Endorsements

Would revise the engineer officer progression to be consistent with the standards set forth by the STCW Convention.

Would provide limited engineer endorsements for service on vessels less than 10,000 horsepower (HP)/7,500 kilowatts (kW) on near-coastal waters.

### 9. Officer Endorsements

Would provide specific areas of knowledge, understanding, and proficiency (KUP) required for operational and management level licenses.

Would provide equivalencies between GRT and GT for use only with the issuance of mariner credentials.

### 10. Rating Endorsements

Would add sections for STCW-specific ratings.

Would add a new endorsement entitled "Survivalman" for individuals serving on vessels without installed lifeboats.

# 11. Manning

Would move sections detailing the certification requirements for ratings from part 12 to part 15.

### 12. Grandfathering

Would clarify that this proposed rule does not require a mariner to meet newly proposed requirements in order to retain a credential already held. However, a mariner would have to meet any newly proposed requirements in order to upgrade a credential. For example, under this proposed rule, a second mate/officer in charge of a navigational watch (OICNW) who seeks to obtain a chief mate endorsement would not be required to go back and

complete training requirements for an OICNW.

## 13. Minimum Age

Would establish the minimum age for those applicants seeking a rating or STCW endorsement under Part 12.

Would incorporate the age of 16 as the minimum age for issuing a rating or STCW endorsement.

### C. Table of Proposed Changes

This table provides a more-detailed, CFR-section-referenced summary of significant changes proposed in this NPRM. The table incorporates the changes noted in the brief summary of the significant changes listed in part C above, "Differences between this NPRM and the Coast Guard's Current Regulations." This part, and part B above, discuss all substantive changes being proposed by this rulemaking.

specific ratings.		would not be required to go back and	being proposed by this rulemaking.
Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
10.107	10.107	Adds the definition of boundary line	Assists applicants in understanding the limit of the STCW Convention.
		Adds the definition of a Coast Guard-accepted quality standards system (QSS) organization.	Adds definition regarding those organization that may conduct QSS activities in regard to training.
		Adds the definition of domestic voyage	Clarifies that domestic service does not in clude entering foreign waters. This clarification is necessary for those operating smapassenger vessels in waters close to or adjacent to foreign waters to assist in determining whether the operator would be required to hold an STCW endorsement.
		Adds definition of gross register tons (GRT)	Provides definition for term used in the proposed rule and establishes an abbreviation for the use of this term throughout this subchapter.
		Adds the definition of gross tonnage (GT)	Provides definition for term used in the proposed rule consistent with the STCW Convention and establishes an abbreviation for use throughout this subchapter.
		Adds the definition of international voyage	Clarifies what constitutes an international voyage.
		Adds the definition of kilowatt (kW)	Provides the definition of a term used in con junction with the implementation of the STCW Convention and STCW Code.
		Adds the definition of management level	Provides that master, chief mate, chief engineer and first assistant engineer (second engineer officer) are considered management level under the STCW Convention.
		Adds the definition of operational level	Provides that officer endorsements other that management level are considered oper ational level under the STCW Convention.
		Adds the definition of propulsion power	Provides a more general definition of a ship' power.
		Adds the definition of <i>quality standard system</i> (QSS).	Provides clarification of what is intended b this term when used in this subchapter.
		Adds the definition of seagoing	Assists in the interpretation of the require ments of the STCW Convention.
		Adds the definition of seagoing vessel	Adds definition to ensure it captures all ves sels to which STCW applies. No commer cial vessels restriction, as appears in cur rent 46 CFR 15.1101 definition, because that would have excluded vessels such a yachts and government-owned vessels which are required to be operated by mariners holding an STCW endorsement.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
		Adds a definition of survivalman	Provides terminology for a new endorsement for persons serving in a position similar to lifeboatman but on a vessel without a lifeboat.
		Adds the definition of training program	Provides clarity regarding what is intended by this term.
		Revises the definition of near coastal	Reflects that this is a domestic definition and that another country may define the term differently.
None	10.205(b)(i)	Adds grandfathering provision for existing STCW endorsements.	Clarifies that this proposed rule does not require a mariner to meet newly proposed requirements in order to retain a credential already held.
10.215		Revises the physical requirements for mariners applying for a Coast Guard-issued credential. These changes include: Annual submission of physicals by pilots, removal of the specific tests for color vision, revision of vision standard, revision of hearing standard, clarification regarding demonstration of physical ability.	Provides the Coast Guard some flexibility in the acceptance of other tests, as well as acknowledgement that some of the vision tests are no longer available. The requirement to demonstrate physical ability provides information required for those mariners serving on vessels to which STCW applies.
11.202(b)	11.202(b)	Moves the requirement for basic safety training (BST) and refers to part 15.	Requires applicant to meet BST requirements as listed in §15.1105. BST requirements are found in part 15 under manning, rather than as a professional requirement to obtain a certificate.
11.202(c)	11.407(a)(2)	Moves the requirement for automatic radar plotting aid (ARPA) from the general section.	Moves requirement to the appropriate operational-level certificate.
11.202(d)	11.407(a)(2)	Moves the requirement for the training and assessment on Global Maritime Distress and Safety System (GMDSS) from the general section.	Incorporates the GMDSS requirement with the requirement for the appropriate operational-level certificate.
11.202(e)	11.407(a)(2)	Moves the requirement for Bridge Resource Management (BRM) (formerly Procedures for Bridge Team Work) from the general section.	Moves the BRM requirement to the appropriate operational-level certificate.
11.213	11.213	Revises the rules affecting the credit of sea service towards a mariner's credential.	Clarifies that maritime service from the armed forces must be consistent with the requirements of other mariners, <i>i.e.</i> , an individual must first hold an operational-level credential in order to qualify for a management-level credential.
11.301	10.301	Revises the applicability to include training programs.	Clarifies that the STCW Convention covers all training used to pursue certification, whether or not it is part of an approved course or training program. See Regulation I/6 of the STCW Convention and Section A–I/6 of the STCW Code.
11.302	10.302	Revises the credit that can be provided by course approval to allow for multiple purposes.	Provides industry more flexibility to complete the requirements, as current regulations are too confining.
		Revises the requirements for the request for course approval.	Incorporates previously issued guidance doc- uments to assist industry in understanding otherwise vague requirements.
		Clarifies the suspension of approval requirements.  Revises the reasons for withdrawal of course	Organizes the requirements for suspension of course approval.  Clarifies reasons for withdrawal of course ap-
11.303	10.303	approval.  Revises section to require that each student demonstrate practical skills appropriate for the course.	proval.  Ensures that the training provided meets the requirements of the STCW Convention, i.e., not only ensuring applicant knowledge, understanding and proficiency (KUP), but also requiring a demonstration of skills. See STCW Regulation I/6 of the STCW Convention.
		Revises the records and reports required for each approved course.	Provides the Coast Guard the ability to fulfill its obligation under the STCW Convention to validate the training received by merchant mariners. See Regulation I/8 of the STCW Convention.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
		Adds QSS requirements for an approved course.	Provides consistency with the obligation under the STCW Convention for approved training to be part of a QSS. See Regulation I/8 of the STCW Convention.
11.304	10.304	Revises the requirement to substitute all sea service for successful completion of an approved training program.	Provides service credit for training programs, since they regularly provide more extensive training situations and broader opportunities to demonstrate proficiency.
11.305	None	Removes specific requirements regarding radar-observer certificates and qualifying courses.	Removes requirements now unnecessary due to other proposed changes throughout this subpart.
None	10.305	Adds requirements for qualification as a designated examiner.	Ensures that qualified individuals conduct evaluations of mariners as required by the STCW Convention. See Section A–I/6 of the STCW Code.
None	10.308	Adds requirements for training programs to meet the proposed requirements for course approval and general training standards, which includes being part of a QSS.	Provides consistency with the obligation under the STCW Convention for approved training to be part of a QSS. <i>See</i> Regulation I/8 of the STCW Convention.
11.309	10.309	Revises section to reduce redundant lan- guage from other sections of this subpart.	Provides clarification with reference to §10.302 for collecting the necessary information.
		Adds QSS requirements for accepted training	Provides consistency with the obligation under the STCW Convention for approved training to be part of a QSS. <i>See</i> Regulation I/8 of the STCW Convention.
None	10.311	Adds simulator performance standards	Provides consistency with existing requirements and Section A–I/12 of the STCW Code.
11.401	11.401	Revises section to more specifically reflect STCW Convention requirements. Provides clarification regarding the requirements for STCW endorsements for mariners on seagoing vessels.	Includes the STCW Convention requirements generally throughout the subpart in an effort to clarify regulations. See Part A, Chapter II of the STCW Code.
		Adds a requirement to complete an assessment of professional skills.	Provides a specific requirement for an STCW endorsement for those serving on seagoing vessels greater than 200 GRT/500 GT or any vessel on an international voyage. This requirement was previously listed in 46 CFR subpart I.
		Revises the list of requirements to obtain a master or mate endorsement for vessels of 200 GRT/500 GT or more and for all seagoing vessels on international voyages.	Provides consistency with the STCW Convention list of requirements for persons on that size vessel, including basic and advanced firefighting, ARPA, GMDSS, and radar observer.
		Revises the flashing light requirement	Extends the flashing light proficiency requirement to those to whom the STCW Convention applies, <i>i.e.</i> , all mariners serving on seagoing vessels. See Table A–II/1 of the STCW Code.
		Removes the requirement for deck officers to obtain a qualification as able seaman.	Provides consistency with the STCW Convention that does not require a qualification as able seaman for seagoing deck officers.
		Revises the application of equivalent sea service to mariners required to meet STCW standards.	Specifies that a course without seagoing service would not be granted equivalent service under the STCW Convention, which requires service at sea for various endorsements. See Chapter II of the STCW Code.
		Moves information requiring compliance with STCW Convention regulations and standards of competence from § 11.903.	Makes the existing requirements easier to locate and follow.
11.402	11.402	Adds a table providing equivalencies between GRT and GT.  Revises tonnage limitations for an unlimited officer endorsement by setting the minimum to 2,000 GRT/3,300 GT.	Enables equating between the two systems, for credentialing purposes only.  Establishes a minimum tonnage limitation. It was previously possible to obtain a limitation of less than 2,000 GRT/3,300 GT; however, there is little reason to establish any limitation less than 2,000 GRT/3,300 GT.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
11.403	11.403 (See also, 11.430(f) Structure of deck officer en- dorsements for Great Lakes and in- land waters service).	Replaces deck officer endorsements structure diagram with new diagram showing progression of deck officer endorsements for seagoing service based on vessel tonnage.	Reflects the proposed progression for deck officer endorsements limited to seagoing service.
11.404	11.404	Revises the requirements to allow multiple routes for progression to master.	Allows advancement to master directly from either officer in charge of a navigation watch (OICNW) or chief mate, as provided in the STCW Convention. This progression would be allowed to assist those mariners who are unable to obtain service time as a chief mate. See Regulation II/2 of the STCW Convention.
		Revises the requirement to include meeting the training requirements for chief mate if the applicant does not hold an endorse- ment or license as chief mate.	Provides consistency with STCW Convention requirements allowing applicants meeting the same minimum training as an individual progressing through chief mate to progress. See Regulation II/2 of the STCW Convention.
11.405	11.405	Revises the requirement for chief mate (oceans and near coastal) to include the requirements for approved training required by the STCW Convention.	Provides a list of necessary KUPs and sets a requirement for assessment of an individual seeking an endorsement as chief mate. A chief mate serving on seagoing vessels must meet STCW Convention requirements. See Section A–II/2 of the STCW Code.
		Provides specific requirements for transition for an endorsed or licensed applicant to serve on seagoing vessels between 200 and 1,600 GRT/500 and 3,000 GT.	Provides necessary training requirements for mariners licensed at the management level for vessels between 200 and 1,600 GRT/500 and 3,000 GT. There are gaps currently in the requirements between these two vessel size categories.
		Revises to specifically state that service as a rating, while holding an officer endorsement, would not count toward a management-level officer endorsement.	Provides consistency with STCW Convention requirements, which do not allow service as a rating to count toward a management-level certificate. See Regulation II/2 of the STCW Convention.
11.406	11.406	Revises the service requirements for second mate to specify that the service must have been on a seagoing vessel.	Provides consistency with STCW Convention requirements that service towards those endorsements be on seagoing vessels.
11.407	11.407	Revises the requirement for OICNW (oceans and near coastal) to provide for approved training as required by the STCW Convention.	Provides a list of necessary KUPs and sets an assessment requirement for endorsement as chief mate. An OICNW serving on seagoing vessels must meet STCW Convention requirements. See Regulation II/1 of the STCW Convention.
		Revises the paragraph, allowing for graduation from a maritime academy to meet this requirement.	Clarifies that an individual must complete an approved program to qualify for this endorsement, and opens up the process to more programs.
11.410	11.410	Revises the section regarding the credential authorizing service on vessels of not more than 500 GRT/1,200 GT. No original endorsement with this tonnage, or a raise of grade to this tonnage, will be issued; however, renewals will continue to be issued.	Clarifies that this credential would no longer be issued as an original endorsement or as a raise of grade to this tonnage. There is limited need for the 500 GRT/1,200 GT level endorsement, and the need could be met with the credential for vessels less than 1,600 GRT/3,000 GT by revising the requirements for those endorsements.
		Restricts officer endorsements issued under this section using orally assisted exams to vessels to which the STCW Convention does not apply.	Provides consistency with STCW Convention requirement for persons serving on seagoing vessels of this size. Orally assisted exams do not satisfy the requirement. See Chapter II of the STCW Code.
11.412	11.412	Adds the requirement that applicants for an endorsement as master must be qualified as mate & OICNW for vessels of 200 GRT/ 500 GT or more.	Provides consistency with STCW Convention requirements that all persons seeking management-level endorsements qualify as OICNW for vessels of 200 GRT/500 GT or more. See Regulation II/2 of the STCW Convention.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
		Revises the service required for an endorsement as master from 4 years total to either 36 months as OICNW, or 24 months including 12 months as chief mate.  Revises the process for obtaining this endorsement directly from OICNW or chief mate to include service.	Provides consistency with STCW Convention requirements for this level of endorsement. The total service time could now be between 5 and 6 years. See Regulation II/2 of the STCW Convention.  Clarifies that the service, training, and assessment requirements of this section must be met to obtain an endorsement as master.
None	11.413	Adds new requirements for chief mate of self-propelled, seagoing vessels of less than 1,600 GRT/3,000 GT.	Provides consistency for this management-level credential, available through the STCW Convention. The Coast Guard received a recommendation from the Merchant Marine Personnel Advisory Committee (MERPAC) to include this level endorsement to assist domestic officers seeking service on foreign flag vessels. See Regulation II/2 of the STCW Convention.
11.414	11.414	Revises this section to require that a person applying for an endorsement as mate must meet the requirements for OICNW in § 11.407.	Provides consistency with STCW Convention requirements that an individual seeking this level endorsement meet the requirements of any other OICNW for seagoing vessels. See Regulation II/1 of the STCW Convention.
		Revises the service requirements for an endorsement as mate to allow service on vessels of 75 GRT or more.	Increases the number of mariners who would qualify for an endorsement as mate.
11.418	None	Removes the officer endorsement for master of vessels not more than 500 GRT.	This endorsement would no longer be required because it would lower the tonnage requirements for those serving on vessels
11.420	None	Removes the officer endorsement for mate of vessels not more than 500 GRT.	of not more than 1,600 GRT/3,000 GT.  This endorsement would no longer be required because it would lower the tonnage requirements for those serving on vessels of not more than 1,600 GRT/3,000 GT.
11.422	11.422	Adds the specific requirement that additional service as a deck officer is required to raise a tonnage limitation.	Provides clarity as to what the Coast Guard would look for when evaluating an application for raising the tonnage limitation.
None	11.423	Adds new section providing requirements for those seeking officer and STCW endorsements as master of vessels of less than 200 GRT/500 GT on near-coastal waters.	Provides specific requirements for those seeking to obtain an STCW endorsement as master on vessels of less than 200 GRT/500 GT. See Regulation II/3 of the STCW Convention.
11.424	11.424	Revises section to address those seeking of- ficer and STCW endorsements as mate or OICNW of vessels less than 200 GRT/500 GT on near coastal waters.  Removes reference to masters of ocean, stream, or motor vessels of not more than 200 gross tons.	Provides specific requirements to meet STCW Convention requirements, including 36 months of service and meeting training and assessment requirements. See Regulation II/3 of the STCW Convention.  Provides consistency with the STCW Convention requiring that applicants seeking to operate vessels of 200 GRT/500 GT or less on ocean waters must meet the requirements for the endorsement as master
11.426	11.426	Revises this section, which is applicable only to those vessels to which the STCW Convention does not apply	of seagoing vessels of between 200 GRT/ 500 GT and 1,600 GRT/3,000 GT. Clarifies existing regulations regarding the applicability of an endorsement as master
11.427	11.427	vention does not apply.  Revises this section, which is applicable only to those vessels to which the STCW Convention does not apply.	of seagoing of less than 200 GRT limited to domestic near-coastal voyages.  Clarifies existing regulations regarding the applicability of an endorsement as mate of seagoing vessels of less than 200 GRT
11.428	11.428	Revises this section, which is applicable only to those vessels to which the STCW Convention does not apply.	limited to domestic near-coastal voyages.  Clarifies existing regulations regarding the applicability of an endorsement as master of seagoing vessels of less than 100 GRT
11.429	11.429	Revises this section, which is applicable only to those vessels to which the STCW Convention does not apply.	limited to domestic near-coastal voyages.  Clarifies existing regulations regarding the applicability of an endorsement as limited master of seagoing vessels of less than 100 GRT on domestic near-coastal voyages.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
11.463	11.463	Adds the requirement for towing vessel officers serving on seagoing vessels to comply with the STCW Convention.	Clarifies the regulations and policy for officers on towing vessels.
11.467	11.467	Adds the limitation to the endorsement as operator of uninspected passenger vessels to not more than 100 nautical miles offshore.	Clarifies that this endorsement is limited to domestic near-coastal waters not more than 100 nautical miles offshore.
11.493	11.493	Revises language to require that Master (OSV) applicants complete a Coast Guard-approved program that meets STCW Convention requirements.	Eliminates unnecessary language and ensures that all programs approved by the Coast Guard are consistent with the STCW Convention. See Chapter II of the STCW Code.
11.495	11.495	Revises language to require that Chief Mate (OSV) applicants complete a Coast Guard-approved program that meets STCW Convention requirements.	Eliminates unnecessary language and ensures that all programs approved by the Coast Guard are consistent with the STCW Convention. See Chapter II of the STCW Code.
11.497	11.497	Revises language to require that Mate (OSV) applicants complete a Coast Guard-approved program that meets STCW Convention requirements.	Reduces unnecessary language and ensures that all programs approved by the Coast Guard are consistent with the STCW Convention. See Chapter II of the STCW Code.
§ 11.501	§ 11.501	Provides a list of engineer officer endorsements for the STCW Convention.	Includes the three endorsements allowed by the STCW Convention for the two levels of engineer officers. These would be included to provide clarity in the incorporation of the STCW Convention. See Chapter III of the STCW Convention.
		Moves information requiring compliance with STCW Convention regulations and standards of competence from §11.903.	Makes the existing requirements easier to locate and follow.
		Adds a restriction regarding limitation for those who do not hold an STCW endorsement.	Provides the limitation for those without the endorsement to serve on vessels of limited horsepower because the STCW Convention applies to all seagoing vessels. See Chapter III of the STCW Convention.
§ 11.502	§ 11.502	Adds specific language requiring that training on any propulsion mode be added to an endorsement.	Provides consistency with the STCW Convention requiring that an individual receive the training and education for the authority placed upon a credential. See Chapter III of the STCW Convention.
§ 11.505	§ 11.505	Adds a new diagram showing the progression and crossover introduced in this rulemaking. Revises the existing engineer license structure diagram to remove chief engineer (limited oceans).	Provides a visual representation of the progression introduced in this rulemaking.  Provides consistency with the STCW Convention. This endorsement would no longer exist; those serving on seagoing vessels must hold an STCW endorsement.
None	§ 11.506	Adds section modifying the required service for chief engineer.	Provides consistency with the STCW Convention. See Regulation III/2 of the STCW Convention.
		Provides additional path to chief engineer from chief engineer (limited).	Provides this progression because the only difference between the two endorsements is the required training and education.
		Revises the service requirements to remove the opportunity to use a qualified member of the engineering department (QMED) service towards an endorsement as chief engineer.	Provides consistency with STCW Convention requirements, which count only service as an officer towards the management level endorsements. See Regulation III/2 of the STCW Convention.
None	§ 11.507	Adds section to make the prerequisite service be that of an officer in charge of an engineering watch (OICEW).	Provides consistency with STCW Convention requirements regarding service and qualification as OICEW. See Regulation III/2 of the STCW Convention.
		Adds a specific requirement to complete approved training for a management-level endorsement.	Includes in regulation the requirement (based upon STCW Convention requirements) previously published in a Coast Guard policy letter. See Regulation III/2 of the STCW Convention.
None	§ 11.508	Adds requirements for officer endorsement as second assistant engineer and STCW endorsement as OICEW.	Provides consistency with STCW Convention requirements regarding service and qualification. See Regulation III/1 of the STCW Convention.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
None	§ 11.509	Adds requirements for officer endorsements as third assistant engineer for seagoing service with an STCW endorsement as OICEW.  Accepts the use of training programs as a	Provides consistency with STCW Convention requirements regarding service and qualification. See Regulation III/1 of the STCW Convention  Clarifies that successful completion of an appropriate the most provide mathematical
		process to achieve these endorsements.	proved program is the most specific meth- od for meeting the requirement. This allows for a broader acceptance of training pro- grams.
		Lists the training and education requirements for an endorsement as third assistant engineer and OICEW.	Provides consistency with STCW Convention requirements regarding specific training and education for these endorsements. See Regulation III/1 of the STCW Convention.
		Provides progression from assistant engineer (limited) and designated duty engineer (DDE) after completing approved or accepted training.	Allows those holding an approved STCW endorsement with limitations to only complete the additional training between the two endorsements. These requirements are based on STCW Convention requirements and were previously published in a Coast Guard policy letter. See Regulation III/1 of the STCW Convention.
§ 11.510		Adds new section to allow an applicant to obtain a chief engineer endorsement limited to vessels less than 10,000 HP and near-coastal waters.	Provides U.S. mariners the opportunity to reduce the training and education requirements for service in near-coastal waters allowed by the STCW Convention. See Regulation III/2 of the STCW Convention.
	§ 11.520	Moves the requirements for chief engineer endorsements without STCW endorsements.	This requirement still exists for inland engineers.
None	§ 11.511	Adds new section allowing applicants to obtain a first assistant engineer endorsement limited to vessels less than 10,000 HP and near-coastal waters. This section provides the management-level training required for these limited endorsements.	Provides U.S. mariners the opportunity to reduce the training and education requirements for service in near-coastal waters allowed by the STCW Convention. See Regulation III/2 of the STCW Convention.
None	§ 11.512	Adds a new section for chief engineer, limited to vessels of less than 4,000 HP.	Provides for the training and education for vessels of this propulsion power, consistent with the STCW Convention. See Regulation III/3 of the STCW Convention.
	§ 11.513	Adds requirements to qualify as first assistant engineer with an STCW endorsement as second engineer officer on motor or gas turbine propelled vessels of less than 4,000 HP/3,000 kW.	Provides consistency with STCW Convention requirements regarding service and qualification. See Regulation III/2 of the STCW Convention.
§ 11.514	§ 11.522	Moves and revises the requirements for sec- ond assistant engineer endorsements with- out STCW endorsements.	This requirement still exists for inland engineers.
	§ 11.514	Revises section to add requirements for assistant engineer on vessels of not more than 4,000 HP on near-coastal routes.	Provides an option consistent with the STCW Convention for a limited endorsement for engineers on vessels of limited propulsion on near-coastal routes. See Regulation III/3 of the STCW Convention.
§ 11.512	§ 11.521	Moves the requirements for first assistant engineer endorsements without STCW endorsements.	This requirement still exists for inland engineers.
§ 11.516	§ 11.523	Moves and revises the requirements for third assistant engineer endorsements without STCW endorsements.	This requirement still exists for inland engineers.
§ 11.518	§ 11.524	Moves and revises the requirements for chief engineer (limited) endorsements without STCW endorsements.	This requirement still exists for inland engineers.
§ 11.522		Moves and revises the requirements for assistant engineer (limited) endorsements without STCW endorsements.	This requirement still exists for inland engineers.
§ 11.524	§ 11.526	Revises the requirement for DDE	Complies with STCW Convention requirements for service on vessels to which the STCW Convention doesn't apply, and to vessels on the Great Lakes and other inland waters. See Chapter III of the STCW Convention.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
§ 11.551	11.551	Revises the section to provide the completion of a program of training, assessment, and sea service approved by the Coast Guard for offshore supply vessel (OSV) engineer endorsements.	Consolidates and clarifies the information that was previously in §§ 11.551, 11.553 and 11.555.
§ 11.811(b)	§ 10.215	Includes medical requirements for vessel security officer (VSO).	Meets the new STCW Convention requirements that come into force on July 1, 2009.
§ 11.901	11.901	Revises the section to require keeping the record of demonstrations of proficiency in the applicant's file.  Removes the list of endorsements requiring	Notifies applicants that the Coast Guard will maintain a record of completed assessments.  Amends section because the list of endorse-
		STCW endorsement.	ments was redundant and unnecessary in this location.
§ 11.903	11.903	Revises the list of endorsements requiring examination.	Removes the endorsements that don't require an examination, based on a change in pol- icy and progression consistent with the STCW Convention, <i>i.e.</i> , master and second mate.
		Deletes the paragraph excluding master and mate of towing vessels.	The exclusion for master and mate of towing vessels would be provided in §§ 11.464 and 11.465
		Revises table 11.903(c) and moves it to the subpart on requirements for deck and engine officers in §§11.401 and 11.501, respectively.	Improves the use of the table as a reference for applicants seeking information on the requirements for various endorsements.
§ 11.910	11.910	Revises table 11.910–1	Reflects the combined endorsements at the management and operational levels.
		Revises table 11.910–2	Revises the table of subjects based on combined examinations at the operational and management levels and updates the information for the STCW Convention.
§ 11.950	11.950	Revised table 11.950 by creating table for seagoing vessels and another for Great Lakes and inland waters.	Reflects the combined endorsements at the management and operational levels and updates information for the STCW Convention.
None	§ 12.201	Adds a minimum age required to obtain a rating endorsement.	Incorporates STCW Convention requirements and current Coast Guard practices that use 16 as the minimum age for these credentials.
§ 12.03–1	Subpart C of part 10	Consolidates Coast Guard-accepted and approved training into one subpart.	Reduces regulatory redundancy.
§ 12.05–3	§ 12.412	Revises the general requirements to obtain an endorsement as able seaman (A/B) to include holding or qualified to hold an en- dorsement as lifeboatman or survivalman.	Clarifies the A/B requirement to allow being qualified for lifeboatman or survivalman, and removes the requirement to pass the lifeboatman exam if the individual already holds the appropriate endorsement.
§ 12.05–3(c)	§ 12.420	Adds a new section to provide the requirements for ratings forming part of a navigational watch (RFPNW).	Provides requirements for RFPNW, required by the STCW Convention, in one location. The regulations do not currently identify these requirements. See Regulation II/4 of the STCW Convention.
§ 12.05–5 [Reserved]	§ 10.215	Consolidates the physical and medical requirements with all other endorsements and provides specific requirements rather than referring the applicant to the requirements for deck officers.	Clarifies the requirements for this endorsement.
§ 12.05–9	§ 12.416	Adds the option of survivalman as meeting the requirements for lifeboatman.	Provides additional flexibility for mariners serving on vessels without lifeboats by allowing them the ability to obtain an A/B endorsement.
§ 12.05–11		Adds the option of survivalman	Allows for additional flexibility for the industry.
§ 12.10–1		Moves this requirement to § 15.403	Moves section to part 15 as it is a manning requirement.
§ 12.10–3	§ 12.610	Revises the section to add the STCW Convention requirements for proficiency in survival craft and rescue boats. Removes the list of specific programs from meeting the requirements.	Includes demonstrations of proficiency required by the STCW Convention. Lifeboatman endorsement must comply with the STCW Convention. There is no need to list the approved programs as they are in the list of approved courses. See Regulation VI/2 of the STCW Convention.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
	12.610	Incorporates revised examination and demonstration of ability requirements into § 12.610 with other requirements for lifeboatman.	Moves these requirements for clarity.
§ 12.10–7	None	Removes section	Information is provided under able seamen (see proposed § 12.418) and not required in this subpart.
§ 12.10–9	§ 12.620	Revises the requirements for certificates of proficiency in fast rescue boats, adding a specific number of drills and the specific areas of competence the STCW Convention requires.	Provides additional information clarifying the STCW Convention requirements to obtain an endorsement for proficiency in fast rescue boats. See Regulation VI/2 of the STCW Convention.
None	§ 12.630	Provides a new section for a survivalman endorsement.	Adds new section because there are individuals assigned to vessels without lifeboats who do not need to meet the full requirements for lifeboatman, but must still meet the proficiency in the survival craft installed on their vessels. See STCW Convention section VI/2.
§ 12.13–1	§ 15.403	Moves this documentary evidence section to part 15.	We made this section consistent with the similar section applicable to able seamen and moved it into part 15 regarding manning requirements.
§ 12.13–3	§ 12.640	Revises this basis-of- documentary- evidence section to include those persons who have alternative qualifications.	Adds the additional process to meet this requirement through the possession of a professional license or alternative professional qualification.
§ 12.15–1	§ 15.825	Moves section to part 15	We made this section consistent with the similar section applicable to able seamen and moved it into part 15 regarding manning requirements; removed requirement to produce an endorsement to the United States Customs and Border Protection Port Director or master.
§ 12.15–3(e)	§ 12.510	Revises the rating forming part of an engineering watch (RFPEW) requirement for QMED.	Removes the specific requirement for the STCW endorsement as RFPEW associated with QMED and moves it to its own subpart. Adds a note that RFPEW may be required for those QMEDs serving on seagoing vessels.
	§ 12.512	Moves the medical and physical exam requirements for QMED.	Places medical and physical requirements for all endorsements in part 10.
§ 12.15–7	§ 12.514	Revises the requirement to provide a more general requirement that a QMED endorsement applicant must complete an appropriate training program.	There is no need to provide specific informa- tion regarding the training programs and courses; this information is included in the course approval letters provided to each training provider.
§ 12.15–11	§ 12.518	Revises existing language without substantive changes.	Removes language that didn't add clarity.
None	§ 12.530	Adds new section providing the requirements for RFPEW.	Provides specific requirements for this STCW rating, even though this rating was part of the requirements for QMED. See Regulation III/4 of the STCW Convention.
§ 12.25–20	§ 12.706	Revises to refer to §10.215	Refers to the medical and physical requirements section in part 10.
	§ 12.650	Revises section to provide more specific in- formation regarding the qualification re- quirements for an endorsement as GMDSS at-sea maintainer.	Specifies the methods of qualification allowed to obtain the endorsement.
§ 15.103	§ 15.103	Adds clarification that a safe manning certificate may be issued to uninspected vessels on an international voyage.	Provides uninspected vessels on international voyages the necessary information they will need to provide port state control officers in foreign ports.
	§ 10.109(d)	Revises section to add VSO to the list of endorsements under the STCW Convention.	Adds endorsement to meet the new STCW Convention requirements that will come into force on July 1, 2009.
Various	§ 15.403	Moves requirements from throughout sub- chapter B to this section, providing details for when various credentials are required.	Consolidates all manning requirements into part 15.
		Consolidates the general exception from the STCW Convention.	Moves the exception to part 15 because it is a manning issue.

Current cite	Cite under proposed rule	Summary of proposed change	Explanation of proposed change
None	§ 15.404	Adds this section to provide the various endorsements required for service.	Explains specific endorsements required and covered under these manning requirements.
§ 15.515	§ 15.515	Clarifies the requirement regarding passenger vessels.	Provides clarification to assist in under- standing manning requirements because existing language is confusing.
§ 15.605	§ 15.605	Adds the requirement that individuals serving on uninspected passenger vessels (UPVs) on international voyages must comply with the STCW Convention.	UPVs operating on near-coastal domestic voyages are held to be substantially in compliance with the STCW Convention. However, the STCW Convention requires all individuals to be in compliance with the STCW Convention when on international voyages. See Article III of the STCW Convention.
§ 15.805	15.805	Provides for all UPVs on international voyages to be under the control of an individual holding a license or endorsement as master.	Provides consistency with the STCW Convention, which requires that all vessels on an international voyage, including UPVs, must be operated by an individual who complies with the STCW Convention. See Article III of the STCW Convention.
§ 15.845	15.845	Adds manning provision for survivalman rating.	Provides an alternative for those vessels without lifeboats and sets the provisions to use survivalmen in lieu of lifeboatmen.
§ 15.1109	15.705	Moves requirement that masters of seagoing vessels must observe the STCW Convention watchkeeping principles.	Consolidates watchkeeping requirements to meet the STCW Convention watchkeeping principles. See Chapter VIII of the STCW Convention.

Old Reference

# D. Part 12 Renumbering

Part 12, Requirements for Rating Endorsements, was largely rewritten to incorporate the rating requirements of the STCW Convention. In addition, the numbering of part 12 was changed to reflect the numbering of the remainder of 46 CFR subchapter B.

Below is a quick-reference table showing the subparts and sections of the previous part 12 that were renumbered, revised, and inserted into the new part 12.

Old Reference	New Reference
Subpart 12.01	Subpart A
§ 12.01–1 § 12.01–3 § 12.01–9	§ 12.101 § 12.103 § 12.105
Subpart 12.02	Subpart B
§ 12.02–11 § 12.02–17	§ 12.201 § 12.203
Subpart 12.03	Subpart C
§ 12.03–1	§ 12.301
Subpart 12.05	Subpart D
§ 12.05–1 § 12.05–3 § 12.05–7 § 12.05–9 § 12.05–11 § 12.05–7(a)(5)	§ 12.410 § 12.412 § 12.414 § 12.416 § 12.418 § 12.420
Subpart 12.15	Subpart E

§12.15–3 §12.15–5 §12.15–7 §12.15–9 §12.15–11 §12.15–13 §12.15–15 §12.15–7(C)	§ 12.510 § 12.512 § 12.514 § 12.516 § 12.518 § 12.520 § 12.522 § 12.530		
	Subpart F		
§ 12.10–3; –5 § 12.10–9 § 12.13–1; –3 § 12.25–45	§ 12.610 § 12.620 § 12.630 § 12.640 § 12.650		
Subpart 12.25	Subpart G		
§ 12.25–1 § 12.25–10 § 12.25–20 § 12.25–25 § 12.25–30 § 12.25–35 § 12.25–40	§ 12.702 § 12.704 § 12.706 § 12.710 § 12.720 § 12.730 § 12.740		
Subpart 12.40	Subpart H		
§ 12.40–1 § 12.40–5 § 12.40–7 § 12.40–9 § 12.40–11 § 12.40–13 § 12.40–15	§ 12.801 § 12.803 § 12.805 § 12.807 § 12.809 § 12.811 § 12.813		
F. Request for Comments			

New Reference

### E. Request for Comments

The Coast Guard seeks specific comment on the requirements within

proposed subpart E of part 11 of 46 CFR in regards to the proposed training for engineering officers and the current lack of approved courses. We would like public comment to determine when training facilities believe they will be able to develop the new training proposed in this rule.

# V. Discussion of Comments on the Interim Rule (IR)

This section contains an analysis of 41 comments received in response to the IR. All references to specific regulations by commenters refer to regulations in existence at the time of the 1997 IR. Comments expressing support for a specific exemption are discussed below under the relevant sections.

# 1. Scope of Application—General

Seven comments were received expressing general views about the scope of application aspects listed in the IR. These commenters were opposed to or concerned about any exemption or relaxation of requirements for personnel on inland vessels, on small passenger vessels, on Great Lakes vessels, on offshore supply vessels (OSVs), on fishing boats, on mobile offshore drilling units (MODUs), and on vessels of less than 200 GRT/500 GT on domestic voyages. One commenter said the Coast Guard should take steps to ensure all personnel on exempted vessels are subject to special training requirements that are equivalent to the

STCW Convention and subject to a quality standards system (QSS). Another commenter agreed that exemptions could not be granted simply on the grounds that vessels operate domestically.

One commenter advocated that a unified set of standards should apply to all licensed officers in the merchant marine, and that, therefore, the STCW Convention standards should apply to all personnel serving not only at sea, but also on inland waters and the Great Lakes. This commenter recognized that this approach would exceed the scope and intent of this rulemaking and the STCW Convention, and suggested that unification of standards be introduced in due course under a separate set of proposals. The commenter said all personnel on seagoing ships, including those serving on smaller ships, should be subject to the full range of the STCW Convention requirements.

We do not propose to extend application of the STCW Convention to inland waters, since the scope of the STCW Convention is limited to seagoing ships. Our entire scheme of licensing, testing, inspection, and continued oversight for inland water and Great Lakes provides a level of safety equivalent to the STCW Convention.

One commenter said the exemption from the STCW Convention for vessels operating exclusively on the Great Lakes should be removed to allow licensed officers on those ships to obtain STCW endorsements.

The exemption does not entirely remove the possibility for such officers to receive an STCW endorsement if they are able to provide evidence of having completed the required training and assessment. It is not necessary or appropriate to expand the application of the STCW Convention requirements to the Great Lakes (which the U.S. considers to be outside the scope of the STCW Convention). We have worked with training facilities in the Great Lakes region, including the Great Lakes Maritime Academy, to provide a route for those mariners interested in acquiring an STCW endorsement for service outside the Great Lakes.

One commenter expressed the view that it would not be appropriate to issue an STCW endorsement for service on the "Inside Passage," *i.e.*, international voyages between Seattle, WA, and Vancouver, British Columbia, to someone who had not demonstrated competence under the STCW Convention. Another commenter requested a determination that this route be considered "within the boundary lines" and, therefore, not subject to the STCW Convention

implementation schedule. Yet another commenter expressly requested that no exemption be granted to vessels operating on the waters of the Inside Passage.

As explained in the preamble to the IR, we consider these waters to be inland waters, which are outside the scope of the STCW Convention. However, on request, we will issue an STCW endorsement limited to service on the Inside Passage to holders of U.S. inland licenses or endorsements, provided such documentation is necessary for operation in waters under Canadian jurisdiction. The limitation placed on the document should be sufficient indication to all concerned that the holder has not been subject to the full range of assessments necessary under the STCW Convention for service on seagoing ships when operating outside the boundary line.

Two commenters supported our implementation of the measurement system established by the International Convention of Tonnage Measurement of Ships. We have used both gross register tons (GRT), which is the domestic tonnage measurement, and gross tonnage (GT), which is the international tonnage measurement, in this NPRM. The GRT/GT tonnage equivalencies are found in the table at 46 CFR 11.402(a).

One commenter did not support the exemption that allowed for "short" voyages.

This exemption has been retained in § 15.103 due to industry needs of the small vessel community, such as towing vessels and small passenger vessels on domestic near-coastal voyages. In addition, STCW provides the administrative flexibility to provide exemptions on such vessels.

One commenter stated that the interchanging of the terms "certificate" and "endorsement" in the IR is confusing.

This issue has been overcome by the development of the MMC rulemaking, which establishes the use of endorsements as the method of placing qualifications on a mariner's Coast Guard-issued credential. The previous concerns related to the STCW Convention's use of certificate and endorsement, as implemented by each administration. These certificates and endorsements are referenced in the MMC final rule (74 FR 11196, Mar. 16, 2009). The definition of "endorsement" may be found at 46 CFR 10.107.

# 2. Application to Fishing Industry Vessels

Six comments noted that the IR, as written, applies only to fish-processing vessels. In general, the commenters said

all fishing industry vessels should be treated the same, and opposed application of STCW Convention requirements to any fishing industry vessel, including fish-processing vessels. The commenters suggested that the Coast Guard should exempt fish-processing vessels from the STCW Convention requirements or be more flexible in applying it, and should seek legislative authority, if necessary, to allow for such an exemption.

We are obligated to treat fishprocessing vessels differently from fishing vessels and fish-tender vessels because fish-processing vessels are distinctively defined by legislation (46 U.S.C. 2101(11b)) as "a vessel that commercially prepares fish or fish products other than by gutting, decapitating, gilling, skinning, shucking, icing, freezing, or brine chilling." Only vessels actively engaged in fishing are excluded under the terms of the STCW Convention, and the Coast Guard has determined that fishprocessing vessels are not actively engaged in fishing. Therefore, we have no authority to fully exempt fishprocessing vessels from the STCW Convention requirements without a legislative change. Where flexibility does exist, we have made every effort to ensure the fishing vessel industry can operate under a uniform system. For example, this NPRM proposes retaining the provision from the IR that recognizes compliance with the regulations in 46 CFR part 28 as meeting STCW Convention requirements for basic safety training (BST).

Two comments stated that it would be preferable to address all fishing industry vessels under the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW–F).

The STCW–F applies only to fishing vessels which do not include fish-processing vessels. We are obligated to treat fish-processing vessels differently from fishing vessels and fish-tender vessels because fish-processing vessels are distinctively defined by legislation (46 U.S.C. 2101(11b)), and as stated in our response to the previous comment.

Three commenters stated that there are competitive impacts from imposing STCW Convention requirements on only one segment of the fishing industry; for example, when fish-processing vessels, which are included, must compete for business with factory trawlers, which are exempt.

We are obligated to treat fishprocessing vessels differently from fishing vessels and fish-tender vessels because fish-processing vessels are distinctively defined by legislation (46 U.S.C. 2101(11b)). Only vessels actively engaged in fishing are excluded under the terms of the STCW Convention, and the Coast Guard has determined that fish-processing vessels are not actively engaged in fishing. Therefore, we have no authority to fully exempt fish-processing vessels from the STCW Convention without a legislative change. Where flexibility does exist, we have made every effort to ensure the fishing vessel industry can operate under a uniform system.

Six commenters said it was not logical to apply the STCW Convention (and impose extra costs) on fish-processing vessels, which typically operate while anchored in protected waters, while exempting fishing vessels operating at sea, where the risks are higher.

As noted in response to the previous comment, we are obligated to treat fishprocessing vessels differently from fishing vessels and fish-tender vessels because fish-processing vessels are distinctively defined by legislation (46 U.S.C. 2101(11b)). Only vessels actively engaged in fishing are excluded under the terms of the STCW Convention, and the Coast Guard has determined that fish-processing vessels are not actively engaged in fishing. Therefore, we have no authority to fully exempt fishprocessing vessels from the STCW Convention without a legislative change. As indicated previously, where flexibility does exist, we have made every effort to ensure the fishing vessel industry can operate under a uniform system.

One commenter said STCW Convention requirements should only be imposed on fishing industry vessels operating outside of the U.S. exclusive economic zone (EEZ) rather than outside the boundary line.

The Coast Guard does not concur with this comment. The STCW Convention applies to all ocean waters, which have been interpreted as those waters outside the boundary line and would include the entire EEZ.

One commenter did not consider the requirements of 46 CFR part 28 on drills and safety instruction comparable to the STCW Convention requirement and recommended deleting this option.

We do not agree that removing this option would be appropriate because the STCW Convention does not apply to fishing vessels. Additionally, the fishing vessel industry has built its safety training programs around the requirements of 46 CFR part 28, and we believe there is a strong interest in having uniform standards wherever possible.

3. Application to Towing Industry Vessels

We received three comments concerning the application of the STCW Convention to the towing vessel industry. Two commenters expressed support for the approach taken in the IR, which effectively exempted towing vessels of less than 200 GRT/500 GT on domestic voyages from additional regulation. These comments also endorsed our intent to avoid duplicate regulation by taking into account the final rule on licensing and manning requirements for towing vessel operators, published on June 17, 2003 (68 FR 35801). One of these commenters said we should proceed with the development of clear policy guidance for vessel owners and operators as well as for regional examination centers (RECs) to ensure consistent implementation of new requirements. One commenter said the application to uninspected towing vessels (UTVs) operating beyond the boundary line was not clear.

While this NPRM proposes to retain the approach taken in the IR, we have clarified that UTVs operating beyond the boundary line are subject to the STCW Convention. Furthermore, since the comment was received (in December 1997), we issued Navigation and Vessel Inspection Circulars (NVIC) 4–01—available at <a href="http://www.uscg.mil/hq/cg5/NVIC/">http://www.uscg.mil/hq/cg5/NVIC/</a>—to address credentialing of towing vessel officers.

# 4. Application to Small Passenger Vessels

There were four comments regarding the passenger vessel industry. Two comments expressed support for the approach taken in the IR, which, on the basis of equivalencies in existing regulations, effectively exempted small passenger vessels on domestic voyages from additional regulation. However, one of these commenters urged us to redraft the equivalency as a general exemption and extend this equivalency exemption to include small passenger vessels on international voyages. This commenter suggested that, if we were unable to issue such an exemption, then we should hold a public hearing to explore the issues of the applicability of the STCW Convention to vessels on domestic voyages, and the "subordination of U.S. regulation to an international organization."

Regarding the need for a public meeting on the relationship of maritime treaty law to vessels in domestic or international service, we do not consider that such a meeting would contribute directly to this rulemaking

project. As a party to the STCW Convention since 1991, the U.S. is committed to its terms, including any revisions that have been adopted in accordance with its amendment procedures. Whether it is proper for U.S. vessels under other circumstances to be subject to international conventions is outside the scope of this rulemaking project.

Two commenters did not support the approach introduced in the IR that would allow holders of licenses for small passenger vessels operating beyond the boundary line to obtain STCW endorsements without being observed by a designated examiner (DE) or completing an approved training program. One of the commenters said an exemption was inconsistent with the revised STCW Convention.

We have maintained the approach taken by the IR in this NPRM. The STCW Convention clearly provides a sufficient range of administrative flexibility to allow for exemptions from requirements for smaller ships on domestic voyages. However, for personnel serving on vessels in international service, where foreign port state control officers can be expected to insist on strict compliance with the STCW Convention, the scope of administrative discretion is very limited. We would consider approving specially tailored training programs, if submitted, for personnel serving on smaller vessels in international service (with a resulting limitation on the licenses, certificates, endorsements, and documents issued).

# 5. Application to Offshore Supply Vessels

We received 10 comments concerning the offshore supply vessel (OSV) industry as discussed below. Three of the commenters supported the approach taken in the IR, which allows the issuance of a special category of licenses for the OSV industry.

One commenter favored some form of relief for OSVs from the application of STCW Convention and Code, but said the exemption the Coast Guard proposed did not go far enough and should be extended up to 500 GRT. This commenter also disagreed on the use of a license restricted to OSVs and doubted that any mariner would want it.

Four commenters disagreed with the approach taken in the IR, because the STCW Convention does not identify OSVs as a special vessel type.

Two commenters focused on training aspects. One commenter said equivalencies should not be applied by a local Officer in Charge, Marine Inspection (OCMI) but, rather, on a

uniform national criterion. One commenter said the Coast Guard should hold a public meeting to educate mariners in the Gulf of Mexico region about STCW Convention requirements and the implications of the IR.

This NPRM retains the approach

taken in the IR. It is clear from working with individuals and companies in the OSV industry that not all the areas of knowledge, understanding and proficiency (KUP), as set out in the tables in the STCW Code (incorporated by reference in the IR and available for viewing at the address under ADDRESSES), are relevant to the OSV industry. Additionally, certain areas of proficiency that are not included or emphasized in the tables of the STCW Code are required for competence in the OSV industry. We will continue to work with companies operating OSVs, individuals who work on OSVs, and organizations that train personnel for service on OSVs to find the right balance of proficiencies needed for this limited license. If any equivalency is ultimately introduced for this license, we will develop the criteria as a national policy to provide the necessary uniformity in local application by OCMIs and RECs.

We do not consider the types of ships identified in Chapter V of the STCW Convention (i.e., tankers, passenger ships, and Ro-Ro passenger ships) to be the only possible categories of ships for which a special or limited license can be issued under the STCW Convention. The STCW Convention clearly allows for limitations to be placed on the STCW endorsement. In the present case, the holder would be limited to service on OSVs unless assessed in those areas of proficiency that would allow removal of the limitation.

One commenter stated that it is necessary to improve the methods used for communicating with active mariners who are directly affected by these regulations.

The Coast Guard agrees and, in an effort to make information on the STCW Convention more easily available, we have launched an STCW Convention Web site, http://www.uscg.mil/STCW/.

Two commenters offered suggestions on specific areas of training and service that need to be emphasized in an OSVbased program of training and experience.

These recommendations do not affect the wording of the regulation and will be considered in developing policy guidance for the approval of OSV training programs.

One commenter said the OSV license provisions (*i.e.*, those formerly found in §§ 10.493, 10.495, and 10.497) should

each explicitly state, "The STCW Convention certificate or endorsement will be expressly limited to service on the vessel or class of vessels and will not establish qualification for any other purpose."

We do not consider it necessary to add this to the regulation since the title and description of the license as given in the regulations and used on the STCW endorsement will expressly limit service to OSVs.

## 6. Tonnage Issues

Three commenters expressed opinions on the application of the regulatory and international tonnage systems to licensing and to OSVs. One commenter supported the use of the 3,000 GT threshold for unlimited U.S. licenses based on the International Tonnage Convention on Tonnage Measurement of Ships, 1969 (ITC). Another commenter urged the Coast Guard to make every effort to promote the use of the ITC for tonnage measurement.

We are obligated not only to operate within the framework of the ITC requirements, but also within the framework of the U.S. statutory requirements, which allow for a domestic tonnage measurement system. Because of the differences between the two measurement systems, we have developed table 11.402(a), which establishes the equivalencies that the Coast Guard will use when evaluating credentials.

