DEPARTMENT OF TRANSPORTATION

Coast Guard

46 CFR Parts 10, 12, and 15

[CGD 95–062]

RIN 2115–AF26

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

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes changes to the current domestic rules on licensing, documentation, and manning in compliance with recent amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW). The amendments were adopted by a Conference of Parties to STCW in July 1995, and will come into force on February 1, 1997, though some changes to domestic rules must come into force before then to ensure these rules conform with international requirements, and other changes may come into force after then to allow a more gradual shift in practice. The proposed changes would affect the full range of activities associated with determining that an individual is competent for service in certain shipboard capacities.

DATES: Comments must be received on or before July 24, 1996.

ADDRESSES: Comments may be mailed to the Executive Secretary, Marine Safety Council (G–LRA, room 3406) [CGD 95–062], U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593–0001, or may be delivered to room 3406 at the same address between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays. The telephone number is (202) 267–1477. Comments on collection-of-information requirements must be mailed also 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.

The Executive Secretary maintains the public docket for this rulemaking. Comments will become part of this docket and will be available for inspection or copying at room 3406, U.S. Coast Guard Headquarters, between 8 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

A copy of the material listed in Incorporation by Reference of this preamble is available for inspection at room 3406, U.S. Coast Guard Headquarters.

A copy of the 1995 Amendments to STCW may be obtained by writing Commandant (G–MOS), U.S. Coast Guard, 2100 Second Street SW., Washington, DC 20593–0001, or by calling (202) 267–0229, between 8 a.m. and 3 p.m. Monday through Friday, except Federal holidays. Requests may also be submitted by facsimile at (202) 267–4570.

FOR FURTHER INFORMATION CONTACT: Mr. Christopher Young, Project Manager, Operating and Environmental Standards Division (G–MOS), U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593–0001, telephone (202) 267–0216.

SUPPLEMENTARY INFORMATION:

Request for Comments

The Coast Guard encourages interested persons to participate in this rulemaking by submitting written data, views, or arguments. Persons submitting comments should include their names and addresses, identify this rulemaking [CGD 95–062] and the specific section of this proposal to which each comment applies, and give the reason for each comment. Please submit two copies of all comments and attachments in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. Persons wanting acknowledgment of receipt of comments should enclose stamped, self-addressed postcards or envelopes.

The Coast Guard will consider all comments received during the comment period. It may change this proposal in view of the comments.

Hearings

The Coast Guard has determined that the opportunity for oral presentations will aid in this rulemaking, and will hold at least one public hearing during the comment period. The Coast Guard solicits recommendations on dates and locations for a public meeting. Requests for a public meeting should be addressed to the Marine Safety Council at the address under **ADDRESSES**. The Coast Guard will provide more information about public hearings by a later document in the Federal Register.

Background and Purpose

On July 7, 1995, a Conference of