A small number of comments from the five commenters above fall outside the scope of this rulemaking.

## 7. STCW Certificate or Endorsement

One commenter said the use of the terms STCW "certificate" and STCW "endorsement" should be clarified.

Another commenter supported the idea of combining the U.S. license and STCW endorsement into a single document.

Subchapter B of 46 CFR was revised under the MMC final rule, which changed the terminology to use the phrase "STCW endorsement" (74 FR 11217, 11219). Additionally, that rulemaking consolidates all our domestic credentials into one document.

# 8. Length of Service Requirement

One commenter requested clarification of the reference to "remaining service" in 46 CFR 10.304(e). Essentially, the commenter suggests that the provision, which requires applicants for an STCW endorsement as officer in charge of a navigational watch (OICNW) to have

"not less than one year of remaining service" as part of an approved training program, does not specify the actual total service required.

We agree that the section is unclear and have clarified the requirements in proposed § 11.407 to address the difference between: (1) Completion of the service and training requirements; and (2) completion of an approved program which includes service.

One commenter suggested that more discussion is needed to resolve inconsistencies between the seagoing service requirements in 46 CFR part 10 and the STCW Convention regulations.

We propose incorporating the sea service requirements of the STCW Convention into the proposed 46 CFR part 11, including the alternate sea service requirements for paths of progression to management level certificates. As with other provisions of this proposed rule, we seek public comment on the proposed 46 CFR part 11.

# 9. Qualifications of Instructors and Designated Examiners (DEs)

One commenter suggested revising 46 CFR 10.309(a)(3)(iii) to allow those with expired licenses to serve as instructors. The commenter observed that performance evaluations from on-the-job experience may be sufficient to enable an individual to qualify as a DE.

We agree and propose to revise the requirement to provide an appropriate balance between the need for instructors to "hold the level of license, endorsement or other professional credential" required of those who would use the knowledge and skills necessary to teach onboard a vessel, and the need to ensure that qualified and experienced instructors are not prevented from giving instruction for lack of a license. A professional credential can be something other than a license if the qualification to perform the skill on a vessel is a special endorsement (as in the case of radar or Global Marine Distress and Safety System (GMDSS)).

This commenter also expressed concern that the Coast Guard would use the recommended timetable from the International Maritime Organization (IMO) model course on "Train the Trainer" as the mandatory length of training for qualifying instructors under U.S. regulations.

The IMO model courses are nonmandatory. They serve as a useful reference point for a wide range of training programs which cover the same basic material.

One commenter said the definition of DE should be expanded to include

licensed engineers and mates performing as instructors at schools operated for the deep sea industry such as the Maritime Institute of Technology and Graduate Studies, the Maritime Administration (MARAD), the Harry Lundeberg School of Seamanship, and the American Maritime Officers' STAR Center. Four other commenters agreed with the view that instructors from union schools should receive the same automatic designation as qualified instructors and DEs as provided to instructors at the maritime academies. One of these commenters said an alternative would be to delete the recognition granted to maritime academy instructors in the IR.

We note that the comments did not provide information to substantiate the proposed revision with respect to instructors at training facilities that are not subject to independent academic accreditation. However, we remain open to the possibility of granting a general approval for instructors at any single training facility to act as DEs within their respective approved training programs. We would grant this approval after establishing that the system used to employ instructors at the facility is effective and reliable in maintaining qualified staff who conduct assessments of proficiency. This can be accomplished through normal course approval procedures as outlined in 10 CFR Subpart C—Training Schools with Approved Courses. In addition, we are satisfied that the special system of oversight maintained jointly by the Coast Guard and MARAD is adequate to verify that academy instructors are qualified.

Three commenters suggested there should be two DE levels: One for shipboard examiners and one for shoreside examiners. One of these commenters said this would address concerns of shipboard officers who are reluctant to perform assessments of proficiency and to make entries in training record books (TRBs).

We do not concur that a two-tier concept for DEs should be introduced in this rulemaking. While the scope of guidance necessary for performing an assessment of proficiency should relate to the range of skills assessed, that assessment, whether performed onshore or onboard a ship, should use the same criteria. The distinction between shoreside and onboard assessment may be important for developing an assessment situation or scenario, but should not require a different set of assessment standards.

### 10. License Structure

One commenter favored retaining the current four-tier system of licenses rather than the three-tier system used in the STCW Convention. Another commenter recommended that no changes should be made to the domestic licensing system without careful study by the Merchant Marine Personnel Advisory Committee (MERPAC).

We asked MERPAC to study this issue, and they recommended that we retain the current four-tier system. Consequently, we have not altered the basic four-tier system of licenses in this NPRM; however, we have provided alternative paths of progression.

# 11. Bridge Teamwork Procedures

Two commenters said it was important to include shipboard training in bridge teamwork procedures for unlicensed personnel (*i.e.*, helmsman and lookout), and to provide bridge teamwork training for ratings forming part of a navigational watch (RFPNWs).

We agree that this is desirable, and that this should be understood within the context of Table A-II/4 of the STCW Code, which lists the following among the required KUPs for qualifying as an RFPNW: The "ability to understand orders and communicate with the officer of the watch in matters relevant to watchkeeping duties \* \* \* procedures for the relief, maintenance, and handover of a watch \* \* \* [and] information required to maintain a safe watch." The level of training and assessment does not have to be of the same scope and depth as required for an officer in charge of a navigation watch (OICNW) in Table A-II/1 of the STCW Code and in 46 CFR 11.407(a)(2).

One commenter requested clarification as to whether the Coast Guard must approve training in bridge teamwork procedures. Another commenter was not opposed to inservice, onboard assessments of competence in bridge teamwork, but stated that the Coast Guard should verify that the resulting level of competence is equal to structured training. A third commenter said the Coast Guard should require formal classroom and simulator instruction in bridge teamwork and bridge resource management (BRM) in all cases.

As a general matter, all training that is provided to meet an STCW Convention requirement must be monitored under an approved QSS. During the transition period, we accepted assessment as one method of proving competence to allow for those who had previously completed BRM or had extensive experience on vessels that

practiced BRM. Now that the transition period has ended, we propose requiring formal training and assessment. Furthermore, we are proposing a requirement for training in BRM at the operational level.

One commenter expressed support for the list of items that the preamble to the IR indicated should be covered in the assessment of proficiency in bridge teamwork procedures (62 FR 34519). These items were included in the guidance contained in NVIC 4–97 on company responsibilities.

# 12. License Renewal and Refresher Training

One commenter felt that the options available in the IR for renewing licenses should be revised to require refresher training in the International Safety Management Code (ISM), GMDSS, and other new technologies.

We drafted the IR to reflect or retain the options made available in section A–I/11 of the STCW Code. These include passing an approved test or performing functions equivalent to seagoing service. Refresher training is also an option. Therefore, we do not consider a revision restricting U.S. license holders to any one of these options appropriate.

#### 13. QSS and ISM Code

One commenter said that before the Coast Guard accepts the ISM certificate as sufficient evidence of a QSS for inhouse training and assessment, it should review the ISM certification process to ensure there is sufficient time and scope to verify evidence of compliance with the STCW Convention. This commenter expressed doubt that the current procedures were adequate to encompass STCW Convention requirements.

The preamble to the IR stated that we were planning to "accept the ISM Certificate of a company as sufficient evidence of a QSS for in-house training and assessment, provided the company incorporates, in its ISM program, a commitment to comply with 46 CFR 10.309," which sets out the elements of a Coast Guard-accepted QSS (62 FR 34513). We provided further guidance on company roles and responsibilities in NVIC 4-97, which states that a valid Safety Management Certificate and Document of Compliance by themselves establish a presumption of compliance with STCW Convention regulation I/14 (Company responsibilities). This is a limited presumption that does not extend to other STCW Convention regulations such as I/8 on Quality Standards. We consider the ISM system to offer a solid basis for adopting the STCW Convention requirements if the

company is providing opportunities for onboard training and assessment. However, some modifications to the company's ISM system are essential to ensure that the special requirements of 46 CFR 10.309 are fulfilled.

Two commenters said that ISM audits would not accomplish STCW Convention audits in the same time period during which both systems are

being implemented.

At this time, there hasn't been an instance of an approved use of ISM to encompass STCW Convention audits. Three classification society systems of evaluation are Coast Guard-accepted QSSs, but the system is not designed to "piggyback" on an ISM audit.

One commenter said if the ISM certificate process is used as evidence of QSS for in-house training, increases in manning should be considered.

The Coast Guard is not considering a specific manning requirement at this time because it is beyond the scope of this rulemaking, which seeks merely to incorporate the STCW Convention into our regulations.

# 14. QSS, Coast Guard Course Approval, and Maritime Academies

One commenter, while expressing general support for the IR, said that, in the absence of any Coast Guard-accepted QSSs, there might be a need to delegate course approvals from the U.S. Coast Guard National Maritime Center (NMC) to the local OCMIs.

We are not endorsing this proposal for several reasons. First, NMC oversight provides a higher degree of nationwide consistency in course approvals. Adding workload to local Coast Guard units would not necessarily increase the efficiency of the approval process. Since receiving the comment, we have approved two classification societies and one accreditation service to act as Coast Guard-accepted QSSs.

One commenter said the system of monitoring the training programs at the maritime academies and the Coast Guard's own course approval system did not comply with STCW Convention Regulation I/8 on QSS. This commenter suggested using International Organization for Standardization (ISO) 9002 and applying it across the board to all maritime training and to the Coast Guard's course approval system.

The Coast Guard has developed a comprehensive QSS for the merchant marine personnel qualification system. We agree that all training courses and programs used for qualification under the STCW Convention should be monitored under a QSS and, in this rulemaking, we are proposing that all training courses and programs used for

qualification under the STCW Convention be monitored under a QSS, including those training programs provided by the maritime academies. While the standard used within the Coast Guard is based upon ISO 9001:2000, we have not required a specific standard to use in this rulemaking.

### 15. QSS Alternatives

Three commenters supported the concept of employing a panel of maritime education specialists from maritime associations, maritime trade organizations, maritime training institutions, corporations, or other organizations that meet the requirements of 46 CFR 10.309(a) as an alternative to a Coast Guard-accepted QSS. One commenter said the Coast Guard should assemble and manage teams of visitors to ensure national uniformity. Another commenter expressed concern about this concept, particularly in the areas of potential conflicts of interest and lack of administrative structure.

If submitted, we will consider any viable proposal for such a concept to be implemented under NVIC 7–97 (Guidance on STCW Quality Standards Systems for Merchant Marine Courses or Training Programs). No regulatory revision is necessary to accommodate this concept.

One commenter said it was important for the Coast Guard to retain the no-cost course approval process and consider the costs associated with third-party QSSs.

We will continue to approve training programs for the foreseeable future because of effectiveness of third-party oversight.

#### 16. Simulators

One commenter said the Coast Guard should not allow or approve "personal computer/PC-based training," as it does not constitute satisfactory simulator training involving spatial and equipment duplication. This commenter added that technical performance standards should be developed for "full-task simulators, part-task simulators, and personal computers used to provide limited visual scenes, diagnostics, and memory" and that the regulations should stipulate the simulators required for radar and automatic radar plotting aid (ARPA) training.

At this time, many questions remain about the effectiveness of simulator technology in maritime training. We will continue working with MERPAC and others in the maritime training community to develop guidance related to simulator technology in maritime training for use in Coast Guard course approvals or by Coast Guard-accepted QSSs that may be interested in implementing this type of technology.

Regarding computer-based training, the Coast Guard continues to accept this type of training under our course approval process.

# 17. Basic Safety Training and Ship-Specific Familiarization

Three commenters raised issues concerning the four elements of basic safety training (BST): Basic fire-fighting, elementary first aid, personal survival, and personal safety/social responsibility. One commenter asked when the Coast Guard would make a notation on the STCW endorsement indicating that the holder had been trained and assessed in BST.

It is unnecessary for such a notation to be placed on the STCW endorsement. Other forms of documentary proof, such as a course completion certificate, meet this STCW Convention requirement. The IR allowed for the possibility that such a notation could be made by the Coast Guard; however, since then, changes in interpretation of the STCW Convention by IMO and the Coast Guard allow a mariner to retain competency in BST through continued sea service.

Another commenter sought consistency between the STCW Convention requirements for BST and other requirements for crew training, particularly requirements associated with life saving appliances and arrangements (46 CFR part 199). The commenter noted that the requirement for drills under part 199 allowed some time for a new crewmember to be trained, while the STCW Convention requirement for ship-specific training required similar training before any shipboard duties could be assigned.

The two sets of regulations have different purposes. Title 46 CFR 199.180(c) focuses on the drills that are essential to ensure the crew can respond to an emergency and coordinate its activities. The STCW Convention requirement focuses on the individual seafarer who must be familiarized with the ship-specific arrangements, installations, equipment, procedures, and ship characteristics relevant to his or her routine or emergency duties, and the ship's written procedures, which must ensure that newly employed seafarers are given a reasonable opportunity to reach an acceptable level of familiarization "before being assigned to those duties" (See Section A–I/14 of the STCW Code). The two regulations are consistent. The onboard written procedures can certainly take into account the schedule of drills as part of

the ship-specific familiarization process before a newly employed seafarer is assigned duties.

One commenter asked whether familiarization training requires an ability to read. The commenter referred to guidance included in the preamble to the IR (62 FR 34520) where the following was included in the recommended checklist of items to be addressed with newly employed crew members: "Read and understand relevant standing orders, safety and environmental-protection procedures, and company policies clarifying any unclear or confusing material." The commenter did not believe that the STCW Convention requires or mentions any reading capability.

The STCW Convention requires deck officers to have an adequate knowledge of English, and for engineer officers to be able to use English in oral and written form. Therefore, when we refer to reading and understanding "relevant" orders, procedures, and policies, this guidance would apply to those to whom such documents are addressed. If an individual is employed on a ship in a capacity where reading is not required, familiarization training could be provided by another means.

One commenter said the requirement for training in personal safety and social responsibility can be accomplished on the job as part of a company's Safety Management System under the ISM Code, and a certificate of completion by a company should be accepted as evidence of such training; therefore, we should revise 46 CFR 10.205(l) accordingly.

A company-issued certificate could serve as documentary proof of this element of basic training and assessment, provided the program of training is approved by the NMC or monitored by a Coast-Guard-accepted QSS in accordance with § 10.309 and NVIC 7–97, and provided the assessment is conducted by a DE. The ISM system can readily be adapted to encompass these elements and no change to the regulation is needed to accommodate such actions.

One commenter said the requirements for BST or instruction, as presented in 46 CFR 15.1105(c), are broader than the STCW Convention requirement because they address all crewmembers who are assigned a duty on the muster list. This commenter suggested requiring only familiarization training for those crewmembers on a cruise ship who have minimal duties on the muster list (such as carrying a blanket to the muster station), will assist passengers in emergencies, or have other specific emergency duties (such as lifeboatman).

We raised this issue at the IMO Maritime Safety Committee in June 1997. The United States stated its support for the new amendments to the STCW Convention to focus on personnel on passenger ships "with the understanding that basic safety training requirements in chapter VI already apply to personnel on passenger ships who are nominated or designated to assist passengers in emergencies." The IMO Committee "agreed with this understanding, recognizing that training should be related to the duties assigned to such personnel." Therefore, we do not see a need to revise 46 CFR 15.1105.

This commenter also expressed the opinion that evidence of having received the appropriate BST or instruction can be met by companymaintained records and need not be in the form of individual certificates. Therefore, the rule should be revised to reflect this view.

We agree that company-maintained records can serve as evidence to be produced to establish that crewmembers have received approved BST or instruction, provided the scope and date of training or instruction are itemized for each crewmember in such records. The wording used in 46 CFR 15.1105(c) and (d) (i.e., "produce evidence") is directly derived from the relevant wording in the STCW Code ("provide evidence"), and would allow the use of company-maintained records as long as the individual concerned has convenient access to the records when he or she needs them for license or document renewal, as well as for port state control purposes. Therefore, no revision to the regulation appears necessary or appropriate.

One commenter endorsed the idea that the companies use a checklist for ensuring that new crewmembers are familiarized with ship-specific procedures, equipment and arrangements.

This idea is included in NVIC 4–97 on company responsibilities.

#### 18. Training Record Books

One commenter noted that his training record book (TRB) should capture all shipboard training and assessment, although he did not view shipboard assessment as required to satisfy STCW Convention competency standards. This commenter noted that his TRB would also serve as documentary evidence of BST.

Another commenter suggested redrafting the regulation to encourage using the TRB to record all required training, including training in hazardous materials and refrigerants. This suggested change is not necessary or appropriate. TRBs have a special limited purpose under 46 CFR 10.304 as part of the licensing process to obtain an operational level endorsement. There is nothing in the regulation that prevents the use of an expanded TRB to encompass other records of training. The subjects suggested as examples go beyond the scope of this rulemaking.

A commenter suggested citing the TRB as "essential documentary evidence" under 46 CFR 10.207 for the purpose of raising the grade of a license.

The TRB has a special limited purpose under the regulations. This purpose is consistent with the TRB requirement under the STCW Convention. Documentary proof of competence based on the relevant tables in the STCW Code would be required for anyone applying for a raise in grade of a license if the sea service or training commenced on or after August 1, 1998, or when the application is submitted. It is unnecessary to revise the regulations to establish a single fixed format for this proof.

### 19. Standards of Medical Fitness

One commenter suggested the Coast Guard revise NVIC 6–89 on physical evaluation guidelines for merchant mariners' documents and licenses, and that it should hold a public meeting to present Coast Guard and MERPAC proposals and receive general industry suggestions and comments.

Since receiving this comment, we replaced NVIC 6–89 with NVIC 2–98. After consulting with MERPAC to solicit their views, we subsequently decided to replace NVIC 2–98 and published a draft document in the **Federal Register** seeking public comment (71 FR 56998, Sept. 28, 2006). After addressing these public comments (73 FR 56600, Sept. 29, 2008), we issued NVIC 04–08 and made it effective October 29, 2008. The Coast Guard will continue to work with MERPAC and other advisory committees when considering medical fitness standards.

One commenter believed the Coast Guard might use a revision of NVIC 6– 89 as a means of imposing the Seafarers' Health Improvement Program (SHIP) on the maritime industry as a mandatory standard.

After considering the use of SHIP, the Coast Guard chose to work in consultation with MERPAC to develop the revised NVIC 04–08 that provides guidance to mariners and their physicians in the evaluation of medical conditions.

Three commenters supported a proposal submitted to the docket in

response to the NPRM that the Coast Guard require mariners to report any prescription drugs they are taking.

We did not require this in the IR because it was not mandated by the STCW Convention. However, this information is already included on the form submitted by the mariner with his or her application (the CG–719K), as required by 46 CFR 10.225(b)(7).

20. Training for Those Providing Medical First Aid or for Qualification as Person in Charge (PIC) of Medical Care Onboard Ship

One comment said the Coast Guard should revise 46 CFR 12.13–1 to require that applicants provide documentation of training within the previous 5 years for certification to provide medical first aid or be in charge of medical care onboard a ship.

Recent qualifying service, or "recency," generally means 90 days of service on vessels of appropriate tonnage or horsepower within the 3 years immediately preceding the date of application. The STCW Convention does not stipulate a period of recency, and we do not consider it appropriate to add a requirement to this rulemaking that exceeds the requirements of the STCW Convention.

# 21. Fatigue and STCW—General

One commenter suggested that increased requirements for obtaining an original license or to renew a license might result in a shortage of qualified officers at a time when more crewmembers are necessary to allow increased off-watch time for operating personnel to reduce fatigue. The commenter suggested "incentives" might be needed to attract new recruits to the maritime industry.

We have no way to make the determination whether increased requirements would result in individuals choosing or not choosing to enter the maritime profession. The Coast Guard is not the appropriate agency to determine incentives to be provided to the maritime industry in order to attract new recruits. That falls within the purview of MARAD.

# 22. STCW Rest Periods for Watchkeeping Personnel

Following the publication of the IR, in March 1998, the Coast Guard's Navigation Safety Advisory Committee (NAVSAC) proposed to allow a deviation from the required rest periods in 46 CFR 15.1111 for circumstances that "could not reasonably have been anticipated at the commencement of the voyage," which is directly derived from

the wording of section B–VIII/1 of the STCW Code.

NAVSAC proposed that this phrase should be interpreted narrowly to include only unexpected circumstances developing during a voyage that cannot normally be avoided by good voyage planning, effective management practices, and a comprehensive, scheduled maintenance program. Such circumstances impose on the crew a temporary increase in workload to maintain the operational status of the ship, but they should not be based on economic considerations, pressure to meet commercial deadlines, or regulatory requirements. Examples of circumstances that "could not reasonably have been anticipated at the commencement of the voyage" include, but are not limited to: Sudden severe weather; a prolonged period of fog; failure of equipment that is fundamental to the safe operation of the ship; and reassignment of workload due to the illness or incapacity of a crew member. This guidance should not be interpreted as undermining the master's authority to take action when necessary for the safety of the ship, the crew, and persons in danger at sea. Several commenters made reference to this proposal.

One commenter supported this proposal. This commenter also supported the definitions of "rest" and "overriding operational conditions" as used in 46 CFR 15.1101 in the IR. Another commenter specifically said he agreed with the principle that proper voyage planning can minimize operational emergencies. This commenter also agreed that when there is a difference between a statutory requirement and the STCW Convention rest periods, the stricter of the two rules should apply.

One commenter supported the provision that permits the interruption of rest periods to ensure full crew participation in drills. This provision directly reflects the wording of the STCW Convention (See A–VIII/1, paragraph 3).

One commenter requested the Coast Guard revise the rule on rest periods to take into account situations where the unlicensed crewmembers work on a schedule of "one week on, one week off" on a "six hours on, six hours off basis," but they are also called out during off-watch periods to assist in line handling and vehicle loading, and therefore do not always get 70 hours of rest in the 7-day work week. This commenter says some adjustment is possible in work schedules, but tides and currents also affect the operational schedule. Almost all of the vessels

operated by the commenter are documented for lakes, bays, and sounds.

The STCW rest requirement does not apply to personnel on vessels operating within the boundary line.

#### 23. GMDSS—General

One commenter observed that there were difficulties in achieving implementation of the GMDSS, and, therefore, that the Coast Guard should consider either introducing a new license for radio officers on GMDSS-equipped ships, or establish a new shipboard position called "communications and electronics officer," which would be filled by someone qualified to be both a GMDSS radio operator and an at-sea maintainer.

In the IR, we retained the provisions on radio officer licenses (46 CFR 10.603), provided for STCW endorsement for competence as a GMDSS radio operator (46 CFR 10.205(n) and 10.603(d)) and as a GMDSS at-sea maintainer (46 CFR 12.25–45). We are proposing to retain these provisions in this NPRM (See proposed § 11.603 and § 12.650). Anyone qualified under either of the GMDSS provisions can receive the appropriate STCW endorsement, and a single individual can receive STCW endorsements for both areas of competence, if qualified. Therefore, there is no need to create a new category of license. The proposal to create a new shipboard position to address difficulties in implementing GMDSS is beyond the scope of this rulemaking.

# 24. GMDSS and ARPA

One commenter suggested the Coast Guard revise 46 CFR 15.1103(e) and (g) to impose an earlier compliance date for certification of deck watch officers in GMDSS (January 1999) and ARPA (January 1998).

We are not adopting this suggestion for several reasons:

- (1) We maintained the requirements of the IR during the transitional period to avoid the confusion that might arise as a result of modifying those requirements;
- (2) The dates used in the IR were consistent with the requirements of the STCW Convention;
- (3) The dates proposed in the comment have passed; and
- (4) As the comment noted, the IR did not preclude earlier implementation by a company or an individual license holder.

Another commenter said the regulations should not permit issuance of a license for service on unlimited tonnage vessels unless the applicant has met the ARPA training requirements.

We do not agree. Currently mariners serving on seagoing vessels equipped with ARPA must meet training and assessment standards for that equipment. Some mariners hold upperlevel licenses, but never serve on seagoing vessels. Requiring training and assessment for such mariners imposes an unnecessary economic burden. The statement that service is limited to ships not fitted with ARPA on the face of the STCW endorsement should preclude any chance of confusion over the scope or validity of the license.

### 25. GMDSS and Electronics Technician

Three commenters said they had hoped the Coast Guard would include a new rating for "electronics technician" in the IR. One commenter wanted this endorsement available for unlicensed mariners. Another commenter wanted the skills associated with this rating to be addressed by creating a new license for radio officer/GMDSS maintainer. This commenter expressed concern that a person could serve as a GMDSS at-sea maintainer without completing an approved training program, by holding only a Federal Communications Commission (FCC) license. Another commenter said the concept of an "electronics technician" sħould address the maintenance associated with the increasing complexity of all the electronic systems on a ship, and not be narrowly linked to GMDSS maintenance.

As noted in the preamble to the IR (62 FR 34516), we will reconsider the concept of an "electronics technician" when developing a proposal for revision of 46 CFR part 12. Based on this concept, and the fact that all essential elements for GMDSS certification under the STCW Convention are in the IR (as indicated above in section 23 on GMDSS—General), we have not included this new rating in this NPRM.

# 26. Proficiency in Survival Craft and Lifeboatman

Seven commenters suggested that proof of proficiency in survival craft in the STCW Convention (section A–VI/2, paragraphs 1 to 4 of the STCW Code) and 46 CFR 10.209 should only be necessary within 5 years of original or initial certification, and not subsequently required.

We agree, provided the mariner maintains continued proficiency in accordance with regulation I/11 of the STCW Code and 46 CFR 10.209 (under the renumbered § 10.227 in this NPRM). No revision is necessary to reflect this interpretation.

One commenter asked the Coast Guard whether certification as lifeboatman would entitle the holder to a 1995 STCW endorsement for proficiency in survival craft to the same extent that it now entitles the holder to a 1978 STCW endorsement.

After February 1, 2002, all mariners with certification as lifeboatman should have held an endorsement for proficiency in survival craft. Any individual who does not hold such an endorsement would have to meet the requirements of 46 CFR 12.610 and 12.630 as proposed in this NPRM.

# 27. Proficiency in Fast Rescue Boats

One commenter would like requirements for training personnel in fast rescue boats in 46 CFR 12.10–9 to be extended to allow scheduling of training to avoid disrupting normal vessel operations.

The MMC final rule removed the deadline of July 1998.

# 28. Company Recordkeeping Responsibilities

One commenter said that, as a vessel owner and operator, his company had "no means of maintaining comprehensive files" on individuals who move from ship to ship and company to company. This commenter suggested the records should be "centralized either with the individual, the appropriate union or the Coast Guard." The commenter suggested limiting the recordkeeping responsibility under 46 CFR 15.1107 to the period of service "on the company's vessel" and that the Coast Guard consider developing a centralized, accessible database to track seafarerspecific information. Another commenter supported the idea of permitting an agent acting on behalf of the company to maintain seafarer records, and asked that the Coast Guard allow this in the regulations.

The wording of 46 CFR 15.1107 does not require "comprehensive" recordkeeping, but only recordkeeping relevant to the mariner's medical fitness, training and experience relevant to his or her assigned duties, and competency in assigned shipboard duties. Furthermore, as stated in section 4(b) of NVIC 4-97, Guidance on Company Roles and Responsibilities Under STCW, the company is responsible for keeping appropriate records, but a third-party agent (such as a union) can maintain custody of the records, provided they are accessible when needed. We do not consider a revision necessary to accommodate this approach. Although we do encourage efforts to develop databases to support the implementation of the STCW Convention, which has its own

recordkeeping obligations (Regulation I/9 of the STCW Code), there are financial, administrative, and privacy implications of a centralized database that would necessitate examination before any concrete steps could be taken in that direction.

# 29. Special Requirements for Personnel on Ro-Ro Passenger Ships

One commenter said that the requirements for training personnel on Ro-Ro passenger ships should allow additional time to develop an in-house training program.

The original deadline for certification (February 1, 1997) was imposed by the 1995 STCW Amendments, and the IR was effective well before the due date. Because the deadline has long since passed, a relaxation of the deadline at this stage would be meaningless.

# 30. Special Requirements for Personnel on Passenger Ships

One commenter suggested the Coast Guard incorporate the amendments that IMO adopted in 1996 concerning special training for personnel on passenger ships other than Ro-Ro passenger ships (i.e., new Regulation V/3 and Section A–V/3 of the STCW Code).

We implemented these IMO amendments as regulations in the final rule, "Training and Qualifications for Personnel on Passenger Ships," published on June 10, 2004 (69 FR 32465).

# 31. Publication of STCW Convention Requirements in the Code of Federal Regulations (CFR)

Two commenters said the Coast Guard should publish all applicable sections of the STCW Convention requirements as part of the rules in the CFR to make the regulations more userfriendly.

Although we will continue to incorporate by reference the STCW Convention and Code (rather than reproducing them wholesale in our regulations), see, 1 CFR part 51, we have included the pertinent requirements of the STCW Convention in regulations containing requirements to qualify for an officer's endorsement, a rating's endorsement, or other STCW qualification. This eliminates the layering of the STCW Convention requirements on top of the requirements for our domestic regulations. An applicant who meets the requirements of the domestic regulations would automatically meet the STCW Convention requirements.

## VI. Incorporation by Reference

Material proposed for incorporation by reference appears in §§ 10.103, 11.102, 12.103, and 15.105. You may inspect this material at U.S. Coast Guard Headquarters where indicated under ADDRESSES. Copies of the material are available from the sources listed in §§ 10.103, 11.102, 12.103, and 15.105.

Before publishing a binding rule, we will submit this material to the Director of the Federal Register for approval of the incorporation by reference.

### VII. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on 13 of these statutes or executive orders.

# A. Regulatory Planning and Review

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. The Office of Management and Budget (OMB) has not reviewed it under that Order.

A combined preliminary Regulatory Analysis and an Initial Regulatory Flexibility Analysis is available in the docket where indicated under the "Public Participation and Request for Comments" section of this preamble. A summary of the analysis follows:

This proposed rule seeks to more fully incorporate the requirements of the Implementation of the 1995
Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW Convention) in the credentialing of United States merchant mariners. The STCW Convention requires, among other actions, that mariners who apply for certain endorsements to obtain specified training and/or meet service requirements as a condition for obtaining the endorsement.

The majority of the STCW Convention training and service requirements were added to Coast Guard rules as a result of the 1997 interim rule. In addition, Coast Guard clarified requirements in the interim rule by issuing a series of policy documents from 1997 through 2003. The costs incurred to comply with the interim rule are not included in the cost estimates for this proposed rule, as these costs were accounted for in the regulatory analysis of the interim rule. The cost estimates for the proposed rule focus on the incremental costs triggered

by the additional requirements imposed by the proposed rule.

In brief, the STCW Convention sets the standards of competence for seafarers internationally. Virtually every maritime country, including the U.S., is a Party to this Convention. The Convention brings U.S. mariners in line with training and certification standards developed by the International Maritime Organization (IMO). The major elements of this proposed rule would specify STCW Convention requirements for mariner training and skill for both officer and ratings (enlisted) applicants. It would increase reporting requirements for the providers of mariner training, and would require the providers to adopt a quality standards system (QSS) for their training facilities.

The changes in this proposed rule that result in additional costs can be divided into the following categories:

(1) Training Requirements, Officers— Proposed changes to our regulations regarding STCW Convention training and assessment of skills requirements for seagoing deck and engineering officer endorsements.

(2) Training Requirements, Ratings—Proposed changes to our regulations regarding STCW Convention training and skill requirements for the ratings forming part of a navigational watch (RFPNW) and the ratings forming part of an engineering watch (RFPEW); would specify the number of man overboard drills for proficiency in fast rescue boats; and would establish a new ratings endorsement for survivalman.

(3) Training Requirements, Engineers—Would add the requirement that engineer officers adding a mode of propulsion to their endorsement must receive training in that mode.

(4) Sea Service Requirements—
Increase sea service requirements for deck officer endorsements for master on seagoing vessels between 200 GRT/500 GT and 1,600 GRT/3,000 GT; and would increase sea service requirements for deck officer endorsements for mate of near-coastal vessels of less than 200 GRT/500 GT.

(5) Training Provider Requirements— Require training providers to adopt a quality standards system (QSS); would require an internal audit of Coast Guardapproved courses midway during the validity period of a course's acceptance; and would require providers to send an annual report to the Coast Guard regarding each course they teach.

We estimate this proposed rule would affect 5,230 mariners who would apply for an STCW endorsement over a 10-year period (2009–2018). We used Coast Guard mariner data, publicly available information on training costs and

mariner wages, and other available industry information to develop the estimates of potential costs to mariners for each proposed requirement.

We estimate that this proposed rule would also affect 160 STCW training providers by requiring them to provide the Coast Guard's National Maritime Center (NMC) with an annual report on all courses. Training providers choosing to offer STCW Convention training would also have to implement a quality standards system (QSS) and write and maintain a QSS manual; conduct internal and external audits of each Coast Guard-approved course, and keep a paper or electronic record on each student completing a course.

The costs of the proposed rule are presented in Table 1. We estimate the total present value cost over the 10-year period of analysis (from 2009 to 2018) to be \$87.1 million at a 7 percent discount rate and \$105.4 million at a 3 percent discount rate. Over the period of analysis, the present value annual costs decline from about \$13.3 million in the first year to about \$6.2 million in the 10th year using a 7 percent discount rate.

TABLE 1—SUMMARY OF PRESENT VALUE COSTS OF PROPOSED RULE [\$Millions]

Vaar	Discount rate			
Year	7%	3%		
2009	\$13.3	\$13.8		
2010	10.6	11.4		
2011	9.9	11.1		
2012	9.2	10.8		
2013	8.6	10.5		
2014	8.1	10.2		
2015	7.5	9.9		
2016	7.1	9.6		
2017	6.6	9.3		
2018	6.2	9.0		
Total*	87.1	105.4		
Annualized	12.4	12.4		

<sup>\*</sup>Totals may not sum due to rounding.

We estimate the proposed changes to mariner training requirements for officer, engineer and rating endorsements are the primary cost driver in the first year of the proposed rule. See Table 2 for a summary of initial costs by requirement category.

<sup>&</sup>lt;sup>1</sup>We estimate the annualized cost of this proposed rule over the 10-year period to be about \$12.4 million (at either a 3 or 7 percent discount rate when rounded to the nearest million).

TABLE 2—SUMMARY OF THE INITIAL (FIRST YEAR) COSTS OF THE PRO-POSED RULE

[\$Millions]

Catagani	Initial costs*			
Category	7%	3%		
Mariner Train- ing ** Sea Service Training Pro- vider	\$7.0 3.5 2.8	\$7.3 3.6 2.9		
Total	13.3	13.8		

<sup>\*</sup> Discounted in the first year at 7 and 3 percent discount rates.

\*\* Includes changes for officer, engineer and

The proposed changes to mariner training requirements for officer, engineer and rating endorsements make up more than 50 percent of the costs in the initial year of the proposed rule. These requirements also represent more than 60 percent of the annualized costs of the proposed rule over the 10-year period of analysis. Table 3 below presents a summary of the costs by requirement as a percentage of the total initial and annualized costs of the proposed rule.

TABLE 3—SUMMARY OF COSTS BY RE-QUIREMENT OF THE PROPOSED RULE [As a percentage of initial and annualized

cost]

Requirements	Initial first year cost (percent)	Annualized cost (percent)
Mariner Train- ing* Training Pro-	53	61
viders	26	9
Sea Service	21	30
Total	100	100

<sup>\*</sup> Includes changes for officer, engineer and rating endorsements.

The primary benefit of the proposed rule is an increase in vessel safety and a resulting decrease in the risk of shipping casualties. According to one study, the human element is involved in 80 percent of shipping casualties, with 45 percent of the casualties primarily due to human error, and another 35 percent in which humans failed to adequately respond to threats. Lack of training in situational awareness and situational assessment are top causes of human error. The enhanced training

and service requirements of the STCW Convention are expected to increase mariners' situational awareness and situational assessment. Mariners are also expected to be able to better respond to threats. With more than 1,725 casualties and 123 fatalities in 2005 related to events on vessel types covered by the STCW Convention, the value of the people and property at risk is very high. Even small increments of reduced risk are expected to result in substantial benefits.

Additional benefits are expected to accrue to the U.S. economy in the form of: (1) Preventing and mitigating casualties on STCW Conventioncompliant vessels in U.S. waters; (2) Maintaining U.S. status on the so-called "White List" (a list of countries assessed to be properly implementing the revised STCW Convention, and is updated regularly), which avoids the detention of non-compliant U.S. flag vessels in foreign ports; (3) Ensuring U.S. mariners can compete in the global workforce market; and (4) Equalizing the competitive global standing of U.S. flag vessels by narrowing the performance gap and cost structure between vessel owners and operators relying on a wide range of standards of training and watchkeeping.

We provide a qualitative discussion of these benefits in the preliminary Regulatory Analysis available in the docket. In the same analysis, we also estimate the break-even point of the proposed rule (i.e., the reduction in risk that results in economic benefits equaling or exceeding the costs). We found that the benefits of the proposed rule will exceed the costs if the STCW Convention training and experience requirements reduce the risk of accidents by only 2 percent. If only fatalities are considered, the risk reduction would need to be 2.6 percent to reach the break-even point. If only property damage were considered, a risk reduction of 7.9 percent would be needed.

We considered three alternatives for this proposed rule: (1) Maintain the current STCW Convention interim rule, which gives effect to most, but not all, of the STCW Convention requirements; (2) Implement the STCW Convention regulations fully and completely, requiring re-certification for existing endorsements; or, (3) Implement the STCW Convention fully and completely, "grandfathering" existing endorsements. The first alternative was not feasible as they would not meet U.S. responsibilities as a party to the STCW

Human%20and%20Organizational%20Factors/ McCafferty%20paper.pdf.

Convention. The second alternative, while meeting the U.S. responsibilities, would place an undue burden on U.S. mariners and the U.S. shipping industry by requiring the re-certification of thousands of existing endorsements. We are proposing the third alternative. Overall, the Coast Guard believes that the full and complete implementation of the STCW Convention would have beneficial impacts—such as improved management skills and judgment and greater situational awareness-to mariners, while contributing to improvements in the safety of the nation's seagoing fleet.

## B. Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601-612), we have considered whether this proposed rule would have a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

An initial regulatory flexibility analysis (IRFA) discussing the impact of this proposed rule on small entities is included within the preliminary Regulatory Analysis document and is available in the docket where indicated under the ADDRESSES section of this preamble. A summary of the analysis follows:

The proposed rule would regulate mariners and training providers. Individuals, such as the mariners regulated by this rule are not small entities under the definition of a small entity in the Regulatory Flexibility Act (RFA).

As the Coast Guard anticipates that mariners will bear the costs for additional training based on past experience, this rulemaking would not directly impact owners and operators of vessels that employ mariners affected by this NPRM. The rulemaking would propose clarifying revisions to the existing "§ 15.1107 Maintenance of merchant mariners' records by owner or operator". These changes are not substantive and include removing unnecessary text and shortening the section. We do not anticipate owners and operators to incur additional costs from this proposed rule.

The proposed rule also included audit and quality system requirements for training providers. Based on the Coast Guard data, there are 160 maritime training providers that offer some type of Coast Guard approved training and could be affected by this proposed rule.

rating endorsements.

<sup>&</sup>lt;sup>2</sup> Clifford C. Baker and Denise B. McCafferty. 2004. ABS Review and Analysis of Accident Databases. American Bureau of Shipping. Accessed at http://www.slc.ca.gov/Division Pages/MFD/ Prevention\_First/Documents/2004/

Of the 160 potentially affected training providers, our analysis indicated that 100 are potentially small entities.

While we do not expect training providers to offer new training programs unless it is beneficial to their business model, we have estimated the impact of the proposed rule to training providers as if they would not pass any of their costs to mariners. Therefore, the following revenue impacts may be overestimates:

We found that this proposed rule would have a revenue impact of less than 1 percent on 43 percent of small training providers, and a revenue impact of less than 3 percent on 75 percent of them, in the first year.

After the first year, we found that the proposed rule would have a recurring revenue impact of less than 1 percent on 73 percent of small training providers and an impact of less than 3 percent on

85 percent of them.

We are interested in the potential impacts from this proposed rule on small businesses and we request public comment on these potential impacts. If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rulemaking would have a significant economic impact on it, please submit a comment to the Docket Management Facility at the address under ADDRESSES. In your comment, explain why you think it qualifies and how and to what degree this rule would economically affect it.

# C. Assistance for Small Entities

Under section 213(a) of the Small **Business Regulatory Enforcement** Fairness Act of 1996 (Pub. L. 104–121), we want to assist small entities in understanding this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please consult Mark Gould, Maritime Personnel Qualifications Division, U.S. Coast Guard, telephone 202-372-1409. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions

annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1–888–REG–FAIR (1–888–734–3247).

# D. Collection of Information

This proposed rule would call for a collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). It would modify an existing Office of Management and Budget (OMB) Collection of Information, OMB Control Number 1625–0028, "Course Approvals for Merchant Marine Training Schools."

As defined in 5 CFR 1320.3(c), "collection of information" comprises reporting, recordkeeping, monitoring, posting, labeling, and other, similar actions. The title and description of the information collections, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

This proposed rule would add to recordkeeping and reporting requirements of training providers.

Training providers that teach STCW Convention courses would: (1) Write and maintain a QSS manual on those courses; (2) Arrange an internal audit of each Coast Guard approved STCW Convention course twice every 5 years and keep the audit records for Coast Guard inspection as needed; (3) Conduct a survey among students and employers; (4) Furnish an annual report to the U.S. Coast Guard National Maritime Center (NMC) on all its Coast Guard-approved courses; and (5) Store student course completion certification for an additional 4 years.

Since training providers are currently required to store student records for 1 year and many of them store records for several years more, the burden of the new requirement that would extend recordkeeping from 1 year to 5 years is small. In addition, STCW Convention training providers presently conduct surveys among students and employers on each course they teach as industry best practice. Requiring them to conduct a survey on STCW Convention courses would not be an additional burden.

Title: Course Approval and Records for Merchant Mariner Training Schools. OMB Control Number: 1625–0028.

Summary of the Collection of Information: Training providers would be required to write and maintain a QSS manual, arrange two internal audits of STCW Convention courses within 5 years and furnish a report to NMC every year for each STCW course.

Need for Information: The information is necessary to show evidence that training providers meet the quality, minimum standard and recordkeeping requirements of each STCW Convention course as established by the International Maritime Organization (IMO).

Proposed Use of Information: The Coast Guard would use this information to document that the training level of mariners meets international

requirements.

Description of the Respondents: The respondents are the mariner training schools that would be required to complete form CG-719B.

*Number of Respondents:* The number of respondents is 160 STCW training providers in the first year and recurring annually.

Frequency of Response: Respondents are required to write a QSS manual in the first year and modify it as needed. They would also arrange internal audits on their STCW courses every two and a half years. Training providers would furnish a report on their Coast Guardapproved courses to NMC every year.

Burden of Response: Writing a QSS manual would take a training provider approximately 206 hours in the first year (205 hours for reporting and 1 hour for recordkeeping), and modifying it would take 9 hours every year (8 hours for reporting and 1 hour recordkeeping). We estimate that it would take 10 hours for each respondent to complete an internal audit twice every 5 years (9 hours for reporting and 1 hour for recordkeeping), and 14 hours to furnish a report on STCW courses to NMC in the first year (12 hours for preparing the report, 1 hour for reporting, and 1 hour for recordkeeping) and 2 hours each year after the first year (1 hour for reporting and 1 hour for recordkeeping).

Estimate of Total Annual Burden: The existing OMB-approved total annual burden, as adjusted in January 2009, is 97,260 hours. This rule would increase the burden for 160 training providers by approximately 241 hours each. The total additional hours requested for this rulemaking is  $38,560 [160 \times (206 + 9 +$ 10 + 14 + 2)]. The new annual burden for the first year is 32,960 hours and about 5,600 hours each year after the first year. In addition, there would be 1,650 hours for the two internal audits every 5 years. The annual cost burden for the first year and each year after the first year are \$1,186,560 and \$201,600, respectively.

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), we will submit a copy of this proposed rule to the Office of Management and Budget (OMB) for its review of the collection of information.

We ask for public comment on the proposed collection of information to help us determine how useful the information is; whether it can help us perform our functions better; whether it is readily available elsewhere; how accurate our estimate of the burden of collection is; how valid our methods for determining burden are; how we can improve the quality, usefulness, and clarity of the information; and how we can minimize the burden of collection.

If you submit comments on the collection of information, submit them to both OMB and to the Docket Management Facility where indicated under ADDRESSES, by the date under DATES.

You need not respond to a collection of information unless it displays a currently valid control number from OMB. Before the Coast Guard could enforce the collection of information requirements in this proposed rule, OMB would need to approve the Coast Guard's request to collect this information.

#### E. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on State or local governments and would either preempt State law or impose a substantial direct cost of compliance on them.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. It is also well settled, now, that all of the categories covered in 46 U.S.C. 3306, 3703, 7101, and 8101 (design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels), as well as the reporting of casualties and any other category in which Congress intended the Coast Guard to be the sole source of a vessel's obligations, are within the field foreclosed from regulation by the States. (See the decision of the Supreme Court in the consolidated cases of *United* States v. Locke and Intertanko v. Locke. 529 U.S. 89, 120 S.Ct. 1135 (March 6, 2000).) Since this NPRM involves the credentialing of merchant mariners, it relates to personnel qualifications and is foreclosed from regulation by the states. Because the States may not regulate within this category, preemption under Executive Order 13132 is not an issue.

# F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531–1538) requires

Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 or more in any one year. Though this proposed rule would not result in such expenditure, we do discuss the effects of this rule elsewhere in this preamble.

### G. Taking of Private Property

This proposed rule would not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

# H. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

# I. Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

# I. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

# K. Energy Effects

We have analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have determined that it is not a "significant energy action" under that order. Though it is a "significant regulatory action" under Executive Order 12866, it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not

require a Statement of Energy Effects under Executive Order 13211.

### L. Technical Standards

The National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This proposed rule does not call for the use of a specific technical standard. Therefore, we did not consider the use of voluntary consensus standards. We do, however, incorporate material by reference. Please see the incorporation by reference of this preamble for specifics related to materials incorporated by reference.

#### M. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023-01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4370f), and have made a preliminary determination that this action is one of a category of actions which do not individually or cumulatively have a significant effect on the human environment. Therefore, this rule is categorically excluded, under section 2.B.2. Figure 2-1, paragraph 34(c), of the Instruction, and neither an environmental assessment nor an environmental impact statement is required. This rule involves the training and qualifying of maritime personnel. A preliminary "Environmental Analysis Check List" supporting this determination is available in the docket where indicated under the "Public Participation and Request for Comments" section of this preamble. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

# List of Subjects

#### 46 CFR Part 10

Incorporation by reference, Penalties, Reporting and recordkeeping requirements, Schools, Seamen, Transportation Worker Identification Card.

### 46 CFR Part 11

Incorporation by reference, Penalties, Reporting and recordkeeping requirements, Schools, Seamen, Transportation Worker Identification Card.

#### 46 CFR Part 12

Incorporation by reference, Penalties, Reporting and recordkeeping requirements, Seamen, Transportation Worker Identification Card.

### 46 CFR Part 15

Incorporation by reference, Reporting and recordkeeping requirements, Seamen, Vessels, Transportation Worker Identification Card.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 46 CFR parts 10, 11, 12, and 15 as follows:

#### TITLE 46 CFR—SHIPPING

# PART 10—MERCHANT MARINER **CREDENTIAL**

1. The authority citation for part 10 continues to read as follows:

Authority: 14 U.S.C. 633; 31 U.S.C. 9701; 46 U.S.C. 2101, 2103, 2110; 46 U.S.C. chapter 71; 46 U.S.C. chapter 72; 46 U.S.C. chapter 75; 46 U.S.C. 7701, 8906 and 70105; Executive Order 10173; Department of Homeland Security No. 0170.1.

2. In § 10.101, revise the section heading to read as set out below and, in paragraph (b), remove the word "their" and add, in its place, the words "his or her".

## §10.101 Purpose.

# §10.103 [Amended]

3. In § 10.103(b)(1), remove the text "10.107, 10.109, and 10.231" and add, in its place, the text "10.303, 10.304, and 10.309"; and remove and reserve paragraph (b)(2).

4. Amend § 10.107 by:

- a. Revising paragraph (a) to read as set out below:
- b. Redesignating paragraph (b) as paragraph (c);
- c. Adding a new paragraph (b) to read as set out below;
- d. Amending newly designated paragraph (c) by adding definitions for Boundary lines, Coast Guard-accepted QSS organization, Coastwise voyage, Domestic voyage, Dual-mode integrated tug barge, Gross register tons or GRT, Gross tonnage or GT, Increase in scope, Integrated tub barge or ITB,

International voyage, Kilowatt or kW, Lifeboatman, Management level, Officer in charge of an engineering watch in a manned engine room or designated duty engineer in a periodically unmanned engine room or OICEW, Officer in charge of a navigational watch or OICNW, Operational level, Overriding operational condition, Propulsion power, Push-mode ITBs, Quality Standard System or QSS, Rest, Seagoing, Seagoing vessel, Second engineer officer, STCW Convention, STCW endorsement, Survivalman, Training program; and

e. Amending newly designated paragraph (c) by revising the definitions for Approved, Approved training, Assistance towing, Assistant Engineer, Chief mate, Coastwise seagoing vessel, Competent person, Credential, Day, Designated duty engineer or DDE, Designated examiner, Drug test, Entrylevel mariner, First assistant engineer, Harbor assist, Horsepower or HP, Large passenger vessel, Lower level, Master, Mate, Near coastal, Non-resident alien, Officer endorsement, Orally assisted examination, Rating endorsement, Selfpropelled tank vessel, Senior company official, Simulated transfer, Staff officer, STCW, STCW Code, Tankerman assistant, Tankerman engineer, Tankerman-PIC (Barge), Tankship, Transfer, Upper level, Vessel Security Officer (VSO) and Western rivers, to read as follows:

# § 10.107 Definitions in subchapter B.

(a) With respect to part 16 of this subchapter only, if the definitions in paragraph (c) of this section differ from those set forth in § 16.105, the definition set forth in § 16.105 applies.

(b) As used in this subchapter, the following terms apply only to merchant marine personnel credentialing and the manning of vessels subject to the manning provisions in the navigation and shipping laws of the United States.

(c) Terms used in this subchapter:

Approved means approved by the Coast Guard according to § 10.302 of this chapter.

Approved training means training that is approved by the Coast Guard or meets the requirements of § 10.309 of this chapter.

Assistance towing means towing a disabled vessel for consideration (for

Assistant engineer means a qualified officer in the engine department other than the chief engineer.

Boundary lines as defined in 46 CFR part 7.

Chief mate means the deck officer next in seniority to the master and upon whom the command of the vessel will fall in the event of incapacity of the master, and who holds a valid officer endorsement as chief mate.

Coast Guard-accepted QSS organization means an entity that has been approved to accept and monitor training on behalf of the Coast Guard.

Coastwise seagoing vessel means a vessel that is authorized by its Certificate of Inspection (COI) to proceed beyond the Boundary Line established in part 7 of this chapter and is limited to coastwise voyages by its COI.

Coastwise voyage means a voyage in which a vessel proceeds from one port or place in the United States to another port or place in the United States, or from a port or place in a possession to another port or place in the same possession, and passes outside the line dividing inland waters from the high seas, as well as a voyage in which a vessel proceeds from a port or place in the United States or her possessions and passes outside the line dividing inland waters from the high seas and navigates on the high seas, and then returns to the same port or place.

Competent person as used in part 13 of this subchapter only, means a person designated as such under 29 CFR 1915.7.

Credential means any or all of the

following:

- (1) Merchant mariner's document.
- (2) License.
- (3) STCW endorsement.
- (4) Certificate of registry.
- (5) Merchant mariner credential.

Day means, for the purpose of complying with the service requirements of this subchapter, 8 hours of watchstanding or day-working not to include overtime. On vessels where a 12-hour working day is authorized and practiced, each work day may be creditable as one and one-half days of service. On vessels of less than 100 GRT/250 GT, a day is considered as 8 hours unless the Coast Guard determines that the vessel's operating schedule makes this criteria inappropriate; in no case will this period be less than 4 hours. When computing service required for MODU endorsements, a day is a minimum of 4 hours, and no additional credit is received for periods served over 8 hours.

Designated duty engineer or DDE means a qualified engineer who may serve as the sole engineer on vessels of less than 500 GRT/1,200 GT with a periodically unattended engine room.

Designated examiner or DE means a person who has been trained or instructed in techniques of training or assessment and is otherwise qualified to evaluate whether an applicant has achieved the level of competence required to hold an endorsement on a merchant mariner credential (MMC). This person may be designated by the Coast Guard or by a Coast Guardapproved or accepted program of training or assessment. A faculty member employed in or instructing a navigation or engineering course at the U.S. Merchant Marine Academy or at a State maritime academy operated under 46 CFR part 310 is qualified to serve as a designated examiner in his or her area(s) of specialization without individual evaluation by the Coast Guard.

Domestic voyage means a voyage from one U.S. port to another U.S. port, without entering foreign waters. This includes a voyage to nowhere that

returns to the originating port. Drug test means a chemical test of an

individual's urine for evidence of dangerous drug use, as required by 46

CFR part 16.

Dual-mode integrated tug barge means those *ITBs* typically involving an articulated (flexible) coupling system where the towing unit rolls and heaves (articulates) about a horizontal pivot point. Dual mode units resemble a conventional tug and are fully capable of towing in other configurations (astern or alongside).

Entry-level mariner means a mariner holding no rating other than ordinary seaman, wiper, steward's department, or steward's department—food handler (F.H.).

First assistant engineer (second engineer officer) means an engineer officer next in rank to the chief engineer and upon whom the responsibility for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship will fall in the event of the incapacity of the chief engineer, and who holds a valid officer endorsement as first assistant engineer.

Gross register tons or GRT means the

gross ton measurement of the vessel under 46 U.S.C. chapter 145, Regulatory Measurement. For a vessel measured

under only 46 U.S.C. chapter 143, Convention Measurement, the vessel's gross tonnage is used to apply all thresholds expressed in terms of gross register tons.

*Gross tonnage or GT* means the gross tonnage measurement of the vessel under 46 U.S.C. chapter 143, Convention Measurement.

\*

\*

Harbor assist means the use of a towing vessel during maneuvers to dock, undock, moor, or unmoor a vessel, or to escort a vessel with limited maneuverability.

Horsepower or HP means, for the purpose of this subchapter, the total maximum continuous shaft horsepower of all the vessel's main propulsion machinery. This term is used when describing a vessel's propulsion power and also when placing limitations on an engineer officer license or endorsement. One horsepower equals 0.75 kW.

\* \* Increase in scope means additional authority added to an existing credential.

Integrated tug barge or ITB means any tug barge combination which, through the use of special design features or a specially designed connection system, has increased seakeeping capabilities relative to a tug and barge in the conventional pushing mode. An ITB can be divided into either a dual-mode ITB or a push-mode ITB. The definitions for those categories can be found elsewhere in this section.

International voyage means a sea voyage between a port in the United States or its territories and a port in a foreign country or its waters, or a voyage between ports within foreign countries or their waters.

Kilowatt or kW means one and onethird horsepower. This term is used when describing a vessel's propulsion power and also when placing limitations on an engineer officer license or endorsement.

Large passenger vessel, for the purposes of Subpart H of Part 12, means a vessel of more than 70,000 gross tons, as measured under 46 U.S.C. 14302 and documented under the laws of the United States, with capacity for at least 2,000 passengers and a coastwise endorsement under 46 U.S.C. chapter 121.

Lifeboatman means a mariner who is qualified to take charge of, lower, and operate a lifeboat and other survival equipment on a vessel.

Lower level is used as a category of deck and engineer officer endorsements established for the assessment of fees. Lower-level officer endorsements are other than those defined as upper level, for which the requirements are listed in subparts D, E, and G of part 11 of this subchapter.

Management level means the level of responsibility associated with serving as master, chief mate, chief engineer officer or second engineer officer onboard a seagoing ship.

Master means the officer having command of a vessel, and who holds a valid officer endorsement as master.

Mate means a qualified officer in the deck department other than the master, and who holds a valid officer endorsement as mate.

Near coastal means, for waters off the United States, ocean waters not more than 200 miles offshore. Near-coastal waters for other countries are established by their Administrations.

Non-resident alien, for the purposes of subchapter H of part 12, means an individual who is not a citizen or alien lawfully admitted to the United States for permanent residence, but who is employable in the United States under the Immigration and Nationality Act (8 U.S.C. 1101 et seq.), including an alien crewman described in section 101(a)(15)(D)(i) of that Act who meets the requirements of 46 U.S.C. 8103(k)(3)(A).

Officer endorsement means an annotation on a merchant mariner credential that allows a mariner to serve in the capacities in § 10.109(a) of this part. The officer endorsement serves as the license and/or certificate of registry pursuant to 46 U.S.C. subtitle II part E.

Officer in charge of an engineering watch in a manned engine room or designated duty engineer in a periodically unmanned engine room or OICEW means an engineering officer qualified at the operational level.

Officer in charge of a navigational watch or OICNW means a deck officer qualified at the operational level.

 $Operational\ level\ means\ the\ level\ of$ responsibility associated with serving as officer in charge of a navigational or engineering watch or as designated duty engineer for periodically unmanned machinery spaces or as GMDSS radio operator onboard a seagoing ship. \*

Orally assisted examination means an examination as described in part 10,

subpart I of this subchapter verbally administered and documented by a Coast Guard examiner.

Overriding operational condition means circumstances in which essential shipboard work cannot be delayed for safety or environmental reasons, or could not reasonably have been anticipated at the commencement of the voyage.

Propulsion power means the total maximum continuous-rated output power of all of the main propulsion machinery of a vessel, in either kilowatts or horsepower, which appears on the ship's Certificate of Registry or other official document and excludes thrusters and other auxiliary machinery.

Push-mode ITBs means those ITBs that typically involve a rigid coupling system and, when not coupled to the barge, they are incapable of conducting towing in any other configuration (such as astern or alongside) because, by themselves, they have very limited seakeeping capability. The propelling unit moves as one with the barge unit.

Quality Standard System or QSS means an organization of policy, procedures, processes, and data working together to establish and fulfill its objectives. A QSS is a required component of any entity offering STCW training, assessment of competence, certification, endorsement and/or revalidations of activities.

Rating endorsement is an annotation on a merchant mariner credential that allows a mariner to serve in those capacities set out in § 10.109(b) and (c) of this part. The rating endorsement serves as the merchant mariner's document pursuant to 46 U.S.C. subtitle II part E.

Rest means a period of time during which the person concerned is off duty, is not performing work (which includes administrative tasks, such as chart corrections or preparation of port-entry documents), and is allowed to sleep without interruption.

Seagoing means operating beyond the boundary line.

Seagoing vessel means a selfpropelled vessel that operates beyond the boundary line established by 46 CFR part 7.

Second engineer officer means an engineer officer next in rank to the chief engineer officer and upon whom the responsibility for the mechanical

propulsion and the operation and maintenance of the mechanical and electrical installations of the ship will fall in the event of the incapacity of the chief engineer officer and who holds a valid STCW endorsement as second engineer officer.

Self-propelled tank vessel means a tank vessel propelled by machinery other than a tankship.

Senior company official means the president, vice president, vice president for personnel, personnel director, or similarly titled or responsible individual, or another employee designated in writing by one of these individuals for the purpose of certifying employment and whose signature is on file at the REC at which application is made.

Simulated transfer means a transfer practiced in a course meeting the requirements of § 13.121 of this subchapter that uses simulation supplying part of the service on transfers required for tankerman by § 13.203 or 13.303 of this subchapter.

Staff officer means a person who holds an MMC with an officer endorsement listed in § 10.109(a)(34) through (a)(41) of this part.

STCW means the STCW Convention. STCW Code means the Seafarer's Training, Certification and Watchkeeping Code.

STCW Convention means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended.

STCW endorsement means an annotation on a merchant mariner credential that allows a mariner to serve in those capacities under § 10.109(d) of this part. The STCW endorsement serves as evidence that a mariner has met the requirements of the STCW Convention.

Survivalman means a mariner who is qualified as a lifeboatman limited to service on vessels where lifeboats are not installed.

Tankerman assistant means a person holding a valid "Tankerman-Assistant" endorsement on his or her merchant mariner credential.

Tankerman engineer means a person holding a valid "Tankerman-Engineer" endorsement on his or her merchant mariner credential.

Tankerman-PIC (Barge) means a person holding a valid "Tankerman-PIC

(Barge)" endorsement on his or her merchant mariner credential.

Tankship means any self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as cargo or as cargo residue.

Training program means a combination of training, practical assessment, and service which provides an individual with the necessary knowledge, understanding, and proficiency required for a specific qualification.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement.

Upper level is used as a category of deck and engineer officer endorsements established for assessment of fees. Upper-level endorsements are those for which the requirements are listed in §§ 11.404 to 11.407 of this subchapter and §§ 11.506 to 11.509 of this subchapter.

Vessel Security Officer or VSO means a person onboard the vessel accountable to the Master, designated by the Company as responsible for security of the vessel, including implementation and maintenance of the Vessel's Security Plan, and for liaison with the Facility Security Officer and the vessel's Company Security Officer.

Western rivers means: (1) the Mississippi River; (2) its tributaries, South Pass, and Southwest Pass, to the navigational demarcation lines dividing the high seas from harbors, rivers, and other inland waters of the United States; (3) the Port Allen-Morgan City Alternate Route; (4) that part of the Atchafalaya River above its junction with the Port Allen-Morgan City Alternate Route including the Old River and the Red River; and (5) those waters specified in 33 CFR 89.25.

5. Amend § 10.109 as follows:

a. Revise paragraph (b)(3) introductory text, redesignate current paragraphs (b)(5) through (b)(11) as new paragraphs (b)(6) through (b)(12), and add new paragraph (b)(5) to read as set out below; and

b. Revise paragraph (d) introductory text and add new paragraph (d)(18) to read as follows and, in paragraph (d)(4), after the word "engineer", add the word "officer".

#### § 10.109 Classification of endorsements.

(b) \* \* \*

(3) QMED including the following specialty endorsements:

(5) Survivalman.

(d) The following STCW endorsements are issued according to the STCW Convention, the STCW Code, and parts 11 and 12 of this subchapter. The endorsements indicate that an individual holding a valid MMC with this endorsement is qualified to serve in that capacity and the endorsement has been issued under the requirements contained in parts 11 or 12 of this subchapter as well as the STCW Convention and STCW Code:

(18) Vessel security officer.

\* \* \*

# Subpart B—General Requirements for all Merchant Mariner Credentials

### §10.201 [Amended]

6. In § 10.201(a), after the word "Code", remove the words "incorporated by reference in § 10.103".

# §10.203 [Amended]

- 7. In  $\S$  10.203 paragraphs (c) and (d), remove the text "as identified in 33 CFR 101.515(d)".
- 8. In § 10.205(d), after the section number "10.227", add the words "of this part" and add paragraph (i) to read as follows:

# § 10.205 Validity of a merchant mariner credential.

\* \* \* \* \*

- (i) A mariner holding a valid STCW endorsement on or before [EFFECTIVE DATE OF THE FINAL RULE] does not need to take additional training to retain the authority granted by that endorsement, and at such time as that mariner is upgrading his or her credential, he or she will only need to meet the requirements for the credential being sought.
  - 9. Amend § 10.209 as follows:
- a. In paragraph (a), in the first sentence after the word "whether" and, before the word "original", add the words "for an"; and, after the word "establish" remove the phrase, "to the Coast Guard":
- b. In paragraph (b), add after section numbers 10.225, 10.227, 10.229 and 10.231 the phrase "of this part";
- c. In paragraph (d) introductory text, after the word "submitted" and before the words "by mail", add the words "in person,";

- d. In paragraph (d)(4), remove the word "chapter" and add, in its place, the word "subchapter";
- e. In paragraph (d)(6), after the text "\\$ 11.807", add the words, "of this subchapter";
- f. In paragraph (d)(7), remove the word "chapter" and add, in its place, the word "subchapter":
- g. In paragraph (e)(3), remove the text "Beginning on April 15, 2009," capitalize the word "no", and remove the words "United States" and "Nationality with";
- h. In paragraph (f), remove the text "Beginning on April 15, 2009," and capitalize the word "the"; and
- i. Revise paragraph (h) to read as follows:

# § 10.209 General application procedures.

\* \* \* \* \*

(h) No MMC will be issued if the applicant fails a chemical test for dangerous drugs as required in paragraphs 10.225(b)(8), 10.227(d)(5), and 10.229(c)(6) of this section.

#### §10.211 [Amended]

- 10. Amend § 10.211 as follows:
- a. In paragraph (a), in the last sentence after the word "all" and before the word "convictions", add the word "prior";
- b. In paragraph (b), after the section number "10.229", add the words "of this part";
- c. In paragraph (c), in the first sentence remove the text "Beginning April 15, 2009," capitalize the word "the", and remove the words ", or the fingerprints taken by the Coast Guard at an REC,";
- d. In paragraph (d), remove the word "disapproved" and add, in its place, the word "denied";
- e. In paragraph (e), remove the word "disapproved" and add, in its place, the word "denied", and remove the word "disapproval" and add, in its place, the word "denial";
- f. In paragraphs (g), (h), (i), and (k), add, after the text "table 10.211(g)", wherever it appears, the words "of this section";
- g. In footnote 3 to table 10.211(g), remove the word "shall" and add, in its place, the word "must"; and
- h. In paragraph (j), remove the word "their" and add, in its place, the words "his or her", and remove the word "disapprove" and add, in its place, the word "deny"; and

i. In paragraph (k), remove the word "their" and add, in its place, the words "his or her".

### §10.213 [Amended]

- 11. Amend § 10.213 as follows: a. In paragraph (b), after the text "table 10.213(c)", add the words "of this section":
- b. In paragraph (c), after the section number "10.211", add the words "of this part", and remove the third sentence;
- c. In footnote 1 to table 10.213(c), remove the word "shall" and add, in its place, the word "must";
- d. In paragraph (d), after the words "responsibilities of the" and, before the word "endorsement", remove the words "MMC or"; remove the word "disapproved" in both places it appears, and add, in its place, the word "denied"; and remove the word "disapproval", and add, in its place, the word "denial"; and
- e. In paragraph (e), remove the word "disapproving" and add, in its place, the word "denying".

#### §10.214 [Removed]

- 12. Remove § 10.214.
- 13. Amend § 10.215 as follows:
- a. In paragraph (a), after the text "table 10.215(a)" and before the word "provide", add the words "of this section", and in paragraph (a)(2), remove the word "exams" and add, in its place, the word "examinations";
- b. In paragraph (b)(1), remove the numbers "20/200" and add, in their place, the numbers "20/400";
- c. In paragraph (b)(3), after the characters "(3)" and before the words "Any applicant", add the word "Waiver.";
- d. In paragraph (g), remove the word "Where" and add, in its place, the word "If":
- e. Revise table 10.215(a), and paragraphs (a)(1), (b)(2), and (c); and f. Add new paragraph (b)(4) to read as

# § 10.215 Medical and physical requirements.

(a) \* \* \*

follows:

(1) First-class pilots, and those serving as pilots under § 15.812 of this subchapter, on vessels and tank barges of 1,600 GRT/3,000 GT or more must satisfactorily complete medical examinations every 12 months and submit the results to the Coast Guard.

Credential	Vision test	Hearing test	General medical exam	Demonstration of physical ability
1	2	3	4	5
(i) Deck officer, including pilot	§ 10.215(b)(2) § 10.215(b)(1) § 10.215(b)(2) § 10.215(b)(1)	§ 10.215(c)	§ 10.215(d)(1) § 10.215(d)(1) § 10.215(d)(1) § 10.215(d)(1) § 10.215(d)(1) § 10.215(d)(1) § 10.215(d)(1)	§ 10.215(e)(1). § 10.215(e)(1). § 10.215(e)(1). § 10.215(e)(1). § 10.215(e)(1). § 10.215(e)(1). § 10.215(e)(1).
does not apply.  (xii) Food handler serving on vessels to which STCW applies.  (xiii) Ratings, including entry level, serving on vessels to which STCW applies, other than those listed above.			§ 10.215(d)(2)	§ 10.215(e)(1). § 10.215(e)(2).

TABLE 10.215(A)—MEDICAL AND PHYSICAL REQUIREMENTS FOR MARINER ENDORSEMENTS

- (b) \* \* \*
- (2) Engineering, radio officer, tankerman, and MODU standard. An applicant must have correctable vision of at least 20/50 in one eye and uncorrected vision of at least 20/400 in the same eye and need only have the ability to distinguish the colors red, green, blue and yellow. The color sense must be determined to be satisfactory when tested by any color-vision test accepted by the Coast Guard without the use of color-sensing lenses.
- (4) Loss of vision. An applicant having lost vision in one eye must wait 6 months from the date of the vision loss before submitting any application, and must provide a statement of demonstrated ability on his or her medical examination.
- (c) Hearing test. If the medical practitioner conducting the general medical examination has concerns that

an applicant's ability to hear may impact maritime safety, the examining medical practitioner must refer the applicant to an audiologist or other hearing specialist to conduct an audiometer test and/or a speech discrimination test, as appropriate.

14. In  $\S$  10.217, revise paragraph (a) to read as follows:

# § 10.217 Merchant mariner credential application and examination locations.

(a) Applicants for an MMC may apply to the Coast Guard National Maritime Center or any of the Regional Examination Centers. Applicants may contact the National Maritime Center at 100 Forbes Drive, Martinsburg, WV 25404, or by telephone 1–888–427–5662 or 304–433–3400. A list of Regional Examination Center locations is available through the Coast Guard Web site at http://www.uscg.mil.

# TABLE 10.219(A)—FEES

- 15. Amend § 10.219 as follows:
- a. In paragraph (d)(4), remove the words "are to" and add, in their place, the word "must";
- b. In paragraph (g), remove the word "subpart" and add, in its place, the word "section":
- c. In paragraph (h)(3), after the word "applicant" and before the word "eligible", remove the words "then is" and add, in their place, the words "will then be", and in paragraph (h)(4), after the word "section" and, before the word "endorsed", remove the word "is" and add, in its place, the words "will be"; and
- d. Revise paragraph (d)(3) to read as set forth below; and revise table 10.219(a) to read as follows:

#### §10.219 Fees.

\* \* \* \* \*

	And you need	t	
If you apply for	Evaluation then the fee is	Examination then the fee is	Issuance then the fee is
MMC with officer endorsement:			
Original			
Upper level	\$100	\$110	\$45.
Lower level	\$100	\$95	\$45.
Renewal	\$50	\$45	\$45.
Raise of grade	\$100	\$45	\$45.
Modification or removal of limitation or scope	\$50	\$45	\$45.
Radio officer endorsement:			
Original	\$50	\$45	\$45.
Renewal	\$50	n/a	\$45.
Staff officer endorsements:			
Original	\$90	n/a	\$45.
Renewal	\$50	n/a	\$45.

# TABLE 10.219(A)—FEES—Continued

	And you need	d		
If you apply for	Evaluation then the fee is	the fee then the fee t		
MMC with rating endorsement:				
Original endorsement for ratings other than qualified ratings	\$95	n/a	\$45.	
Original endorsement for qualified rating	\$95	\$140	\$45.	
Upgrade or raise of Grade	\$95	\$140	\$45.	
Renewal endorsement for ratings other than qualified ratings	\$50	n/a	\$45.	
Renewal endorsement for qualified rating	\$50	\$45	\$45.	
STCW endorsement:				
Original	No fee	No fee	No fee.	
Renewal	No fee	No fee	No fee.	
Reissue, replacement, and duplicate	n/a	n/a	\$45 <sup>1</sup> .	

<sup>&</sup>lt;sup>1</sup> Duplicate for MMC lost as result of marine casualty—No Fee.

(d) \* \* \*

(3) Payments submitted by mail may not be made in cash.

\* \* \* \* \*

### §10.221 [Amended]

16. In § 10.221 (a)(1), remove the word "part" and add, in its place, the word "subchapter".

#### §10.223 [Amended]

17. Amend § 10.223 as follows:
a. In paragraphs (c)(3)(i), (c)(3)(ii) and (c)(3)(iii), remove the word "chapter" wherever it appears and add, in its place, the word "subchapter";

b. In paragraph (c)(3)(iv), remove the text "chapter and in the STCW Convention and Code (incorporated by reference, see § 10.103)" and add, in its place, the word "subchapter"; and

- c. In paragraph (c)(5), remove the word "old" and add, in its place, the word "canceled".
- 18. Amend § 10.225 as follows: a. Revise paragraphs (b)(2) and (b)(7) to read as set out below;
- b. In paragraph (a)(2), remove the words "they do" and add, in their place, the words "the applicant does", and, in paragraphs (a)(2) and (a)(3), remove the word "their", wherever it appears, and add, in its place, the words "his or her";
- c. In paragraphs (b)(3)(i), (b)(3)(ii) and (b)(3)(iii), remove the word "chapter"; wherever it appears, and add, in its place, the word "subchapter"; in paragraph (b)(3)(iv), remove the text "chapter and in the STCW Convention and Code (incorporated by reference, see § 10.103)" and add, in its place, the word "subchapter"; in paragraph (b)(6), remove the word "Discharges" and add, in its place, the words "Where sea service is required, discharges"; and

d. In paragraph (c), after the section number "§ 10.217" and before the words "must be verified", add the words "of this part".

# § 10.225 Requirements for original merchant mariner credentials.

\* \* \* \* \*

(b) \* \* \*

(2) Proof that the mariner either holds a valid TWIC or has applied for a TWIC within the past 30 calendar days;

(7) Proof, documented on CG-719–K or CG-719–K/E, as appropriate, that the applicant passed all applicable vision, hearing, medical and/or physical examinations as required by § 10.215 of this part;

# §10.227 [Amended]

19. Amend § 10.227 as follows: a. In paragraph (a), after the words "before the", remove the words "renewal MMC will be issued", and add, in their place, the words "MMC will be renewed";

b. In paragraph (d)(8)(i)(D), after the word "knowledge", remove the words "on an" and add, in their place, the words "of the"; in paragraphs (d)(8)(ii) and (iii), remove the word "chapter", wherever it appears, and add, in its place, the word "subchapter"; in paragraph (d)(8)(iv), after the word 'present" and, before the words "a currently", remove the words "evidence of", and remove the words "If submitted, the original" and add, in their place, the word "This"; in paragraph (d)(8)(vii), remove the word ''chapter'' and add, in its place, the word "subchapter"; and, in paragraph (d)(9), remove the text "chapter and must meet the requirements of section A–VI/2, paragraphs 1 to 4 of the STCW Code (incorporated by reference in § 10.103)" and add, in its place, the word "subchapter";

c. In paragraph (e)(1), after the section number "§ 10.215", add the words "of this part" and, after the text "paragraph (d)" in the final sentence, add the words "of this section";

- d. In paragraph (e)(2)(ii), remove the words "their inability" and add, in their place, the words "his or her ineligibility";
- e. In paragraph (f), remove the words "To obtain a re-issuance of the credential" and add, in their place, the words "For a credential to be re-issued by the Coast Guard more than 12 months after its expiration";
- f. In paragraph (g)(1), remove the word "Whenever" and add, in its place, the word "If"; after the words "12 months after", and before the word "expiration", add the word "its"; after the words "credential was awarded", remove the word "on" and add, in its place, the words "based on the results of"; after the section number "§ 10.219", add the words "of this part"; and, in paragraph (g)(2), remove the word "shall" and add, in its place, the word "must".

# §10.229 [Amended]

20. Amend § 10.229 as follows:
a. In paragraph (a), remove the first sentence and add, in its place, the following sentence: "A mariner may be issued a duplicate credential upon request and without examination, after submitting an application with an affidavit describing the circumstances of the loss."; and

b. In paragraphs (c) and (d), after the word "duplicate", add the word "credential", and, in paragraph (d), after the section number "§ 10.219", add the words "of this part".

### §10.231 [Amended]

21. Amend § 10.231 as follows:
a. In paragraphs (c)(3)(i), (ii), and (iii),

a. In paragraphs (c)(3)(1), (11), and (111), remove the word "chapter", wherever it appears, and add, in its place, the word "subchapter";

b. In paragraph (c)(3)(iv), remove the text "chapter and in the STCW Convention and Code (incorporated by

reference, see § 10.103)" and add, in its place, the word "subchapter";

- c. In paragraph (c)(7), remove the words "An applicant for an endorsement where sea service is required" and add, in their place, the words "If sea service is required, an applicant for endorsement";
- d. In paragraph (c)(8), remove the words "Applicants who have" and add, in their place, the words "Any applicant who has", remove the words "they have" and add, in their place, the words "he or she has", and, after the section number "§ 10.215", add the words "of this part";
- e. In paragraph (d)(1), in the third sentence, move the word "therefore," to before the words "service acquired";
- f. In paragraph (d)(2), remove the word "on" and add, in its place, the word "with", and remove the words "a citizen of the United States by birth" and add, in their place, the words "a native-born U.S. citizen";
- g. In paragraph (d)(3), after the word "tonnage," and before the words "and operating conditions", remove the words "horsepower, waters," and add,

in their place, the words "propulsion power, waters upon which service occurred,", remove the word "shall" and add, in its place, the word "must", and, after the words "into English)" and before the words "the forms", remove the word "in" and add, in its place, the word "on";

h. In paragraph (d)(4), remove the words "the applicant's" in both places they appear and add, in their place, the words "his or her": and

i. In paragraph (d)(5)(i), remove the words "to be" and add, in their place, the word "is"; in paragraph (d)(5)(ii), remove the word "chapter" and add, in its place, the word "subchapter"; and, in paragraph (d)(5)(iii), remove the word "appear" and add, in its place, the words "are found", and remove the text "I of this chapter" and add, in its place, the text "I of this subchapter".

### §10.235 [Amended]

22. Amend § 10.235 as follows: a. In paragraph (d), after the words "suspended or revoked,", and before the words "will be issued", remove the words "the mariner" and add, in their place, the words "he or she";

- b. In paragraph (f), after the text "\\$ 10.227(d)(8)(vi) (A)", add the words "of this part";
- c. In paragraph (g), remove the text "Beginning April 15, 2009," and capitalize the word "if"; and
- d. In paragraph (h), remove the words "Beginning April 15, 2009, a mariner that", and add, in their place, the words, "A mariner who".
- 23. In  $\S$  10.237, revise paragraph (a) to read as follows:

### § 10.237 Right of appeal.

(a) If the Coast Guard refuses to grant an applicant an MMC or endorsement, it will provide a written statement listing the reason(s) for denial.

24. In § 10.239, revise table 10.239 to

read as follows:

# § 10.239 Quick reference table for MMC requirements.

Table 10.239 of this section provides a guide to the requirements for officer endorsements. Provisions in the reference section are controlling.

TABLE 10.239

					9					
Endorsement category	Minimum age	Citizenship	Medical and physical exam	Experience	Recommenda- tions and char- acter check	Firefighting	Professional exam	Demonstration of professional ability	Recency of service	First aid and CPR
Master, mates and opera- tors of uninspected passenger vessels	21, 11.201(e); Note: exceptions.	U.S., 11.201(d); Note: exception for OUPV.	Yes, 10.215; Note: exceptions.	Yes, 11.205(b); subpart D.	11.205(c)	11.205(d); Note: exceptions.	Yes, 11.205(f); 11.903; 11.910; Note: 11.903(b).	Yes, 11.205(g); 11.901(c); 11.903(c).	Yes, 3 months in past 3 years, 11.201(c).	11.205(e); Note: exceptions.
Engineers (original).	21, 11.201 (e); Note: exceptions.	U.S., 11.201(d);no exceptions.	Yes, 10.215; Note: exceptions.	Yes, 11.205(b); subpart E.	11.205(c)	11.205(d)	11.205(f); 11.903; 11.950.	Yes, 11.205(g); 11.901(c); 11.903(c).	Yes, 3 months in past 3 years,	11.205(e); Note: excep- tions.
Officer raises of grade.	21, 11.201(e); Note: exceptions.	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	Yes, 10.231(c); subpart D and E.	N/A	Yes, 10.231(e)	Yes, 10.231(d); 11.903; 11.910; 11.920;	Yes, 11.205(g); 11.901(c); 11.903(c).	Yes, 3 months in past 3 years, 11.201(c).	N/A.
Officer renewals.	N/A	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	Yes, 10.227(g); Note: excep- tions.	N/A	N/A	10.227(g)	Towing officers, 10.227(i).	Yes, 1 year in past 5, 10.227(g); Note: alternative.	N/A.
Pilot	21, 46 U.S.C. 7101.	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	Yes, 11.703	11.205(c)	N/A	11.707; 11.903; 11.910.	N/A	Yes, 11.703, 11.75(e), 11.713.	11.205(e); Note: excep- tions.
Towing vessels	21, Master 19, Mate 18, App. Mate 11.201(e).	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	Yes, 10.464; 10.465; 10.466.	11.205(c)	Yes, 11.205(d) oceans.	Yes, 11.205(f); 11.903; 11.910; Note: 11.903(b).	Yes, 11.464; 11.465; 11.205(g); 11.901(c).	Yes, 3 months in past 3 years, 11.201(c).	11.205(e); Note: excep- tions.
Uninspected fishing industry vessels.	21, 11.201(e); Note: exceptions.	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	Deck: 11.462; Eng: 11.530.	11.205(c)	11.205(d); Note: exceptions.	Yes, 11.205(f); 11.903; 11.910; Note: 11.903(b).	N/A	Yes, 3 months in past 3 years, 11.201(c).	11.205(e); Note: excep- tions.
Radio officer	19, 11.201 (e)(1).	U.S., 11.201(d); no excep- tions	Yes, 10.215; Note: exceptions.	11.603	11.205(c)	N/A	N/A	N/A	N/A	11.205(e); Note: exceptions.
Staff officer	N/A	U.S., 11.201(d); no excep-	Yes, 10.215; Note: exceptions.	11.807	11.205(c)	N/A	N/A	N/A	N/A	N/A.
Staff officer re- newals.	N/A	U.S., 11.201(d); no excep- tions.	Yes, 10.215; Note: exceptions.	10.227 (g)(5)	N/A	N/A	N/A	N/A	N/A	N/A.

11.205(e); Note: excep- tions.	12.412(b).	12.503(d).	N/A.	N/A.	N/A.	12.610(c)(5).	12.630(c)(5).
Yes, 3 months in past 3 years, 11.201(c).	Renewal only, 1 year in past 5, 10.227(g); Note: alter-	Renewal only, 1 year in past 5, 10.227(g); Note: alter-	N/A				
N/A	Yes, 12.412(c); 12.416.	Yes, 12.510(d)	N/A	Yes, 12.420	Yes, 12.520(e)	12.610(c)(2), (c)(3).	12.630(c)(3), (c)(4).
Yes, 11.205(f); N/A1.920.	Yes, 12.412(a); 12.416.	Yes, 12.516	N/A	N/A	N/A	12.610	N/A
11.205(c)   11.205(d)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11.205(c)	N/A	N/A	N/A		N/A	N/A	N/A
OIM: 11.470 B.S.: 11.472 BCO: 11.474 Eng: 11.540.	12.414	12.514	N/A	12.420	12.530	10.610(c)(4)	10.630 (c)(4)
Yes, 10.215; Note: exceptions.	Yes, 10.215; Note: exceptions.	Yes, 10.215; Note: exceptions.	Yes, 10.215 Note;; ex- ceptions.	Yes, 10.215; Note: exceptions.	Yes, 10.215; Note: exceptions.	Yes, 10.215; Note: exceptions.	Yes, 10.215; Note: exceptions.
U.S., 11.201(d); no excep- tions.	U.S. or alien admitted for permanent residence, 10.221.	U.S. or alien admitted for permanent residence, 10.221.	U.S. or alien admitted for permanent residence,	U.S. or alien admitted for permanent residence,			
21, 11.201(e); Note: exceptions.	18, 12.412 (a)(1).	16, 12.201(e)	16, 12.201(e)	12.203(e)	12.203(e)	12.610(a)	N/A
Offshore installation manager, barge supervisor, ballation properties of the propert	Able seamen	Qualified mem- bers of en- gine depart- ment.	Entry level ratings.	Ratings for forming a navigational watch.	Ratings for forming an engineering watch.	Lifeboatman	Survivalman

# Subpart C [Redesignated]

- 25. Redesignate part 11, subpart C, consisting of §§ 11.301 through 11.309, as part 10, subpart C, §§ 10.301 through 10.309.
- 26. Revise newly redesignated part 10, subpart C to read as follows:

### Subpart C—Training Schools With Approved Courses

Sec.

10.301 Applicability.

10.302 Course approval.

10.303 General standards.

10.304 Substitution of training for required service, use of training-record books, and use of towing officer assessment records.

10.305 Qualification as designated examiner (DE).

10.307 Approved courses.

10.309 Coast Guard-accepted training other than approved courses and programs.

10.311 Simulator performance standards.

# Subpart C—Training Schools With Approved Courses

# § 10.301 Applicability.

This subpart prescribes the general requirements applicable to all approved courses and training programs.

# § 10.302 Course approval.

- (a) Courses may be approved to fulfill the following requirements:
  - (1) In lieu of service experience;
- (2) In lieu of examination required by the Coast Guard;
- (3) Course completion requirements; and
  - (4) Regulatory requirements.
- (b) Organizations desiring course approval by the Coast Guard must submit a written request, either by mail or e-mail, to the National Maritime Center, that contains:
- (1) *A cover letter*. The cover letter must contain:
  - (i) The name of the course;
- (ii) The location(s) where it will be held:
- (iii) A general description and overview of the course;
- (iv) The category of acceptance being sought as listed in paragraph (a) of this section; and
- (v) Individual major components of the course.
- (2) A goal statement. The goal statement should describe:
- (i) A specific performance behavior to be measured;
- (ii) The conditions under which that performance behavior will be exhibited; and
- (iii) A level of performance behavior that is to be achieved.
- (3) Performance objectives. Performance Objectives are statements which identify the specific knowledge,

- skill, or attitude the student should gain and display as a result of the training or instructional activity. A performance objective is made up of three elements: student performance, condition, and criterion.
- (4) Assessment instruments.
  Assessment instruments are any tools used to determine whether the student has achieved the desired level of knowledge, understanding or proficiency.
- (5) *Instructor information*. Each instructor must:
- (i) Have either experience, training, or evidence of instruction in effective instructional techniques within the past five years;
- (ii) Be qualified in the task for which the training is being conducted and have relevant experience; and
- (iii) Hold a license, endorsement, or other professional credential that provides proof of having attained a level of qualification equal or superior to the relevant level of knowledge, skills and abilities described in the performance objective.
- (6) Site information. Site information must include a description of the facility at which the training will be held.
- (7) A teaching syllabus. A detailed teaching syllabus providing the following information:
- (i) Instructional strategy. Aspects of instructional strategies should include:
  - (A) The order of presentation;
- (B) The level of interaction, including the student teacher ratio;
  - (C) Feedback;
  - (D) Remediation;
  - (E) Testing strategies; and
- (F) Media used to present information.
- (ii) Instructional materials, including lesson plans containing:
  - (A) Pre-instructional activities;
  - (B) Content presentation;
  - (C) Student participation;
  - (D) Assessment processes; and
  - (E) Follow-up activities.
- (iii) Course surveys on the relevance and effectiveness of the training completed by students and their employers.
- (iv) Course schedule, including the duration and order of lessons, and an indication as to whether each lesson is:
  - (A) A classroom lecture:
  - (B) A practical demonstration;
  - (C) A simulator exercise;
  - (D) An examination; or
- (E) Another method of instructional reinforcement.
- (c) The Coast Guard will notify each applicant for course approval when an approval is granted or denied. If the Coast Guard denies a request for

approval, the Coast Guard will inform the applicant of the reasons for the denial and describe the corrections required for granting an approval.

(d) Unless surrendered, suspended, or withdrawn, an approval for a course expires 5 years after issuance, unless:

(1) The school ceases operation;

(2) The course has not been presented in the previous 12 months;

(3) The school gives notice that it will no longer offer the course;

(4) The owner or operator fails to submit any required report; or

(5) Any change occurs in the management of the school to which the approval was issued.

(e) If the owner or operator of a training school desires to have a course's approval renewed, the owner or operator must submit a request to the NMC. If satisfied that the content and quality of instruction remain satisfactory, the NMC will approve the request. The renewed approval is valid as detailed in paragraph (d) of this section

- (f) Suspension of approval. (1) The Coast Guard may suspend the approval, require the holder to surrender the certificate of approval, and may direct the holder to cease claiming the course is Coast Guard-approved, if it determines that a specific course does not comply with the:
- (i) Applicable provisions of 46 CFR parts 11, 12, or 13;
- (ii) Requirements specified in the course's approval; or

(iii) Course's curriculum package as submitted for approval;

(2) The Coast Guard will notify the approval holder in writing of the intent to suspend course approval and the reasons for suspension. If the approval holder fails to correct the reasons for suspension, the course will be suspended. The NMC will notify the approval holder that the specific course fails to meet applicable requirements

(3) The NMC may grant the approval holder up to 60 days in which to correct deficiencies; and

and explain how those deficiencies can

be corrected:

(4) Course completion certificates will not be accepted if dated during a period of suspension.

(g) *Withdrawal of approval*. The NMC may withdraw approval for any course:

(1) When the approval holder fails to correct the deficiency(ies) of a suspended course within 60 days; and

(2) Upon determining that the approval holder has demonstrated a pattern or history of:

(i) Failing to comply with the applicable regulations or the course approval requirements;

- (ii) Deviating from approved course curricula;
- (iii) Presenting courses in a manner that does not achieve the learning objectives; or
- (iv) Falsifying any document required and integral to the conduct of the course, including but not limited to attendance records, written test grades, course completion grades, or assessment of practical demonstrations.
- (h) Appeals of suspension or withdrawal of approval. Anyone directly affected by a decision to suspend or withdraw an approval may appeal the decision to the Commandant via the NMC as provided in § 1.03–40 of this chapter.

### § 10.303 General standards.

- (a) Each school with an approved course must:
- (1) Have a well-maintained facility that accommodates the students in a safe and comfortable environment conducive to learning:
- (2) Have visual aids for realism, including simulators where appropriate, which are modern and well maintained and sufficient for the number of students to be accommodated;
- (3) Give written examinations to each student appropriate for the course material and of such a degree of difficulty that a student who successfully completes them would most likely pass, on the first attempt, an examination prepared by the Coast Guard based upon the knowledge requirements of the position or endorsement for which the student is being trained;
- (4) Require each student to successfully demonstrate practical skills appropriate for the course material and equal to the level of endorsement for which the course is approved;
- (5) Effective [EFFECTIVE DATE OF FINAL RULE], keep physical or electronic copies of the following records for at least 5 years after the end of each student's enrollment:
- (i) A copy of each student's written examination answers;
- (ii) A copy of each written examination or, in the case of a practical test, a report of such test;
- (iii) A record of each student's classroom attendance; and
- (iv) A copy of each student's course completion certificate;
- (6) Not change its approved curriculum without approval from the NMC;
- (7) Provide an annual report to the NMC to include a summary for each of the provider's approved courses. For each approved course, the report will contain the following information:

- (i) A summary of changes or modification to the last course submittal;
- (ii) A list of all locations at which the training course was presented and the number of times it was presented at each location;
- (iii) The name(s) of the instructor(s) who taught the course;
- (iv) The number of students who began the training;
- (v) The number of students who successfully completed the training;
- (vi) The number of students who were required to retest;
- (vii) The number of students who were required to retake the entire course; and
- (viii) The number of students who were required to retake a portion of the course:
- (8) Conduct an internal audit midway through the term of the course's approval and submit the results to the NMC. The audit will evaluate whether:
- (i) Records are being maintained according to these regulations;
- (ii) The course is being presented in accordance with the approval letter;
- (iii) Surveys from employers and students indicate that the course is meeting their needs; and
- (9) At any time, allow the Coast Guard to:
- (i) Inspect its facilities, equipment, and records, including scholastic records;
- (ii) Conduct interviews and surveys of students to aid in course evaluation and improvement;
- (iii) Assign personnel to observe or participate in the course of instruction; and
- (iv) Supervise or administer the required examinations or practical demonstrations, including the substitution of an applicable Coast Guard examination;
- (10) Be subject to the offerer's QSS and monitored by the Coast Guard—or a Coast Guard-accepted QSS organization—when providing training to meet STCW requirements, in accordance with Regulation I/8 of the STCW Convention (incorporated by reference in § 10.103).
- (b) When the Coast Guard is monitoring the QSS, the course provider must:
- (1) Maintain a QSS manual that defines the objectives, authorities, and responsibilities and essential controls for:
- (i) Planning and scheduling of courses;
- (ii) Designing courses to fulfill learning objectives and regulatory requirements;

- (iii) Verifying the competence of all instructors and training provider examiners;
- (iv) Validating simulators used for training or testing;
- (v) Maintaining the learning environment and teaching of mariners;
- (vi) Certifying mariner, skills, knowledge, and abilities per applicable regulatory requirements;
- (vii) Enabling mariner completion of Coast Guard applications for Merchant Mariner Credentials;
- (viii) Filing and archiving of records so they are retrievable and legible;
- (ix) Taking action to stop recurrence of system, process and product nonconformity; and
- (x) Auditing, reviewing and improving the performance of the training management system.
- (2) Arrange for an audit to be conducted twice in a 5-year period.

# § 10.304 Substitution of training for required service, use of training-record books, and use of towing officer assessment records.

- (a) Satisfactory completion of an approved training course may be substituted for a portion of the required service on deck or in the engine department for deck or engineer endorsements. Satisfactory completion of an approved training program which includes sea service may be substituted for all of the required service on deck or in the engine department, except as limited by law for ratings. The list of all currently approved courses of instruction, including the equivalent service and applicable endorsements, is maintained by the NMC.
- (b) Recency requirements may not be achieved by service granted as a result of successful completion of approved training or by training on a simulator; however, underway service obtained as a portion of an approved course or program may be used for this purpose.
- (c) Unless otherwise allowed, training obtained before receiving an endorsement may not be used for subsequent raises of grade, increases in scope, or renewals.
- (d) A training-record book required as part of an approved training program for OICNW and OICEW must contain at least the following:
  - (1) The name of the applicant;
- (2) The tasks to be performed or the skills to be demonstrated, with reference to the standards of competence set forth in the tables of the appropriate sections in part A of the STCW Code (incorporated by reference in § 10.103);
- (3) The criteria to be used in determining that the tasks or skills have been performed properly, with reference

to the standards of competence set forth in the tables of competence in the appropriate sections in part A of the STCW Code;

(4) A place for a qualified instructor to indicate by his or her initials that the applicant has received training in the proper performance of the task or skill;

- (5) A place for a designated examiner to indicate by his or her initials that the applicant has successfully completed a practical demonstration and has proved competent in the task or skill under the criteria, when assessment of competence is to be documented in the record books;
- (6) The name of each qualified instructor, including any MMC endorsements held, and the instructor's signature; and
- (7) The name of each designated examiner, when any assessment of competence is recorded, including any MMC endorsement, license, or document held, and the examiner's signature confirming that his or her initials certify that he or she has witnessed the practical demonstration of a particular task or skill by the applicant.

(e) The training-record book referred to in paragraph (d) of this section may be maintained electronically, provided the electronic record meets Coast Guardaccepted standards for accuracy, integrity, and availability

integrity, and availability.

- (f) Each applicant for an endorsement as master or mate (pilot) of towing vessels, and each master or mate of self-propelled vessels of 200 GRT/500 GT or more, seeking an endorsement for towing vessels, must complete a towing officers' assessment record (TOAR) that contains at least the following:
- (1) Identification of the applicant, including his or her full name, home address, photograph or photo-image, and personal signature;
- (2) Objectives of the training and assessment;
- (3) Tasks to perform or skills to demonstrate;
- (4) Criteria to use in determining that the tasks or skills have been performed properly;
- (5) A place for a qualified instructor or credentialed officer (with authority to operate a towing vessel) to indicate by his or her initials that the applicant has received training in the proper performance of the tasks or skills:
- (6) A place for a designated examiner (DE) to indicate by his or her initials that the applicant has successfully completed a practical demonstration and has proved proficient in the task or skill under the criteria;
- (7) Identification of each qualified instructor or credentialed officer (with

- authority to operate a towing vessel) by his or her full name, home address, employer, job title, ship name or business address, TWIC and serial number of the MMC, license, or document held, and personal signature;
- (8) Identification of each designated examiner by his or her full name, home address, employer, job title, ship name or business address, TWIC and serial number of the MMC, license, or document held, and personal signature confirming that his or her initials certify that he or she has witnessed the practical demonstration of a particular task or skill by the applicant.

## § 10.305 Qualification as designated examiner (DE).

- (a) To become a DE, an applicant must have documentary evidence to establish:
- (1) Experience, training, or instruction in assessment techniques;
- (2) Qualifications in the task for which the assessment is being conducted; and
- (3) Possession of the level of endorsement, or other professional credential, which provides proof that he or she has attained a level of qualification equal or superior to the relevant level of knowledge, skills and abilities described in the training objectives.
- (b) Documentary evidence may be in the form of performance evaluations, which include an evaluation of effectiveness in on-the-job organization and delivery of training, and/or a certificate of successful completion from a "train-the-trainer" course. A train-the-trainer course must be based on the International Maritime Organization's (IMO) model course 6.09 (Training Course for Instructors), or on another Coast Guard-accepted syllabus.

### §10.307 Approved courses.

The NMC maintains the list of training organizations and the approved training they offer. This information is available on the Internet at: www.uscg.mil/nmc.

## §10.308 Coast Guard-approved training program requirements for STCW endorsements.

Training programs used to qualify a mariner to hold an STCW endorsement must meet the same standards as those found in §§ 10.302 and 10.303 of this part.

## § 10.309 Coast Guard-accepted training other than approved courses and programs.

(a) When the training and assessment of competence required by this part are used to qualify a mariner to hold an endorsement, the offerer of the course or program must ensure that:

(1) Such training and assessment meets the same standards as those found in §§ 10.302 and 10.303 of this part; and

- (2) Such training is subject to the offerer's QSS and monitored by the Coast Guard or a Coast Guard-accepted OSS organization, in accordance with Regulation I/8 of the STCW Convention (incorporated by reference in § 10.103). The purpose of the offerer's QSS is to document and implement a quality policy and organizational structure, responsibilities, procedures, processes, resources and equipment necessary to implement a QSS to monitor mariner training and assessment of competence in accordance with the STCW Convention and STCW Code. The QSS should include the following information:
- (i) Course design, organization and implementation to fulfill learning objectives and regulatory requirements;
- (ii) Verification of the competence of all instructors and training provider examiners;
- (iii) Validation of simulators used for training or testing;
- (iv) Certification of mariner knowledge, skills, and abilities per applicable regulatory requirements;
- (v) Record-keeping procedures that ensure that records are retrievable and legible;
- (vi) Non-conformity reporting, analysis and implementation of corrective actions; and
- (vii) Conducting annual internal audits for each core and core support process, reviewing and improving the performance of the training management system.
- (3) Arrangements are made for a complete external audit to be conducted twice in a 5-year period.
- (b) The Coast Guard will accept courses approved by a Coast Guard-accepted QSS organization. The Coast Guard maintains a list of training organizations conducting accepted training and who are independently monitored by a Coast Guard-accepted QSS organization. The Coast Guard-accepted QSS organization must:
- (1) Submit a certificate of acceptance of training to the Coast Guard;
- (2) Wait at least 45 days after Coast Guard recognition before offering the course for credit;
- (3) Submit an updated certificate of acceptance to the Coast Guard annually; and
- (4) Sign each certificate by the training organization owner or operator, or its authorized representative(s), stating that the training fully complies with the requirements of this section,

and identifying the Coast Guardaccepted QSS organization being used for independent monitoring.

(c) If the Coast Guard determines, on the basis of observations or conclusions either of its own or by someone authorized to monitor the training, that the particular training does not satisfy one or more of the conditions described in paragraph (a) of this section:

(1) The Coast Guard will so notify the offerer of the training by letter, enclosing a report of the observations

and conclusions;

(2) The offerer may, within a period specified in the notice, either appeal the observations or conclusions to the Commandant (CG–543) or bring the training into compliance; and

(3) If the appeal is denied—or the deficiency is not corrected in the allotted time, or within any additional period judged by the Coast Guard to be appropriate, considering progress toward compliance—the Coast Guard will remove the training from the list maintained under paragraph (b) of this section until it can verify full compliance; and it may deny applications for licenses for officer or STCW endorsements based in whole or in part on training not on the list, until additional training or assessment is documented.

## § 10.311 Simulator performance standards.

Any simulators used in assessment of competence must meet the appropriate performance standards set out in Section A–I/12 of the STCW Code (incorporated by reference in § 10.103). However, a simulator installed or brought into use before February 1, 2002, need not meet those standards if they fulfill the objectives of the assessment of competence or demonstration of proficiency.

## PART 11—REQUIREMENTS FOR OFFICER ENDORSEMENTS

27. The authority citation for part 11 continues to read as follows:

Authority: 14 U.S.C. 633; 31 U.S.C. 9701; 46 U.S.C. 2101, 2103, and 2110; 46 U.S.C. chapter 71; 46 U.S.C. 7502, 7505, 7701, 8906, and 70105; Executive Order 10173; Department of Homeland Security Delegation No. 0170.1. Section 11.107 is also issued under the authority of 44 U.S.C. 3507.

### Subpart A—General

28. Amend § 11.101 as follows: a. Revise section heading to read as set out below;

b. Revise paragraph (a) introductory text and paragraph (a)(2) to read as set out below;

c. In paragraph (a)(1), after the word "engineer", add the word "officer"; and d. Remove paragraph (c).

### §11.101 Purpose.

(a) The purpose of this part is to provide:

(2) A means of determining that an applicant is competent to serve as a master, chief mate, officer in charge of a navigational watch, chief engineer officer, second engineer officer (first assistant engineer), officer in charge of an engineering watch, designated duty engineer, or GMDSS radio operator, in accordance with the provisions of the STCW Convention, and other laws, and to receive the appropriate certificate or endorsement as required by the STCW Convention.

29. Amend § 11.102 by revising paragraph (b) to read as follows:

### § 11.102 Incorporation by reference.

(b) International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR, England:

(1) The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (the STCW Convention or the STCW), approved for incorporation by reference in §§ 11.401, 11.493, 11.495, 11.497, 11.514, and 11.551.

(2) The Seafarers' Training, Certification and Watchkeeping Code, as amended (the STCW Code), approved for incorporation by reference in §§ 11.205, 11.401, 11.405, 11.412, 11.413, 11.424, 11.501, 11.507, 11.509, 11.511, 11.513, 11.551, 11.603, and 11.901.

### §11.107 [Amended]

30. In § 11.107, in paragraph (b)(2) remove the section numbers "11.302, 11.303, 11.304,", and remove paragraph (b)(3).

## Subpart B—General Requirements for Officer Endorsements

### §11.201 [Amended]

31. Amend § 11.201 as follows: a. In paragraph (b), remove the text "(h)" and add, in its place, the text "(g)";

b. In paragraph (e)(1)(i), after the text "25–200 GRT", add the text "/500 GT";

c. In paragraph (e)(1)(iv), remove the text "200–1,600 GRT" and add, in its place, the text "200 GRT/500 GT–1,600 GRT/3,000 GT"; in paragraph (e)(1)(x), remove the word "oceans"; in paragraph (e)(1)(xi), remove the word

"horsepower" and add, in its place, the text "HP/3,000 kW"; in paragraphs (e)(2)(i) and (ii), after the text "100 GRT", add the text "/250 GT"; in paragraphs (e)(2)(iii) and (iv), after the text "25–200 GRT", add the text "/500 GT"; and, in paragraph (e)(2)(vi), remove the word "horsepower" and add, in its place, the text "HP/750 kW";

d. In paragraph (f), after the words "general physical condition", remove the words "where required";

e. In paragraph (h), remove the words "meet the requirements for an officer endorsement" and add, in their place, the words "also meet the requirements of paragraph (a) of this section"; and

f. In paragraph (i), remove the text "Officer in Charge, Marine Inspection (OCMI)," and add, in its place, the words "Coast Guard".

32. Revise § 11.202 to read as follows:

### §11.202 STCW endorsements.

(a) When an original MMC for service on seagoing vessels is issued, renewed, upgraded, or otherwise modified, the Coast Guard will determine whether the applicant meets the standards for an STCW endorsement for service on a seagoing vessel. If the applicant is qualified, the Coast Guard will issue the appropriate endorsement. The Coast Guard will also issue an STCW endorsement at other times, if circumstances so require and if the applicant is qualified to hold the endorsement.

(b) Basic safety training or instruction for applicants who will serve on seagoing vessels will have to meet the requirements of § 15.1105 of this subchapter.

subchapter. (c) Notwi

(c) Notwithstanding § 11.901 of this part, each mariner found qualified to hold any of the following officer endorsements will also be entitled to hold an STCW endorsement corresponding to the service or other limitations of the license or officer endorsements on the MMC, because the vessels concerned are not subject to further obligation under the STCW because of their special operating conditions as small vessels engaged in domestic, near-coastal voyages:

(1) Masters, mates, or engineers endorsed for service on small passenger vessels that are subject to subchapter T or K of this chapter and that operate beyond the boundary line.

(2) Masters, mates, or engineers endorsed for service on seagoing vessels of less than 200 GRT/500 GT, other than passenger vessels subject to subchapter H of this chapter.

(3) Operators of uninspected passenger vessels as defined in 46 U.S.C. 2101(42)(B).

- (d) No mariner serving on, and no owner or operator of any of the following vessels, need hold an STCW endorsement, because they are exempt from application of STCW:
- (1) Fishing vessels as defined in 46 U.S.C. 2101(11)(a).
- (2) Fishing vessels used as fish-tender vessels as defined in 46 U.S.C. 2101(11)(c).

(3) Barges as defined in 46 U.S.C. 2101(2), including non-self-propelled mobile offshore drilling units.

(4) Vessels operating exclusively on the Great Lakes or on the inland waters of the U.S. in the Straits of Juan de Fuca inside passage.

33. Revise § 11.205 to read as follows:

## § 11.205 Requirements for original officer endorsements and STCW endorsements.

- (a) General. In addition to the requirements in part 10 of this subchapter and §§ 11.201 through 11.202 of this part, the applicant for an original officer endorsement must also satisfy the requirements of this section.
- (b) Experience or training. (1) All applicants for original officer or STCW endorsements must present to the Coast Guard letters, discharges, or other documents certifying the amount and character of their experience and the names, tonnage, waters, and propulsion power of the vessels on which the experience was acquired. The Coast Guard must be satisfied as to the authenticity and acceptability of all evidence of experience or training presented. Certificates of discharge will be returned to the applicant. The Coast Guard will annotate on the application that service represented by these documents has been verified. All other documentary evidence of service, or authentic copies thereof, will be filed with the application. An MMC is not considered satisfactory evidence of any qualifying experience.

(2) No original officer or STCW endorsement may be issued to any naturalized citizen based on less experience in any grade or capacity than would have been required of a citizen of the United States by birth.

(3) No applicant for an original officer or STCW endorsement who is a naturalized citizen and who has obtained experience on foreign vessels will be given an original officer endorsement in a grade higher than that upon which he or she has actually served while acting under the authority of a foreign credential.

(4) Experience and service acquired on foreign vessels is creditable for establishing eligibility for an original officer or STCW endorsement, subject to evaluation by the Coast Guard to determine that it is a fair and reasonable equivalent to service acquired on merchant vessels of the United States, with respect to grade, tonnage, propulsion power, waters upon which service occurred, and operating conditions. An applicant who has obtained qualifying experience on foreign vessels must submit satisfactory documentary evidence of such service (including any necessary translation into English) in the forms prescribed by paragraph (b)(1) of this section.

(c) Character check and references.
Each applicant for an original officer or
STCW endorsement must submit
written recommendations concerning
the applicant's suitability for duty from
a master and two other individuals
holding officer endorsements or licenses
on vessels on which the applicant has
served

(1) For an officer endorsement as engineer or as pilot, at least one of the recommendations must be from the chief engineer or pilot, respectively, of a vessel on which the applicant has served.

(2) For an officer endorsement as engineer where service was obtained on vessels not carrying a credentialed engineer, and for an officer endorsement as master or mate (pilot) of towing vessels, the recommendations may be by recent marine employers with at least one recommendation from a master, operator, or person in charge (PIC) of a vessel upon which the applicant has served.

(3) For an officer endorsement as offshore installation manager (OIM), barge supervisor (BS), or ballast control operator (BCO), at least one recommendation must be from an offshore installation manager of a unit on which the applicant has served.

(4) Where an applicant qualifies for an endorsement through an approved training school or program, one of the character references must be from an official of that school or program.

(5) For an endorsement for which no commercial experience may be required, such as master or mate 25–200 GRT/500 GT, operator of uninspected passenger vessel (OUPV), radio officer, or certificate of registry, the applicant may have the written recommendations of three persons who have knowledge of the applicant's suitability for duty.

(6) An individual may apply for an original officer or STCW endorsement, or officer or STCW endorsement of a different type, while on probation as a result of administrative action under part 5 of this chapter. The offense for which the applicant was placed on probation will be considered in determining his or her fitness to hold

the endorsement applied for. An officer or STCW endorsement issued to an applicant on probation will be subject to the same probationary conditions as were imposed against the applicant's other credential. An applicant may not take an examination for an officer or STCW endorsement during any period when a suspension without probation or a revocation is effective against the applicant's currently held license, merchant mariner's document, or MMC, or while an appeal from these actions is pending.

(7) If an original license, certificate of registry, or officer endorsement has been issued when information about the applicant's habits of life and character is brought to the attention of the Coast Guard, if such information warrants the belief that the applicant cannot be entrusted with the duties and responsibilities of the license, certificate of registry, or officer endorsement issued, or if such information indicates that the application for the license, certificate of registry, or officer endorsement was false or incomplete, the Coast Guard may notify the holder in writing that the license, certificate of registry, or officer endorsement is considered null and void, direct the holder to return the credential to the Coast Guard, and advise the holder that, upon return of the credential, the appeal procedures of § 10.237 of this subchapter apply.

(d) Firefighting certificate. Applicants for the officer endorsements in the following categories must present a certificate of completion from a firefighting course of instruction which has been approved by the Coast Guard. The course must meet the requirements in Regulation VI/3 of the STCW Convention and section A–VI/3 of the STCW Code (both incorporated by reference in § 11.102). The course must have been completed within five years before the date of application for the license requested.

(1) All master endorsements for service on vessels of 200 GRT/500 GT or less in ocean service.

(2) All master or mate endorsements for service on vessels over 200 GRT/500 GT.

- (3) All endorsements for master or mate of towing vessels, except apprentice mate of such vessels, on oceans.
- (4) All endorsements on mobile offshore drilling units.
- (5) All engineer officer endorsements. (e) First aid and cardiopulmonary resuscitation (CPR) course certificates. All applicants for an original officer endorsement, except as provided in §§ 11.429, 11.456, 11.466, and 11.467 of

this part, must present to the Coast Guard:

(1) A certificate indicating completion of a first aid course not more than 1 year from the date of application from:

(i) The American National Red Cross Standard First Aid or Community First Aid & Safety;

(ii) A Coast Guard-approved first aid

training course; or

- (iii) Ā course the Coast Guard determines meets or exceeds the standards of the American Red Cross courses; and
- (2) A currently valid certificate of completion of a CPR course from either:
  - (i) The American National Red Cross;(ii) The American Heart Association;
- (iii) A Coast Guard-approved CPR training course; or
- (iv) A course the Coast Guard determines meets or exceeds the standards of the American Red Cross or American Heart Association courses.
- (3) In lieu of completing the required training in (e)(1) and (2) of this section, to obtain a seagoing officer endorsement, applicants must complete and provide evidence of approved training as medical first aid provider or person in-charge medical care.

(f) Professional Examination. (1) When the Coast Guard finds the applicant's experience and training to be satisfactory, and the applicant is eligible in all other respects, the Coast Guard will authorize the examination in accordance with the following

accordance wit requirements: (i) Except for

- (i) Except for an endorsement required by the STCW Convention, any applicant for a deck or engineer officer endorsement limited to vessels not exceeding 200 GRT/500 GT, or an officer endorsement limited to uninspected fishing industry vessels, may request an orally assisted examination in lieu of any written or other textual examination. If there are textual questions that the applicant has difficulty reading and understanding, the Coast Guard will offer the orally assisted examination. 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
- (ii) The general instructions for administration of examinations and the lists of subjects for all officer endorsements appear in subpart I of this part. The Coast Guard will place in the applicant's file a record indicating the subjects covered.
- (2) When the application has been approved, the applicant should take the required examination as soon as practicable. If the applicant cannot be

- examined without delay at the office where the application is made, the applicant may request that the examination be given at another office.
- (3) An examination is not required for a staff officer or radio officer endorsement.
- (g) Practical demonstration of skills. Each applicant for an original STCW endorsement must successfully complete any practical demonstrations required under this part and appropriate to the particular endorsement concerned, to prove that he or she is sufficiently proficient in the skills required under subpart I of this part. The Coast Guard must be satisfied with the authenticity and acceptability of all evidence that each applicant has successfully completed the demonstrations required under this part in the presence of a designated examiner. The Coast Guard will place a written or electronic record of the skills required, the results of the practical demonstrations, and the identification of the designated examiner in whose presence the requirements were fulfilled, in the file of each applicant.
- (h) Radar observer. Applicants for an endorsement as radar observer must present a certificate of completion from a radar observer course as required by § 11.480 of this part.

### §11.211 [Amended]

- 34. Amend § 11.211 as follows:
- a. In paragraph (a), remove the words "gross tons" and add, in their place, the text "GRT/500 GT", remove the words "shaft horsepower" and add, in their place, the words "propulsion power", and, before the words "dates of service", remove the word "approximate";
- b. In paragraph (b), remove the word "Port" and add, in its place, the words "Service as port", and remove the text ", as appropriate, using the following:" and add, in its place, the words "; however, it may not be used for obtaining an original management-level endorsement. The service is creditable as follows:"; and
- c. In paragraph (e), remove the text "OCMI and forwarded to the Commandant" and add, in its place, the words "Coast Guard".
  - 35. Amend § 11.213 as follows:
- a. In paragraph (a), remove the words "Officer in Charge, Marine Inspection" and add, in their place, the words "Coast Guard with", remove the word "horsepower" and add, in its place, the words "propulsion power", remove the words "OCMI and forwarded to the Commandant" and add, in their place, the words "Coast Guard", and revise the last sentence to read as set forth below;

- b. Revise paragraph (c) to read as set forth below; and
- c. In paragraph (e), remove the words "is evaluated by the OCMI and forwarded to the National Maritime Center" and add, in their place, the words "will be evaluated by the Coast Guard".

# § 11.213 Sea service as a member of the Armed Forces of the United States and on vessels owned by the United States as qualifying experience.

- (a) \* \* \* In order to be eligible for a management level officer or STCW endorsement, the applicant must have acquired equivalent service while holding an appropriate officer or STCW endorsement at the operational level.
- (c) In addition to service on vessels that get underway regularly, members of the Armed Forces may obtain creditable service for assignment to vessels that get underway infrequently, such as tenders and repair vessels. Normally, a 25 percent factor is applied to these time periods. This experience can be equated with general shipboard familiarity, training, ship's business, and other related duties.

36. In § 11.217, in paragraph (a)(1), remove the word "OCMI" and add, in its place, the words "Coast Guard", and revise paragraph (b) to read as follows:

### § 11.217 Examination procedures and denial of officer endorsements.

\* \* \* \* \*

(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 which must be retaken and the date by which the examination must be completed.

37. Add subpart C to read as follows:

## Subpart C—Approved and Accepted Training

## §11.301 Coast Guard-approved and accepted training.

Coast Guard-approved training must meet the requirements found in 46 CFR part 10 subpart C.

### Subpart D—Professional Requirements for Deck Officer Endorsements

38. Revise § 11.401 and add new table 11.401(a) to read as follows:

## § 11.401 Ocean and near-coastal or STCW endorsements.

(a) Each applicant for any of the following endorsements (except for

persons serving on those vessels listed in 46 CFR 15.103 (e) and (f)) must meet the requirements of the appropriate STCW Convention regulations and standards of competence, and those in part A of the STCW Code (incorporated by reference in § 11.102), as indicated in table 11.401(a) of this section:

- (1) Master of ocean or near-coastal, self-propelled vessels of unlimited tonnage.
- (2) Chief mate of ocean or nearcoastal, self-propelled vessels of unlimited tonnage.

- (3) Master of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3.000 GT.
- (4) Chief mate of ocean or nearcoastal, self-propelled, vessels of less than 1,600 GRT/3,000 GT.
- (5) Second mate of ocean or nearcoastal, self-propelled vessels of unlimited tonnage.
- (6) Third mate of ocean or nearcoastal, self-propelled vessels of unlimited tonnage.

- (7) Mate of ocean or near-coastal, selfpropelled vessels of less than 1,600 GRT/3,000 GT.
- (8) Master of towing vessels of 200 GRT/500 GT or more, oceans and nearcoastal.
- (9) Mate of towing vessels of 200 GRT/500 GT or more, oceans and near coastal.
- (10) Master or mate, near coastal, less than 200 GRT/500 GT1.
  - (11) Master (OSV).2
  - (12) Chief mate (OSV).2
  - (13) Mate (OSV).

### TABLE 11.401(A)

	1*	2	3	4	5	6	7	8	9	10 ¹	112	12 <sup>2</sup>	13
Regulation II/1 of the STCW Convention <sup>3</sup>	,,	.,			x	х	х		x		.,	.,	х
Regulation II/2 of the STCW Convention, pp. 3 & 43	Х	X	Х	Х				х		v	X	X	
Regulation II/3 of the STCW Convention <sup>3</sup>										Х			

- \*Column headings coincide with subparagraphs of paragraph (a) of this section.
- <sup>1</sup> Not applicable to persons serving on those vessels listed in 46 CFR 15.103 (e) and (f).
- <sup>2</sup> Based upon the tonnage limitation on the endorsement.
  <sup>3</sup> Regulations of the STCW Convention are incorporated by reference in § 11.102 of this part.
- (b) Every applicant for an ocean or near-coastal officer endorsement of 200 GRT/500 GT or more, or an officer endorsement for less than 200 GRT/500 GT intending to serve on a passenger vessel of 100 GRT/250 GT or more, or on any vessel engaged on an international voyage, must hold the appropriate STCW endorsement. The STCW endorsement will also authorize service in the capacities stated on the endorsement subject to any limitations stated on it.
- (c) Subject to the provisions of §§ 11.464(d) and 11.465(b) of this part, any license or officer endorsement for service as master or mate on ocean waters qualifies the holder to serve in the same grade on any waters, subject to the limitations of the endorsement.
- (d) Subject to the provisions of §§ 11.464(d) and 11.465(b) of this part, any license or officer endorsement issued for service as master or mate on near-coastal waters qualifies the holder to serve in the same grade on nearcoastal, Great Lakes, and inland waters, subject to the limitations of the endorsement.
- (e) Near-coastal endorsements of unlimited tonnage require the same number of years of service as the ocean unlimited endorsements. The primary differences in these endorsements are the nature of the service, reduced training, lack of assessment in areas not relevant, and the scope of the professional examination.

- (f) The holder of a master or mate license or MMC officer endorsement for near-coastal service may obtain an MMC officer endorsement for ocean service by completing training, assessments of professional skills, and the appropriate examination relevant to ocean service.
- (g) A master or mate endorsement for service on vessels of 200 GRT/500GT or more, and a master or mate endorsement for service on vessels under 200 GRT/ 500GT issued under §§ 11.423 or 11.424 of this part, may be endorsed for sail or auxiliary sail as appropriate. The applicant must present the equivalent total qualifying service required for conventional officer endorsements, including at least 1 year of deck experience on that specific type of vessel. For example, for an officer endorsement as master of vessels of less than 1,600 GRT/3,000 GT endorsed for auxiliary sail, the applicant must meet the total experience requirements for the conventional officer endorsement, including time as mate, and the proper tonnage experience, including at least 1 year of deck service, on appropriately sized auxiliary sail vessels. For an endorsement to serve on vessels of less than 200 GRT/500 GT, see the individual endorsement requirements.
- (h) To obtain a master or mate endorsement with a tonnage limit of 200 GRT/500 GT or more, an endorsement for less than 200 GRT/500 GT with an ocean route, or an endorsement issued under § 11.426 of this part, the applicant

- must successfully complete the following approved training:
  - (1) Basic and advanced firefighting;
- (2) Automatic radar-plotting aids (ARPA), or the endorsement will be limited to service on vessels not equipped with ARPA;
- (3) Global Maritime Distress and Safety System (GMDSS), and hold the license for operator of radio in the GMDSS issued by the Federal Communications Commission, or the endorsement will be limited to service on vessels not equipped with GMDSS; and
  - (4) Radar observer unlimited.
- (i) An applicant for his or her first deck officer endorsement authorizing service on vessels of 200 GRT/500GT or more on ocean or near-coastal waters must pass a practical signaling examination (flashing light). If the original or raise of grade did not require passing a practical signal examination, an applicant for a raise in grade or renewal will be required to pass this examination.
- (j) Training and shoreside employment may not be accepted as equivalent to sea service under the STCW Convention, except as part of an approved training program. However, it may be allowed for specific domestic officer endorsements. Sea service equivalency may be substituted for sea service required to qualify for an endorsement as second mate.
  - 39. Revise § 11.402 to read as follows:

## § 11.402 Tonnage requirements for ocean or near-coastal endorsements for vessels of 1,600 GRT/3,000 GT or more.

(a) With the exception of offshore supply vessels (OSVs), for the purposes of this subpart only, the following equivalencies between GRT and GT are established:

TABLE 11.402(A)—GROSS REGISTER TONS TO GROSS TONNAGE EQUIVA-LENCIES

Gross register tonnage (GRT)	Gross tonnage (GT)
100	250
150	375
200	500
300	700
500	1,200
1,000	2,000
1,600	3,000
2,000	3,300
3,000	3,700
4,000	4,000

Above 4,000 tons, the GRT and the GT are considered equal.

- (b) To qualify for an ocean or nearcoastal endorsement for service on vessels of unlimited tonnage:
- (1) All the required experience must be obtained on vessels of 200 GRT/500 GT or more; and
- (2) At least one-half of the required experience must be obtained on vessels of 1,600 GRT/3,000 GT or more.
- (c) If an applicant for an endorsement as master or mate does not have the

service on vessels of 1,600 GRT/3,000 GT or more as required by paragraph (b) of this section, a tonnage limitation will be placed on the MMC based on the applicant's qualifying experience. The endorsement will be limited to the maximum tonnage on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. However, the minimum tonnage limitation calculated according to this paragraph will be 2,000 GRT/3,300 GT. Limitations are in multiples of 1,000 GRT and the corresponding GT from the table in paragraph (a) of this section, using the next higher figure when an intermediate tonnage is calculated. When the calculated limitation equals or exceeds 10,000 GRT/GT, the applicant is issued an unlimited tonnage endorsement.

- (d) Tonnage limitations imposed under paragraph (c) of this section may be raised or removed in the following manner:
- (1) When the applicant provides evidence of 6 months of service on vessels of 1,600 GRT/3,000 GT or more in the highest grade endorsed, all tonnage limitations will be removed;
- (2) When the applicant provides evidence of 6 months of service on vessels of 1,600 GRT/3,000 GT or more in any capacity as an officer other than the highest grade for which endorsed, all tonnage limitations for the grade in

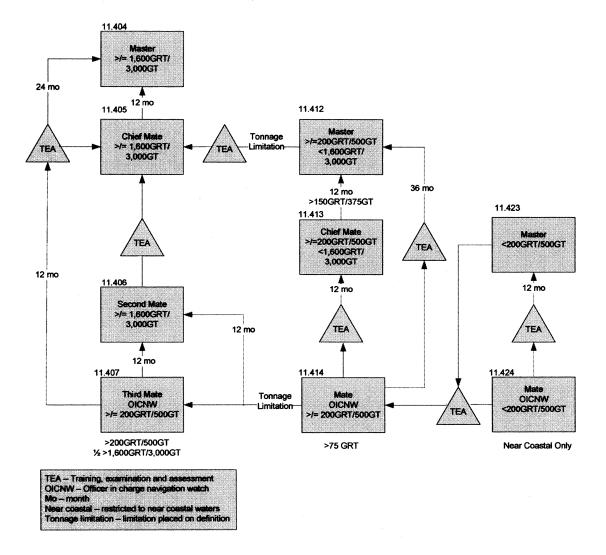
- which the service is performed will be removed and the next higher grade endorsement will be raised to the tonnage of the vessel on which the majority of the service was performed. The total cumulative service before and after issuance of the limited license or MMC officer endorsement may be considered in removing all tonnage limitations; or
- (3) When the applicant has 12 months of service as able seaman on vessels of 1,600 GRT/3,000 GT or more while holding a license or endorsement as third mate, all tonnage limitations on the third mate's license or MMC officer endorsement will be removed.
- (e) An applicant holding a license or endorsement as master or mate of vessels of less than 1,600 GRT/3,000 GT, not more than 500 GRT/1,200 GT, or less than 25–200 gross tons, is prohibited from using the provisions of paragraph (d) of this section to increase the tonnages of his or her license or endorsement.
  - 40. Revise § 11.403 to read as follows:

## §11.403 Structure of deck officer endorsements for seagoing service.

The following diagram (Figure 11.403) illustrates the deck officer endorsement structure, including crossover points. The section numbers on the diagram refer to the specific requirements applicable.

### Figure 11.403 Structure of deck officer endorsements for

### seagoing service



41. Revise § 11.404 to read as follows:

# § 11.404 Requirements to qualify for an STCW and officer endorsement as master of ocean or near-coastal, self-propelled vessels of unlimited tonnage.

- (a) To qualify for an STCW and officer endorsement as master of ocean or nearcoastal, self-propelled vessels of unlimited tonnage an applicant must:
- (1) Provide evidence of sea service consisting of either:
- (i) Twelve months of service as chief mate on self-propelled, seagoing vessels while holding an endorsement as chief mate unlimited; or
- (ii) Thirty-six months of service as second mate or third mate on self-propelled, seagoing vessels.
- (2) Complete the approved training as detailed in § 11.405 of this subchapter if he or she does not hold a license or endorsement as chief mate of self-

propelled, seagoing vessels of unlimited tonnage; and

- (3) Complete the assessments of professional skills in the above areas as required by § 11.401(a) of this part, if not already completed.
- (b) Service as a rating will not be accepted to upgrade to an officer's endorsement as either chief mate or master.
- 42. Revise § 11.405 to read as follows:

# § 11.405 Requirements to qualify for an STCW and officer endorsement as chief mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage.

- (a) To qualify for an STCW and officer endorsement as chief mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage, an applicant must:
- (1) Provide evidence of 12 months of service as OICNW on self-propelled, seagoing vessels;

- (2) Complete the approved training in the following areas that provide the applicant with the knowledge, understanding, and proficiency required by Section A–II/2 of the STCW Code:
  - (i) Navigation, including:
  - (A) Voyage Planning; and
  - (B) Compass Correction.
  - (ii) Search and Rescue;
  - (iii) Watchkeeping, including:
- (A) The International Regulations for Preventing Collisions at Sea (COLREGS); and
  - (B) Principles of Safe Watchkeeping.
- (iv) Meteorology/oceanography, including:
  - (A) Weather forecasting; and
- (B) Dynamics of weather and current systems.
  - (v) Shiphandling, including:
  - (A) Shallow water operations;
  - (B) Hydrodynamic effects;(C) Mooring operations;

- (D) Heavy weather operations; and
- (E) Emergency procedures.
- (vi) Marine engineering, including:
- (A) Remote controls;
- (B) Operating principles of propulsion plant; and
  - (C) Auxiliary machinery.
  - (vii) Cargo handling, including:
- (A) Loading and transportation of all cargo types; and
  - (B) Carriage of dangerous goods.
- (viii) Stability for all vessel types, including:
  - (A) Damage stability;
  - (B) Draft, trim and stress; and
  - (C) Bending moments; and
  - (ix) Maritime law, including:
  - (A) International requirements;
  - (B) U.S. requirements;
  - (C) Ship's business; and
  - (D) Security; and
- (3) Complete the assessments of professional skills in paragraph (a)(2) as required by § 11.401(a) of this part; or
- (b) An applicant for this endorsement may, while holding a license or endorsement for service as master on self-propelled, seagoing vessels between 200 GRT/500 GT and 1,600 GRT/3,000 GT, complete training approved for the purpose of transitioning to this endorsement and the applicable assessments of professional skills required by subpart I of this part. The training must include the following topics:
  - (1) Cargo handling, including:
- (i) Loading and transportation of all cargo types; and
  - (ii) Carriage of dangerous goods.
- (2) Stability for all vessel types, including:
  - (i) Damage stability;
  - (ii) Draft, trim and stress; and
  - (iii) Bending moments.
- (3) Marine engineering—steam propulsion systems;
  - (4) Ship's business; and
- (5) Shiphandling for vessels of unlimited tonnage.
- (c) Service as a rating will not be accepted to upgrade to an officer's endorsement as either chief mate or master.
  - 43. Revise § 11.406 to read as follows:

# § 11.406 Requirements to qualify for an STCW endorsement as OICNW and an officer endorsement as second mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage.

To qualify for an STCW endorsement as OICNW and an officer endorsement as second mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage, an applicant must:

(a) Provide evidence of 12 months of service as OICNW on self-propelled, seagoing vessels while holding a license or endorsement as third mate; or

- (b) Provide evidence of 12 months of service while holding a license or endorsement as third mate for service on seagoing vessels, or while holding a license or endorsement as mate on self-propelled, seagoing vessels of less than 1,600 GRT/3,000 GT that includes
- (1) At least 6 months of service as OICNW on self-propelled, seagoing vessels, in combination with;
- (2) Service on self-propelled, seagoing vessels as boatswain, able seaman, or quartermaster while holding a certificate as able seaman, which may be accepted on a two-for-one basis to a maximum allowable substitution of 6 months (12 months of experience equals 6 months of creditable service).
  - 44. Revise § 11.407 to read as follows:

# § 11.407 Requirements to qualify for an STCW endorsement as OICNW and an officer endorsement as third mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage.

To qualify for an STCW endorsement as OICNW and an officer endorsement as third mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage, an applicant must comply with paragraphs (a), (b), or (c) of this section.

(a) To qualify for these endorsements,

an applicant must:

- (1) Provide evidence of 36 months of service in the deck department on self-propelled, seagoing vessels, at least 6 months of which must have been as able seaman or quartermaster while holding both a rating endorsement as able seaman and an STCW endorsement as RFPNW. Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to 3 months of the service requirements;
- (2) Complete approved training that provides the applicant with the knowledge, understanding, and proficiency required by Section A–II/1 of the STCW Code, in the following areas:
  - (i) Terrestrial navigation;
  - (ii) Celestial navigation;
  - (iii) Electronic navigation;
- (iv) Compasses, magnetic and gyro;
- (v) Meteorology/oceanography, including:
  - (A) Weather instruments;
  - (B) Weather observations;
  - (C) Basic weather systems; and
  - (D) Basic current systems.
  - (vi) Shiphandling, including:
  - (A) Steering controls systems;
  - (B) Maneuvering characteristics;
  - (C) Emergency procedures; and
  - (D) Search and rescue.
  - (vii) Watchkeeping including:(A) Bridge resource management;
  - (B) COLREGS;

- (C) Sea watch;
- (D) Port watch:
- (E) Anchor watch;
- (F) Record keeping;
- (G) Communications;(H) Maritime law; and
- (I) Prevention of pollution of the maritime environment.
  - (viii) Radar observer;
  - (ix) ARPA, if required;
  - (x) GMDSS, if required;
  - (xi) Cargo handling;
  - (xii) Stability and ship construction;
  - (xiii) Advanced firefighting;
  - (xiv) Medical first aid provider; and
  - (xv) Proficiency in survival craft.
- (3) Complete the assessments of professional skills in paragraph (a)(2) the above areas as required by subpart I of this part; and
- (4) Qualify as proficient in survival craft and rescue craft except fast-rescue craft; or
- (b) An applicant for this endorsement must complete a program of education, training, assessment, and sea service approved by the Coast Guard as leading to an endorsement as third mate and as OICNW; or
- (c) An applicant must, while holding a license or endorsement as mate of self-propelled, seagoing vessels of 1,600 GRT/3,000 GT and an endorsement as OICNW, provide evidence of additional sea service on vessels of sufficient tonnage to qualify for an endorsement under this paragraph as specified in § 11.402 of this part.
- (d) An applicant for this endorsement who does not meet the requirements of § 11.402 of this part will have a tonnage restriction placed on his or her MMC.
  - 45. Revise § 11.410 to read as follows:

# §11.410 Requirements for deck officer endorsements for service on self-propelled, seagoing vessels of less than 1,600 GRT/ 3,000 GT.

- (a) Endorsements as master and mate of vessels of less than 1,600 GRT/3,000 GT are issued in the following tonnage categories:
  - (1) Less than 1,600 GRT/3,000 GT;
- (2) Not more than 500 GRT/1200 GT. Existing licenses or officer endorsements in this category may be renewed or reissued; however, no original endorsements or raises of grade to this tonnage category will be issued after [EFFECTIVE DATE OF FINAL RULE]; or
- (3) Less than 200 GRT/500 GT (between 25–200 GRT) in tonnage increments as specified in § 11.422 of this part and with an appropriate mode of propulsion.
- (b) Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to 90

days of the service requirements for any mate endorsement in this category.

- (c) An officer endorsement in this category obtained with an orally assisted examination will be limited to service on vessels listed in § 15.103(e) and (f) of this subchapter. To remove this limitation and qualify for an appropriate STCW endorsement, the written examination, training, service requirements, and assessments must be successfully completed.
- (d) If an applicant holds a license or endorsement for master or mate issued before [EFFECTIVE DATE OF FINAL RULE] for service on vessels of not more than 500 GRT/1,200 GT, and an accompanying STCW endorsement, he or she may apply for an upgrade:
- (1) The tonnage limitation on an applicant's endorsement will be increased to authorize service on vessels of less than 1,600 GRT/3,000 GT if the applicant provides evidence of 6 months of service on vessels of:
- (i) 75 GRT or more for a mate's license or endorsement; or
- (ii) 150 GRT/375 GT or more for a master's license or endorsement.
- (2) The service required in paragraph (d)(1) of this section may have been acquired before the applicant qualified for his or her present license or endorsement of not more than 500 GRT/1,200 GT, and it may have been used to qualify for that license or endorsement.
- 46. Revise § 11.412 to read as follows:

# §11.412 Requirements for an STCW and officer endorsement as master of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT.

To qualify for an STCW and officer endorsement as master of ocean or nearcoastal, self-propelled vessels of less than 1,600 GRT/3,000 GT, an applicant must:

- (a) Be qualified as a mate and as an OICNW on seagoing vessels of 200 GRT/500 GT or more, and have either:
- (1) Twenty-four months of seagoing service as an officer, of which 12 months must have been as chief mate, and at least 6 months of which must have been on vessels of 150 GRT/375 GT or more; or
- (2) Thirty-six months of service as OICNW on self-propelled, seagoing vessels, of which at least 6 months must have been on vessels of 150 GRT/375 GT or more.
- (b) Complete approved training that provides the applicant with knowledge, understanding, and proficiency required by Section A–II/2 of the STCW Code, as detailed in § 11.413 of this part; and
- (c) Complete the assessments of professional skills in the above areas as required by § 11.401(a) of this part.

47. Add § 11.413 to read as follows:

# §11.413 Requirements for an STCW and officer endorsement as chief mate of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT.

To qualify for an STCW and officer endorsement as chief mate of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT, an applicant must:

- (a) Qualify as a mate and as an OICNW on seagoing vessels of 200 GRT/500 GT or more;
- (b) Complete approved training in the following areas that provide the applicant with the knowledge, understanding, and proficiency required by Section A–II/2 of the STCW Code:
  - (1) Navigation, including:
  - (i) Voyage planning; and
  - (ii) Compass correction;
  - (2) Search and rescue;
  - (3) Watchkeeping, including:
  - (i) COLREGS; and
  - (ii) Principles of Safe Watchkeeping;
- (4) Meteorology/Oceanography, including:
  - (i) Weather forecasting; and
- (ii) Dynamics of weather and current systems;
- (5) Shiphandling, including:
- (i) Shallow water operations;
- (ii) Hydrodynamic effects;
- (iii) Mooring operations;
- (iv) Heavy weather operations; and
- (v) Emergency procedures;
- (6) Marine engineering, including:
- (i) Remote controls;
- (ii) Operating principles of propulsion plant, except steam; and
  - (iii) Auxiliary machinery;
  - (7) Cargo handling, including:
  - (i) Use of cranes;
  - (ii) Stowage of deck cargo;
  - (iii) Liquid cargoes;
  - (iv) Carriage of dangerous goods; and
- (v) Compliance with vessel stability letter;
  - (8) Stability, including:
- (i) Use of simplified stability book; and
- (ii) Calculations required by stability book/letter;
  - (9) Maritime law, including:
  - (i) International requirements;
  - (ii) U.S. requirements;
  - (iii) Ship's business; and
  - (iv) Security; and
- (c) Complete the assessments of professional skills in the above areas as required by § 11.401(a) of this part.
  - 48. Revise § 11.414 to read as follows:

# §11.414 Requirements for an STCW and officer endorsement as mate of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT.

(a) To qualify for an STCW and officer endorsement as mate of ocean or near-

- coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT, an applicant must meet the same requirements for sea service, training, and assessments as specified in § 11.407 of this part, except for the tonnage of the vessels upon which the applicant acquires seagoing service. To qualify for an endorsement under this section, sea service may be performed on smaller vessels; however, at least 6 months of the required experience must have been on vessels of 75 GRT or more.
- (b) An applicant holding a license or MMC endorsement on vessels of 50 GRT or more, as either master or mate, limited to service on vessels listed in § 15.103(e) and (f) of this subchapter, may apply for the endorsement under this section after:
- (1) Completing training approved by the Coast Guard for this crossover;
- (2) Presenting evidence of having the required seagoing service; and
- (3) Completing the assessments of professional skills required by § 11.401(a) of this part.

### §11.416 [Removed]

49. Remove § 11.416.

### §11.418 [Removed]

50. Remove § 11.418.

### §11.420 [Removed]

51. Remove § 11.420.

### §11.421 [Removed]

- 52. Remove § 11.421.
- 53. Amend § 11.422 as follows:
- a. Revise the section heading and paragraph (a), paragraph (b) introductory text, and paragraphs (b)(1) and (b)(2) to read as set out below;
- b. In paragraph (b)(3), remove the word "Additional" and add, in its place, the words "With additional" and, after the words "basic formula", add the words "specified in paragraph (a) of this section"; in paragraph (b)(4), remove the word "Six" and add, in its place, the words "With six";
- c. In paragraph (c), remove the word "OCMI" and add, in its place, the words "Coast Guard";
- d. In paragraph (d), remove the text "not more than 200 gross tons" and add, in its place, the text "200 GRT/500 GT"; and
  - e. Remove paragraph (e).

# § 11.422 Tonnage limitations and qualifying requirements for endorsements as master or mate of vessels of less than 200 GRT/500 GT.

(a) Each endorsement as master or mate of vessels of less than 200 GRT/ 500 GT is issued with a tonnage limitation based on the applicant's qualifying experience. The tonnage limitation will be at the 25, 50, 100, or 200 GRT level. The endorsement will be limited to the maximum GRT on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum GRT on which at least 50 percent of the service was obtained, whichever is higher. Limitations are as stated above, using the next higher figure when an intermediate tonnage is calculated. If more than 75 percent of the qualifying experience is obtained on vessels of 5 GRT or less, the license will automatically be limited to vessels of not more than 25 GRT.

- (b) The tonnage limitation may be raised:
- (1) For an endorsement as mate, with at least 45 days of additional service on deck of a vessel in the highest tonnage increment authorized by the officer endorsement;
- (2) For an endorsement as master, with at least 90 days of additional service on deck of a vessel in the highest tonnage increment authorized by the master endorsement;

54. Add § 11.423 to read as follows:

# § 11.423 Requirements for an STCW and officer endorsement as master of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters

- (a) Within the limitations specified, an STCW and an officer endorsement as master of self-propelled seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters, are valid for service on self-propelled, seagoing vessels engaged on international voyages; on passenger vessels of 100 GRT/250 GT or more on domestic, near-coastal voyages; and the vessels specified in 15.103(e) and (f) of this subchapter.
- (b) To qualify for an STCW and officer endorsement as master of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters, an applicant must have 12 months of service as an OICNW while holding an endorsement issued in accordance with § 11.424 of this part. Service on the Great Lakes, bays, or sounds that are navigable waters of the United States may be substituted for up to 60 days of the required service.
- (c) To obtain an endorsement for sail or auxiliary sail vessels, an applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. This 12 months of experience may have been obtained before qualifying for an officer endorsement.
  - 55. Revise § 11.424 to read as follows:

# §11.424 Requirements for an officer endorsement as mate and STCW endorsement as OICNW of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters.

- (a) Within the limitations specified, an endorsement as mate and STCW endorsement as OICNW of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters is valid for service on self-propelled, seagoing vessels engaged on international voyages; on passenger vessels of 100 GRT/250 GT or more on domestic, near-coastal voyages; and on the vessels specified in 15.103(e) and (f) of this subchapter.
- (b) The requirements to qualify for an officer endorsement as mate and STCW endorsement as OICNW of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to near-coastal waters are:
- (1) Three years of service in the deck department on self-propelled, seagoing vessels. Service on the Great Lakes, bays, or sounds that are navigable waters of the United States may substitute for up to 180 days of the required service;
- (2) Completion of approved training in the following areas that provide the applicant with knowledge, understanding and proficiency required by Part A Section II/3 of the STCW Code:
- (i) Plan and conduct a coastal passage and determine position;
- (ii) Maintain a safe navigational watch:
  - (iii) Respond to emergencies;
- (iv) Respond to a distress signal at sea; (v) Maneuver the vessel and operate
- small vessel power plants; (vi) Monitor the loading, stowage, security and unloading of cargoes and
- their care during the voyage; (vii) Ensure compliance with pollution-prevention requirements;
- (viii) Maintain seaworthiness of the vessel;
- (ix) Prevent, control and fight fires onboard;
  - (x) Operate life-saving appliances;
- (xi) Apply medical first aid onboard;
- (xii) Monitor compliance with legal requirements; and
- (3) Completion of the assessments of professional skills in the above areas and as required by § 11.401(a) of this part.
- (c) To obtain an endorsement for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. This 12 months of experience may have been obtained before qualifying for an officer endorsement.

- (d) In addition to any required examination, the applicant must comply with the requirements listed in § 11.401(h) of this part.
- 56. In § 11.426, revise the section heading, paragraph (a) introductory text, and paragraph (b), and add paragraph (c) to read as follows:

# § 11.426 Requirements for an officer endorsement as master of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to domestic voyages upon near-coastal waters.

(a) Within the limitations specified, this endorsement is valid for service only on the vessels identified in § 15.103(e) and (f) of this subchapter. The minimum service required to qualify for an officer endorsement as master of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to domestic voyages upon near-coastal waters is:

\* \* \* \* \*

- (b) To obtain this officer endorsement for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. This 12 months of experience may have been obtained before qualifying for an officer endorsement.
- (c) Holders of this endorsement are considered to be in substantial compliance with the STCW Convention while operating within the limitations of this endorsement.
  - 57. Amend § 11.427 as follows:
- a. Revise the section heading and paragraph (a) introductory text to read as set forth below;
- b. In paragraph (a)(2), remove the text "not more than 200 gross tons" and add, in its place, the text "less than 200 GRT/500 GT":
- c. In paragraphs (c) and (e), remove the words "In order to", and add, in their place, the word "To";
- d. In paragraph (e), remove the text "over 100 gross tons" and add, in its place, the text "100 GRT/250 GT or more"; and
- e. Add paragraph (f) to read as follows:

# § 11.427 Requirements for an officer endorsement as mate of self-propelled, seagoing vessels of less than 200 GRT/500 GT limited to domestic voyages upon near-coastal waters.

(a) Within the limitations specified, this endorsement is valid for service on the vessels identified in § 15.103(e) and (f) of this subchapter. The minimum service required to qualify for this endorsement is:

\* \* \* \* \*

(f) Holders of this endorsement are considered to be in substantial

compliance with the STCW Convention while operating within the limitations of this endorsement.

58. Revise § 11.428 to read as follows:

### § 11.428 Requirements for master of selfpropelled, seagoing vessels of less than 100 GRT/250 GT limited to domestic voyages upon near-coastal waters.

- (a) Within the limitations specified, this endorsement is valid for service on the vessels identified in § 15.103(e) and (f) of this subchapter. The minimum service required to qualify for this endorsement is 2 years of service in the deck department of a self-propelled vessel on ocean or near-coastal waters. Service on Great Lakes and inland waters may substitute for up to 1 year of the required service.
- (b) To obtain an endorsement for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary-sail vessels. This required 12 months of service may have been obtained before issuance of the license or MMC.
- (c) Holders of this endorsement are considered to be in substantial compliance with the STCW Convention while operating within the limitations of this endorsement.
  - 59. Amend § 11.429 as follows:
- a. Revise the section heading and paragraph (a) introductory text, and add paragraphs (d) and (e) to read as set forth below:
- b. In paragraph (b), remove the word "OCMI" and add, in its place, the words "Coast Guard"; and
- c. In paragraph (c), remove the words "In order to" and add, in their place, the word "To".

# § 11.429 Requirements for limited master of self-propelled, seagoing vessels of less than 100 GRT/250 GT limited to domestic voyages upon near-coastal waters.

(a) A limited master's endorsement for service on near-coastal waters on vessels of less than 100 GRT/250 GT may be issued to an applicant for employment by organizations such as yacht clubs, marinas, formal camps, and educational institutions. An endorsement issued pursuant to this section is limited to the specific activity and locality of the yacht club, marina, or camp. To obtain this restricted endorsement, an applicant must:

\* \* \* \* \*

- (d) Within the limitations specified, this endorsement is valid for service on the vessels identified in 15.103(e) and (f) of this subchapter.
- (e) Holders of this endorsement are considered to be in substantial compliance with the STCW Convention while operating within the limitations of this endorsement.
  - 60. Revise § 11.430 to read as follows:

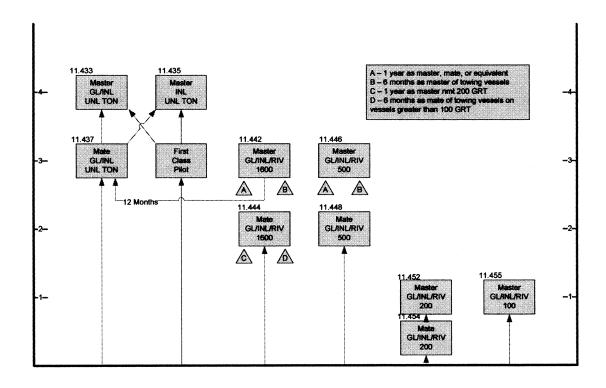
### § 11.430 Endorsements for the Great Lakes and inland waters.

- (a) Subject to §§ 11.464(d) and 11.465(b) of this part, any license or MMC endorsement issued for service on the Great Lakes and inland waters is valid on all of the inland waters of the United States as defined in § 10.107 of this subchapter.
- (b) Any license or MMC endorsement issued for service on inland waters is valid for the inland waters of the United States, excluding the Great Lakes.

- (c) Any license or MMC endorsement issued for service on inland waters or an inland route is valid for service on the sheltered waters of the Inside Passage between Puget Sound and Cape Spencer, AK.
- (d) As these licenses and MMC 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.
- (e) In order to obtain a master or mate endorsement with a tonnage limit above 200 GRT, whether an original, raise-ingrade, or increase in the scope of authority, the applicant must successfully complete the following training and examination requirements:
- (1) Approved basic and advanced fire fighting course;
- (2) Approved radar observer course; and.
- (3) Qualification as an able seaman unlimited or able seaman limited. Able seaman special or able seaman (OSV) satisfy the able seaman requirement for licenses or endorsements permitting service on vessels of 1,600 GRT/3,000 GT or less.
- (f) The following diagram (Figure 11.430(f)) illustrates the deck officer endorsement structure, including crossover points, for Great Lakes and inland waters service. The section numbers on the diagram refer to the specific requirements applicable.

#### Figure 11.430(f) Structure of deck officer endorsements for

### Great Lakes and inland waters service



- 61. Amend § 11.431 as follows:
- a. Revise the section heading to read as set forth below;
- b. In paragraph (a), remove the text "over 200 gross tons" and add, in its place, the text "200 GRT/500 GT or more", and remove the text "1600 gross tons or over" and add, in its place, the text "1,600 GRT/3,000 GT or more"; and
- c. In paragraph (b), remove the text "(b) and (c)" and add, in its place, the text "(c) and (d) of this part".

### §11.431 Tonnage requirements for Great Lakes and inland endorsements for vessels of 1,600 GRT/3,000 GT.

- 62. Amend § 11.433 as follows:
- a. Revise the section heading and paragraph (b) to read as set out below;
- b. In the introductory text, remove the words "steam or motor vessels of any gross tons" and add, in their place, the words "self-propelled vessels of unlimited tonnage"; and
- c. In paragraphs (a) and (c), remove the text "more than 1600 gross tons", wherever it appears, and add, in its place, the text "1,600 GRT/3,000 GT or more", and remove the words "steam or

motor", wherever they appear, and add, in their place, the words "selfpropelled".

### § 11.433 Requirements for master of Great Lakes and inland self-propelled vessels of unlimited tonnage.

(b) Two years of service as master of self-propelled vessels of 1,600 GRT/ 3,000 GT or more on inland waters excluding the Great Lakes; or,

- 63. Amend § 11.435 as follows:
- a. Revise the section heading and the introductory text to read as set forth below; and
- b. In paragraph (a), remove the text "steam or motor vessels of more than 1,600 gross tons" and add, in its place, the text "self-propelled vessels of 1.600" GRT/3.000 GT or more".

### § 11.435 Requirements for master of inland self-propelled vessels of unlimited tonnage.

The minimum service required to qualify an applicant for endorsement as master of self-propelled vessels of

unlimited tonnage on inland waters excluding the Great Lakes is:

\* 64. Amend § 11.437 as follows:

\*

\*

- a. Revise the section heading, paragraph (a) introductory text, and paragraph (a)(3) to read as set forth below: and
- b. In paragraph (a)(1), remove the words "steam or motor" and add, in their place, the words "self-propelled".

### § 11.437 Requirements for mate of Great Lakes and inland self-propelled vessels of unlimited tonnage.

- (a) The minimum service required to qualify an applicant for endorsement as mate of Great Lakes and inland selfpropelled vessels of unlimited tonnage is:
- (3) While holding a license or MMC endorsement as master of Great Lakes and inland self-propelled vessels of not more than 1,600 GRT/3,000 GT, 1 year of service as master on vessels of 200 GRT/500 GT or more. A tonnage limitation may be placed on this license in accordance with § 11.431 of this part.

- 65. Amend § 11.442 as follows:
- a. Revise the section heading to read as set forth below;
- b. In the introductory text, remove the text "steam or motor vessels of not more than 1600 gross tons is" and add, in its place, the text "self-propelled vessels of not more than 1,600 GRT/3,000 GT";
- c. In paragraphs (a) and (b), remove the text "over 100 gross tons", wherever it appears, and add, in its place, the text "100 GRT/250 GT or more".

### § 11.442 Requirements for master of Great Lakes and inland steam or motor vessels of not more than 1,600 GRT/3,000 GT.

\*

- 66. Amend § 11.444 as follows:
- a. Revise the section heading to read as set forth below;
- b. In the introductory text, remove the text "steam or motor vessels of not more than 1600 gross tons" and add, in its place, the text "self-propelled vessels of not more than 1,600 GRT/3,000 GT";
- c. In paragraph (a), remove the words "steam or motor, sail, or auxiliary sail" and add, in their place, the words "selfpropelled", and remove the text "over 100 gross tons" wherever it appears and add, in its place, the text "100 GRT/250 GT or more";
- d. In paragraph (b), remove the text "over 50 gross tons" and add, in its place, the text "50 GRT or more"; after the words "holding a license or MMC endorsement as master", remove the text "steam or motor, sail, or auxiliary sail vessels of not more than 200 gross tons or operator of uninspected passenger vessels" and add, in its place, the text "of self-propelled vessels of not more than 200 GRT/500 GT or OUPV";
- e. In paragraph (c), remove the text "over 100 gross tons" and add, in its place, the text "100 GRT/250 GT or

### §11.444 Requirements for mate of Great Lakes and inland steam or motor vessels of not more than 1,600 GRT/3,000 GT.

\*

67. Amend § 11.446 as follows

- a. Revise the section heading to read as set forth below:
- b. In the introductory text, remove the words "steam or motor" and add, in their place, the words "self-propelled" and remove the words "gross tons" and add, in their place, the text "GRT/1,200 GT"; and
- c. In paragraph (a), remove the text "over 50 gross tons" and add, in its place, the text "50 GRT or more", and remove the words "operator of uninspected passenger vessels" and add, in their place, the word "OUPV".

### § 11.446 Requirements for master of Great Lakes and inland steam or motor vessels of not more than 500 GRT/1,200 GT.

\* \* \*

68. Revise § 11.448 to read as follows:

### §11.448 Requirements for mate of Great Lakes and inland self-propelled vessels of not more than 500 GRT/1,200 GT.

The minimum service required to qualify an applicant for an endorsement as mate of Great Lakes and inland selfpropelled vessels of not more than 500 GRT/1,200 GT is two years total service in the deck department of self-propelled vessels. One year of the required service must have been on vessels of 50 GRT or more. Three months of the required service must have been as able seaman, boatswain, quartermaster, or equivalent position on vessels of 50 GRT or more while holding an endorsement as able seaman.

- 69. Amend § 11.450 as follows:
- a. Revise the section heading and paragraph (a) to read as set forth below;
- b. In paragraph (b), remove the words "gross tons" and add, in their place, the text "GRT/500 GT";
- c. In paragraph (c), remove the word "OCMI" and add, in its place, the words "Coast Guard"; and
- d. In paragraph (d), remove the words "gross tons" wherever they appear and add, in their place, the word "GRT".

### §11.450 Tonnage limitations and qualifying requirements for endorsements as master or mate of Great Lakes and inland vessels of not more than 200 GRT/ 500 GT.

(a) Except as noted in paragraph (d) of this section, all endorsements issued for master or mate of vessels of not more than 200 GRT/500 GT are issued in 50 GRT increments based on the applicant's qualifying experience in accordance with the provisions of § 11.422 of this part.

70. Amend § 11.452 by revising the section heading and paragraph (a) to read as set forth below and, in paragraph (b), remove the words "The required six months of" and add, in their place, the words "This required".

### § 11.452 Requirements for master of Great Lakes and inland self-propelled vessels of not more than 200 GRT/500 GT.

(a) The minimum service required to qualify an applicant for a license as master of Great Lakes and inland selfpropelled vessels of not more than 200 GRT/500 GT is 1 year of service on vessels. Six months of the required service must have been as master, mate, or equivalent supervisory position while holding a license as master, mate, master or mate (pilot) of towing vessels,

or OUPV. To obtain authority to serve on the Great Lakes, 3 months of the required service must have been on Great Lakes waters; otherwise the license will be limited to the inland waters of the United States, excluding the Great Lakes.

\*

\*

- 71. Amend § 11.454 as follows:
- a. Revise the section heading and paragraph (a) to read as set forth below;
- b. In paragraph (d), remove the words "(excluding the Great Lakes)" and add, in their place, the words ", excluding the Great Lakes"; and
- c. In paragraph (e), remove the text "of over 100 gross tons" and add, in its place, the text "for more than 100 GRT/ 250 GT".

### §11.454 Requirements for mate of Great Lakes and inland self-propelled vessels of not more than 200 GRT/500 GT.

(a) The minimum service required to qualify an applicant for an endorsement as mate of Great Lakes and inland selfpropelled vessels of not more than 200 GRT/500 GT is 6 months of service in the deck department of self-propelled vessels. To obtain authority to serve on the Great Lakes, 3 months of the required service must have been on Great Lakes waters; otherwise the endorsement will be limited to the inland waters of the United States, excluding the Great Lakes.

72. Amend § 11.455 as follows

a. Revise the section heading to read as set forth below; and

b. In paragraph (a), remove the words ''steam or motor'' and add, in their place, the words "self-propelled"; remove the words "gross tons" and add, in their place, the text "GRT/250 GT", and remove the words "(excluding the Great Lakes)" and add, in their place, the words ", excluding the Great Lakes".

### § 11.455 Requirements for master of Great Lakes and inland self-propelled vessels of not more than 100 GRT/250 GT.

73. Amend § 11.456 as follows:

- a. Revise the section heading to read as set forth below;
- b. In the introductory text, remove the words "Limited masters' endorsements' and add, in their place, the words "An endorsement as limited master", and remove the words "gross tons" and add, in their place, the text "GRT/250 GT";
- c. In paragraph (d), remove the word "OCMI" and add, in its place, the words "Coast Guard".

# § 11.456 Requirements for limited master of Great Lakes and inland self-propelled vessels of not more than 100 GRT/250 GT.

\* \* \* \* \*

- 74. Amend § 11.457 as follows:
- a. Revise the section heading to read as set forth below; and
- b. In paragraph (a), remove the words "steam or motor" and add, in their place, the words "self-propelled", remove the words "gross tons", wherever they appear, and add, in their place, the text "GRT/250 GT", and, after the section number "§ 11.452(a)", add the words "of this part".

# § 11.457 Requirements for master of inland self-propelled vessels of not more than 100 GRT/250 GT.

\* \* \* \* \*

- 75. Amend § 11.459 as follows:
- a. Revise the section heading and paragraph (b) to read as set forth below; and
- b. In paragraph (a), remove the words "steam or motor" wherever they appear and add, in their place, the words "self-propelled", and remove the words "any gross tons" wherever they appear and add, in their place, the words "unlimited tonnage".

### § 11.459 Requirements for master or mate of rivers.

\* \* \* \* \*

(b) An applicant for an endorsement as master or mate of rivers for self-propelled vessels, with a limitation of 25 to 1,600 GRT/3,000 GT, must meet the same service requirements as those required by this subpart for the corresponding tonnage Great Lakes and inland steam or motor endorsement. However, service on the Great Lakes is not required.

### §11.462 [Amended]

- 76. Amend § 11.462 as follows:
- a. In paragraph (a)(3), remove the words "gross tons" and add, in their place, the text "GRT/500 GT";
- b. In paragraph (b), after the section number "§ 11.401", remove the text "(g)" and add, in its place, the text "(h)";
- c. In paragraph (c)(1), after the number "500", remove the words "gross tons" and add, in their place, the text "GRT/1,200 GT", and remove the text "of more than 50 gross tons" and add, in their place, the words "of 50 GRT or more";
- d. In paragraph (c)(2), after the number "1,600", remove the words

- "gross tons" and add, in their place, the text "GRT/3,000 GT", and remove the text "more than 100 gross tons" and add, in its place, the text "100 GRT/250 GT or more";
- e. In paragraph (c)(3), after the number "1,600", wherever it appears, remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT", after the number "5,000", remove the words "gross tons" and add, in their place, the text "GRT/GT", after the number "1,000", remove the words "gross tons" and add, in their place, the word "GRT", and remove the text "more than 100 gross tons" and add, in its place, the text "of 100 GRT/250 GT or over";
- f. In paragraph (c)(4), after the number "5,000", remove the words "gross tons" and add, in their place, the text "GRT/GT", and after the number "1,000", remove the words "gross tons" and add, in their place, the word "GRT";
- g. In paragraph (c)(4)(i), after the number "1000", remove the words "gross tons", and add, in their place, the word "GRT";
- h. In paragraph (c)(4)(iii), after the number "1600", remove the words "gross tons"" and add, in their place, the text "GRT/3,000 GT", and, after the number "5000", remove the words "gross tons" and add, in their place, the text "GRT/GT";
- i. In paragraph (c)(4)(iv), after the number "1600", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT";
- j. In paragraph (c)(4)(v), after the number "5,000", remove the words "gross tons" and add, in their place, the words "GRT/GT";
- k. In paragraph (d)(1), after the number "500", remove the words "gross tons" and add, in their place, the text "GRT/1,200 GT", and remove the text "more than 50 gross tons" and add, in its place, the text "50 GRT or more";
- l. In paragraph (d)(2), after the number "1,600", remove the words "gross tons" and add, in their place, the words "GRT/3,000 GT", and remove the text "more than 100 gross tons" and add, in its place, the text "100 GRT/250 GT or more";
- m. In paragraph (d)(3), after the number "1,600", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT", after the number "5,000", remove the words "gross tons" and add, in their place, the text "GRT/GT", and after the number "1,000",

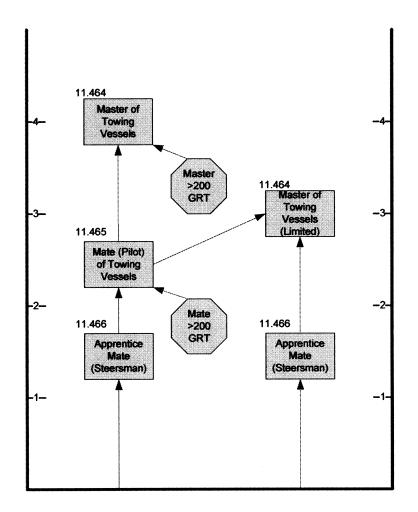
- remove the words "gross tons" and add, in their place, the word "GRT";
- n. In paragraph (d)(4), after the number "5,000", remove the words "gross tons" and add, in their place, the text "GRT/GT", and, after the number "1000", remove the words "gross tons" and add, in their place, the word "GRT";
- o. In paragraph (d)(4)(i), after the number "1000", remove the words "gross tons" and add, in their place, the word "GRT";
- p. In paragraph (d)(4)(iii), remove the text "over 1600 gross tons" and add, in its place, the text "1,600 GRT/3,000 GT", and, after the number "5000", remove the words "gross tons" and add, in their place, the text "GRT/GT";
- q. In paragraph (d)(4)(iv), after the number "1,600", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT", and after the number "5,000", remove the words "gross tons" and add, in their place, the text "GRT/GT"; and
- r. In paragraph (d)(4)(v), remove the words "gross tons" and add, in their place, the words "GRT/GT".
  - 77. Amend § 11.463 as follows:
- a. Add new paragraphs (d) and (e) to read as set out below; and
- b. In paragraph (c), remove the words "gross tons" and add, in their place, the text "GRT/500 GT".

# § 11.463 General requirements for endorsements as master, mate (pilot), and apprentice mate (steersman) of towing vessels.

- (d) Mariners who serve on the following seagoing vessels must comply with the requirements of §§ 11.412, 11.413, and 11.414 of this part for the appropriate STCW endorsement:
- (1) A towing vessel on an oceans voyage operating beyond near-coastal waters:
- (2) A towing vessel on an international voyage; and
- (3) A towing vessel of 200 GRT/500 GT or more on a domestic, near-coastal voyage.
- (e) The following diagram (Figure 11.463(e)) illustrates the towing officer endorsement structure, including crossover points. The section numbers on the diagram refer to the specific requirements applicable.

Figure 11.463(e) Structure of towing officer endorsements.

#### Figure 11.463(e) Structure of towing officer endorsements.



78. Amend § 11.464 as follows:

a. Revise table 11.464(a) to read as set forth below; and

b. In paragraph (f)(2)(i), remove the section number "§ 11.304(h)" and add, in its place, the text "§ 10.304(f) of this part".

§11.464 Requirements for endorsements as master of towing vessels.

(a) \* \* \*

TABLE 11.464(A)—REQUIREMENTS FOR ENDORSEMENT AS MASTER OF TOWING VESSELS 1

Route endorsed	Total service <sup>2</sup>	TOS <sup>3</sup> on T/V as mate (pilot)	TOS <sup>3</sup> on T/V as mate (pilot) not as harbor assist	TOS <sup>3</sup> on particular route	Subordinate route authorized
1	2	3	4	5	6
(1) OCEANS (O)	48 48		12 of 18 12 of 18		

<sup>&</sup>lt;sup>1</sup>The holder of an endorsement as master of towing vessels may have an endorsement—as mate (pilot) of towing vessels for a route superior to the current route on which the holder has no operating experience—placed on the MMC after passing an examination for that additional route. After the holder completes 90 days of experience and completes a Towing Officer's Assessment Record (TOAR) on that route, the Coast Guard will add it to the holder's endorsement as master of towing vessels and remove the endorsement for mate (pilot) of towing vessels.

<sup>&</sup>lt;sup>2</sup> Service is in months. <sup>3</sup>TOS is time of service.

§11.465 [Amended]

79. Amend § 11.465 as follows: a. Redesignate Table 11.465-1 as Table 11.465(a);

b. In paragraph (d) introductory text, after the text "200 GRT", add the text "/500 GT", and, in paragraph (d)(2), after the section number "11.304" remove the text "(h)" and add, in its place, the text "(f) of this part"; and

c. In paragraph (f), remove the text and add, in its place, the text "Table 11.910–2 in  $\S$  11.910 of this part".

80. Amend § 11.467 as follows:

- a. Revise the section heading and paragraph (b) to read as set out below;
- b. In paragraph (a), remove the words "gross tons" and add, in their place, the text "GRT/250 GT";
- c. Remove paragraph (f) and redesignate paragraphs (g) and (g)(1) through (4) as paragraphs (f) and (f)(1) through (4), respectively;
- d. In newly redesignated paragraph (f)(4), remove the word "OCMI" and add, in its place, the words "Coast Guard"; and
- e. Add new paragraph (g) to read as set out below:

### §11.467 Requirements for an endorsement as operator of uninspected passenger vessels of less than 100 GRT/250 GT.

\* \* \* \*

- (b) An endorsement as OUPV for nearcoastal waters limits the holder to service on domestic, near-coastal waters not more than 100 miles offshore, the Great Lakes, and all inland waters. Endorsements issued for inland waters include all inland waters except the Great Lakes. Endorsements may be issued for a particular local area under paragraph (f) of this section.
- (g) An applicant for an OUPV endorsement who intends to serve only in the vicinity of Puerto Rico, and who speaks Spanish but not English, may be issued an endorsement restricted to the navigable waters of the United States in the vicinity of Puerto Rico, as defined in 33 CFR 2.36.
- 81. Amend § 11.468 as follows:
- a. Revise the section heading to read as set forth below: and
- b. Remove the words "any gross tons" and add, in their place, the words "unlimited tonnage".

### § 11.468 Officer endorsements for mobile offshore drilling units (MODUs).

### §11.470 [Amended]

82. Amend 11.470 as follows:

- a. In paragraphs (b)(1)(ii), (d)(1)(ii), and (h)(1)(ii), remove the words "Commanding Officer,", wherever they appear, and add, in their place, the word "The"; and
- b. In paragraph (b)(2)(i), remove the words "for a license or MMC endorsement as OIM unrestricted" and add, in their place, the words "for OIM Unrestricted".

### §11.472 [Amended]

83. In § 11.472, in paragraph (a)(1)(ii), remove the words "Commanding Officer," and add, in their place, the word "The", and, in paragraph (a)(2)(i), remove the words "a license or MMC endorsement as".

### §11.474 [Amended]

84. In § 11.474, in paragraph (a)(1)(ii), remove the words "Commanding Officer," and add, in their place, the word "The", and, in paragraph (a)(2)(i), remove the words "a license or MMC endorsement as".

- 85. Amend § 11.480 as follows:
- a. In paragraph (a), remove the parentheses; and
- b. In paragraphs (d) and (e), remove the word "OCMI" and add, in its place, the words "Coast Guard".
- 86. Revise § 11.482(a) to read as follows:

### §11.482 Assistance towing.

(a) This section contains the requirements to qualify for an endorsement authorizing a mariner to engage in assistance towing. Except as noted in this paragraph, 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/500 GT do not need the assistance towing endorsement. The endorsement applies to all MMCs except master and mate (pilot) of towing vessels and master or mate authorizing service on inspected vessels 200 GRT/ 500 GT or more. Holders of any of these endorsements may engage in assistance towing within the scope of their MMC or license.

87. Revise § 11.493 to read as follows:

### § 11.493 Master (OSV).

To qualify for an endorsement for service as master (OSV), an applicant must complete a Coast Guard-approved program of training, assessment, and sea service that meets the requirements of Regulation II/2 of the STCW Convention (incorporated by reference in § 11.102.)

88. Revise § 11.495 to read as follows:

#### §11.495 Chief Mate (OSV).

To qualify for an endorsement for service as chief mate (OSV), an applicant must complete a Coast Guardapproved program of training, assessment, and sea service that meets the requirements of Regulation II/2 of the STCW Convention (incorporated by reference in § 11.102).

89. Revise § 11.497 to read as follows:

#### § 11.497 Mate (OSV).

To qualify for an endorsement as mate (OSV), an applicant must complete a Coast Guard-approved program of training, assessment, and sea service that meets the requirements of Regulations II/1 of the STCW Convention (incorporated by reference in § 11.102).

90. Revise the heading to subpart E to read as shown below:

### Subpart E—Professional Requirements for Engineer Officer Endorsements

91. Revise § 11.501 to read as follows:

### §11.501 Engineer endorsements.

- (a) MMC endorsements for engineer officers who do not qualify for an STCW endorsement are issued in the grades of:
  - (1) Chief engineer;
  - (2) First assistant engineer;
  - (3) Second assistant engineer;
  - (4) Third assistant engineer:
- (5) Chief engineer (limited);
- (6) Assistant engineer (limited); (7) Designated duty engineer (DDE);
- (8) Chief engineer uninspected fishing industry vessels; and
- (9) Assistant engineer uninspected fishing industry vessels.
- (b) MMC endorsements will be issued for the following STCW qualifications:
- (1) Chief engineer officer (equivalent to an endorsement as chief engineer);
- (2) Second engineer officer (equivalent to an endorsement as first assistant engineer); and
- (3) OICEW (equivalent to an endorsement as third assistant engineer, second assistant engineer, or assistant engineer [limited]).
- (c) Each applicant for any of the following STCW and license endorsements must meet the requirements of the appropriate STCW Convention regulations and standards of competence in part A of the STCW Code (incorporated by reference in § 11.102), as indicated in table 11.501(c):
- (1) Chief engineer officer (chief engineer), unlimited propulsion power;
- (2) Second engineer officer (first assistant engineer), unlimited propulsion power;
- (3) OICEW (second assistant engineer), unlimited propulsion power;

- (4) OICEW (third assistant engineer), unlimited propulsion power;
- (5) Chief engineer officer (chief engineer) of vessels of less than 10,000 HP/7,500 kW on near-coastal voyages;
- (6) Second engineer officer (first assistant engineer), of vessels of less
- than 10,000 HP/7,500 kW on nearcoastal vovages;
- (7) Chief engineer officer (chief engineer), of vessels of less than 4,000 HP/3,000 kW:
- (8) Second engineer officer (first assistant engineer), of vessels of less than 4,000 HP/3,000 kW;
- (9) OICEW (assistant engineer), of vessels of less than 4,000 HP/3,000 kW on near-coastal voyages;
  - (10) Chief engineer (OSV); and
  - (11) Engineer (OSV).

### TABLE 11.501(C)

	1*	2	3	4	5	6	7	8	9	10 ¹	11
STCW REGULATION III/1 2	Х	х	Х	Х	х	х	х	x	Х	X X	Х

- \*Column heading numbers coincide with subparagraphs of paragraph (c) of this section.
- Depending on propulsion power sought on the endorsement. STCW regulations are incorporated by reference in §11.102.

- (d) An engineer officer who does not hold an STCW endorsement may serve on seagoing vessels propelled by machinery of less than 1,000 HP/750 kW, the vessels specified in § 15.103(e) and (f) of this subchapter, and vessels operating on the Great Lakes or inland waters of the United States.
- (e) An MMC officer endorsement for service on vessels not subject to the STCW Convention will be endorsed to authorize service on either steam and/or motor propelled vessels.
- (f) An MMC officer endorsement for service on vessels subject to the STCW Convention will be endorsed to authorize service on steam, motor, and/ or gas turbine-propelled vessels.
- (g) A person holding an engineer license or MMC officer endorsement which is restricted to near-coastal waters may serve within the limitations of the license or MMC upon near coastal, Great Lakes, and inland waters.
- (h) An officer endorsement issued in the grade of chief engineer (limited) or assistant engineer (limited) allows the holder to serve within any propulsion power limitations on vessels of unlimited tonnage on inland waters, on vessels of less than 1,600 GRT/3,000 GT in Great Lakes service, and on the vessels specified in §§ 15.103(e) and (f) of this subchapter.
- (i) An officer endorsement issued after EFFECTIVE DATE OF THIS FINAL RULE] in any grade of DDE authorizes the holder to serve within stated propulsion power limitations on vessels of less than 500 GRT/1,200 GT on the Great Lakes or inland waters, and on vessels of less than 500 GRT/1,200 GT as specified in § 15.103(e) and (f) of this subchapter.
- (j) An engineer holding a chief engineer or assistant engineer (limitedocean) license, chief engineer (limitednear-coastal) license, or license as DDE and accompanying STCW endorsement

issued before [EFFECTIVE DATE OF THIS FINAL RULE] may:

- (1) Continue to serve under the authority of those credentials until the first renewal or re-issuance of that license. At that time, the same authority and limitations will be placed on an MMC:
- (2) Increase the scope of those credentials by raising or removing a propulsion power limitation or by adding an additional propulsion mode;
- (3) Upgrade his or her current credentials by meeting the qualification requirements for an endorsement authorized under these regulations. When the mariner qualifies for the upgraded credential, it will be issued in the form of an MMC.
  - 92. Amend § 11.502 as follows:
- a. Revise the section heading to read as follows;
- b. In paragraph (a), after the word "MMC" and before the word "endorsements", add the word "officer": and
- c. Revise paragraph (b) introductory text and paragraph (c), and add new paragraph (d) to read as follows:

### §11.502 General requirements for engineer endorsements.

(b) If an applicant desires to add a propulsion mode (steam, motor, or gas turbine) to his or her endorsement, the following alternative methods, while holding a license or MMC officer endorsement in that grade, are

acceptable:

(c) An applicant for an endorsement of an additional propulsion mode must, in addition to the required sea service, provide evidence of having completed relevant approved or accepted training, and of having been assessed in the

professional skills applicable to the additional propulsion mode.

- (d) Merchant Mariner Credential (MMC) officer and STCW endorsements issued in accordance with §§ 11.508, 11.509, 11.510, 11.511, 11.512, 11.513, and 11.514 of this part for motor or gas turbine propulsion modes will be endorsed as limited to serve on vessels without auxiliary boilers, waste-heat boilers, or steam-operated distilling plants. An applicant may qualify for removal of any of these limitations by completing Coast Guard-approved or accepted training.
  - 93. Amend § 11.503 as follows:
- a. Revise the section heading to read as follows:
- b. Revise paragraph (b) to read as set forth below;
- c. In paragraphs (a) and in paragraphs (c)(1) through (c)(4), remove the word "horsepower", wherever it appears, and add, in its place, the words "propulsion power":
- d. In paragraph (c) introductory text, after the number "4,000" and, before the words "or over", remove the word "horsepower" and add, in its place, the text "HP/3,000 kW", and, after the words "removing of", and before the word "limitations", remove the word "horsepower" and add, in its place, the words "propulsion power"; and
- e. In paragraph (d), remove the word "horsepower" and add, in its place, the words "propulsion power", and remove the words "providing the OCMI who issued the applicant's license or MMC endorsement," and add, in their place, the words "if the Coast Guard".

### §11.503 Propulsion power limitations.

(b) If an applicant desires to add a propulsion mode (steam, motor, or gas turbine) to his or her endorsement, the following alternative methods, while holding a license or MMC office

endorsement in that grade, are acceptable:

(1) Four months of service as an observer in the same capacity as their endorsement on vessels of another propulsion mode;

(2) Four months of service as an engineer officer at a lower level on vessels of another propulsion mode;

(3) Six months of service as an oiler, watertender, or junior engineer on vessels of another propulsion mode; or

(4) Completion of a Coast Guardapproved or accepted training course for this endorsement.

\* \* \* \* \*

### §11.504 [Amended]

94. In § 11.504, remove the words "designated duty engineer" and add, in their place, the word "DDE".

95. Revise § 11.505 to read as follows:

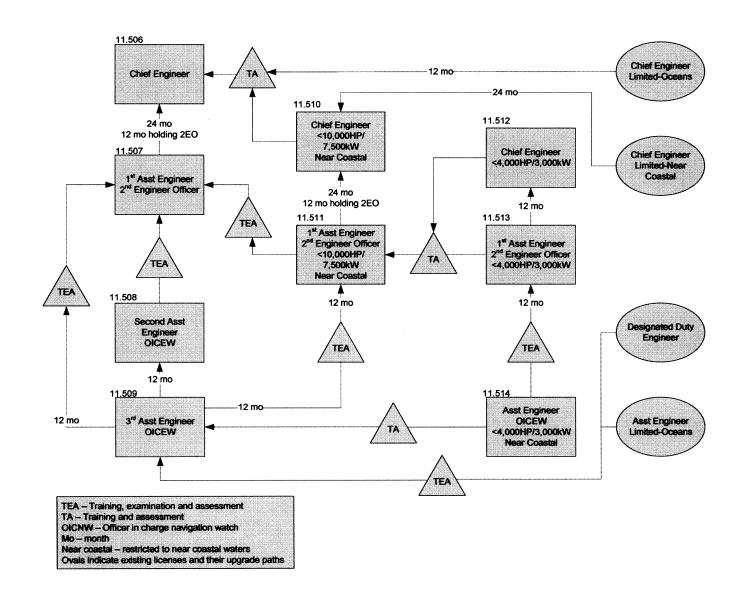
#### §11.505 Engineer officer endorsements.

(a) The following diagram illustrates the engineer officer endorsement structure, including crossover points, for seagoing service. The section numbers on the diagram refer to the specific requirements applicable.

Figure 11.505(a) Structure of engineer officer endorsements for seagoing service.

### Figure 11.505(a) Structure of engineer officer endorsements

### for seagoing service

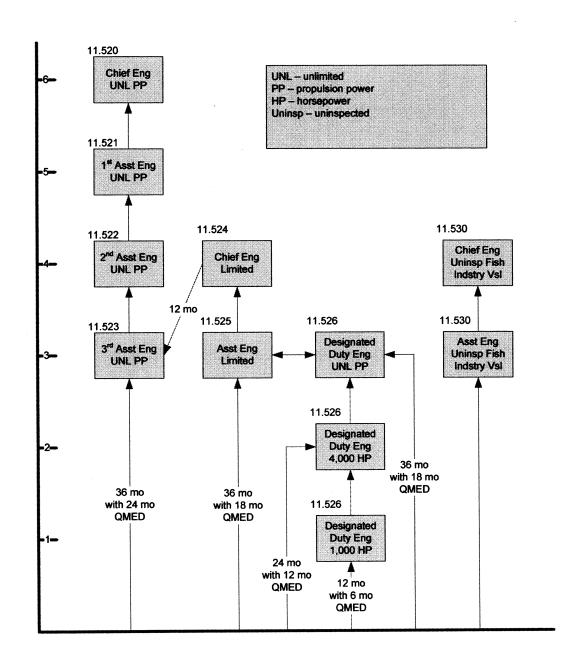


(b) The following diagram illustrates the engineering endorsement structure,

including crossover points, for non-seagoing service.

Figure 11.505(b) Structure of engineer officer endorsements for non-seagoing service.

Figure 11.505(b) Structure of engineer officer endorsements for non-seagoing service



96. Add § 11.506 to read as follows:

§ 11.506 Requirements to qualify as chief engineer for seagoing service with an STCW endorsement as chief engineer officer.

(a) To qualify as chief engineer for seagoing service with an STCW endorsement as chief engineer officer, an applicant must provide evidence of 36 months of seagoing service of which not less than 12 months must have been served as a watchstanding engineer officer or in another position of responsibility required by a vessel's Certificate of Inspection (COI) while holding a license or endorsement as first assistant engineer.

(b) An applicant who holds a license or endorsement issued under § 11.510 of this part, or a license or endorsement as chief engineer (limited–oceans) and an accompanying STCW endorsement issued before [EFFECTIVE DATE OF THIS FINAL RULE], may qualify for this endorsement upon completion of approved or accepted training.

- (c) Service as a QMED will not be accepted as meeting the sea service requirements for chief engineer.
  - 97. Add § 11.507 to read as follows:

# § 11.507 Requirements to qualify as first assistant engineer for seagoing service with an STCW endorsement as second engineer officer.

- (a) To qualify as first assistant engineer for seagoing service with an STCW endorsement as second engineer officer, an applicant must provide evidence of:
- (1) Qualification and 12 months of sea service as an OICEW;
- (2) Completion of approved or accepted training in the following areas that provide the mariner with the knowledge, understanding, and proficiency required by section A–III/2 of the STCW Code:
- (i) Management skills, including the following subjects:
- (A) Recent innovations in the field of management;
  - (B) Employee performance;
  - (C) Job standards and employee goals;
  - (D) Employee performance problems;
  - (E) Employee counseling;
  - (F) Fears;
  - (G) Motivating people;
  - (H) Non-Verbal signals;
  - (I) Basic human needs;
  - (J) Worker behavior patterns;
  - (K) Effective shipboard meetings;
  - (L) Team building;
- (M) Principles in the effective use of human resources;
  - (N) Budget;
  - (O) Personnel evaluations; and
  - (P) Mentoring/career guidance;
- (ii) Application of principles in crisis management, including the following subjects:
- (A) Setting up and directing firefighting squads in machinery spaces;
- (B) Setting up and directing dewatering during flooding of the machinery spaces:
- (C) Setting up and directing damage control (DC) operations (leading DC teams):
- (D) Principles of engine room resource management (ERM), including:
- (1) Engineering operations and procedures;
  - (2) Team building;
- (3) Situational awareness and error trapping;
  - (4) Communication;
  - (5) Stress;
  - (6) Fatigue; and
- (7) Leadership and group decisionmaking;
- (iii) Organizing and preparing for shipyard repairs and inspection, including the following subjects:
  - (A) Repairs specifications;

- (B) Progress plan;
- (C) Onboard preparation prior to arrival at shipyard;
  - (D) Work planning and scheduling;
  - (E) Pareto's Rule; and
- (F) Elements of writing shipyard specifications;
- (iv) Preparing for regulatory and class society inspections and surveys, including the following subjects:
  - (A) Class society inspections;
- (B) United States Coast Guard inspections;
  - (C) Port State control;
  - (D) Record-keeping;
- (E) Relationships with regulatory bodies; and
  - (F) Alternative compliance;
- (v) Vessel lay-up and break-out, including the following subjects:
  - (A) Lay-up;
- (B) Spare parts and consumable inventory; and
- (C) Breaking out a vessel and getting underway;
- (iv) Assessing skills through successful performance-based demonstration, including the following:
- (A) Reasons for validating and assessing skill performance;
- (B) Engineers who may validate performance;
- (C) Extent of responsibility when conducting assessments, including:
- (1) Signing off on assessments only when personally witnessed; and
- (2) Validating performance only to the extent that applicant skill was proficient during assessment;
  - (D) Use of sample control sheets;
- (E) Assessor may modify control sheets to conform to specific propulsion plant operating parameters;
- (F) Assessor to understand that absence of equipment and/or systems will restrict applicant to lesser certification; and
- (G) Details of control sheets are to provide applicant specifics of processes performed unsatisfactorily:
- (vii) Implementing and updating a plan for engine room operation and familiarization for new employees;
- (viii) Quantitative approaches to management;
  - (ix) Quality management planning;
  - (x) Arbitration process;
- (xi) Development and maintenance of internal documents, including:
  - (A) Standing orders;
  - (B) Safety rules;
  - (C) Bunkering procedures;
  - (D) Engine room library; and
- (E) Documentation of engine room lifting gear maintenance;
- (xii) International laws and conventions, including the following subjects:
- (Å) The International Convention for the Safety of Life at Sea (1974) (SOLAS);

- (B) The International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78):
  - (1) Oil record book:
  - (2) Oily water separator maintenance;
- (3) Marine sanitation device maintenance; and
  - (4) Incinerator maintenance;
- (C) The STCW Convention and the STCW Code;
- (D) Implementing a safety management system; and
- (E) Implementing an engine management system (including a preventive maintenance system (PMS));
- (xiii) Stability and damage control, including the following subjects:
  - (A) Stability theory;
- (B) Emergency measures to de-water flooded spaces; and
- (C) Emergency repairs to damaged hull, piping and equipment;
- (xiv) Technical analysis—operational condition of systems, including the following subjects:
  - (A) Engine analysis—performance;
- (B) Fuel oil testing/treatment/consumption;
- (C) Lube oil testing/treatment/consumption; and
- (D) Boiler operation and water treatment;
- (xv) Management/oversight of preventive and predictive maintenance, including the following subjects:
- (A) Use of preventive maintenance management systems (computerized);
- (B) Use of spare parts and stores inventory/ordering systems (computerized);
  - (C) Vibration analysis; and(D) Electric thermography;
- (xvi) Principles of troubleshooting and their application to the following subjects:
- (Å) Electrical power and control systems;
- (B) Electronic monitoring and controls;
- (C) Hydraulic power and control systems; and
- (D) Pneumatic power and control systems;
- (xvii) Review of major engine room casualties, causes, and remedies to avoid future mishaps, including the following subjects:
  - (A) Reports for review;
  - (B) Lessons learned; and
- (C) Plans of action to prevent incidents;
- (xviii) Unless the applicant has previously qualified for service on vessels equipped with any of these systems, the theory, construction, operation, maintenance, troubleshooting, and repair of:
  - (A) Auxiliary boilers;

(B) Waste heat boilers; and

(C) Steam-operating distilling plants.

(b) The applicant must have evidence of assessment of his or her professional skills as required by § 11.501 (c) of this part; or

(c) An applicant who holds a license or endorsement issued under § 11.511 of this part may qualify for this endorsement upon completion of approved or accepted training.

(d) Service as a QMED will not be accepted as meeting the sea service requirements for first assistant engineer/

second engineer officer.

98. Add § 11.508 to read as follows:

# § 11.508 Requirements to qualify as second assistant engineer for seagoing service with an STCW endorsement as OICEW.

To qualify as second assistant engineer for seagoing service with an STCW endorsement as OICEW, an applicant must provide evidence of:

- (a) One year of service as an assistant engineer, while holding a license with an STCW endorsement, or an MMC endorsed as third assistant engineer and OICEW; or
- (b) One year of service while holding a license and STCW endorsement, or an MMC endorsed as third assistant engineer and OICEW, which includes a minimum of 6 months of service as third assistant engineer or OICEW; and the remaining service may be served as watchstanding QMED, calculated on a two-for-one basis.
  - 99. Add § 11.509 to read as follows:

# §11.509 Requirements to qualify as third assistant engineer for seagoing service and an STCW endorsement as OICEW.

To qualify as third assistant engineer for seagoing service and an STCW endorsement as OICEW, an applicant must provide evidence of:

(a) Six months of sea service;

(b) Completion of approved or accepted training of at least 30 months in the following areas that provide the mariner with the knowledge, understanding, and proficiency required by Section A/III–1 of the STCW Code:

(1) General—Basic theory, including

the following subjects:

(i) Terms used in machinery spaces;

(ii) Shipboard organization;

(iii) Safe working practices as related to engine room operations;

(iv) Appropriate use of internal communications systems;

(v) Prints and tables;

(vi) Ship's construction and stability;

(vii) Fuel and lubricating oil principals;

(viii) Pressure and temperature measuring devices;

(ix) Casualty prevention and response;

(x) Familiarization with the STCW Convention and STCW Code, SOLAS, and MARPOL 73/78; and

(xi) Pollution prevention and environmental protection.

(2) General—basic theory, construction, operation, maintenance, troubleshooting and repair, including the following subjects:

(i) Pipes and fittings;

(ii) Valves;

(iii) Pumps;

(iv) Hydraulics;

(v) Heat exchangers;

(vi) Fresh and salt water systems;

(vii) Air compressors and systems;

(viii) Basic control devices;

(ix) Lubricating oil systems;

(x) Refrigeration and air conditioning compressors and systems;

(xi) Desalinization systems other than steam operated distilling plants;

(xii) Sanitary systems, sewage treatment, and oily water separators; and

(xiii) Steering systems;

(3) Steam plants—basic theory, construction, operation, maintenance, troubleshooting and repair; including the following subjects:

(i) Properties of steam;

(ii) Introduction to marine turbines;

(iii) Drive connections, gears, propellers, stern tubes, shafting;

(iv) Basic turbine construction, bearings, couplings and accessories;

(v) Propulsion boilers;

(vi) Fuel oil systems;

(vii) Fuel and lube oil analysis;

(viii) Fuel and lube oil treatment and purification systems; and

(ix) Boiler water testing and treatment;

(4) Motor plants—basic theory, construction, operation, maintenance, troubleshooting and repair, including:

(i) Introduction to diesel engines, engine terms, and engine cycles;

(ii) Basic construction of diesels, including:

(A) Large low speed;

(B) Medium speed;

(C) High speed; and

(D) Opposed piston engines;

(iii) Drive connections, gears, propellers, stern tubes, shafting;

(iv) Governors;

(v) Fuel and lube oil analysis;

(vi) Diesel engine systems;

(vii) Fuel and lubrication filtration and purification systems; and

(viii) Gas turbines;

(5) Maintaining a safe watch, including:

(i) Assuming and handing over a watch; and

(ii) Duties while on watch;

(6) Electrical machinery—basic theory, construction, operation,

maintenance, troubleshooting and repair, including the following subjects:

(i) Electrical safety at sea—lockout/tag

(ii) Batteries:

(iii) Measuring equipment and testing;

(iv) Circuit protection devices;

(v) Transformers;

(vi) Electrical distribution systems;

(vii) Wiring and lighting systems;

(viii) Motors and generators;

(ix) A.C. Generators and operation in parallel;

(x) Starters and motor controllers;

(xi) High voltage systems; and

(xii) Electrical propulsion systems;

(7) Fabrication and repair, including the following subjects:

(i) Machine shop operations;

(ii) Hand tools and measuring instruments;

(iii) Power tools; and

(iv) Burning and welding;

(8) Basic electronics—basic theory, construction, operation, maintenance, troubleshooting and repair; including the following subjects:

(i) Introduction to electronics and

components;

(ii) Semiconductor fundamentals;

(iii) Analog/digital principles;

(iv) Special purpose diodes and applications;

(v) Power supplies and filtering;

(vi) Voltage multipliers;

(vii) Amplifiers; and

(viii) Integrated circuits;

(9) Control systems, including:

(i) Pneumatic;

(ii) Hydraulic; and

(iii) Electronic;

(10) Fire fighting: an approved basic and advanced fire-fighting course;

(11) Training to establish proficiency in the use of survival craft and rescue boats other than fast rescue boats;

(12) Medical first aid: an approved medical first aid course; and

(c) Evidence of assessment of professional skills as required by § 11.501(c) of this part; or

(d) An applicant who holds a license and STCW endorsement or an MMC endorsement as assistant engineer (limited-oceans) and as OICEW issued based on regulations that existed before [EFFECTIVE DATE THIS FINAL RULE] may qualify for this endorsement by completing training approved or accepted for that purpose; or

(e) An applicant who holds a license as DDE and an accompanying STCW endorsement issued based on regulations that existed before [EFFECTIVE DATE OF THIS FINAL RULE] may qualify for this endorsement by completing training approved or accepted for that purpose.

100. Revise § 11.510 to read as follows:

- § 11.510 Requirements to qualify as chief engineer with an STCW endorsement limited to service on motor or gas turbine-propelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes.
- (a) An applicant must provide evidence of 36 months of seagoing service of which not less than 12 months must have been served as a watchstanding engineer officer or in another position of responsibility required by a vessel's Certificate of Inspection (COI) while holding endorsements as first assistant engineer and second engineer officer limited to service on motor or gas turbinepropelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes. Applicants for an endorsement as chief engineer with an STCW endorsement limited to service on motor or gas turbine-propelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes will be evaluated in accordance with § 11.503(b) of this part.
- (b) An applicant who holds a license and accompanying STCW endorsement as chief engineer (limited-oceans) issued before [EFFECTIVE DATE OF THIS FINAL RULE] may qualify for these endorsements by providing evidence of 12 months of sea service as an engineer at the operational or management level.
  - 101. Add § 11.511 to read as follows:
- § 11.511 Requirements to qualify as first assistant engineer with an STCW endorsement as second engineer officer limited to service on motor or gas turbine-propelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes.

To qualify as first assistant engineer with an STCW endorsement as second engineer officer limited to service on motor or gas turbine-propelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes, an applicant will be evaluated in accordance with § 11.503(b) of this part and must provide evidence of:

- (a) Qualification as OICEW in accordance with § 11.509 of this part;
- (b) Twelve months of sea service as an OICEW, at least 6 months of which must have been on vessels of more than 4,000 HP/3,000 kW:
- (c) Having completed approved or accepted training in the following areas that provides the mariner with the knowledge, understanding, and proficiency required by Section A–III/2 of the STCW Code:
- (1) Management skills, including the following subjects:
  - (i) Employee performance;
  - (ii) Employee performance problems;
  - (iii) Team building; and
  - (iv) Personnel evaluations;

- (2) Application of principles in crisis management, including the following subjects:
- (i) Setting up and directing fire fighting in machinery spaces;
- (ii) Setting up and directing dewatering during flooding of the machinery spaces;
- (iii) Setting up and directing damage control (DC) operations (leading DC teams);
- (iv) Principles of engine-room resource management (ERM), including:
- (A) Engineering operations and procedures;
- (B) Situational awareness and error trapping;
  - (C) Communication;
  - (D) Stress; and
  - (E) Fatigue;
- (3) Organizing and preparing for shipyard repairs and inspection, including the following subjects:
- (i) Repairs specifications; and(ii) Onboard preparation prior to
- arrival at shipyard;
  (4) Preparing for regulatory and class society inspections and surveys,
- including the following subjects:
  (i) Class society inspections;
- (ii) United States Coast Guard inspections;
  - (iii) Port state control;
  - (iv) Recordkeeping;
- (v) Relationships with regulatory bodies; and
  - (vi) Alternative compliance;
- (5) Assessing skills through successful performance-based demonstration, including:
- (i) Reasons for validating and assessing skill performance;
- (ii) Engineers who may validate performance;
- (iii) Extent of responsibility when conducting assessments, including:
- (A) Signing off on assessments only when personally witnessed; and
- (B) Validating performance only to the extent that applicant skill was proficient during assessment:
  - (iv) Use of sample control sheets;
- (v) Modifying control sheets to conform to specific propulsion-plant operating parameters;
- (vi) Understanding that absence of equipment and or systems will restrict the applicant to lesser certification; and
- (vii) Details of control sheets providing applicants with specifics of process performed unsatisfactorily;
- (6) Implementing and updating a plan for engine-room operation and familiarization for new employees;
- (7) Developing and maintaining internal documents, including:
  - (i) Standing orders;
  - (ii) Safety rules;
  - (iii) Bunkering procedures; and

- (iv) Documentation of engine-room lifting-gear maintenance;
- (8) International laws and conventions, including the following subjects:
- (i) The International Convention for the Safety of Life at Sea (1974) (SOLAS);
- (ii) The International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78):
  - (A) Oil record book;
  - (B) Oily water separator maintenance;
- (C) Marine sanitation device maintenance;
  - (D) Incinerator maintenance.
- (iii) The STCW Convention and STCW Code;
- (iv) Implementing safety management systems; and
- (v) Implementing engine management systems (including a preventive maintenance system (PMS));
- (9) Stability and damage control, including the following subjects:
  - (i) Stability theory;
- (ii) Emergency measures to dewater flooded spaces; and
- (iii) Emergency repairs to damaged hull, piping, and equipment;
- (10) Technical analysis—operational condition of systems, including the following subjects:
  - (i) Engine analysis—performance;
- (ii) Fuel-oil testing/treatment/ consumption; and
- (iii) Lube-oil testing/treatment/consumption;
- (11) Management/oversight of preventive and predictive maintenance, including the following subjects:
  - (i) Vibration analysis; and
  - (ii) Electric thermography;
- (12) Principles of troubleshooting and their application to the following subjects:
- (i) Electrical power and control systems;
- (ii) Electronic monitoring and controls;
- (iii) Hydraulic power and control systems;
- (iv) Pneumatic power and control systems; and
- (v) Desalinization systems other than steam-operated distilling plants;
- (13) Review of major engine-room casualties, causes, and remedies to avoid future mishaps, including the following subjects:
  - (i) Reports for review;
  - (ii) Lessons learned; and
- (iii) Plans of action to prevent incidents; and
- (d) Assessment of his or her professional skills as required by § 11.501(c) of this part. Applicants for this credential will not be assessed on the operation of boilers, waste-heat

boilers, or steam-operated distilling plants; or

(e) An applicant holding a license or endorsement issued under §§ 11.512 or 11.513 of this part may qualify for these endorsements upon completion of training approved or accepted for that

purpose; or

(f) An applicant holding a license or endorsement as chief engineer (limited-near coastal) and an accompanying STCW endorsement issued before [EFFECTIVE DATE OF THIS FINAL RULE] may qualify for this endorsement by providing evidence of 12 months of sea service as an engineer officer at the operational or management level.

102. Revise § 11.512 to read as follows:

### §11.512 Requirements to qualify as chief engineer with an STCW endorsement limited to service on motor or gas turbine propelled vessels of less than 4,000 HP/ 3,000 kW.

To qualify as chief engineer with an STCW endorsement limited to service on motor or gas turbine propelled vessels of less than 4,000 HP/3,000 kW,

an applicant must provide:

(a) Evidence of 24 months of seagoing service as an engineer officer on vessels of 1,000 HP/750 kW or more, of which not less than 12 months must have been served while holding a license or endorsement as first assistant engineer/second engineer officer; or

(b) Qualification as a first assistant engineer on vessels of 4,000 HP/3,000 kW or more, and 12 months of service in a position of responsibility.

103. Add § 11.513 to read as follows:

# §11.513 Requirements to qualify as first assistant engineer with an STCW endorsement as second engineer officer of motor or gas turbine propelled vessels of less than 4,000 HP/3,000 kW.

- (a) To qualify as first assistant engineer with an STCW endorsement as second engineer officer of motor or gas turbine propelled vessels of less than 4,000 HP/3,000 kW, an applicant must provide evidence of:
  - (1) Qualification as OICEW;
- (2) Twelve months of sea service as an OICEW, at least 6 months of which must have been on vessels of 1,000 HP/750 kW or more or equivalent position;
- (3) Completion of approved or accepted training in the following areas that provides the mariner with the knowledge, understanding, and proficiency required by the Section A–III/3 of the STCW Code:
- (i) Management skills, including the following subjects:
  - (A) Employee performance;
  - (B) Employee performance problems;
  - (C) Employee counseling;

- (D) Motivating people;(E) Team building; and
- (F) Mentoring/career guidance;
- (ii) Application of principles in crisis management, including the following subjects:
- (Á) Setting up and directing firefighting in machinery spaces;
- (B) Setting up and directing dewatering during flooding of the machinery spaces;
- (C) Setting up and directing damage control operations (leading DC teams);
- (D) Principles of engine room resource management (ERM):
- (1) Engineering operations and procedures;
- (2) Situational awareness and error trapping;
  - (3) Communication;
  - (4) Stress; and
  - (5) Fatigue:
- (iii) Organizing and preparing for shipyard repairs and inspection, including the following subjects:
  - (A) Repairs specifications; and
- (B) Onboard preparation prior to arrival at shipyard;
- (iv) Preparing for regulatory and class society inspections and surveys, including the following subjects:
- (A) Regulatory and class society inspections;
- (B) United States Coast Guard inspections;
  - (Č) Classification society surveys;
  - (D) Port state control;
  - (E) Recordkeeping;
- (F) Relationships with regulatory bodies; and
  - (G) Alternative compliance;
- (v) Assessing skills through successful performance-based demonstration, including:
- (A) Reasons for validating and assessing skill performance;
- (B) Engineers who may validate performance;
- (C) Extent of responsibility when conducting assessments, including:
- (1) Signing off on assessments only when personally witnessed; and
- (2) Validating performance only to the extent that an applicant's skill was proficient during assessment;
  - (D) Use of sample control sheets;
- (E) Modifying control sheets to conform to specific propulsion-plant operating parameters;
- (F) Understanding that absence of equipment and or systems will restrict the applicant to lesser certification; and
- (G) Details of control sheets providing applicants with specifics of process performed unsatisfactorily;
- (vi) Implementing and updating a plan for engine-room operation and familiarization for new employees;
- (vii) Developing and maintaining internal documents, including:

- (A) Standing orders;
- (B) Safety rules;
- (C) Bunkering procedures;
- (D) Engine-room library; and(E) Documentation of engine-room
- lifting-gear maintenance;
- (viii) International laws and conventions, including the following subjects:
- (A) The International Convention for the Safety of Life at Sea (1974) (SOLAS);
- (B) The International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78):
  - Oil record book;
  - (2) Oily water separator maintenance;
- (3) Marine sanitation device maintenance; and
  - (4) Incinerator maintenance.
- (C) The STCW Convention and STCW Code:
- (D) Implementing a safety management system; and
- (E) Implementing an engine management system;
- (ix) Stability and damage control, including the following subjects:
  - (A) Stability theory;
- (B) Emergency measures to dewater flooded spaces; and
- (C) Emergency repairs to damaged hull, piping, and equipment;
- (x) Technical analysis—operational condition of systems, including the following subjects:
  - (A) Engine analysis—performance;
- (B) Fuel-oil testing/treatment/consumption;
- (C) Lube-oil testing/treatment/consumption; and
- (D) Boiler operation and water treatment (required for steampropulsion mode only);
- (xi) Management/oversight of preventive and predictive maintenance, including the following subjects:
  - (A) Vibration analysis; and(B) Electric thermography;
- (xii) Principles of troubleshooting and their application to the following subjects:
- (Å) Electrical power and control systems;
- (B) Electronic monitoring and controls;
- (C) Hydraulic power and control systems;
- (D) Pneumatic power and control systems; and
- (E) Desalinization systems other than evaporators;
- (xiii) Review of major engine-room casualties, causes, and remedies to avoid future mishaps, including the following subjects:
  - (A) Reports for review;
  - (B) Lessons learned; and
- (C) Plans of action to prevent incidents; and

- (4) Completion of assessment of the applicant's professional skills, as required by § 11.501(c) of this part.
- (b) Service as a QMED will not be accepted as meeting the sea service requirement for first assistant engineer/second engineer officer.
- 104. Revise § 11.514 to read as follows:

# § 11.514 Requirements to qualify as assistant engineer with an STCW endorsement as OICEW limited to service on motor or gas turbine-propelled vessels of not more than 4,000 HP/3,000 kW on near-coastal routes.

To qualify as assistant engineer with an STCW endorsement as OICEW limited to service on motor or gas turbine-propelled vessels of not more than 4,000 HP/3,000 kW on near-coastal routes, an applicant must provide evidence of having completed an approved or accepted training program meeting the requirements of Regulation III/I of the STCW Convention (incorporated by reference in § 11.102).

### §11.516 [Redesignated as §11.523]

- 105. Redesignate § 11.516 as § 11.523.106. In newly redesignated § 11.523—
- a. Revise the section heading and paragraph (a) introductory text, and add paragraph (c) to read as set forth below;
- b. In paragraph (a)(1), remove the words "qualified member of the engine department" and add, in their place, the word "OMED";
- c. In paragraph (a)(6), remove the words "Commanding Officer,";
- d. In paragraph (a)(7), after the word "limited", remove the words "-near coastal"; and
- e. In paragraph (b), after the number "100" and before the words "or over", remove the words "gross tons" and add, in their place, the text "GRT/250 GT".

# § 11.523 Requirements to qualify for an endorsement as third assistant engineer without an STCW endorsement.

(a) To qualify for an endorsement as third assistant engineer without an STCW endorsement, an applicant must submit evidence of:

(c) This endorsement is not valid for service on seagoing vessels except those seagoing vessels to which § 15.103(e) and (f) of this subchapter apply or that

are propelled by machinery of less than

1,000 HP/750 kW.

### §11.518 [Remove]

107. Remove § 11.518 108. Revise § 11.520 to read as follows:

## §11.520 Service requirements for chief engineer of steam and/or motor vessels.

The minimum service required to qualify an applicant for endorsement as chief engineer of steam and/or motor vessels is:

(a) One year of service as first assistant engineer; or,

(b) One year of service while holding a license or MMC endorsement as first assistant engineer. A minimum of six months of this service must have been as first assistant engineer. Service as an assistant engineer is accepted on a two-for-one basis to a maximum of six months (12 months of service as a second or third assistant engineer equals six months of creditable service).

109. Add § 11.521 to read as follows:

# §11.521 Requirements to qualify for an endorsement as first assistant engineer without an STCW endorsement.

(a) The minimum service required to qualify an applicant for endorsement as first assistant engineer of steam and/or motor vessels is one year of service as an assistant engineer, while holding a license or MMC endorsement as second assistant engineer.

(b) This endorsement is not valid for service on seagoing vessels except those seagoing vessels to which paragraphs 15.103(e) and (f) of this subchapter apply or that are propelled by machinery of less than 1000 HP/750 kW

110. Revise § 11.522 to read as follows:

# §11.522 Requirements to qualify for an endorsement as second assistant engineer without an STCW endorsement.

- (a) The minimum service required to qualify an applicant for an endorsement as second assistant engineer without an STCW endorsement is:
- (1) One year of service as an assistant engineer, while holding a license or endorsement as third assistant engineer; or
- (2) One year of service while holding a license or endorsement as third assistant engineer, which includes:

(i) A minimum of 6 months of service as third assistant engineer; and,

- (ii) Additional service as a qualified member of the engine department, calculated on a two-for-one basis (12 months of service as QMED equals 6 months of creditable service).
- (b) This endorsement is not valid for service on seagoing vessels, except those seagoing vessels to which paragraphs 15.103(e) and (f) of this subchapter apply, or that are propelled by machinery of less than 1000 HP/750 kW
- 111. Revise § 11.524 to read as follows:

## § 11.524 Service requirements for chief engineer (limited) without an STCW endorsement.

(a) The minimum service required to qualify an applicant for endorsement as chief engineer (limited) of steam, motor, and/or gas turbine vessels is five years total service in the engineroom of vessels. Two years of this service must have been as an engineer officer. Thirty months of the service must have been as a qualified member of the engine department (QMED) or equivalent supervisory position.

(b) This endorsement is not valid for service on seagoing vessels except those seagoing vessels to which § 15.103(e) and (f) of this subchapter apply or that are propelled by machinery of less than

1,000 HP/750 kW.

112. Add § 11.525 to read as follows:

# § 11.525 Service requirements for assistant engineer (limited) without an STCW endorsement.

(a) The minimum service required to qualify an applicant for endorsement as assistant engineer (limited) of steam, motor, and/or gas turbine vessels is three years of service in the engineroom of vessels. Eighteen months of this service must have been as a QMED or equivalent supervisory position.

(b) This endorsement is not valid for service on seagoing vessels except those seagoing vessels to which § 15.103(e) and (f) of this subchapter apply or that are propelled by machinery of less than

1000 HP/750 kW.

(c) A DDE unlimited is qualified for this endorsement without examination or additional sea service.

113. Add § 11.526 to read as follows:

# §11.526 Service requirements for designated duty engineer of steam or motor vessels.

- (a) Designated duty engineer (DDE) endorsements are issued in three levels of propulsion power limitations, dependent upon the total service of the applicant and completion of appropriate examination. DDE licenses are limited to service on seagoing vessels of not more than 500 GRT/1,200 GT listed in § 15.103(e) and (f) of this subchapter, seagoing vessels of not more than 500 GRT/1,200 GT propelled by machinery of less than 1000 HP/750 kW, and to vessels of not more than 500 GRT/1,200 GT operating on the Great Lakes or other inland waters.
- (b) The service requirements for endorsements as DDE are:
- (1) For DDE vessels of any propulsion power, the applicant must have three years of service in the engineroom. Eighteen months of this service must have been as a QMED or equivalent supervisory position.

- (2) For DDE vessels of not more than 4,000 HP/3,000 kW, the applicant must have two years of service in the engineroom. One year of this service must have been as a QMED or equivalent supervisory position.
- (3) For DDE vessels of not more than 1,000 HP, the applicant must have one year of service in the engineroom. Six months of this service must have been as a QMED or equivalent supervisory position.

### §11.530 [Amended]

114. Amend § 11.530 as follows:

a. In paragraph (a)(3), remove the words "gross tons" and add, in their place, the text "GRT/500 GT"; and

b. In paragraph (b), remove the word "horsepower" and add, in its place, the words "propulsion power".

#### §11.540 [Amended]

115. In § 11.540, remove the words "of any horsepower" and add, in their place, the words "unlimited propulsion power".

### §11.542 [Amended]

116. In § 11.542(c), remove the word "OCMI", wherever it appears, and add, in its place, the words "Coast Guard".

### §11.544 [Amended]

117. In § 11.544(c), remove the word "OCMI", wherever it appears, and add, in its place, the words "Coast Guard".

118. Revise § 11.551 to read as follows:

## § 11.551 Endorsements for service on offshore supply vessels (OSVs).

An endorsement for service on an offshore supply vessel (OSV) may be issued as chief engineer or assistant engineer/OICEW. To qualify for an engineer officer endorsement limited to service on an OSV, an applicant must complete a program of training, assessment, and sea service approved or accepted by the Coast Guard as meeting the requirements of Chapter III of the STCW Convention and STCW Code (incorporated by reference in § 11.102). Service is limited to any restrictions placed on the MMC.

#### §11.553 [Removed]

119. Remove § 11.553.

### § 11.555 [Removed]

120. Remove § 11.555.

## Subpart F—Credentialing of Radio Officers

121. Amend 11.603 as follows: a. Revise the section heading to read as set out below;

- b. Remove paragraph (b) and redesignate paragraph (c) as paragraph (b): and
- c. Add new paragraph (c) to read as follows:

# § 11.603 Requirements for a radio officer endorsement and STCW endorsement for Global Maritime Distress and Safety System (GMDSS) radio operators.

\* \* \* \* \*

- (c) Evidence required by paragraph (b) of this section must include a certificate—
- (1) For operator of radio in the GMDSS issued by the Federal Communications Commission (FCC); and
- (2) Of completion from a Coast Guardapproved course for operator of radio in the GMDSS, or other approved programs of training and assessment covering the same areas of competence.

## Subpart G—Professional Requirements for Pilots

### §11.701 [Amended]

122. In § 11.701 (d), after the number "1,600" and before the words "or less", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT".

123. Amend § 11.703 as follows:

- a. Revise paragraph (c) to read as set forth below; and
- b. In paragraph (d), after the number "1,600" and before the word "meets", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT".

### §11.703 Service requirements.

\* \* \* \* \*

(c) Completion of an approved or accepted pilot training course may be substituted for a portion of the service requirements of this section.

Additionally, round trips made during this training may apply toward the route familiarization requirements of § 11.705 of this part. An individual using substituted service must have at least 9 months of shipboard service.

### §11.707 [Amended]

124. In § 11.707(b), after the number "1,600" and before the word "seeking", remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT".

125. Amend § 11.709 as follows:

- a. Remove paragraph (e) and revise paragraph (c) to read as set forth below;
- b. In paragraph (a), remove the words "gross tons" and add, in their place, the text "GRT/3,000 GT".

## § 11.709 Annual physical examination requirements.

\* \* \* \* \*

(c) Each annual physical examination must meet the requirements specified in § 10.215 of this subchapter and be recorded on forms provided by the Coast Guard. The record of examination must be submitted to the Coast Guard within 1 month of completing the physical examination.

### §11.711 [Amended]

126. Amend § 11.711 as follows: a. Remove the text "1,600 gross tons", wherever it appears, and add, in its place, the text "1,600 GRT/3,000 GT";

b. In paragraph (d), remove the word "OCMI" wherever it appears and add, in its place, the words "Coast Guard".

## Subpart H—Registration of Staff Officers

127. Amend § 11.805 as follows:

a. In paragraph (a), remove the word "OCMI" and add, in its place, the words "Coast Guard";

b. Remove paragraph (b) and redesignate paragraphs (c) through (g) as paragraphs (b) through (f), respectively;

- b. In newly redesignated paragraph (d), remove the word "OCMI" and add, in its place, the words "Coast Guard", and add a new last sentence to read as set forth below;
- c. Revise newly redesignated paragraph (e) to read as set forth below; and
- d. In newly redesignated paragraph (f), remove the text "(c)" and add, in its place, the text "(b)".

### §11.805 General requirements.

(d) \* \* \* Procedures for obtaining a duplicate credential can be found in § 10.229 of this subchapter.

(e) An MMC is valid for a term of 5 years from the date of issuance. Procedures for renewing endorsements are found in § 10.227 of this subchapter.

### §11.807 [Amended]

128. In § 11.807(d), remove the words "Officer in Charge, Marine Inspection" wherever they appear and, add in their place, the words "Coast Guard".

# Subpart I—Subjects of Examinations and Practical Demonstrations of Competence.

129. Revise § 11.901 to read as follows:

### §11.901 General provisions.

(a) Where required by § 11.903 of this subpart, each applicant for an endorsement listed in that section must

pass an examination on the appropriate subjects listed in this subpart.

- (b) If the endorsement is to be limited in a manner that would render any of the subject matter unnecessary or inappropriate, the examination may be amended accordingly by the Coast Guard. Limitations that may affect the examination content are as follows:
- (1) Restricted routes for reduced service licenses or officer endorsements (master or mate of vessels of less than 250 GRT/500 GT, OUPV, or master or mate (pilot) of towing vessels).
- (2) Limitations to a class or certain classes of vessels.
- (c) Except as provided in § 10.227 of this subchapter, an applicant for an STCW endorsement must demonstrate through practical demonstrations of professional skills that he or she has been assessed by an assessor acceptable to the Coast Guard, and that he or she has attained the level of competence required by the STCW Code. The Coast Guard must be satisfied with the authenticity and acceptability of all evidence that the applicant has successfully completed the required demonstrations. The Coast Guard will place a written or electronic record of the skills required, the results of the practical demonstrations, and the identity of the assessor in whose presence the requirements were fulfilled in the file of each applicant.
- (d) Simulators used in assessments of competence required by paragraph (c) of this section must meet the appropriate performance standards set out in Section A–I/12 of the STCW Code (incorporated by reference in § 11.102). However, simulators installed or brought into use before February 1, 2002, need not meet these performance standards if they fulfill the objective of the assessment of competence or demonstration of proficiency.
- 130. Revise § 11.903 to read as follows:

## § 11.903 Officer endorsements requiring examinations.

- (a) The following officer endorsements require examinations for issuance:
- (1) Chief mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage (examined at the management level); <sup>1</sup>
- (2) Third mate of ocean or near-coastal, self-propelled vessels of unlimited tonnage (examined at the operational level); <sup>1</sup>
- (3) Chief mate of ocean or nearcoastal, self-propelled vessels of less than 1,600 GRT/3,000 GT; <sup>1</sup>

- (4) Mate of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT; <sup>1</sup>
- (5) Master of near coastal vessels less than 200 GRT/500 GT;
- (6) Mate of near coastal vessels less than 100 GRT/250 GT;
- (7) Master of Great Lakes and inland vessels of unlimited tonnage;
- (8) Mate of Great Lakes and inland vessels of unlimited tonnage;
- (9) Master of inland vessels of unlimited tonnage;
- (10) Master of river vessels of unlimited tonnage;
- (11) Master of Great Lakes and inland/river vessels not more than 500 GRT or 1,600 GRT/3,000 GT;
- (12) Mate of Great Lakes and inland/river vessels not more than 500 or 1,600 GRT/3,000 GT:
- (13) Mate of Great Lakes and inland/inland/river vessels not more than 200 GRT/500 GT;
- (14) Master of Great Lakes and inland/inland/river vessels not more than 100 GRT/250 GT;
  - (15) First class pilot;
- (16) Apprentice mate (steersman) of towing vessels;
- (17) Apprentice mate (steersman) of towing vessels, limited;
- (18) Operator of uninspected passenger vessels;
- (19) Master of uninspected fishing industry vessels;
- (20) Mate of uninspected fishing industry vessels;
- (21) Čhief engineer for service on Great Lakes and inland vessels (limited or unlimited propulsion power);
- (22) First assistant engineer (limited or unlimited propulsion power);
- (23) Second assistant engineer for service on Great Lakes and inland vessels (limited or unlimited propulsion power);
- (24) Third assistant engineer (limited or unlimited propulsion power);
- (25) Chief engineer (limited) steam/motor vessels;
- (26) Assistant engineer (limited) steam/motor vessels;
- (27) Designated duty engineer steam/motor vessels;
- (28) Chief engineer (uninspected fishing industry vessels or OSVs); and
- (29) Assistant engineer (uninspected fishing industry vessels or OSVs).
- (b) The following officer endorsements do not require examinations:
- (1) Master of seagoing vessels of unlimited tonnage when upgrading from MMC officer endorsements, or a license and STCW endorsement as chief mate of seagoing vessels of unlimited tonnage, provided the applicant has already been examined at the management level;

- (2) Master of seagoing vessels of unlimited tonnage when adding an endorsement as offshore installation manager (OIM);
- (3) Master of ocean or near-coastal, self-propelled vessels of less than 1,600 GRT/3,000 GT, when upgrading from a MMC officer/STCW endorsement or a license and STCW endorsement as chief mate of seagoing vessels of less than 1,600 GRT/3,000 GT, provided that the applicant has already been examined at the management level;
- (4) Master of ocean or near-coastal self-propelled vessels of less than 200 GRT/500 GT, when upgrading from mate of near-coastal self-propelled vessels of less than 200 GRT/500 GT. Master of ocean self-propelled vessels of less than 200 GRT/500 GT would, however, require an examination in celestial navigation;
- (5) Second mate of seagoing vessels when upgrading from third mate of seagoing vessels, provided the applicant has already been examined at the operational level;
- (6) Master of Great Lakes and inland vessels, inland vessels, or river vessels of not more than 200 GRT/500 GT when upgrading from mate of not more than 200 GRT/500 GT on the same route;
- (7) Chief engineer unlimited, provided the applicant has already been examined at the management level;
- (8) Chief engineer limited to service on motor or gas turbine-propelled vessels of less than 10,000 HP/7,500 kW on near-coastal routes, provided the applicant has already been examined at the management level;
- (9) Chief engineer limited to service on motor or gas turbine-propelled vessels of less than 4,000 HP/3,000 kW on near-coastal routes, provided the applicant has already been examined at the management level; and
- (10) Second assistant engineer when upgrading from OICEW, provided the applicant has already been examined at the operational level.
- 131. Revise § 11.910 to read as follows:

### § 11.910 Subjects for deck officer endorsements.

Table 11.910–1 gives the codes used in table 11.910–2 for all deck officers. Table 11.910–2 indicates the examination subjects for each endorsement, by code number. Figures in the body of Table 11.910–2, in place of the letter "x", refer to notes.

### TABLE 11.910–1—CODES FOR DECK OFFICER ENDORSEMENTS

### **Deck Officer Endorsements**

- 1. Master/chief mate, oceans/near coastal, any gross tons.
- 2. Master/chief mate, oceans/near coastal, 1,600 GRT/3,000 GT.
- 3. Second mate/third mate/mate, oceans/ near coastal, any gross tons.
- Master, oceans/near coastal, and mate, near coastal, 200 GRT/500 GT (includes master, near coastal, 100 GRT/250 GT).
- 5. Operator, uninspected passenger vessels, near coastal.
- 6. Operator, uninspected passenger vessels, Great Lakes/inland.
- 7. Apprentice mate, towing vessels, ocean (domestic trade) and near-coastal routes.

## TABLE 11.910–1—CODES FOR DECK OFFICER ENDORSEMENTS—Continued

### **Deck Officer Endorsements**

- 8. Apprentice mate (steersman), towing vessels, Great Lakes and inland routes.
- Steersman, towing vessels, Western Rivers.
- 10. Master, Great Lakes/inland, or master, inland, any gross tons.
- 11. Mate, Great Lakes/inland, any gross tons.
- Master, Great Lakes/inland, 500 GRT/ 1,200 GT and 1,600 GRT/3,000 GT.
- Mate, Great Lakes/inland, 500 GRT/ 1,200 GT and 1,600 GRT/3,000 GT.
- Master or mate, Great Lakes/inland, 200 GRT/500 GT (includes master, Great Lakes/inland, 100 GRT/250 GT).

## TABLE 11.910–1—CODES FOR DECK OFFICER ENDORSEMENTS—Continued

#### **Deck Officer Endorsements**

- 15. Master, rivers, any gross tons.
- 16. Master, rivers, 500 GRT/1,200 GT and 1,600 GRT/3,000 GT.
- 17. Mate, rivers, 500 GRT/1,200 GT and 1.600 GRT/3.000 GT.
- Master or mate, rivers, 200 GRT/500 GT (includes master, rivers, 100 GRT/250 GT).
- Master, uninspected fishing industry vessels, oceans/near coastal.
- 20. Mate, uninspected fishing industry vessels, oceans/near coastal.
- 21. First class pilot.

### TABLE 11 910-2-LICENSE CODES

TA	BLE	11	.910	)–2-	—Lı	CEN	ISE	Cor	DES												
Examination topics	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Navigation and position determination:  Ocean Track Plotting:  Middle Latitude Sailing  Mercator Sailing  Great Circle Sailing  Parallel Sailing  ETA  Piloting:	X 1	1 X 1 1 X	1 1 1 1 X				1														1
Distance Off Bearing Problems Fix or Running Fix Chart Navigation Dead Reckoning Celestial Observations: Special Cases (hi/lo Alt.)	X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	X X X X	2	X X X X	X X X X	X X X X	X X X X	X X X X	2	2	2	2	X X X X	X X X X	X X X X
Latitude by Polaris	1 1 X X	1 1 1 1 1	1 X X 1 1 1	1			1												1 1	1 1 1	
Times of Celestial Phenomena: Time of Meridian Transit Time of Meridian Transit (Sun Only) Second Estimate Meridian Transit/Zone Time Sun Rise/Set/Twilight Speed by RPM Fuel Conservation Electronic Navigation Instruments and Accessories Aids to Navigation	X 1 X X X X	1 1 X X X X X X X	X 1 X X X X X	1 1 X X X X	XXX	XXX	1 X X X	XXX	X	3 3 X X	XXX	XXX	X X X	XXX	X	X	X	X	1 X X X X X X	1 1 X X X X	1 X X X X
Charts, Navigation Publications, and Notices to Mariners		X 1	XX	X	X	X	X	X	X	x	X	X	X	X	X	X	X	X	X	X	X 4
Seamanship:  Marlinspike Seamanship			X X X	X	x	х	×	X	X	x	X X X		X	X	X	X	X	X	X	X	X X
COLREGS Inland Navigational Rules Basic Principles, Watchkeeping Navigation Safety Regs. (33 CFR 164) Radar Equipment:	X	X X X	X X X	X X X	X	5 X	X X X	5 X X	X	5 X X X	5 X X X	5 X X	5 X X	5 X X	X X X	X	X	X	X X 6	X X 6	5 X 6
Radar Observer Certificate  Compass-Magnetic and Gyro: Principles of Gyro Compass		X	X	1			1			X	X	x	X		X				X	X	X
Principles of Magnetic Compass  Magnetic Compass Adjustment  Gyro Compass Error/Correction  Magnetic Compass Error/Correction  Determination of Compass Error:	X	XXX	XXX	7 X	х	x	х	X	X	X X X	X X X	X X X	X X X	7 X	X	X	X	X	X X X	X X X	XXX
Azimuth (Any Body) Azimuth (Sun Only) Amplitude (Any Body) Amplitude (Sun Only)	X	x x	1 X 1 X	1			1			3									1	1	

TABLE 11.910-2—LICENSE CODES—Continued

Examination topics	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Deviation Table Construction	X	1	Х							3											
Terrestrial Observation		X	X	X	Х	X	Х	X		X	X	X	x	Х					X	Х	X
Gyro Controlled Systems		X	X																		
Operation & Care of Main Gyro Systems	X	X	X																		
Meteorology and Oceanography:	١.,		.,	,	.,	.,	.,	.,	.,		.,	.,		.,	.,		١.,			.,	
Characteristics of Weather Systems		X	X	X	X	X	Х	X	Х	X	X	X	X	Х	X	X	X	Х	X	X	
Ocean Current Systems		X	X	X		X	Х												X	X	
Weather Charts and Reports  Tides and Tidal Currents:	^	^	^	^		^	^												^		
Extensive Tidal Effects	X	X																			
Terms and Definitions		X	X	X	Х	X	Х	X		X	Х	Х	x	х					Х	Х	X
Publications		Х	Х	X	Х	X	Х	X		X	Х	Х	x	Х					X	Х	Х
Calculations	X	X	X	X	Х	X	Х	X		X	Х	X	X	Х					X	X	X
Ship Maneuvering and Handling:																					
Approaching Pilot Vessel or Station		X		١.,		١.,		١.,		١.,		١.,			١.,		١.,		١.,		X
Shiphandling in Rivers, Estuaries		X		X	X	X	X	X	X	X	X	X	X     X	X	X	X	X	X	X		X
Maneuvering in Shallow WaterInteraction with Bank/Passing		Х		X	X	X	Α.	X	X	X	\ X	X	^	Х	X	Α.	X	X	X		X
Ship		x		X	X	X	х	x	Х	X	Х	x	x	х	x	х	x	х	x		x
Berthing and Unberthing		x		X	X	X	X	^		x	x	x	^	x	x	X	^	X	x		x
Anchoring and Mooring		X	X	X	X	X	X			X	X	X	x	Х	'			' '	X	Х	X
Dragging, Clearing Fouled Anchors		X	Х	X						X	Х	Х	x	Х					X		
Drydocking, with & without Prior Damage		X																			
Heavy Weather Operations		X		X	X	X								Х				'	X	X	
Maneuvering for Launching of Lifeboats and Liferafts in		.,		١.,			.,					.,							.,	.,	
Heavy Weather		X		X			X			X		X							X	X	
Receiving Survivors From Lfbts/Lfrfts	X	X	Х	X	Х	X	X	X	Х	X	Х	Х	х	Х	X	х	X	Х	x	Х	\ \
General: Turn Circle, Pivot Point, Advance and Transfer Determine Maneuvering Characteristics of Major Vessel			^	^	^	^	^	^	_ ^	^	^	^	^	^	^	_ ^	^	^	^	_ ^	X
Types		x	x																		
Wake Reduction		X	^`	X	Х	X	Х	X	Х	X	Х	Х	x	х	X	Х	X	Х	Х		X
Ice Operations/Ice Navigation		Х					Х	X	Х	X	3	Х	3								
Towing Operations		X	Х	X			Х	X	Х		Х		X	Х	X	Х	X	Х			
Ship Stability, Construction, and Damage Control:																					
Principles of Ship Construction		X	X	X			Х	3	Х	X	3	X	3	Х	X	Х					
Trim and Stability		X	X	X			Х	X	Х	X	3	X	3	Х	X	Х		Х	X	X	
Damage Trim and Stability		X		7																	
Stability, Trim, and Stress Calculation Vessel Structural Members		x	X	7							X	x	3	7							
IMO Ship Stability Recommendations		^	^	'							^	^	ا	<b>'</b>							
Damage Control		X			7								7								
Change in Draft Due to Density					-																
Ship Power Plants:																					
Marine Power Plant Operating Principles		X		7						X		X		7	X	Х					
Ships' Auxiliary Machinery		X							Χ			X			X	Х					
Marine Engineering Terms		X		7					Х	X	X	X		7	X	X	\ ,				
Small Engine Operations and Maintenance				X	X	X								Х			X				
Cargo Handling and Stowage: Cargo Stowage and Security, Including Cargo Gear	X	х	Х	7						X	Х	Х	<sub>v</sub>	7	X	х	x				
Loading and Discharging Operations		x	x	'						x	x	x	X     X	′	x	x	x				
International Regulations for Cargoes, Especially IMDG		X	^`							^	^`	^`	^		^	\ \ \	^`				
Dangerous/Hazardous Cargo Regulations		X	X							X	X	X	x		X	Х	X				
Tank Vessel Safety		X	X							X	X	Х	X		X	Х	X				
Cargo Piping and Pumping Systems		X	X							X	X	X	X		X	Х	X				
Cargo Oil Terms and Definitions		X	X							X	X	X	X		X	X	X				
Ballasting, Tank Clean., & Gas Free Ops		X	X						X	X	X	X		X	X	X					
Load on Top Procedures  Barge Regulations (Operations)		X	Х				х	X	X	X	X	Х		Х	X	X					
Fire Prevention and Firefighting:							^	^	_ ^												
Appliances:																					
Organization of Fire Drills	X	X	Х	X			Х	X	Х	X	X	Х	x	х	X	Х	X	Х	Х	Х	X
Classes and Chemistry of Fire		Х	Х	X	Х	X	Х	X	Х	X	Х	Х	x	Х	Х	Х	X	Х	X	Х	X
Firefighting Systems	X	X	Х	X			Х	X	Х	X	Х	Х	X	Х	X	Х	X	Х	X	Х	X
Firefighting Equip. and Regulations		X	X	7			Х	X	Х	X	X	X	X	7	X	Х	X	7	X	X	X
Firefighting Equip. & Regs. for T-Boats				X		l								Х	l		l	Х			
Basic Firefighting and Prevention	X	X	X	X	X	X	Х	X	Х	X	X	X	X	Х	X	X	X	Х	X	X	X
Emergency Procedures:	X	\ \										\ _									
Ship Beaching Precautions		X								X		X			X	Х					
Refloating a Grounded Ship		x								î		x			x	x			İ		
Collision		x		X	Х		Х	X	Х	x		x		х	x	x		Х			
Temporary Repairs		X	X	X	X	X	X	X	X	X	Х	X	x	X	X	X	X	X	Х	Х	X
Passenger/Crew Safety in Emergency		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	.	-	'
Fire or Explosion	X	X	X	X	Х	X	Х	X	Х	X	Х	X	X	Х	X	Х	X	Х	X	Х	
Abandon Ship Procedures		Х	Х	X	Х	X	Х	X	Х	X	Х	Х	X	Х	X	Х	X	Х	Х	X	
Emergency Steering		X	X	X						X	.,	X	,		X	X			X	X	
Rescuing Surv. From Ship/Airc. in Dist		X	X	X			X	.,	.,	X	X	X	X	X	X	X	,,	,,	.,	.,	
		X	Х	X	X	X	X	X	Х	X	X	X	Х	Х	X	X	X	Х	X	X	
Man Overboard Procedures						1				1	1	1		1	1	1	1	1 '	1	1	1
Man Overboard Procedures  Emergency Towing	X	Х		^			^												ļ		

### TABLE 11.910-2—LICENSE CODES—Continued

Examination topics	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	2
Int'l. Medical Guide for Ships	. X . X . X	X X X X	x	x	x	x	X	x	x	x	x	x	x	x	x	x	X	X	x	x	
Maritime Law:	`   ^	^	^	^	^	^	^	^	^	^	_^	^	_ ^	^	^	^	^	^	^	^	
International Maritime Law:																					
Int'l. Convention on Load Lines		X		_																	
SOLAS MARPOL 73/78		X	X	7																	
International Health Regulations		x	^																		
Other International Instruments for Ship/Pass./Crew Cargo Safety	/	X																			
National Maritime Law:																					
Load Lines		X		X			Х	X		3	3	3	3	7							
Cert. and Documentation of Vessels		X	١.,	X	X	X	Х	X	X	X		X		X	X	X	١.,	X	X		
Rules & Regs. for Inspected Vessels		X	Х	7 X						X	Х	X	Х	7	X	Х	X	7 X			
Rules & Regs. for Inspected T-Boats				x	Х	X	Х	X	Х					X				X	X	Х	
Pollution Prevention Regulations		X	x	x	x	x	x	x	x	x	х	x	Х	x	X	х	X	x	x	X	,
Pilotage		X	^	^	\ \ \	^	\ \ \	^	\ \	^	^`	^`	^	^`	^`	\ \ \	^	\ \ \	^	^	
Licensing & Certification of Seamen	. X	X	Х	X	Х	X	Х	X	Х	X	Х	Х	Х	Х	X	Х	X	Х	X	Х	
Shipment and Discharge, Manning	. X	X		X			Χ			X		X			X	Х					
Title 46, U.S. Code		X								X		X			X	X					
Captain of the Port Regulations, Vessel Traffic Serv																					Ι,
ice Procedures for the Route DesiredShipboard Management and Training:	•																				)
Personnel Management	.   x	X								x		x			x	Х					
Shipboard Organization		X								X		X			X	X					
Required Crew Training		X								X		X			X	X					
Ship Sanitation		X		X	Х	X	Χ	X	Х	X	Х	X	X	Х	X	Х	X	Х	X	Х	
Vessel Alteration/Repair Hot Work		X		X		l		l		X		X			X	Х	l		l		
Safety	. X	X	Х	X	X	X	X	X	Х	X	Х	X	X	Х	X	X	X	Х	X	Х	
Ship's Business:	.   x	X																			
Charters Liens, Salvage		x																			
Insurance		X																			
Entry, Clearance		X																			
Certificates and Documents Required	. X	X	Х	X	Х	X	Х	X	Х	X	Х	X	Х	Х	X	Х	X	Х	X	Х	
Communications:																					
Flashing Light			X			\ ,	.,				.,			.,	\ ,	.,	,				Ι,
Radiotelephone Communications		X	X	X	Х	X	Х	X	X	X	Х	X	Х	Х	X	Х	X	Х	X	Х	>
Signals: Storm/Wreck/Dist./Special		x	x	X	х	Х	Х	X		x	Х	Х	Х	Х	Х	Х	X	Х	X	Х	
International Code of Signals		x	x	_ ^	^	^	^	^		^	_ ^	^	_ ^	^	^	^	^	^	^	^	
Lifesaving:	.   ``	\ \tag{\chi}	^`																		
Survival at Sea		X	Х	X			Х												X	Х	
Lifesaving Appliance Regulations		X	X	7						X	X	X		7	X	X	X	7			
Lifesaving Appliance Regs. for T-Boats		.,	.,	X		.,	.,	,,			.,	.,	.,	X	.,	.,	,,	X	,,	.,	
Lifesaving Appliance Operation		X	Х	7 X	Х	X	Х	X		X	Х	X	X	7 X	X	Х	X	7 X	X	Х	
Lifesaving Appliance Ops. for T-Boats	•			<b>^</b>										X				^			
Search and Rescue Procedures	.   x	x																			
AMVER		x																			
SAIL/AUXILIARY SAIL VESSELS ADDENDUM (8):	'																				
Any other subject considered necessary to establish the																					
applicant's proficiency	. X	X	Х	X	Х	X	Х	X	X	X	Х	X	X	Х	X	Х	X	Х	X	X	>

132. Revise § 11.950 to read as follows:

§11.950 Examination subjects for engineer officer endorsements.

<sup>&</sup>lt;sup>1</sup> For ocean routes only.

<sup>2</sup> River chart navigation only.

<sup>3</sup> Topic covered only on Great Lakes specific module(s) taken for "Great Lakes and Inland" routes.

<sup>4</sup> Including recommended courses, distances, prominent aids to navigation, depths of waters in channels and over hazardous shoals, and other important features of the route, such as character of the bottom. The Coast Guard may accept chart sketching of only a portion or portions of the route for long or extended routes.

<sup>5</sup> Take COLREGS if endorsement is not limited to non-COLREGS waters.

<sup>6</sup> For officer endorsements over 1,600 GRT/3,000 GT.

<sup>7</sup> For officer endorsements over 100 GRT/250 GT.

TABLE 11.950-1—EXAMINATION SUBJECTS FOR ENGINEER OFFICER AND STCW ENDORSEMENTS FOR SERVICE ON SEAGOING VESSELS

	neer	assistan second eer offic	engi-		assista eer OIC		First a ant e neer/s	engi-	ant o	assist- engi- econd	Assis engii OIC	neer
	STM	MTR	GT	STM	MTR	GT	coasta	near al less 0,000 ',500	ficer coasta than HP/3	eer of- near al less 4,000 3,000 W	near of all le than 4 HP/3 kV	ess 4,000 ,000
							MTR	GT	MTR	GT	MTR	GT
General Subjects:												
Prints and Tables	X	X	X	X	X	X	X	Х	X	X	X	X
Pipes, Fittings, Valves	X	X	X	X	X	X	X	Х	X	X	X	X
Hydraulics	X	X	X	X	X	X	X	X	X	X	X	X
Bilge SystemsSanitary/Sewerage Systems	X	X	X	X	X	X	X	X	X	X	X	X
Freshwater Systems	X	x	x	x	x	x	x	x	x	x	x	x
Lubricants	X	X	X	X	X	X	X	X	X	X	X	X
Lubrication Systems	X	X	X	X	X	X	X	Х	Χ	Х	X	X
Automation and Control Systems	X	X	X	X	X	X	X	Х	Χ	Х	X	X
Propellers/Shafting Systems	X	X	X	X	X	X	X	Х	X	X	X	X
Machine Shop	X	X	X	X	X	X	X	X	X	X	X	X
Desalinization Systems Pumps	X	X	X	X	X	X	X	X	X	X	X	X
Compressors	x	x	x	x	x	x	x	x	x	x	x	X
Administration	X	X	X	X	X	X	X	X	X	X	X	X
Roller Bearings	X	Х	X	X	X	X	X	Х	Χ	Х	X	X
Instruments	X	X	X	X	X	X	X	Х	X	Х	X	X
Ship Construction and Repair	X	X	X	X	X	X	X	X	X	X	X	X
Steering Systems	X	X	X	X	X	X	X	X	X	X	X	X
Deck Machinery Ventilation Systems	X	X	X	X	X	X	X	X	X	X	X	X
Thermodynamics	T	Ť	T	Î	T	Ť	^		^	_ ^	^	^
Watch Duties	X	X	X	X	X	X	X	Х	Х	Х	X	X
Refrigeration and Air Conditioning:												
Theory		X	X	X	X	X	X	Х	X	Х	X	X
Air Conditioning Systems	X	X	X	X	X	X	X	Х	X	X	X	X
Refrigeration Systems	X	X	X	X	X	X	X	X	X	X	X	X
Control Systems	X	x	X	X	X	X	X	X	X	X	X	X
Casualty Control	X	X	X	X	X	x	X	x	X	X	X	X
Electricity:												
Theory	X	X	X	X	X	X	X	Х	Х	Х	X	X
General Maintenance	X	X	X	X	X	X	X	Х	X	X	X	X
Generators	X	X	X	X	X	X	X	X	X	X	X	X
Motors Motor Controllers	X	X	X	X	X	X	X	X	X	X	X	X
Propulsion Systems	x	x	x	x	x	X	x	x	x	x	x	X
Distribution Systems	X	X	X	X	X	X	X	X	X	X	X	X
Electronic Systems	X	X	X	X	X	X	X	Х	Х	Х	X	X
Batteries	X	X	X	X	X	X	X	Х	X	X	X	X
Internal Communication Systems		X	X	X	X	X	X	X	X	X	X	X
Safety Casualty Control	X	X	X	X	X	X	X	X	X	X	X	X
Steam Propulsion:	^	^	_ ^	^	^	^	_ ^	^	^	^	^	^
Steam	Х			X								
Main Boilers	X			X								
Feedwater Systems				X								
Condensate Systems				X								
Recovery SystemsFuel				X								
Fuel Systems	x			x̂								
Boiler Water				X								
Control Systems	X			X								
Automation Systems				X								
Burner management systems	X			X								
Main Turbine				X								
Auxiliary Turbine	X			X								
Governor SystemsLubrication Systems				X								
Drive Systems				x								
Safety				X								

TABLE 11.950–1—EXAMINATION SUBJECTS FOR ENGINEER OFFICER AND STCW ENDORSEMENTS FOR SERVICE ON SEAGOING VESSELS—Continued

	neer/	assistan second	engi-		assista eer OIC		ant o	assist- engi- econd	First a ant e neer/s	engi- econd	Assis engii OIC	neer EW
	STM	MTR	GT	STM	MTR	GT	ficer coasta than 1 HP/7	eer of- near al less 10,000 7,500 W	engine ficer coasta than HP/3	near al less 4,000 3,000	near of all left than 4 HP/3	ess 4,000 ,,000 W
							MTR	GT	MTR	GT	MTR	GT
Casualty Control	Х			Х								
Motor Propulsion:												
Main Engines		X			X		X		X		X	_
Auxiliary Engines	X	X	X	X	X	X	X	X	X	X	X	P
Starting Systems	Р	Х	P	P	X	Р	X	Р	X	Р	X	
Lubrication Systems	X	Х	X	X	X	X	X	Х	X	Х	X	X
Fuel	X	X	X	X	X	X	X	Х	X	Х	X	X
Fuel Systems	X	X	X	X	X	X	X	Х	X	Х	X	X
Combustion Systems	Х	X	X	X	X	X	X	X	X	Р	X	
Intake Systems	X	X	X	X	X	X	X	X	X	X	X	
Exhaust Systems	X	X	Х	X	X	X	X	Х	X	X	X	
Cooling Systems	X	X	X	X	X	X	X	Х	X	X	X	
Supercharging Systems	X	Х	X	X	X	X	X	X	Х		X	
Drive Systems	Х	Х	Х	X	X	Х	Х		Χ		X	
Control Systems	Х	Х	X	X	X	Х	Х	Х	Χ	Х	X	
Automation Systems	Х	Х	Х	X	X	Х	Х	Х	Χ	Х	X	
Governors	Х	Х	Х	X	X	Х	Х	Х	Х	Х	X	
Turbines	Х	Х	Х	X	X	Х	Х	Х	Х		X	
Safety	X	X	X	X	X	X	X	X	X	Х	X	X
Casualty Control	X	X	X	X	X	X	X	X	X	X	X	X
Auxiliary Boilers	1	X	X	``	X	X	'	'`	, ,	, ,	'`	'`
Gas Turbines:		``	'`		'`	'`						
Starting Systems			X			X	İ	Х		Х		X
Lubrication Systems			x			X	İ	X		X		X
Fuel			x			x		X		X		X
Fuel Systems			x			X		x		x		X
Combustion Systems			x			X		x		x		X
			X			X		x		X		x
Intake Systems			X			x		X		X		x
Exhaust Systems			x			x		X		X		x
Cooling Systems						1		X				1
Drive Systems			X			X		X		X		X
Control Systems			X			X						X
Automation Systems			X			X		X		X		X
Governors			X			X		X		X		X
Turbines			X			X		X		X		X
Safety			X			X		X		X		X
Casualty Control			X			X		X		Х		X
Safety:								.,	.,			
Fire	X	X	X	X	X	X	X	X	X	X	X	X
Fire Prevention	X	X	X	X	X	X	X	X	X	X	X	X
Firefighting	X	X	X	X	X	X	X	X	X	Х	X	X
Flooding	X	X	X	X	X	X	X	X	X	Х	X	X
Dewatering	Х	Х	X	X	X	X	X	X	X	Х	X	X
Stability and Trim	X	X	X	X	X	X	X	Х	X	Х	X	X
Damage Control	X	Х	X	X	X	X	X	Х	X	Х	X	X
Emergency Equipment and Lifesaving Appliances	Х	Х	X	X	X	X	X	X	X	Х	X	X
General Safety	Х	Х	X	X	X	X	X	Х	X	X	X	X
First Aid	Х	X	X	X	X	X	X	Х	X	Χ	X	X
Dangerous Materials	Х	X	X	X	X	X	X	Х	X	Χ	X	X
Pollution	Х	Х	X	X	X	X	X	Х	Х	Χ	X	X
Inspections and Surveys	Х	Х	X	X	X	Х	X	Х	X	Χ	X	X
U.S. Rules and Regulations	Х	Х	X	X	X	Х	X	Х	X	Χ	X	X
International Rules and Regulations	Х	Х	Х	X	X	Х	Х	Х	Х	Х	X	X

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	Unlimite	Unlimited chief engineer	ief Unlimited	Unlimited 1st asst	Unlimited 2nd	od 2nd	Unlimited 3rd	od 3rd	Chief engineer limited	gineer	A/E Ltd & DDE unlim	i ii ii	Unin	Fish Vsl A/E	DDE Ltd HP	td HP	MODI	МОБО
	STM	MTR	STM	MTR	STM	MTR	MTS	MTR	STM	MTR	STM	MTR	_	MTR	STM	MTR	ch Eng	asst
General Subjects:																		
Prints and Tables	P-T	P-T	P-T	P-T	P-T		P-T	P-T				<u></u>	P-T	P-T	P-T	P-T	P-T	P-T
Pipes, Fittings, Valves	<u>-</u> -	<u>-</u> -	<u>-</u> г	<u>-</u> г	<u>-</u> -	<u>-</u> -	<u>⊢</u> ⊢	H 6				⊢ ⊦ ∩	H- 1	<u>.</u>	۵. ۵	<u> </u>	<u>-</u> -	F C
Hydraulics	- H-	- L-	- H	- L	- L			_				- L-	- I				- L-	<u> </u>
Sanitary/Sewerage Systems	P-T	P-T	P-T	P-T	P-T							P-T	P-T	<u>a</u> 1	۱ ۵	<u>ا</u> ـ	ا د ک	<u>Б</u>
Freshwater Systems	P-4	F-4	- H - H	- L	H- H-	H- H-	P-4	H-H					P-1	ь Г	<u> </u>	<u> </u>	H-H	Р-Т В
Lubrication Systems	- H	<u> </u>	- H	- H	- L						- <del>-</del>	- L-	- L	- L				
Automation Systems	P-T	P-T	P-T	P-T	P-T							<u></u>	<u> </u>	<u> </u>	<u>م</u>	۵	P-T	<u>а</u>
Control Systems	F-1	<u>-</u>	<u>Б</u>	<u>-</u> - г	<u>Г</u>			H 4				⊢ ⊦	<u> </u>	<u> </u>	۵.	۵.	P-T	P-T
Propellers/Shaffing Systems Machine Shon	- L	- L			- L							- F	<u> </u>	<u> </u>	<u>.                                    </u>	<u>.                                    </u>	۵	۵
Distilling Systems	P-T	- L-T	- H-	P-T	- H-				P-T	- L-4	- HH	- L-A						
Pumps	P-T	P-T	P-T	P-T	P–T							T-0	P-T	P-T	۵	۵	P-T	<u>ـ</u>
Compressors	H C	H C	- - - -	- - -	H- H			<u>-</u> -				<u> </u>		<u>-</u>	<u> </u>	<u> </u>	H- 6	<u> </u>
Governors	- L		- H	- L	- L					. 0		. 0	L Q	L 0	L 0	L Q		л <u>Ч</u>
Cooling Systems	- <del>-</del> -	- <del>L</del>	- <del>-</del> -	- <del>-</del> -	- <del>-</del> -							<u></u>	P-T	. 🕰	. 🕰	. 🕰	. <u>a</u>	. <u>a</u>
Bearings	P-T	P-T	P-T	P-T	P-T		P-T	P-T	P-T	P-T	F-T	P-T	P-T	<u>a</u> 1	<u>م</u>	<u>م</u>	<u>م</u>	<u>م</u>
Ship Construction and Beneir	- L	- L	д о - Н	_ ը	- L							- F	- H	L 0	<u> </u>	<u> </u>	L 0	<u>.</u> .
Theory	- -	<u> </u>	- - -	Ī ,_	- -	- - -				 - <sub>-</sub> -	- <u>-</u>	- -		- - -	- ⊢	- ⊢		L  -
Steering Systems	- <del>-</del> T	- <del>-</del> T	- <b>P</b> -T	- <del>-</del> T	- <del>-</del> -	P-T	- <del>-</del> -	_					P-T	P-T	. 🕰	. 🕰	-	
Deck Machinery	P-T	P-T	P-T	P-T	P-T	P-T		P-T		P-T	P-T	<u></u>	а.	а.	Д.	<u>م</u>	а.	<b>L</b>
Ventilation Systems	<u>-</u> -	<u>-</u> +	<u>-</u>	<u>-</u> +	<u>-</u> +	<u>-</u> -						n		<u> </u>	<u> </u>	_	<u> </u>	<u> </u>
I hermodynamics	_ L _ d	- <u>L</u>	_ d	_ d	_ <u>L</u>	_ L	_ I_				L-0	L-I	L-d	۵	۵	۵	L-d	F_T
Refrigeration and Air Conditioning:		- - -	- -		<u> </u>							-		_	_	_	<u>-</u>	_
Theory	_	_	<b>-</b>	<b>-</b>	_	_				_			_	_	_	_	_	_
Air Conditioning Systems	- L	<u>-</u> -	- - - -	- - -	H -	<u>-</u> -						⊢ ⊦ 0 0	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Control Systems	- L	- 1	- L	- L	- L		- I	- 1										
Safety	P-T	P-T	P-T	P-T	F-T	F-T					F-T	T-0	P-T			_		_
Casualty Control	P-T	P-T	F-T	P-T	F-	F-T						<u> </u>	P-T	<u> </u>	<u>.                                    </u>	<u> </u>	<u> </u>	
Electricity. Theory	<b>-</b>	_	-	-	-	-	_						_	_	-	_	_	_
General Maintenance	P-T	P-T	P-T	P-T	P-T	P-T		_				T-0	P-T	P-T		_	P-T	P-T
Generators	P-1	<u>-</u> -	<u>Б</u> -	<u>Б</u> -	H 6	F-1		H- H	F-4		H-4	⊢ ⊢ •	F-T	F-1	۵.	۵.	<u></u>	P-T
Motor Controllers	- L	- I	- L	- L	- I	- 1							- I	- 1			- 1	- I
Propulsion Systems	P-T	P-T	P-T	P-T	P-T	P-T							P-T	P-T		_		
Distribution Systems	- L	- L	- L	- L	- L	- L		- L			- d	<u> </u>	- - -	- -	<u>.</u> 0	۵ ۵	ا د د	L L
Batteries	- H-	- <del>-</del> -	- H	- H-	- H-	- H					- H	T-0	P-T	P-T				
Communications	P-T	P-T	P-T	F-T	F-1	F-T							L I	P-T	<u> </u>	۱ ۵	I L	L L
Safety	- H	 			 	- H	- H	- H	 		- H	- H	 	 	<u>.                                    </u>	<u>.                                    </u>	- H	 
Steam Generators:					-										•		-	
Steam	P-T	۵	P-T	۵	F-1	<u> </u>	P-T	۵.	P-T		P-1		<u>م</u>	۵.	F		P-T	
Auxiliary Boilers	Ī	P-T	Ī	P-T	Ī	F-T				- 		F-T	_	<u> </u>	Ī	<u> </u>	P-T	P-T
Feedwater Systems	P-T	P-T	P-T	F-T	P-T	P-T		P-T	P-T					_	P-T		P-T	
Condensate Systems	P-4	P-1	P-4	۵ ۵	H- H-	<u> </u>			P-1	_ 4			۵	۵	H- H-		F-4	<u>.</u> .
Fuel	P-T	P-T	P-T	- <del>L</del>	- H	P-T		_				T-0	P-T	P-T	P-T	۵	P-T	P-T
Fuel Systems	L- - ⊢	P-T	<u>Б</u> -	<u>Г</u> д	F- 	H- H	P-1	H- H- H-	F-T	F-4	F-4	F-7	P-T	P-T	F-T	۵	P-1	P-T
Control Systems	P-T	- L-	P-T	- L-	- L-	- H-	_	_	_						P-T	P-T	 	_

Table 11.950-2—Subjects for Engineer Officer Endorsements for Service on Great Lakes and Inland Waters—Continued

asst eng				
	<b>_</b>			
ch Eng	P-T P-T			
MTR	۵.۵			
STM	P-T P-T		7 7 7 7	
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MTR	<u> </u>			
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STM	P-T P-T			
MTR	P-T P-T			
STM	P-T P-T			
MTR	P-T P-T	<b>~</b> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
STM	P-T P-T			
MTR	P-T P-T	<b>~</b> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
STM	P-T P-T			
MTR	P-T P-T	<b>~</b> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
MTS	P-T P-T			
MTR	P-T P-T P-T	<b>~</b> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		P P T T T T T T T T T T T T T T T T T T
MTS	P-T P-T P-T			
	Automation Systems	am Engines:  Main Turbine  Auxiliary Turbine  Reciprocating Machines  Governor Systems  Control Systems  Automation Systems  Lubrication Systems  Drive Systems  Safety  Casualty Control	Main Engines Auxiliary Engines Starting Systems Lubrication Systems Fuel Systems Combustion Systems Intake Systems Exhaust Systems Cooling Systems Cooling Systems Drive Systems Automation Systems Automation Systems Governors Turbines	Safety: Fire Prevention Fire Fighting Fire Fighting Flooding Dewatering Stability and Trim Damage Control Saving Appliances: General Safety First Aid Dangerous Materials Pollution Inspections and Surveys US Rules and Regulations International Rules and Regula-
	MTR STM MTR STM MTR STM MTR STM MTR STM MTR MTR MTR MTR MTR	Systems         Part (matrol)         Part (matrol)<	tomation Systems         PT         PT	Systems         Pri         Pri

P=Practical Knowledge. T=Theoretical Knowledge

### §§ 11.1001–11.1005 (Subpart J) [Removed and Reserved]

133. Remove and reserve subpart J, consisting of §§ 11.1001 through 11.1005.

## §§ 11.1101–11.1105 (Subpart K) [Removed and Reserved]

134. Remove and reserve subpart K, consisting of §§ 11.1101 through 11.1105.

135. Revise part 12 to read as follows:

## PART 12—REQUIREMENTS FOR RATING ENDORSEMENTS

### Subpart A—General

Sec.

12.101 Purpose.

12.103 Incorporation by reference.

12.105 Paperwork approval.

### Subpart B—General Requirements for Rating Endorsements

12.201 General provisions respecting rating endorsements and STCW endorsements.
 12.203 Examination procedures and denial.

12.203 Examination procedures and denial of rating and STCW endorsements.

#### Subpart C—Approved and Accepted Training

12.301 Coast Guard-accepted training other than approved courses.

### Subpart D—Deck Ratings

12.410 Categories of able seaman (A/B) endorsements.

12.412 General requirements for able seaman (A/B) endorsements.

12.414 Service or training requirements for able seaman (A/B) endorsements.

12.416 Examination and demonstration of ability for able seaman (A/B) endorsements.

12.418 General provisions respecting endorsements for service as able seaman.

12.420 General requirements for rating forming part of a navigational watch (RFPNW).

### Subpart E—Engineering Ratings

12.510 General requirements for qualified member of the engine department (QMED).

12.512 Physical and medical requirements.

12.514 Service or training requirements.

12.516 Examination requirements.

12.518 General provisions respecting an endorsement as qualified member of the engineering department (QMED).

12.520 Deck engine mechanic.

12.522 Engineman.

12.530 General requirements for rating forming part of an engineering watch (RFPEW).

### Subpart F—Specialty Ratings

12.610 Qualification requirements for a lifeboatman endorsement.

12.620 Certificates of proficiency in fast rescue boats.

12.630 Qualification requirements for survivalman.

12.640 Required documentary evidence as persons designated to provide medical care onboard ship.

12.650 Global maritime distress and safety system (GMDSS) at-sea maintainer.

### Subpart G—Entry Level and Miscellaneous Ratings

12.702 Credentials required for entry level and miscellaneous ratings.

12.704 General requirements.

12.706 Physical and medical requirements.

12.710 Members of the Cadet Corps of the U.S. Merchant Marine Academy.

12.720 Student observers.

12.730 Apprentice engineers.

12.740 Apprentice mate.

# Subpart H—Non-Resident Alien Unlicensed Members of the Steward's Department on U.S.-Flag Large Passenger Vessels

12.801 Purpose.

12.803 General requirements.

12.805 Employer requirements.

12.807 Basis for denial.

12.809 Citizenship and identity.

12.811 Restrictions.

12.813 Alternative means of compliance.

**Authority:** 31 U.S.C. 9701; 46 U.S.C. 2101, 2103, 2110, 7301, 7302, 7503, 7505, 7701, and 70105; Department of Homeland Security Delegation No. 0170.1.

### Subpart A—General

### §12.101 Purpose.

The purpose of this part is to provide—

(a) A comprehensive and adequate means of determining and verifying the professional qualifications an applicant must possess to be eligible for certification to serve on merchant vessels of the United States; and

(b) A means of determining that an applicant is qualified to receive the endorsement required by the STCW Convention.

### § 12.103 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/ federal register/

federal\_register/
code\_of\_federal\_regulations/
ibr\_locations.html. Also, it is available
for inspection at the Coast Guard, Office
of Operating and Environmental
Standards (CG–5221), 2100 Second
Street SW., Washington, DC 20593–
0001, and is available from the sources
indicated in this section.

(b) International Maritime Organization (IMO), 4 Albert Embankment, London SE1 7SR, England:

(1) The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (the STCW Convention), incorporation by reference approved for §§ 12.620, and 12.640.

(2) The Seafarers' Training, Certification and Watchkeeping Code as amended (the STCW Code), incorporation by reference approved for §§ 12.420, 12.530, 12.602, and 12.640.

### §12.105 Paperwork approval.

(a) This section lists the control numbers assigned by the Office of Management and Budget under the Paperwork Reduction Act of 1980 (Pub. L. 96–511) for the reporting and record keeping requirements in this part.

(b) The following control numbers have been assigned to the sections

indicated:

(1) OMB 1625–0079–46 CFR 12.217 and 12.301.

(2) [Reserved]

### Subpart B—General Requirements for Rating Endorsements

## § 12.201 General provisions respecting rating endorsements and STCW endorsements

(a) An MMC issued to a deck or engineer officer will be endorsed for all entry level ratings and any other ratings for which they qualify.

(b) The authorized holder of any valid rating endorsement may serve in any capacity in the staff department of a vessel, except in those capacities requiring a staff officer; except that whenever the service includes the handling of food, no person may be so employed unless his or her credential bears the food handler's endorsement "(F.H.)".

(c) When an applicant meets the requirements for certification set forth in this part, the Coast Guard will issue the appropriate endorsement. The Coast Guard will also issue an STCW endorsement to qualified applicants for any of the following ratings or qualifications:

(1) Rating forming part of a navigational watch (RFPNW);

(2) Rating forming part of a watch in a manned engine room or designated to perform duties in a periodically unmanned engine room (RFPEW);

(3) Proficiency in survival craft and rescue boats, other than fast rescue boats:

(4) Proficiency in survival craft and rescue boats other than lifeboats and fast rescue boats;

- (5) Proficiency in fast rescue boats;
- (6) Global maritime distress and safety system (GMDSS) operator;
  - (7) GMDSS at-sea maintainer;
  - (8) Medical first aid provider; or
  - (9) Person-in-charge of medical care.
- (d) Basic safety training or instruction. Applicants serving on seagoing vessels must meet the requirements of § 15.1105 of this subchapter.
- (e) Except as otherwise noted in this part, applicants for a rating and/or associated STCW endorsement must be at least 16 years of age.

## § 12.203 Examination procedures and denial of rating and STCW endorsements.

- (a) Upon receipt of 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.
- (b) An applicant for a rating endorsement who has been duly examined and refused the endorsement by the Coast Guard may seek reexamination at any time after the date of the initial examination. The Coast Guard sets the time of reexamination based on the applicant's performance on the initial examination. However, the maximum waiting period after the initial failure will be 30 days, and the maximum waiting period after a second or subsequent failure will be 90 days.
- (c) Upon receipt of an application for an STCW endorsement, the Coast Guard will evaluate the applicant's qualifications. The Coast Guard will issue the appropriate endorsement after determining that the applicant satisfactorily meets all requirements for any requested STCW rating or qualification.

## Subpart C—Approved and Accepted Training

## § 12.301 Coast Guard-accepted training other than approved courses.

Coast Guard-accepted training for other than approved courses must meet the requirements found in 46 CFR part 10 subpart C.

### Subpart D—Deck Ratings

### § 12.410 Categories of able seaman (A/B) endorsements.

The following categories of able seaman endorsements are established:

- (a) Able seaman—any waters, unlimited.
  - (b) Able seaman—limited.
  - (c) Able seaman—special.
  - (d) Able seaman—special (OSV).

## § 12.412 General requirements for able seaman (A/B) endorsements.

To qualify for an endorsement as able seaman an applicant must:

(a) Be at least 18 years of age;

- (b) Pass the prescribed physical and medical examination requirements specified in § 10.215 of this subchapter;
- (c) Present evidence of having passed a chemical test for dangerous drugs or of qualifying for an exemption from testing described in § 16.220 of this subchapter;
- (d) Meet the sea service or training requirements set forth in this part;
- (e) Pass an examination demonstrating ability as an able seaman;
- (f) Hold or be qualified to hold an endorsement as lifeboatman or survivalman; and
- (g) Speak and understand the English language as would be required in performing the general duties of able seaman and during an emergency aboard ship.

## § 12.414 Service or training requirements for able seaman (A/B) endorsements.

- (a) The minimum service required to qualify an applicant for the various categories of endorsement as able seaman is:
- (1) Able seaman—any waters, unlimited. Three years of service on deck on vessels operating on the oceans or the Great Lakes.
- (2) Able seaman—limited. Eighteen months of service on deck on vessels of 100 GRT/250 GT or over which operate in a service not exclusively confined to the rivers and smaller inland lakes of the United States.
- (3) Able seaman—special. Twelve months of service on deck on vessels operating on the oceans or the navigable waters of the United States including the Great Lakes.
- (4) Able seaman—special (OSV). Six months of service on deck on vessels operating on the oceans or the navigable waters of the United States including the Great Lakes.
- (b) Training programs approved by the Coast Guard may be substituted for the required periods of service on deck as follows:
- (1) A graduate of a school ship may be rated as able seaman upon satisfactory completion of the course of instruction. For this purpose, school ship is interpreted to mean an institution which offers a complete approved course of instruction, including a period of at sea training, in the skills appropriate to the rating of able seaman.
- (2) Training programs, other than those classified as a school ship, may be substituted for up to one-third of the

required service on deck. The service/ training ratio for each program is determined by the Coast Guard, which may allow a maximum of 3 days on deck service credit for each day of instruction.

# §12.416 Examination and demonstration of ability for able seaman (A/B) endorsements.

- (a) Before an applicant is issued an endorsement as an able seaman, he or she must prove to the satisfaction of the Coast Guard by oral or other means of examination, and by actual demonstration, his or her knowledge of seamanship and the ability to carry out effectively all the duties that may be required of an able seaman, including those of a lifeboatman or survivalman.
- (b) The examination, whether administered orally or by other means, must be conducted only in the English language and must consist of questions regarding:
- (1) The applicant's knowledge of nautical terms; use of the compass for navigation; running lights, passing signals, and fog signals for vessels on the high seas, inland waters, or Great Lakes depending upon the waters on which the applicant has had service; and distress signals; and
- (2) The applicant's knowledge of commands in handling the wheel by obeying orders passed to him or her as wheelsman, and knowledge of the use of engine-room telegraph.
- (c) The applicant must demonstrate knowledge of the principal knots, bends, splices, and hitches in common use by actually making them.
- (d) The applicant must demonstrate, to the satisfaction of the Coast Guard, knowledge of pollution laws and regulations, procedures for discharge containment and cleanup, and methods for disposal of sludge and waste material from cargo and fueling operations.

## § 12.418 General provisions respecting endorsements for service as able seamen.

- (a) The holder of an MMC or MMD endorsed for the rating of able seamen may serve in any rating in the deck department without obtaining an additional endorsement, provided:
- (1) That the holder possesses an endorsement showing that he or she is qualified for the survival equipment installed on the vessel; and
- (2) That the holder possesses the appropriate STCW endorsement when serving as an RFPNW on a seagoing ship of 200 GRT/500 GT or more.
- (b) After [EFFECTIVE DATE OF THIS FINAL RULE] any MMC endorsed as able seaman (A/B) will also be endorsed

as lifeboatman or survivalman, as

appropriate.

(c) The A/B endorsement will clearly describe the type of rating which it represents (*See* § 12.410 of this subpart).

## § 12.420 General requirements for ratings forming part of a navigational watch (RFPNW).

To qualify for an STCW endorsement as an RFPNW on a seagoing vessel of 200 GRT/500 GT or more, an applicant must:

(a) Meet the medical and physical requirements found in § 10.215 of this subchapter:

(b) Provide evidence of having passed a chemical test for dangerous drugs or of qualifying for an exemption from testing described in § 16.220 of this subchapter;

(c) Provide evidence of service as follows:

(1)(i) Six months of approved, seagoing service that includes training and experience associated with navigational watchkeeping functions and involving the performance of duties carried out under the supervision of an OICNW or a qualified deck rating; and

(ii) At least one-half of the required experience must be obtained on vessels of at least 200 GRT/500 GT; or

(2) Proof of successful completion of a course approved or accepted as special training required by the STCW Convention and a period of approved seagoing service. The length of approved seagoing service will be specified as part of the course's approval; and

(d) The applicant must receive training and satisfactorily complete assessments necessary to meet the standards of competence prescribed in table A–II/4 of the STCW Code (incorporated by reference in § 12.103). The assessment criteria is published by the Coast Guard, and the training must include:

- (1) Steering the ship and complying with helm orders;
- (2) Keeping a proper look-out by sight and hearing;
- (3) Contributing to monitoring and controlling a safe watch; and
- (4) Operating emergency equipment and applying emergency procedures.

### Subpart E—Engineer Ratings

# § 12.510 General requirements for a qualified member of the engine department (QMED).

- (a) A qualified member of the engine department (QMED) is any person below officer and above the rating of coal passer or wiper who holds an MMC or MMD endorsed as QMED by the Coast Guard.
- (b) For purposes of administering this part, the rating of assistant electrician is considered a rating equal to coal passer or wiper.
- (c) To be eligible for an endorsement as QMED, an applicant must be able to speak and understand the English language relevant to the duties of a QMED or in an emergency aboard ship.
- (d) An applicant for QMED seeking an STCW endorsement as RFPEW must also meet the standards of competence as required in § 12.530 of this part.

## § 12.512 Physical and medical requirements.

The physical and medical requirements for an endorsement as

QMED are found in § 10.215 of this subchapter.

### §12.514 Service or training requirements.

- (a) An applicant for an endorsement as QMED must furnish the Coast Guard proof of qualification based on 6 months of service in a rating at least equal to that of wiper or coal passer.
- (b) Training programs approved by the Coast Guard, may be substituted for the required sea service for QMED such as:
- (1) A graduate of an approved training program aboard a school ship may qualify for a rating endorsement as QMED without further service upon satisfactory completion of the appropriate training program.
- (2) Approved courses other than those classified as a school ship may be substituted for up to one-half of the required sea service.

### §12.516 Examination requirements.

- (a) Each applicant for endorsement as a QMED in the rating of oiler, watertender, fireman, deck engineer, refrigeration engineer, junior engineer, electrician, or machinist must be examined orally or by other means and only in the English language on the subjects listed in paragraph (b) of this section. The applicant's general knowledge of the subjects must be sufficient to satisfy the examiner that the applicant is qualified to perform the duties of the rating for which he or she makes application.
  - (b) List of subjects required:

TABLE 12.516(B)

Subjects	Machinist	Refrigerating engineer	Fireman/ watertender	Oiler	Electrician	Junior engi- neer	Deck engineer
Application, mainte- nance, and use of							
hand tools and meas- uring instruments	Χ	X	×	×	×	×	×
2. Uses of babbitt, copper, brass, steel, and							
other metals	X	Х	X	x	X	Х	X
Methods of measuring pipe, pipe fittings, sheet metal, machine bolts and							
nuts, packing, etc	X	X	X	X	X	Х	X
Operation and maintenance of mechanical remote control							
equipment	X		X	X	X	X	X
5. Precautions to be taken for the preven- tion of fire and the proper use of fire-							
fighting equipment	X	X	X	X	X	X	X

TABLE 12.516(B)—Continued

Subjects	Machinist	Refrigerating engineer	Fireman/ watertender	Oiler	Electrician	Junior engi- neer	Deck engineer
6. Principles of me- chanical refrigeration; and functions, oper- ation, and mainte-							
nance of various ma- chines and parts of the systems		х		X		X	
<ol> <li>Knowledge of piping systems as used in ammonia, freon, and CO<sub>2</sub>, including testing for leaks, operation of</li> </ol>							
bypasses, and making up of joints		Х				х	
be observed in the operation of various refrigerating systems, including storage of refrigerants, and the use of gas masks							
and firefighting equipment	Х	Х	x	x	x	х	x
proper temperature, pressures, and atom- ization			x	x		х	
fuel oil system on oil burning boilers, in- cluding the transfer			_			X	X
and storage of fuel oil 11. Hazards involved and the precautions taken against accu- mulation of oil in fur- naces, bilges, floorplates, and tank tops; flarebacks, leaks in fuel oil heat-			X	X		*	*
ers, clogged strainers and burner tips  12. Precautions necessary when filling empty boilers, starting up the fuel oil burning system, and	X	Х	X	X	X	Х	
raising steam from a cold boiler			X	X		Х	
engineroom auxiliaries14. Proper operation of the various types of	X	Х	x	X	X	Х	
lubricating systems 15. Safety precautions to be observed in connection with the operation of engineroom auxil-	X	х	Х	х	х	X	x
iaries, electrical ma- chinery, and switch- board equipment	Х	x	×	×	×	x	x

TABLE 12.516(B)—Continued

	ı		ı	ı	T	T	1
Subjects	Machinist	Refrigerating engineer	Fireman/ watertender	Oiler	Electrician	Junior engi- neer	Deck engineer
16. The function, operation, and maintenance of the bilge, ballast, fire, fresh-							
water, sanitary, and							
lubricating systems	×	Х	X	X		X	X
17. Proper care of							
spare machine parts and idle equipment	×	X	x	×	X	X	X
18. The procedure in	^	^	^	^	^	^	^
preparing a turbine,							
reciprocating, or Die-							
sel engine for stand-							
by; also the proce-			.,				
dure in securing			X	X		X	
19. Operation and maintenance of the							
equipment necessary							
for the supply of							
water to boilers, the							
dangers of high and							
low water and reme- dial action			x	×		X	
20. Operation, location,			^	^		^	
and maintenance of							
the various boiler fit-							
tings and accessories	X		X	X		X	
21. The practical appli-							
cation and solution of							
basic electrical cal- culations (Ohm's law,							
power formula, etc.)					X	X	X
22. Electrical wiring cir-							
cuits of the various							
two-wire and three-							
wire D.C. systems and the various sin-							
gle-phase and poly-							
phase A.C. systems					X	X	X
23. Application and							
characteristics of par- allel and series cir-							
cuits					X	X	X
24. Application and					,	,	
maintenance of elec-							
trical meters and in-							
struments					X	X	X
25. The maintenance and installation of							
lighting and power							
wiring involving test-							
ing for, locating and							
correcting grounds,							
short circuits and							
open circuits, and making splices					X	X	X
26. The operation and							
maintenance of the							
various types of gen-							
erators and motors,						V	
both A.C. and D.C					X	X	X
27. Operation, installation, and mainte-							
nance of the various							
types of electrical							
controls and safety							
devices	I	1	I	I	X	X	X

	TABLE 12.3 To(b)—Continued							
Subjects	Machinist	Refrigerating engineer	Fireman/ watertender	Oiler	Electrician	Junior engi- neer	Deck engineer	
28. Testing and maintenance of special electrical equipment, such as telegraphs, telephones, alarm systems, fire-detecting systems, and rudder angle indicators 29. Rules and Regulations and requirements for installation, repair, and maintenance of electrical wiring and equipment					х	Х		
installed aboard ships 29a. Pollution laws and regulations, proce- dures for discharge containment and cleanup, and meth- ods for disposal of sludge and waste from cargo and fuel-					х	х	х	
ing operations	X	Х	X	X	X	Х		

#### TABLE 12.516(B)—Continued

(c) Each applicant for an endorsement as a QMED in the rating of pumpman must be examined to demonstrate sufficient knowledge of the subjects peculiar to that rating. The examination must be given only in the English language.

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Charge, Marine Inspection, may consider necessary to establish the appli-

cant's proficiency .....

(d) An applicant for endorsement as QMED in the rating of deck engine mechanic or engineman, who has proved eligibility for such endorsement under either § 12.520 or § 12.522 of this part, will not be required to take a written or oral examination for such ratings.

# § 12.518 General provisions respecting an endorsement as a qualified member of the engineering department (QMED).

Each QMED rating must be endorsed separately, unless the applicant qualifies for all QMED ratings, in which case the endorsement will read "QMED—any rating." The ratings are:

- (a) Refrigerating engineer.
- (b) Oiler.
- (c) Deck engineer.
- (d) Fireman/Watertender.
- (e) Junior engineer.
- (f) Electrician.
- (g) Machinist.
- (h) Pumpman.

(i) Deck engine mechanic.

Χ

(j) Engineman.

Х

#### § 12.520 Deck engine mechanic.

(a) An applicant for an endorsement as deck engine mechanic must hold an MMC or MMD endorsed as junior engineer and furnish one of the following:

Х

- (1) Satisfactory documentary evidence of sea service of 6 months in the rating of junior engineer on steam vessels of 4,000 HP/3,000 kW or more; or,
- (2) Documentary evidence from an operator of an automated vessel that the applicant has satisfactorily completed at least 4 weeks indoctrination and training in the engine department of an automated steam vessel of 4,000 HP/3,000 kW or more; or
- (3) Evidence of satisfactory completion of an approved training course as deck engine mechanic.
- (b) When the applicant meets the requirements specified in this section, the Coast Guard will add this rating endorsement to the applicant's MMC.
- (c) Any holder of an MMC or MMD endorsed for any rating in the engine department or QMED—any rating is qualified as a deck engine mechanic,

therefore, that endorsement will not be entered on his or her credential.

Х

Χ

#### § 12.522 Engineman.

Χ

- (a) An applicant for an endorsement as engineman must hold an MMC or MMD endorsed as fireman/watertender and oiler, or junior engineer. The applicant will be eligible for such endorsement upon furnishing one of the following:
- (1) Satisfactory documentary evidence of 6 months of sea service in any one or combination of the following capacities on steam vessels of 4,000 HP/3,000 kW or over: junior engineer; fireman/watertender; or oiler.
- (2) Documentary evidence from an operator of a partially automated steam vessel that the applicant has satisfactorily completed at least 2 weeks of indoctrination and training in the engine department of a partially automated steam vessel of 4,000 HP/ 3,000 kW or over; or
- (3) Proof of satisfactory completion of an approved training course for engineman.
- (b) When an applicant for the rating of engineman meets the requirements specified in this section, the Coast

Guard will add this rating endorsement to his or her MMC.

(c) Any holder of an MMC or MMD endorsed for any rating in the engine department, QMED—any rating or deck engine mechanic is qualified as an engineman and that endorsement will not be entered on his or her credential.

## § 12.530 General requirements for a rating forming part of an engineering watch (RFPEW).

- (a) A rating forming part of an engineering watch (RFPEW) is any person employed in the engine department, below the position of licensed officer, who is responsible for standing a watch in a manned engine room or who is designated to perform duties in a periodically unmanned engine room on seagoing vessels with main propulsion machinery of 1,000 HP/750 kW or more. It does not include a rating under training and a rating whose duties are of an unskilled nature, such as a wiper or other unskilled entry-level rating.
- (b) To qualify for an STCW endorsement as an RFPEW, an applicant must meet the following requirements:
- (c) All applicants for an RFPEW endorsement must meet the medical and physical requirements of § 10.215 of this subchapter.
  - (d) Applicants must have completed:
- (1) Six months of approved, seagoing service that includes training and experience associated with engine room watchkeeping functions and involves the performance of duties carried out under the supervision of an engineer officer or a rating holding an RFPEW endorsement; or
- (2) A course approved, or accepted, as special training required by the STCW Convention, and a period of approved seagoing service. The length of approved seagoing service will be specified as part of the course's approval.
- (e) Assessments. The applicant must satisfactorily complete assessments prescribed in table A–III/4 of the STCW Code (incorporated by reference § 12.103). The assessment criteria is published by the Coast Guard. The assessments include:
  - (1) Carrying out a watch routine;
- (2) Understanding orders and being understood in matters relevant to watchkeeping duties;
- (3) Maintaining the correct water levels and steam pressures (required for certification to serve on steam vessels); and
- (4) Operating emergency equipment and applying emergency procedures.

#### **Subpart F—Specialty Ratings**

### § 12.610 Qualification requirements for a lifeboatman endorsement.

To qualify for a lifeboatman endorsement, and for an STCW endorsement showing proficiency in survival craft including rescue boats other than fast rescue boats, the applicant must:

(a) Be at least 18 years of age;

(b) Be able to speak and understand the English language as would be relevant to the duties of a lifeboatman and for an emergency aboard ship; and

(c) Meet the following:

(1) Pass the lifeboatman written exam; including questions on:

(i) Lifeboats and liferafts, the names of their essential parts, and a description and use of the required equipment;

- (ii) The clearing away, swinging out, and lowering of lifeboats and liferafts, and handling of lifeboats under oars and sails, including questions relative to the proper handling of a boat in a heavy sea; and
- (iii) The operation and functions of commonly used types of davits;
- (2) Participate in 24 abandon ship drills, eight of which must include the boat being placed in the water and the mariner being exercised in all means of propulsion;

(3) In the presence of a designated examiner, demonstrate knowledge, understanding, and proficiency in the following competencies:

following competencies:

(i) Taking charge of a survival craft and rescue boat during and after launch;

(ii) Operating a survival craft engine; (iii) Demonstrating the ability to row by actually pulling an oar in the boat;

(iv) Managing a survival craft and survivors after abandoning ship; and

- (v) Using locating and communication devices;
- (4) Provide evidence of at least 6 months of sea service; and
- (5) Complete the first aid and personal survival technique elements of BST, found in § 15.1105(c)(1) of this subchapter; or
- (d) In lieu of the requirements in paragraph (c) of this part, an applicant may successfully complete an approved training program that includes a prescribed period of sea service.

### § 12.620 Certificates of proficiency in fast rescue boats.

To be eligible for an MMC endorsed for proficiency in fast rescue boats, an applicant must:

(a) Be qualified as a lifeboatman with proficiency in survival craft and rescue boats, other than fast rescue boats, under this subpart;

(b) Furnish satisfactory proof that he or she has met the requirements for

training and competence of STCW Regulation, VI/2, paragraph 2, and the appropriate requirements of Section A–VI/2 of the STCW Code (incorporated by reference in § 12.103);

(c) Participate in six drills that include a fast rescue boat being placed in the water and the applicant performing man-overboard recovery

drills; and

(d) Be successfully assessed in the demonstrations of the following competencies before a designated examiner:

(i) Taking charge of a fast rescue boat during and after launch; and

(ii) Operating a fast rescue boat engine.

### § 12.630 Qualification requirements for survivalman.

To qualify as survivalman, and for an STCW endorsement showing proficiency in survival craft except for lifeboats and fast rescue boats, the applicant must:

(a) Be at least 18 years of age;

- (b) Be able to speak and understand the English language as would be relevant to the duties of a survivalman and for an emergency aboard ship; and
  - (c) Meet the following:

(1) Pass the written exam for survivalman including questions on:

(i) Liferafts, rescue boats and other survival craft except lifeboats, the names of their essential parts, and a description and use of the required equipment;

(ii) The clearing away, launching, and handling of rescue craft except lifeboats;

and

(iii) The operation and functions of commonly used launching devices;

- (2) Participate in twelve rescue boat, liferaft, or other drills involving lifesaving apparatus, four that include a rescue boat being placed in the water and the mariner being exercised in rescue boat drills;
- (3) In the presence of a designated examiner, demonstrate knowledge, understanding, and proficiency in the following competences:

(i) Taking charge of a rescue boat, liferaft, or other lifesaving apparatus during and after launch;

(ii) Operating a rescue boat engine;

- (iii) Managing a rescue boat and survivors; and
- (iv) Using locating and communication devices.
- (4) Obtain at least 6 months of sea service; and
- (5) Complete the first aid and personal survival technique elements of BST as required in § 15.1105(c)(1) of this subchapter.
- (d) In lieu of the requirements in paragraph (c) of this section, an

applicant may successfully complete an approved training program, including a prescribed period of sea service.

## §12.640 Required documentary evidence for persons designated to provide medical care onboard ship.

- (a) The Coast Guard will issue an STCW endorsement for medical first aid provider or person-in-charge of medical care to an applicant who provides evidence that establishes that he or she meets the standards of competence set out in Section A–VI/4 of the STCW Code (incorporated by reference in § 12.103).
- (b) An applicant holding any of the following credentials is qualified for an endorsement as person-in-charge of medical care:
- (1) A valid professional license listed in § 11.807 (a)(5) or (6) of this subchapter, without restriction or limitation placed upon it by the issuing State, or
- (2) A rating listed in § 11.807 (a)(7) or (8) of this subchapter.

### § 12.650 Global maritime distress and safety system (GMDSS) at-sea maintainer.

An applicant may qualify for an STCW endorsement as GMDSS at-sea maintainer if he or she presents evidence of:

- (a) Passing a course specializing in the maintenance and repair of radio electronics completed within five years of the date of application, with additional documentation demonstrating that the course is equivalent to the guidance in section B–IV/2 of the STCW Code; or,
- (b) Passing an approved GMDSS atsea maintainer course; and
- (c) Possessing a valid Federal Communications Commission (FCC) certificate as GMDSS at-sea maintainer.

### Subpart G—Entry Level and Miscellaneous Ratings

### § 12.702 Credentials required for entry level and miscellaneous ratings.

Every person employed in a rating other than able seaman (A/B) or QMED aboard U.S.-flag vessels requiring such persons must produce an MMC or MMD with the appropriate endorsement to the master or person in charge (PIC), if appropriate, before signing shipping articles.

#### § 12.704 General requirements.

Rating endorsements will be issued without professional examination to applicants in capacities other than able seaman, lifeboatman, tankerman, or QMED—for example, ordinary seaman—wiper—steward's department (F.H.). Holders of MMCs or MMDs

endorsed as ordinary seaman may serve in any unqualified rating in the deck or steward's department except as a food handler. Holders of MMCs or MMDs endorsed as wiper may serve in any unqualified rating in the engine or steward's department except as a food handler. Only MMCs or MMDs endorsed as steward's department (F.H.) will authorize the holder's service in any capacity in the steward's department, including food handler. (See § 12.201(b) of this part for unqualified ratings in the staff department.)

### § 12.706 Physical and medical requirements.

The physical and medical requirements for this subpart are found in § 10.215 of this subchapter.

### § 12.710 Members of the Cadet Corps of the U.S. Merchant Marine Academy.

No ratings other than cadet (deck) or cadet (engine), as appropriate, and lifeboatman will be shown on an MMC issued to a member of the U.S. Merchant Marine Cadet Corps. The MMC will also indicate that it is valid only while the holder is a cadet in the U.S. Maritime Administration training program. The MMC must be surrendered upon the holder leaving the cadet corps, being endorsed in any other rating, or upon being issued an officer's endorsement.

#### §12.720 Student observers.

Students in technical schools who are enrolled in courses in marine management and ship operations, and who present a letter or other documentary evidence that they are enrolled, will be issued an MMC endorsed as a student observer—any department and may be signed on ships as such. Students holding these endorsements will not take the place of any of the crew, or replace any of the regular required crew.

#### §12.730 Apprentice engineers.

- (a) Persons enrolled in an apprentice engineer training program approved by the Coast Guard, and who present a letter or other documentary evidence that they are enrolled, may be issued an MMC endorsed as apprentice engineer and may be signed on ships as such. The endorsement as apprentice engineer may be in addition to other endorsements; however, this endorsement does not authorize the holder to replace any of the regular required crew.
- (b) Persons holding the endorsement as apprentice engineer are deemed to be seamen.

#### § 12.740 Apprentice mate.

- (a) A person enrolled in an apprentice mate training program approved by the Coast Guard who presents a letter or other documentary evidence that he or she is enrolled may be issued an MMC endorsed as apprentice mate and may be signed on a vessel as apprentice mate. The endorsement as apprentice mate may be in addition to other endorsements; however, this endorsement does not authorize the holder to replace any of the regular required crew.
- (b) Persons holding the endorsement as apprentice mate are deemed to be seamen.

#### Subpart H—Non-Resident Alien Unlicensed Members of the Steward's Department on U.S.-Flag Large Passenger Vessels

#### §12.801 Purpose.

The rules in this subpart implement 46 U.S.C. 8103(k) by establishing requirements for the issuance of merchant mariner's documents, valid only for service in the steward's department of U.S.-flag large passenger vessels, to non-resident aliens.

#### § 12.803 General requirements.

- (a) Unless otherwise expressly specified in this subpart, non-resident alien applicants for Coast Guard-issued merchant mariner's documents are subject to all applicable requirements contained in this subchapter.
- (b) No application from a non-resident alien for a merchant mariner's document issued pursuant to this subpart will be accepted unless the applicant's employer satisfies all of the requirements of § 12.805 of this part.

#### § 12.805 Employer requirements.

- (a) The employer must submit the following to the Coast Guard, as a part of the applicant's merchant mariner's document (MMD) application, on behalf of the applicant:
- (1) A signed report that contains all material disciplinary actions related to the applicant, such as, but not limited to, violence or assault, theft, drug and alcohol policy violations, and sexual harassment, along with an explanation of the criteria used by the employer to determine the materiality of those actions;
- (2) A signed report regarding an employer-conducted background check. The report must contain:
- (i) A statement that the applicant has successfully undergone an employerconducted background check;
- (ii) A description of the employerconducted background check, including

all databases and records searched. The background check must, at a minimum, show that the employer has reviewed all information reasonably and legally available to the owner or managing operator, including the review of available court and police records in the applicant's country of citizenship, and any other country in which the applicant has received employment referrals, or resided, for the past 20 years prior to the date of application; and

(iii) All information derived from the employer-conducted background check.

(3) The employer-conducted background check must be conducted to the satisfaction of the Coast Guard for an MMD to be issued to the applicant.

(b) If an MMD is issued to the applicant, the report and information required in paragraph (a)(2) of this section must be securely kept by the employer on the U.S.-flag large passenger vessel, or U.S. flag large passenger vessels, on which the applicant is employed. The report and information must remain on the last U.S. flag large passenger vessel on which the applicant was employed until such time as the MMD is returned to the Coast Guard in accordance with paragraph (d) of this section.

(c) If an MMD or a transportation worker identification credential (TWIC) is issued to the applicant, each MMD and TWIC must be securely kept by the employer on the U.S. flag large passenger vessel on which the applicant is employed. The employer must maintain a detailed record of the seaman's total service on all authorized U.S. flag large passenger vessels, and must make that information available to the Coast Guard upon request, to demonstrate that the limitations of § 12.811(c) of this part have not been

exceeded.

(d) In the event that the seaman's MMD and/or TWIC expires, the seaman's visa status terminates, the seaman serves onboard the U.S. flag large passenger vessel(s) for 36 months in the aggregate as a nonimmigrant crewman, the employer terminates employment of the seaman, or, if the seaman otherwise ceases working with the employer, the employer must return the MMD to the Coast Guard and/or the TWIC to the Transportation Security Administration (TSA) within 10 days of the event.

(e) In addition to the initial material disciplinary actions report and the initial employer-conducted background check specified in paragraph (a) of this section, the employer must:

(1) Submit an annual material disciplinary actions report to update

whether there have been any material disciplinary actions related to the applicant since the last material disciplinary actions report was submitted to the Coast Guard.

(i) The annual material disciplinary actions report must be submitted to the satisfaction of the Coast Guard in accordance with the same criteria set forth in paragraph (a)(1) of this section, except that the period of time examined for the material disciplinary actions report need only extend back to the date of the last material disciplinary actions report; and

(ii) The annual material disciplinary actions report must be submitted to the Coast Guard on or before the anniversary of the issuance date of the

(2) Conduct a background check each year that the merchant mariner's document is valid to search for any changes that might have occurred since the last employer-conducted background check was performed.

(i) The annual background check must be conducted to the satisfaction of the Coast Guard in accordance with the same criteria set forth in paragraph (a)(2) of this section, except that the period of time examined during the annual background check need only extend back to the date of the last background check; and

(ii) All information derived from the annual background check must be submitted to the Coast Guard on or before the anniversary of the issuance date of the MMD.

(f) The employer is subject to the civil penalty provisions specified in 46 U.S.C. 8103(f) for any violation of this section.

#### §12.807 Basis for denial.

In addition to the requirements for a merchant mariner's document established elsewhere in this subchapter, and the basis for denial established in §§ 10.209, 10.211, and 10.213 of this subchapter, an applicant for a merchant mariner's document issued pursuant to this subpart must:

(a) Have been employed, for a period of at least 1 year, on a foreign flag passenger vessel, or foreign flag passenger vessels, that are under the same common ownership or control as the U.S. flag large passenger vessel, or U.S. flag large passenger vessels, on which the applicant will be employed upon issuance of an MMD under this subpart.

(b) Have no record of material disciplinary actions during the employment required under paragraph (a) of this section, as verified in writing by the owner or managing operator of the U.S. flag large passenger vessel, or U.S. flag large passenger vessels, on which the applicant will be employed.

(c) Have successfully completed an employer-conducted background check to the satisfaction of both the employer and the Coast Guard.

(d) Meet the citizenship and identity requirements of § 12.809 of this part.

#### §12.809 Citizenship and identity.

(a) In lieu of the requirements of § 10.221 of this subchapter, a non-resident alien may apply for a Coast Guard-issued merchant mariner's document, endorsed and valid only for service in the steward's department of a U.S. flag large passenger vessel as defined in this subpart, if he or she is employable in the United States under the Immigration and Nationality Act (8 U.S.C. 1101, et seq.), including an alien crewman described in section 101 (a)(15)(D)(i) of that Act.

(b) To meet the citizenship and identity requirements of this subpart, an applicant must present an unexpired passport issued by the government of the country of which the applicant is a citizen or subject; and either a valid U.S. C-1/D Crewman Visa or other valid U.S. visa or authority deemed acceptable by the Coast Guard.

(c) Any non-resident alien applying for a merchant mariner's document under this subpart may not be a citizen of, or a temporary or permanent resident of, a country designated by the Department of State as a "State Sponsor of Terrorism" pursuant to section 6(j) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)) or section 620A

of the Foreign Assistance Act of 1961

#### §12.811 Restrictions.

(22 U.S.C. 2371).

(a) A merchant mariner's document issued to a non-resident alien under this subpart authorizes service only in the steward's department of the U.S.-flag large passenger vessel(s), that is/are under the same common ownership and control as the foreign flag passenger vessel(s), on which the non-resident alien served to meet the requirements of § 12.807(a) of this part:

(1) The merchant mariner's document will be endorsed for service in the steward's department in accordance with § 12.704 of this part;

(2) The merchant mariner's document may also be endorsed for service as a food handler if the applicant meets the requirements of § 12.706 of this part; and

(3) No other rating or endorsement is authorized, except lifeboatman, in which case all applicable requirements of this subchapter and the STCW Convention and STCW Code must be met.

- (b) The following restrictions must be printed on the MMD, or be listed in an accompanying Coast Guard letter, or both:
- (1) The name and official number of all U.S. flag vessels on which the nonresident alien may serve. Service is not authorized on any other U.S. flag vessel;
- (2) Upon issuance, the MMD must remain in the custody of the employer at all times;
- (3) Upon termination of employment, the MMD must be returned to the Coast Guard within 10 days in accordance with § 12.805 of this part;
- (4) A non-resident alien issued an MMD under this subpart may not perform watchstanding, engine room duty watch, or vessel navigation functions; and
- (5) A non-resident alien issued an MMD under this subpart may perform emergency-related duties, provided:
- (i) The emergency-related duties do not require any other rating or endorsement, except lifeboatman as specified in paragraph (a)(3) of this section;
- (ii) The non-resident alien has completed familiarization and basic safety training (BST), as required in § 15.1105 of this subchapter;
- (iii) That if the non-resident alien serves as a lifeboatman, he or she must have the necessary lifeboatman's endorsement; and
- (iv) The non-resident alien has completed the training for crewmembers on passenger ships performing duties involving safety or care for passengers, as required in § 15.1103 of this subchapter.
- (c) A non-resident alien may only serve for an aggregate period of 36 months actual service on all authorized U.S. flag large passenger vessels combined under the provisions of this subpart:
- (1) Once this 36-month limitation is reached, the MMD becomes invalid and must be returned to the Coast Guard under § 12.805(d) of this part, and the non-resident alien is no longer authorized to serve in a position requiring a merchant mariner's document on any U.S. flag large passenger vessel; and
- (2) An individual who successfully adjusts his or her immigration status to become either an alien lawfully admitted for permanent residence to the United States, or a citizen of the United States, may apply for an MMD, subject to the requirements of § 10.221 of this subchapter, without any restrictions or limitations imposed by this subpart.

#### § 12.813 Alternative means of compliance.

(a) The owner or managing operator of a U.S. flag large passenger vessel, or U.S. flag large passenger vessels, seeking to employ non-resident aliens issued MMDs under this subpart may submit a plan to the Coast Guard, which, if approved, will serve as an alternative means of complying with the requirements of this subpart.

(b) The plan must address all the elements contained in this subpart, as well as the related elements contained in § 15.530 of this subchapter, to the satisfaction of the Coast Guard.

#### PART 15—MANNING REQUIREMENTS

136. The authority citation for part 15 continues to read as follows:

**Authority:** 46 U.S.C. 2101, 2103, 3306, 3703, 8101, 8102, 8104, 8105, 8301, 8304, 8502, 8503, 8701, 8702, 8901, 8902, 8903, 8904, 8905(b), 8906, 9102, and 70105; and Department of Homeland Security Delegation No. 0170.1.

#### Subpart A—Purpose and Applicability

#### §15.101 [Amended]

137. In § 15.101 introductory text, remove the words "the regulations in" and ", parts E & F,".

138. Revise § 15.103 to read as follows:

#### §15.103 General.

(a) The regulations in this part apply to all vessels that are subject to the manning requirements contained in the navigation and shipping laws of the United States, including uninspected vessels (46 U.S.C. 7101–9308).

(b) The navigation and shipping laws state that a vessel may not be operated unless certain manning requirements are met. In addition to establishing a minimum number of officers and rated crew to be carried onboard certain vessels, they establish minimum qualifications concerning licenses and MMC endorsements, citizenship, and conditions of employment. It is the responsibility of the owner, charterer, managing operator, master, or person in charge or in command of the vessel to ensure that appropriate personnel are carried to meet the requirements of the applicable navigation and shipping laws and regulations.

(c) Inspected vessels are issued a Certificate of Inspection (COI) which indicates the minimum complement of officers and crew (including lifeboatmen) considered necessary for safe operation. The COI complements the statutory requirements but does not supersede them.

(d) Uninspected vessels operating on an international voyage may be issued a safe manning certificate indicating the minimum complement of qualified mariners necessary for safe operation.

(e) The regulations in subpart J of this part apply to seagoing vessels subject to the STCW Convention, except those vessels noted below:

- (1) Fishing vessels as defined in 46 U.S.C. 2101(11)(a);
- (2) Fishing vessels used as fish-tender vessels as defined in 46 U.S.C. 2101(11)(c):
- (3) Barges as defined in 46 U.S.C. 2101(2), including non-self-propelled mobile offshore-drilling units; and

(4) Vessels operating exclusively on the Great Lakes and other inland waters.

- (f) Owners and operators, and personnel serving on the following small vessels engaged exclusively on domestic, near-coastal voyages are in compliance with subpart J and are, therefore, not subject to further obligation for the purposes of the STCW Convention:
- (1) Small passenger vessels subject to subchapter T or K of title 46, CFR;
- (2) Vessels of less than 200 GRT/500 GT, other than passenger vessels subject to subchapter H of title 46 CFR;
- (3) Uninspected passenger vessels (UPVs) as defined in 46 U.S.C. 2101(42)(B).
- (g) Personnel serving on vessels identified in paragraphs (f)(1) and (2) of this section may be issued, without additional proof of qualification, an appropriate STCW endorsement on their license or MMC when the Coast Guard determines that such an endorsement is necessary to enable the vessel to engage on a single international voyage of a non-routine nature. The STCW endorsement will be expressly limited to service on the vessel or the class of vessels and will not establish qualification for any other purpose. All personnel on the specified vessels must comply with the requirements of § 15.1105 of this part when the vessel is engaged on an international voyage.

139. Revise § 15.105(b) to read as follows:

#### § 15.105 Incorporation by reference.

\* \* \* \*

(b) International Maritime Organization (IMO), 4 Albert Embankment, London, SE1 7SR, England:

(1) The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW Convention), incorporation approved for §§ 15.403, 15.1103, 15.1105, and 15.1109.

(2) The Seafarer's Training, Certification and Watchkeeping Code, as amended (STCW Code), incorporation by reference approved for §§ 15.1105, and 15.1109.

#### Subpart B [Removed and Reserved]

140. Revise part 15, subpart C, to read as follows:

### Subpart C—Manning Requirements; All Vessels

Sec.

- 15.401 Employment and service within restrictions of credentials.
- 15.403 When credentials are required.
- 15.404 Requirements for serving onboard a vessel.
- 15.405 Familiarity with vessel characteristics.
- 15.410 Credentialed individuals for assistance towing vessels.

### Subpart C—Manning Requirements; All Vessels

### § 15.401 Employment and service within restrictions of credentials.

- (a) A person may not employ or engage an individual, and an individual may not serve, in a position in which an individual is required by law or regulation to hold a license, certificate of registry, merchant mariner's document, TWIC and/or MMC, unless the individual holds all credentials required, as appropriate, authorizing service in the capacity in which the individual is engaged or employed, and the individual serves within any restrictions placed on the credential. An individual holding an active license, certificate of registry, MMD, or MMC issued by the Coast Guard must also hold a valid TWIC issued by the Transportation Security Administration under 49 CFR part 1572.
- (b) Each individual referred to in paragraph (c) of this section must hold an MMD or MMC that serves as identification, with an appropriate endorsement for the position in which the seaman serves, and must be presented to the master of the vessel at the time of employment or before signing Articles of Agreement.
- (c) Each individual employed on any merchant vessel of the United States of 100 GRT/250 GT or more must possess a valid MMD or MMC issued by the Coast Guard, except as noted below:
- (1) Mariners on vessels navigating exclusively on rivers and lakes, except the Great Lakes, as defined in § 10.107 of this subchapter; or
- (2) Mariners below the rank of licensed officer employed on any non-self-propelled vessel, except seagoing barges and certain tank barges.
- (d) Every person employed on a vessel with dual tonnages (both domestic and international) must hold a credential authorizing service appropriate to the

tonnage scheme under which the vessel is operating.

#### § 15.403 When credentials are required.

- (a) Every seaman, as referred to in paragraph (a) of this section, must produce a valid MMC or MMD with all applicable rating endorsements for the position sought, and a valid TWIC, to the master of the vessel at the time of his or her employment before signing Articles of Agreement. Seamen who do not possess one of these credentials may be employed at a foreign port or place.
- (b)(1) Every person below the grades of officer and staff officer employed on any U.S. flag merchant vessel of 100 GRT/250 GT and upward, except those navigating rivers exclusively and the smaller inland lakes, must possess a valid MMC or MMD with all appropriate endorsements for the positions served.
- (2) No endorsements are required of any person below the rank of officer employed on any barges except seagoing barges and certain tank barges.
- (3) No endorsements are required of any person below the rank of officer employed on any sail vessel of less than 500 net tons while not carrying passengers for hire and while not operating outside the line dividing inland waters from the high seas. 33 U.S.C. 151.
- (c) Each person serving as an able seaman or an RFPNW on a seagoing ship of 200 GRT/500 GT or more must hold an STCW endorsement certifying him or her as qualified to perform the navigational function at the support level, in accordance with the STCW Convention (incorporated by reference in § 15.105).
- (d) Each person serving as a QMED or an RFPEW, on a seagoing ship driven by main propulsion machinery of 1,000 HP/750 kW of propulsion power or more, must hold an STCW endorsement certifying him or her as qualified to perform the marine-engineering function at the support level, in accordance with STCW (incorporated by reference in § 15.105).
- (e) Notwithstanding any other rule in this part, no person subject to this part serving on any of the following vessels needs an STCW endorsement:
- (1) Fishing vessels as defined in 46 U.S.C. 2101(11)(a);
- (2) Fishing vessels used as fish-tender vessels as defined in 46 U.S.C. 2101(11)(c);
- (3) Barges as defined in 46 U.S.C. 2101(2), including non-self-propelled mobile offshore-drilling units; or
- (4) Vessels operating exclusively on the Great Lakes.

- (5) Vessels not subject to further obligation under the STCW Convention due to their special operating conditions as small vessels engaged in domestic, near-coastal voyages, including:
- (i) Small passenger vessels subject to subchapter T or K of title 46 CFR;
- (ii) Vessels of less than 200 GRT/500 GT (other than passenger vessels subject to subchapter H of title 46 CFR); or
- (iii) Uninspected passenger vessels as defined in 46 U.S.C. 2101(42)(B).

### § 15.404 Requirements for serving onboard a vessel.

- (a) RFPNW. Each person serving as a rating forming part of a navigational watch on a seagoing vessel of 200 GRT/500 GT or more, subject to the STCW Convention, must hold an STCW endorsement attesting to his or her qualifications to perform the navigational function at the support level.
- (b) Able Seaman. Each person serving as a rating as able seaman on a U.S. flag vessel must hold an MMC endorsed as able seaman, except that no credential as able seaman is required of any person employed on any tug or towboat on the bays and sounds connected directly with the seas, or on any barges except seagoing barges or tank barges.
- (c) *RFPEW*. Each person serving as a rating forming part of a watch in a manned engine room or designated to perform duties in a periodically unmanned engine room, on a seagoing vessel driven by main propulsion machinery of 1,000 HP/750 kW of propulsion power or more, must hold an STCW endorsement attesting to his or her qualifications to perform the marine-engineering function at the support level.
- (d) QMED. (1) The holder of an MMD or MMC endorsed with one or more QMED ratings may serve in any unqualified rating in the engine department without obtaining an additional endorsement.
- (2) A QMED may serve as a qualified rating in the engineering department only in the specific ratings endorsed on his or her MMD or MMC.
- (e) Lifeboatman. Every person assigned duties as a lifeboatman must hold a credential attesting to such proficiency. Persons serving on vessels subject to the STCW Convention must also hold an STCW endorsement attesting to proficiency in survival craft and rescue boats other than fast rescue boats.
- (f) Survivalman. Every person employed onboard a vessel that is not required to carry lifeboats and is required to employ lifeboatmen must hold an endorsement as either

lifeboatman or survivalman. Persons serving on vessels subject to the STCW Convention must also hold an STCW endorsement attesting to proficiency in survival craft and rescue boats other than lifeboats and fast rescue boats.

(g) Lifeboatman Equivalent. (1) An endorsement issued before [EFFECTIVE DATE OF THE FINAL RULE] as able seaman is the equivalent of a credential endorsed as lifeboatman or survivalman, as appropriate.

(2) An endorsement as lifeboatman is the equivalent of a credential endorsed as survivalman.

- (h) Fast Rescue Boats. Every person engaged or employed in a position requiring proficiency in fast rescue boats must hold an endorsement attesting to such proficiency.
- (i) Entry Level. Every person employed in a rating other than able seaman or OMED on a U.S. vessel on which MMCs are required must hold an MMD or MMC endorsed as wiper, ordinary seaman, or foodhandler.
- (j) Person in charge of medical care. Every person designated to take charge of medical care must hold an MMD or MMC endorsed as person in charge of medical care.
- (k) Medical first aid provider. Every person designated to provide medical first aid onboard a ship must hold an MMD or MMC endorsed as medical first aid provider or a deck or engineer officer endorsement.
- (l) GMDSS radio operator or maintainer. Every person responsible for the operation or shipboard maintenance of GMDSS radio equipment must hold an MMD or MMC endorsed as GMDSS radio operator or GMDSS radio maintainer, as appropriate.

#### § 15.405 Familiarity with vessel characteristics.

Every crewmember must become familiar with the relevant characteristics of the vessel on which he or she is engaged prior to assuming his or her duties. These include, but are not limited to: general arrangement of the vessel; maneuvering characteristics; proper operation of the installed navigation equipment; proper operation of firefighting and lifesaving equipment; stability and loading characteristics; emergency duties; and main propulsion and auxiliary machinery, including steering gear systems and controls.

#### § 15.410 Credentialed individuals for assistance towing vessels.

Every assistance towing vessel must be under the direction and control of an individual holding a license or MMC authorizing him or her to engage in

assistance towing under the provisions of § 11.482 of this subchapter.

#### Subpart D—Manning Requirements; **Inspected Vessels**

#### §15.505 [Amended]

141. In § 15.505, remove the words "changes in manning as indicated on the" and add, in their place, the words 'changes to the manning required on the".

142. Revise § 15.515 to read as follows:

#### § 15.515 Compliance with Certificate of Inspection (COI).

- (a) Except as provided by § 15.725 of this part, no vessel may be navigated unless it has in its service and onboard the crew complement required by the
- (b) Any time passengers are embarked on a passenger vessel, the vessel must have the crew complement required by the COI, whether the vessel is underway, at anchor, made fast to shore, or aground.
- (c) No vessel subject to inspection under 46 U.S.C. 3301 will be navigated unless it is under the direction and control of an individual who holds an appropriate license or officer endorsement on his or her MMC.
- 143. Revise § 15.520 to read as follows:

#### § 15.520 Mobile offshore drilling units (MODUs).

(a) The requirements in this section for MODUs supplement other requirements in this part.

(b) The OCMI determines the minimum number of officers and crew (including lifeboatmen) required for the safe operation of inspected MODUs. In addition to other factors listed in this part, the specialized nature of the MODU is considered in determining the specific manning levels.

(c) A license or officer endorsement on an MMC as offshore installation manager (OIM), barge supervisor (BS), or ballast control operator (BCO) authorizes service only on MODUs. A license or endorsement as OIM is restricted to the MODU type and mode of operation specified on the credential.

(d) A self-propelled MODU, other than a drillship, when underway must be under the command of an individual who holds a license or MMC endorsed as master and OIM. When not underway, such a vessel must be under the command of an individual holding the appropriate OIM credential.

(e) A drillship must be under the command of an individual who holds a license or MMC officer endorsement as master. When a drillship is on location,

the individual in command must hold a license as master endorsed as OIM or an MMC with master and OIM officer endorsements.

- (f) A non-self-propelled MODU must be under the command of an individual who holds a license or MMC officer endorsement as OIM.
- (g) An individual serving as mate on a self-propelled surface unit, other than a drillship, when underway must hold an appropriate MMC endorsed as mate and BS or BCO. When not underway, such a vessel may substitute an individual holding the appropriate BS or BCO endorsement for the mate, if permitted by the cognizant OCMI.

(h) An individual holding a license or MMC officer endorsement as barge supervisor is required on a non-selfpropelled surface unit other than a drillship.

(i) An individual holding a license or

MMC officer endorsement as barge

supervisor may serve as BCO. (j) The OCMI issuing the COI for the MODU may authorize the substitution of chief or assistant engineer (MODU) for chief or assistant engineer, respectively, on self-propelled or

propulsion-assisted surface units, except drillships. The OCMI may also authorize the substitution of assistant engineer (MODU) for assistant engineer

on drillships.

(k) Requirements in this part concerning radar observers do not apply to non-self-propelled MODUs.

- (l) A surface mobile offshore drilling unit underway or on location, when afloat and equipped with a ballast control room, must have that ballast control room manned by an individual holding a license or MMC officer endorsement authorizing service as ballast control operator.
- 144. Revise the heading to § 15.525 to read as follows:

#### § 15.525 Additional manning requirements for tank vessels.

#### Subpart E-Manning Requirements; **Uninspected Vessels**

145. Revise § 15.605 to read as follows:

#### § 15.605 Credentialed operators for uninspected passenger vessels.

Each uninspected passenger vessel (UPV) must be under the direction and control of an individual credentialed by the Coast Guard, as follows:

(a) Every UPV of 100 GRT/250 GT or more, as defined by 46 U.S.C. 2101(42)(A), must be under the command of an individual holding a license or MMC endorsed as master.

When navigated, it must be under the direction and control of a credentialed

master, pilot, or mate.

(b) Every self-propelled UPV as defined by 46 U.S.C. 2101(42)(B) must be under the direction and control of an individual holding a license or MMC endorsed as or equivalent to OUPV.

(c) Personnel serving on UPVs engaged on international voyages must meet the requirements of subpart J of this part.

146. Revise § 15.610 to read as follows:

### § 15.610 Master and mate (pilot) of towing vessels.

(a) Except as provided in this paragraph, every towing vessel of at least 8 meters (26 feet) in length, measured from end to end over the deck (excluding sheer), must be under the direction and control of a person holding a license or MMC officer endorsement as master or mate (pilot) of towing vessels, or as master or mate of vessels greater than 200 GRT/500 GT, holding either an endorsement on his or her license or MMC for towing vessels or a completed Towing Officer's Assessment Record (TOAR) signed by a designated examiner and indicating that the officer is proficient in the operation of towing vessels. This requirement does not apply to any vessel engaged in assistance towing, nor does it apply to any towing vessel of less than 200 GRT/ 500 GT if the vessel is going to or coming from equipment or a site that is exploiting offshore minerals or oil.

(b) Any towing vessel operating in the pilotage waters of the Lower Mississippi River must be under the control of an officer meeting the requirements of paragraph (a) of this section who holds either a first-class pilot's endorsement for that route or MMC officer endorsement for the Western Rivers, or who meets the requirements of paragraph (a) and also meets the requirements of either paragraph (b)(1) or paragraph (b)(2) of this section, as

applicable:

(1) To operate a towing vessel with tank barges, or a tow of barges carrying hazardous materials regulated under subchapter N or O of this chapter, an officer in charge of the towing vessel must have completed 12 round trips over this route as an observer, with at least three of those trips during hours of darkness, and at least one of the 12 round trips completed within the last 5 years

(2) To operate a towing vessel without barges, or a tow of uninspected barges, an officer in charge of the towing vessel must have completed at least four round trips over this route as an observer, with at least one of those trips during hours of darkness, and at least one of the four round trips within the last 5 years.

### Subpart F—Limitations and Qualifying Factors

#### §15.701 [Amended]

147. Amend § 15.701 as follows: a. In paragraph (a)(4), remove the words "gross tons" and add, in their place, the text "GRT/500 GT"; and

b. In paragraph (b), remove the word "chapter" and add, in its place, the word "subchapter".

148. Revise § 15.705 to read as follows:

#### §15.705 Watches.

(a) Title 46 U.S.C. 8104 applies to the establishment of watches aboard certain U.S. vessels. The establishment of adequate watches is the responsibility of the vessel's master. The Coast Guard interprets the term "watch" to be the direct performance of duties pertaining to a vessel's operations, whether deck or engine, where such operations would routinely be controlled and performed in a scheduled and fixed rotation. The performance of maintenance or work necessary to the vessel's safe operation on a daily basis does not in itself constitute the establishment of a watch. The minimum safe manning levels specified in a vessel's Certificate of Inspection (COI) take into consideration routine maintenance requirements and ability of the crew to perform all operational evolutions, including emergencies, as well as those functions which may be assigned to persons in

(b) Subject to exceptions, 46 U.S.C. 8104 requires that when a master of a seagoing vessel of more than 100 GRT/ 250 GT establishes watches for the officers, sailors, coal passers, firemen, oilers and watertenders, "the personnel shall be divided, when at sea, into at least three watches and shall be kept on duty successively to perform ordinary work incidental to the operation and management of the vessel". The Coast Guard interprets "sailors" to mean those members of the deck department other than officers, whose duties involve the mechanics of conducting the ship on its vovage, such as helmsman (wheelsman), lookout, etc., and which are necessary to the maintenance of a continuous watch. "Sailors" is not interpreted to include able seamen and ordinary seamen not performing these duties.

(c) Subject to exceptions, 46 U.S.C. 8104(g) permits the officers and crew members (except the coal passers, firemen, oilers, and watertenders) to be divided into two watches when at sea

and engaged on a voyage of less than 600 miles, on the following categories of vessels:

- (1) Towing vessel;
- (2) Offshore supply vessel; or
- (3) Barge.
- (d) Subject to exceptions, 46 U.S.C. 8104(h) permits a master or mate (pilot) operating a towing vessel that is at least 8 meters (26 feet) in length measured from end to end over the deck (excluding sheer) to work not more than 12 hours in a consecutive 24-hour period except in an emergency. The Coast Guard interprets this, in conjunction with other provisions of the law, to permit masters or mates (pilots) serving as operators of towing vessels that are not subject to the provisions of the Officers' Competency Certificates Convention, 1936, to be divided into two watches regardless of the length of the voyage.
- (e) Fish processing vessels are subject to various provisions of 46 U.S.C. 8104 concerning watches, including:
- (1) For fish processing vessels that entered into service before January 1, 1988, the following watch requirements apply to the officers and deck crew:
- (i) If over 5,000 GRT/GT—three watches.
- (ii) If more than 1,600 GRT/3,000 GT and not more than 5,000 GRT/GT—two watches.
- (iii) If not more than 1,600 GRT/3,000 GT—no watch division specified;
- (2) For fish processing vessels that entered into service after December 31, 1987, the following watch requirements apply to the officers and deck crew:
- (i) If over 5,000 GRT/GT—three watches;
- (ii) If not more than 5,000 GRT/GT and having more than 16 individuals onboard, primarily employed in the preparation of fish or fish products—two watches; and
- (iii) If not more than 5000 GRT/GT and having not more than 16 individuals onboard, primarily employed in the preparation of fish or fish products—no watch division specified.
- (f) Properly manned uninspected passenger vessels of at least 100 GRT/250 GT—
- (1) Which are underway for no more than 12 hours in any 24-hour period, and which are adequately moored, anchored, or otherwise secured in a harbor of safe refuge for the remainder of that 24-hour period, may operate with one navigational watch;
- (2) Which are underway more than 12 hours in any 24-hour period must provide a minimum of a two-watch system;

- (3) In no case may the crew of any watch work more than 12 hours in any 24-hour period, except in an emergency.
  - 149. Amend § 15.720 as follows:
- a. Revise the section heading and paragraph (d) to read as set out below; and
- b. In paragraph (b)(1), remove the words "a foreign" and add, in their place, the words "an international".

### § 15.720 Use of non-U.S. credentialed personnel.

\* \* \* \* \*

(d) The master must assure that any replacement of crewmembers by non-U.S. citizens made in accordance with this section will be with an individual who holds a credential that requires experience, training, and other qualifications equivalent to the U.S. credential required for the position, and that the person possesses or will possess the training required to communicate to the extent required by § 15.730 of this part.

#### §15.725 [Amended]

150. In § 15.725 text, remove the words "Officer in Charge, Marine Inspection (OCMI)" and add, in their place, the word "OCMI".

#### §15.730 [Amended]

- 151. Amend § 15.730 as follows:
- a. In paragraph (a) introductory text, remove the words "gross tons" and add, in their place, the text "GRT/250 GT";
- b. In paragraphs (a)(1) and (2), remove the parentheses wherever they appear; and
- c. In paragraph (a)(6), remove the words "not more than 1600 gross tons or which enters" and add, in their place, the words "not more than 1,600 GRT/3,000 GT or which entered".

#### Subpart G—Computations

- 152. Amend § 15.805 as follows:
- a. Revise paragraph (a) introductory text and paragraphs (a)(5) and (a)(5)(ii), and add new paragraph (a)(7) to read as set out below:
- b. In paragraph (a)(1), remove the words "gross tons and over." and add, in their place, the text "GRT/500 GT or more;";
- c. In paragraphs (a)(2) through (4), remove the text "." wherever it appears and add, in its place, the text ";"; and
- d. In paragraph (a)(6), remove the words "gross tons." and add, in their place, the words "GRT/250 GT; and".

#### § 15.805 Master.

(a) An individual holding either an appropriate, valid license as master or an MMC endorsed as master must be in command of each of the following vessels:

\* \* \* \* \*

- (5) Every towing vessel of at least 8 meters (26 feet) or more in length must be under the command of a master of towing vessels, or a mariner holding a license or MMC endorsed as master of inspected, self-propelled vessels greater than 200 GRT/500 GT holding either—
- (ii) A license or MMC endorsed for master of towing vessels.
- (7) Every uninspected passenger vessel on an international voyage.

#### §15.810 [Amended]

153. Amend § 15.810 as follows: a. In paragraphs (b)(1), (b)(2) introductory text, and (b)(3), remove the text "1000 gross tons" wherever it appears and add, in its place, the text

"1,000 GRT/2,000 GT";

b. In paragraph (b)(3), remove the text "100 or more gross tons" and add, in its place, the text "100 GRT/250 GT or more";

- c. In paragraphs (b)(4) and (5), remove the text "100 gross tons" wherever it appears and add, in its place, the text "100 GRT/250 GT",;
- d. In paragraph (b)(3), (c), and (d)(2), remove the text "200 gross tons" and add, in its place, the text "200 GRT/500 GT"; and
- e. In paragraph (d)(2)(i), remove the words "Towing Officer's Assessment Record (TOAR)" and add, in their place, the word "TOAR".
- 154. Revise § 15.812 to read as follows:

#### §15.812 Pilot.

- (a) Except as specified in paragraph (f) of this section, the following vessels, not sailing on register, when underway on the navigable waters of the United States, must be under the direction and control of an individual qualified to serve as pilot under paragraph (b) or (c) of this section, as appropriate:
- (1) Coastwise seagoing vessels propelled by machinery and subject to inspection under 46 U.S.C. Chapter 33, and coastwise seagoing tank barges subject to inspection under 46 U.S.C. Chapter 37;
- (2) Vessels that are not authorized by their Certificate of Inspection (COI) to proceed beyond the boundary line established in part 7 of this Chapter, and are in excess of 1,600 GRT/3,000 GT, propelled by machinery, and subject to inspection under 46 U.S.C. chapter 33; and
- (3) Vessels operating on the Great Lakes, that are propelled by machinery

- and subject to inspection under 46 U.S.C. chapter 33, or are tank barges subject to inspection under 46 U.S.C. chapter 37.
- (b) The following individuals may serve as pilots on a vessel subject to paragraph (a) of this section, when underway on the navigable waters of the United States that are designated areas:
- (1) An individual holding a valid first class pilot's license or MMC officer endorsement as first class pilot, operating within the restrictions of his or her credential, may serve as pilot on any vessel to which this section applies.
- (2) An individual holding a valid license or MMC officer endorsement as master or mate, employed aboard a vessel within the restrictions of his or her credential, may serve as pilot on a vessel of not more than 1,600 GRT/3,000 GT propelled by machinery, described in paragraphs (a)(1) and (a)(3) of this section, provided he or she:

(i) Is at least 21 years old;

(ii) Is able to show current waters of the waters to be navigated, as required in § 11.713 of this subchapter; and

(iii) Has completed a minimum of four round trips over the route to be traversed while in the wheelhouse as watchstander or observer. At least one of the round trips must be made during the hours of darkness if the route is to be traversed during darkness.

(3) An individual holding a valid license or MMC officer endorsement as master, mate, or operator employed aboard a vessel within the restrictions of his or her credential, may serve as pilot on a tank barge or tank barges totaling not more than 10,000 GRT/GT, described in paragraphs (a)(1) and (a)(3) of this section, provided he or she:

(i) Is at least 21 years old;

(ii) Is able to show current knowledge of the waters to be navigated, as required in § 11.713 of this subchapter;

(iii) Has a current physical examination in accordance with the provisions of § 11.709 of this subchapter;

- (iv) Has at least 6 months of service in the deck department on towing vessels engaged in towing operations; and
- (v) Has completed a minimum of 12 round trips over the route to be traversed, as an observer or under instruction in the wheelhouse. At least three of the round trips must be made during the hours of darkness if the route is to be traversed during darkness.
- (c) An individual holding a valid license or MMC officer endorsement as master, mate, or operator, employed aboard a vessel within the restrictions of his or her credential, may serve as a pilot for a vessel subject to paragraphs

- (a)(1) and (a)(2) of this section, when underway on the navigable waters of the United States that are not designated areas of pilotage waters, provided he or she:
  - (1) Is at least 21 years old;
- (2) Is able to show current knowledge of the waters to be navigated, as required in § 11.713 of this subchapter; and
- (3) Has a current physical examination in accordance with the provisions of § 11.709 of this subchapter.
- (d) In any instance when the qualifications of a person satisfying the requirements for pilotage through the provisions of this subpart are questioned by the Coast Guard, the individual must, within a reasonable time, provide the Coast Guard with
- documentation proving compliance with the applicable portion(s) of paragraphs (b) and (c) of this section.
- (e) Federal pilotage requirements contained in paragraphs (a) through (d) of this section are summarized in the following two quick reference tables:
- (1) Table 15.812(e)(1) provides a guide to the pilotage requirements for inspected, self-propelled vessels.

TABLE 15.812(E)(1)—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED SELF-PROPELLED VESSELS, NOT SAILING ON REGISTER

	Designated areas of pilotage waters (routes for which First-Class Pilot's licenses or MMC officer endorsements are issued)	Non-designated areas of pilotage waters (between the 3-mile line and the start of traditional pilotage routes)
Inspected self-propelled vessels greater than 1,600 GRT/3,000 GT, authorized by their Certificate of Inspection (COI) to proceed beyond the boundary line, operating on the Great Lakes.		Master or Mate may serve as pilot if he or she:  1. Is at least 21 years old; 2. Has an annual physical exam; and 3. Maintains current knowledge of the waters to be navigated.
Inspected self-propelled vessels not more than 1,600 GRT/3,000 GT, if authorized by their COI to proceed beyond the boundary line, or operating on the Great Lakes.	First-Class Pilot, or Master or Mate may serve as pilot if the individual:  1. Is at least 21 years old.  2. Maintains current knowledge of the waters to be navigated   3. Has four round trips over the route   2	Master or Mate may serve as pilot if he or she:  1. Is at least 21 years old; and 2. Maintains current knowledge of the waters to be navigated.1
Inspected self-propelled vessels greater than 1,600 GRT/3,000 GT, not authorized by their COI to proceed beyond the boundary line (inland route vessels); other than vessels operating on the Great Lakes.	First-Class Pilot	Master or Mate may serve as pilot if he or she:  1. Is at least 21 years old; 2. Has an annual physical exam; and 3. Maintains current knowledge of the waters to be navigated.1
Inspected self-propelled vessels not more than 1,600 GRT/3,000 GT, not authorized by their COI to proceed beyond the boundary line (inland route vessels); other than vessels operating on the Great Lakes.	No pilotage requirement	No pilotage requirement.

<sup>&</sup>lt;sup>1</sup> One round trip within the past 60 months.

(2) Table 15.812(e)(2) provides a guide to the pilotage requirements for tank barges.

TABLE 15.812(E)(2)—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED TANK BARGES, NOT SAILING ON REGISTER

	Designated areas of pilotage waters (routes for which First-Class Pilot's licenses or MMC officer endorsements are issued)	Non-designated areas of pilotage waters (between the 3-mile line and the start of traditional pilotage routes)
Tank barges greater than 10,000 GRT/GT, authorized by their COI to proceed beyond the boundary line, or operating on the Great Lakes.	First-Class Pilot	Master, Mate, or Master, Mate (Pilot) of towing vessels may serve as pilot if he or she:  1. Is at least 21 years old; 2. Has an annual physical exam;  3. Maintains current knowledge of the waters to be navigated;  2 and 4. Has at least 6 months' service in the deck department on towing vessels engaged in towing.
Tank barges 10,000 GRT/GT or less, authorized by their COI to proceed beyond the boundary line, or operating on the Great Lakes.	First-Class Pilot, or Master, Mate, or Master, Mate (Pilot) of towing vessels may serve as pilot if he or she:  1. Is at least 21 years old; 2. Has an annual physical exam;  3. Maintains current knowledge of the waters to be navigated;  2	Master, Mate, or Master, Mate (Pilot) of towing vessels may serve as pilot if he or she:  1. Is at least 21 years old;  2. Has an annual physical exam;  3. Maintains current knowledge of the waters to be navigated; <sup>2</sup> and

<sup>&</sup>lt;sup>2</sup> If the route is to be traversed during darkness, 1 of the 4 round trips must be made during darkness.

#### TABLE 15.812(E)(2)—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED TANK BARGES, NOT SAILING ON REGISTER—Continued

	Designated areas of pilotage waters (routes for which First-Class Pilot's licenses or MMC officer endorsements are issued)	Non-designated areas of pilotage waters (between the 3-mile line and the start of traditional pilotage routes)
Tank barges authorized by their COI for inland routes only (lakes, bays, and sounds/rivers); other than vessels operating on the Great Lakes.		No pilotage requirement.

Annual physical exam does not apply to an individual who will serve as a pilot of a tank barge of less than 1,600 GRT/3,000 GT.

<sup>2</sup>One round trip within the past 60 months.

- <sup>3</sup> If the route is to be traversed during darkness, 3 of the 12 round trips must be made during darkness.
- (f) In Prince William Sound, Alaska, coastwise seagoing vessels over 1,600 GRT/3,000 GT and propelled by machinery and subject to inspection under 46 U.S.C. Chapter 37 must:
- (1) When operating from 60°49′ north latitude to the Port of Valdez be under the direction and control of an individual holding a valid license or MMC endorsed as pilot who:
- (i) Is operating under the authority of a license or MMC;
- (ii) Holds a license issued by the State of Alaska; and
- (iii) Is not a member of the crew of the vessel; and
- (2) Navigate with either two credentialed deck officers on the bridge, or an individual holding a valid license or MMC endorsed as pilot, when operating south of 60°49' north latitude and in the approaches through Hinchinbrook Entrance and in the area bounded:
- (i) On the West by a line one mile west of the western boundary of the traffic separation scheme;
- (ii) On the East by 146°00′ West longitude;
- (iĭi) On the North by 60°49′ North latitude: and
- (iv) On the South by that area of Hinchinbrook Entrance within the territorial sea bounded by 60°07' North latitude and 146°31.5′ West longitude. 155. Revise § 15.815 to read as
- follows:

#### § 15.815 Radar observer.

- (a) Every person in the required complement of deck officers, including the master, on inspected vessels of 300 GRT/700 GT or over that are radar equipped, must hold a valid endorsement as radar observer.
- (b) Every person who is employed or serves as pilot in accordance with Federal law onboard radar-equipped vessels of 300 GRT/700 GT or over must hold a valid endorsement as radar observer.

- (c) Every person having to hold a license or MMC officer endorsement under 46 U.S.C. 8904(a) for employment or service as master or mate onboard an uninspected towing vessel of 8 meters (26 feet) or more in length must, if the vessel is equipped with radar, hold a valid endorsement as radar observer.
- (d) Every person who is required to hold a radar endorsement must have his or her certificate of training readily available to demonstrate that the endorsement is still valid.
- (e) For this section, readily available means that the documentation must be provided to the Coast Guard, or other appropriate federal agency, within 48 hours. The documentation may be provided by the individual, or his or her company representative, electronically, by facsimile, or physical copy.
  - 156. Add § 15.816 to read as follows:

#### § 15.816 Automatic radar plotting aids (ARPAs).

Every person in the required complement of deck officers, including the master, on seagoing vessels equipped with automatic radar plotting aids (ARPAs), except those vessels listed in § 15.103(e) and (f) of this part, must provide evidence of competence in the use of ARPA.

157. Add § 15.817 to read as follows:

#### § 15.817 Global Maritime Distress and Safety System (GMDSS) radio operator.

Every person in the required complement of deck officers, including the master, on seagoing vessels equipped with a GMDSS, except those vessels listed in § 15.103(e) and (f) of this part, must provide evidence of a valid STCW endorsement as GMDSS radio operator.

158. Add § 15.818 to read as follows:

#### § 15.818 Global Maritime Distress and Safety System (GMDSS) at-sea maintainer.

Every person employed or engaged to maintain GMDSS equipment at sea,

when the service of a person so designated is used to meet the maintenance requirements of SOLAS Regulation IV/15, must provide documentary evidence that he or she is competent to maintain GMDSS equipment at sea.

159. Revise § 15.820 to read as follows:

#### §15.820 Chief engineer.

- (a) There must be an individual holding an MMC or license endorsed as chief engineer, or other credential authorizing service as chief engineer, employed onboard the following mechanically propelled inspected
- (1) Seagoing or Great Lakes vessels of 200 GRT/500 GT and over;
- (2) Offshore supply vessels of more than 200 GRT/500 GT; and
- (3) Inland (other than Great Lakes) vessels of 300 GRT/700 GT or more, if the OCMI determines that an individual with a license or the appropriate MMC officer endorsement responsible for the vessel's mechanical propulsion is necessarv.
- (b) An individual engaged or employed to perform the duties of chief engineer on a mechanically propelled, uninspected, seagoing, documented vessel of 200 GRT/500 GT or more must hold an appropriately endorsed license or MMC authorizing service as a chief engineer.

160. Revise § 15.825 to read as follows:

#### §15.825 Engineer.

- (a) An individual in charge of an engineering watch on a mechanically propelled, seagoing, documented vessel of 200 GRT/500 GT or over, other than an individual described in § 15.820 of this part, must hold an appropriately endorsed license or MMC authorizing service as an assistant engineer.
- (b) The OCMI determines the minimum number of credentialed

engineers required for the safe operation of inspected vessels.

161. Revise § 15.840 to read as follows:

#### §15.840 Able seaman.

- (a) With certain exceptions, 46 U.S.C. 8702 applies to all vessels of at least 100 GRT/250 GT. At least 65 percent of the deck crew of these vessels, excluding individuals serving as officers, must be able seamen. For vessels permitted to maintain a two-watch system, the percentage of able seamen may be reduced to 50.
- (b) Able seamen are rated as: unlimited, limited, special, offshore supply vessel (OSV), sail, and fishing industry, under the provisions of part 12 of this subchapter. 46 U.S.C. 7312 specifies the categories of able seaman (i.e., unlimited, limited, etc.) necessary to meet the requirements of 46 U.S.C. 8702.
- (c) It is the responsibility of the master or person in charge (PIC) to ensure that the able seamen in the service of the vessel meet the requirements of 46 U.S.C. 7312 and 8702.
- 162. Revise § 15.845 to read as follows:

### § 15.845 Lifeboatman including survivalman.

The number of lifeboatmen required for a vessel is specified in part 199 of this chapter; however, on vessels not equipped with lifeboats, a lifeboatman may be replaced by a survivalman.

#### §15.855 [Amended]

- 163. Amend § 15.855 as follows:
- a. In paragraph (b), remove the words "gross tons" and add, in their place, the text "GRT/250 GT":
- b. In paragraph (c) introductory text, remove the words "gross tons" and add, in their place, the text "GRT/700 GT";
- c. In paragraphs (c)(1) through (4), remove the text "." wherever it appears at the end of each paragraph and add, in its place, the text ";";

- d. In paragraph (c)(5), remove the text "." and add, in its place, the text "; and"; and
- e. In paragraph (c)(6), after section number "§ 15.705", add the words "of this part".
- 164. Revise § 15.860 to read as follows:

#### §15.860 Tankerman.

- (a) The OCMI enters on the Certificate of Inspection (COI) issued to each manned tank vessel subject to the regulations in this chapter the number of crewmembers required to hold valid MMDs or MMCs with the proper tankerman endorsement. Table 15.860(h)(1) of this section provides the minimal requirements for tankermen aboard manned tank vessels; Table 15.860(h)(2) of this section provides the tankerman endorsements required for personnel aboard tankships.
- (b) For each tankship of more than 5,000 GRT/GT certified for voyages beyond the boundary line as described in Part 7 of this chapter:
- (1) The number of tankerman-PICs or restricted tankerman-PICs carried must be at least two;
- (2) The number of tankermanassistants carried must be at least three; and
- (3) The number of tankermanengineers carried must be at least two.
- (c) For each tankship of 5,000 GRT/GT or less certified for voyages beyond the boundary line:
- (1) The number of tankerman-PICs or restricted tankerman-PICs carried must be at least two; and
- (2) The number of tankermanengineers carried must be at least two, unless only one engineer is required, in which case the number of tankermanengineers carried may be just one.
- (d) For each tankship not certified for voyages beyond the boundary line, as described in Part 7 of this chapter, if the total crew complement is:
- (1) One or two, the number of tankerman-PICs or restricted tankerman-PICs carried may be just one; or

- (2) More than two, the number of tankerman-PICs or restricted tankerman-PICs carried must be at least two.
- (e) For each tank barge manned under § 31.15–5 of this chapter, if the total crew complement is:
- (1) One or two, the number of tankerman-PICs, restricted tankerman-PICs, tankerman-PICs (barge), or restricted tankerman-PICs (barge) carried may be just one; or
- (2) More than two, the number of tankerman-PICs, restricted tankerman-PICs, tankerman-PICs (barge), or restricted tankerman-PICs (barge) carried must be at least two.
- (f) The following personnel aboard each tankship certified for voyages beyond the boundary line, as described in part 7 of this chapter, must hold valid MMDs or MMCs, endorsed as follows:
- (1) The master and chief mate must each hold a tankerman-PIC or restricted tankerman-PIC endorsement.
- (2) The chief, first assistant, and cargo engineers must each hold a tankermanengineer or tankerman-PIC endorsement.
- (3) Every credentialed officer acting as the PIC of a transfer of liquid cargo in bulk must hold a tankerman-PIC or restricted tankerman-PIC endorsement.
- (4) Every officer or crewmember who is assigned by the PIC duties and responsibilities related to the cargo or cargo-handling equipment during a transfer of liquid cargo in bulk, but is not directly supervised by the PIC, must hold a tankerman-assistant endorsement.
- (g) The endorsements required by this section must be for the classification of the liquid cargo in bulk or of the cargo residue being carried.
- (h) Because the STCW Convention does not recognize restricted Tankerman-PIC endorsements, persons may act under these only aboard vessels conducting business inside the boundary line, as described in Part 7 of this chapter.

TABLE 15.860(H)(1)—MINIMAL REQUIREMENTS FOR TANKERMEN ABOARD MANNED TANK VESSELS

Tank vessels	Tankerman- PIC	Tankerman assistant	Tankerman engineer	Tankerman PIC or tankerman-PIC (barge)
Tankship Certified for Voyages Beyond Boundary Line: Over 5,000 GRT/GT	2	3	2	
5,000 GRT/GT or less	2		*2	
Tankship Not Certified for Voyages Beyond Boundary Line  Tank Barge	** 2			***2

<sup>\*</sup> If only one engineer is required, then only one Tankerman Engineer is required.

<sup>\*\*</sup> If the total crew complement is one or two persons, then only one Tankerman-PIC is required.

<sup>\*\*\*</sup> If the total crew complement is one or two persons, then only one Tankerman-PIC or Tankerman-PIC (Barge) is required.

## TABLE 15.860(H)(2)—TANKERMEN ENDORSEMENTS REQUIRED FOR PERSONNEL ABOARD TANKSHIPS [Endorsement for the Classification of the Bulk Liquid Cargo or Residues Carried]

Tankship certified for voyages beyond boundary line	Tankerman- PIC		Tankerman engineer	Tankerman assistant
Master Chief Mate Chief Engineer First Assistant Engineer Cargo Engineer Credentialed Officer Acting as PIC of Transfer of Liquid Cargo in Bulk Credentialed Officer or Crewmember Not Directly Supervised by PIC	X X X X X	or or or	X X X	X

#### Subpart H—Equivalents

165. Revise § 15.901 to read as follows:

### § 15.901 Inspected vessels of less than 100 GRT/250 GT.

- (a) An individual holding a license or MMC endorsed as mate or pilot of inspected, self-propelled vessels of 200 GRT/500 GT or more is authorized to serve as master on inspected vessels of less than 100 GRT/250 GT within any restrictions on the individual's license or MMC.
- (b) An individual holding a license or MMC endorsed as master or mate of inspected, self-propelled vessels is authorized to serve as master or mate, respectively, of non-self-propelled vessels other than sail vessels, within any restrictions on the individual's license or MMC.
- (c) An individual holding a license or MMC endorsed as master or mate of inspected sail vessels is authorized to serve as master or mate, respectively, of other non-self-propelled vessels, within any restrictions on the individual's license or MMC.
- (d) An individual holding a license or MMC endorsed as master or mate of inspected, auxiliary sail vessels, is authorized to serve as master or mate, respectively, of self-propelled and nonself-propelled vessels, within any restrictions on the individual's license or MMC.

166. Revise § 15.905 to read as follows:

#### § 15.905 Uninspected passenger vessels.

- (a) An individual holding a license or MMC endorsed as master or pilot of an inspected, self-propelled vessel is authorized to serve as operator of an uninspected passenger vessel less than 100 GRT/250 GT within any restrictions, other than tonnage limitations, on the individual's license or MMC.
- (b) An individual holding a license or MMC endorsed as a master or pilot of an inspected, self-propelled vessel is authorized to serve as master, as

- required by § 15.805(a)(6) of this part, of an uninspected passenger vessel of 100 GRT/250 GT or more within any restrictions, including tonnage and route, on the individual's license or MMC.
- (c) An individual holding a license or MMC endorsed as mate of inspected, self-propelled vessels (other than Great Lakes, inland, or river vessels of less than 200 GRT/500 GT) is authorized to serve as operator of uninspected passenger vessels of less than 100 GRT/250 GT within any restrictions, other than tonnage limitations, on the individual's license or MMC.
- 167. Revise § 15.915 to read as follows:

#### § 15.915 Engineer officer endorsements.

- (a) The following license and MMC officer endorsements authorize the holder to serve as noted, within any restrictions on the license or MMC:
- (1) An engineer officer's license or endorsement issued in the grade of chief engineer (limited) or assistant engineer (limited) on vessels as specified in § 11.501(d) of this subchapter.
- (2) An engineer's license or endorsement issued in any grade of DDE authorizes the holder to serve as chief engineer or assistant engineer on vessels of not more than 500 GRT/1,200 GT on the Great Lakes and inland waters, on seagoing vessels of not more than 500 GRT/1,200 GT specified in 15.103(2) of this part, and on seagoing vessels of not more than 500 GRT/1,200 GT propelled by machinery of less than 1,000 HP/750 kW within any limitations of the license or endorsement.
- (b) On Great Lakes or inland waters, an engineer holding a license or MMC endorsement for steam or motor propulsion may serve also on a gas turbine-propelled vessel.

### Subpart J—Vessels Subject to Requirements of STCW

168. Revise § 15.1101 to read as follows:

#### §15.1101 General.

- (a) Except as noted in paragraphs (1) and (2) of this paragraph, the regulations in this subpart apply to seagoing vessels.
- (1) The following vessels are exempt from application of the STCW Convention:
- (i) Fishing vessels as defined in 46 U.S.C. 2101(11)(a);
- (ii) Fishing vessels used as fish-tender vessels as defined in 46 U.S.C. 2101(11)(c):
- (iii) Barges as defined in 46 U.S.C. 2101(2), including non-self-propelled MODUs; and
- (iv) Vessels operating exclusively on the Great Lakes.
- (2) The following small vessels engaged exclusively on domestic, nearcoastal voyages, are not subject to further obligation for the purposes of the STCW Convention:
- (i) Small passenger vessels subject to subchapter T or K of title 46, CFR;
- (ii) Vessels of less than 200 GRT/500 GT (other than passenger vessels subject to subchapter H of title 46 CFR); and
- (iii) Uninspected passenger vessels as defined in 46 U.S.C. 2101(42)(B).
- (b) Masters, mates, and engineers serving on vessels identified in paragraph (a)(2) of this section may be issued, without additional proof of qualification, an appropriate STCW endorsement when the Coast Guard determines that such a document is necessary to enable the vessel to engage on a single international voyage of a non-routine nature. The STCW endorsement will be expressly limited to service on the vessel or the class of vessels and will not establish qualification for any other purpose. All personnel on the specified vessels must comply with the requirements of § 15.1105 of this part when the vessel is engaged on an international voyage.
- (c) A vessel with a valid Safety Management Certificate and a copy of a Document of Compliance issued for that vessel under 46 U.S.C. 3205 is presumed to comply with the STCW

Convention.

169. Revise § 15.1103 to read as follows:

#### §15.1103 Employment and service within the restrictions of an STCW endorsement or of a certificate of training.

(a) Onboard a seagoing vessel operating beyond the boundary line, as described in Part 7 of this chapter, no person may employ or engage any person to serve, and no person may serve, in a position requiring a person to hold an STCW endorsement, including master, chief mate, chief engineer, second engineer, officer of the navigational or engineering watch, or GMDSS radio operator, unless the person serving holds an appropriate, valid STCW endorsement issued in accordance with part 11 of this subchapter.

(b) Onboard a seagoing vessel of 200 GRT/500 GT or more, no person may employ or engage any person to serve, and no person may serve, as an RFPNW, except for training, unless the person serving holds an appropriate, valid STCW endorsement issued in accordance with part 12 of this

subchapter.

(c) Onboard a seagoing vessel driven by main propulsion machinery of 1,000 HP/750 kW propulsion power or more, no person may employ or engage any person to serve, and no person may serve, in a rating forming part of a watch in a manned engine room, nor may any person be designated to perform duties in a periodically unmanned engine room, except for training or for the performance of duties of an unskilled nature, unless the person serving holds an appropriate, valid STCW endorsement issued in accordance with part 12 of this subchapter.

(d) Onboard a Ro-Ro passenger ship, or on a passenger ship other than a Ro-Ro passenger ship as defined by the Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), on an international voyage, any person serving as master, chief mate, mate, chief engineer, engineer officer, and any person holding a license, MMD or MMC and performing duties towards safety, cargo handling, or care for passengers, must meet the appropriate requirements of Regulation V/2 or V/3 of the STCW Convention (incorporated by reference in § 15.105). These individuals must hold documentary evidence to show they meet these requirements.

170. Revise § 15.1105 to read as follows:

### §15.1105 Familiarization and basic safety training (BST).

(a) Onboard a seagoing vessel, no person may assign any person to

- perform shipboard duties, and no person may perform those duties, unless the person performing them has received—
- (1) Approved familiarization training in personal survival techniques as set out in the standard of competence under Regulation VI/1 of the STCW Convention (incorporated by reference in § 15.105); or
- (2) Sufficient familiarization training or instruction to be able to:
- (i) Communicate with other persons onboard about elementary safety matters and understand informational symbols, signs, and alarm signals concerning safety;
- (ii) Know what to do if a person falls overboard; if fire or smoke is detected; or if the fire alarm or abandon-ship alarm sounds;
- (iii) Identify stations for muster and embarkation and emergency-escape routes;
- (iv) Locate and put on personal flotation devices;
- (v) Raise the alarm and knows the use of portable fire extinguishers;
- (vi) Take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance onboard; and
- (vii) Close and open the fire doors, weather-tight doors, and water-tight doors fitted in the vessel other than those for hull openings.
- (b) In accordance with Regulation I/14 of the STCW Convention (incorporated by reference in § 15.105), no person on board a seagoing vessel may assign a shipboard duty or responsibility to any person who is serving in a position that must be filled as part of the required crew complement, and no person may perform any such duty or responsibility, unless he or she is:
- (1) Familiar with his or her duty and with all vessel's arrangements; and
- (2) Familiar with installations, equipment, procedures, and characteristics relevant to his or her routine or emergency duties or responsibilities.
- (c) Onboard a seagoing vessel, no person may assign a shipboard duty or responsibility to any person who is serving in a position that must be filled as part of the required crew complement or who is assigned a responsibility on the muster list or station bill, and no person may perform any such duty or responsibility, unless the person performing it produces satisfactory evidence that she or he has achieved or maintained the minimum standards of competence for the following four areas of basic safety within the previous 5 years:

- (1) Personal survival techniques as set out in table A–VI/1–1 of the STCW Code (incorporated by reference in § 15.105).
- (2) Fire prevention and firefighting as set out in table A–VI/1–2 of the STCW Code (incorporated by reference in § 15.105).
- (3) Elementary first aid as set out in table A–VI/1–3 of the STCW Code (incorporated by reference in § 15.105).
- (4) Personal safety and social responsibilities as set out in table A–VI/1–4 of the STCW Code (incorporated by reference in § 15.105).
- (d) Fish-processing vessels in compliance with the provisions of 46 CFR part 28 on instructions, drills, and safety orientation are deemed to be in compliance with the requirements of this section on familiarization and basic safety training.
  - 171. Amend § 15.1107 as follows:

a. Revise the introductory text and paragraph (c) to read as set out below;

- b. In paragraph (a), remove the words "a recent evaluation" and add, in their place, the words "an evaluation not older than 5 years"; and, at the end of paragraph (a), remove the text "." and add, in its place, the text ";"; and
- c. At the end of paragraph (b), remove the text "." and add, in its place, the text ";".

### § 15.1107 Maintenance of merchant mariners' records by owner or operator.

For every credentialed mariner employed on a U.S.-documented seagoing vessel, the owner or operator must ensure that the following information is maintained and readily accessible to those in management positions, including the master of the vessel, who are responsible for the safety of the vessel, compliance with laws and regulations, and for the prevention of marine pollution:

- (c) Competency in assigned shipboard duties as proven by:
- (1) Copies of the mariner's current credentials;
- (2) Records of the most recent BST; and
- (3) Records of ship-specific familiarization that have been achieved and maintained.
- 172. Revise § 15.1109 to read as follows:

#### §15.1109 Watches.

Each master of a vessel that operates beyond the boundary line, as described in part 7 of this chapter, must ensure observance of the principles concerning watchkeeping set out in Regulation VIII/2 of the STCW Convention and section A–VIII/2 of the STCW Code (both incorporated by reference in § 15.105).

173. Revise § 15.1111 paragraph (a) to read as follows:

#### §15.1111 Work hours and rest periods.

(a) Every person assigned duty as officer in charge of a navigational or engineering watch, or duty as a rating forming part of a navigational or engineering watch, on board any vessel that operates beyond the boundary line,

as described in part 7 of this chapter, must receive a minimum of 10 hours of rest in any 24-hour period.

\* \* \* \* \* \* 174. Revise § 15.1113 to read as follows:

#### §15.1113 Vessel Security Officer (VSO)

After July 1, 2009, onboard a seagoing vessel of 200 GRT/500 GT or more, all

persons performing duties as VSO must hold a valid endorsement as Vessel Security Officer.

Dated: September 30, 2009.

#### RADM Brian M. Salerno,

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[FR Doc. E9–26821 Filed 11–16–09; 8:45 am]

BILLING CODE 4910-15-P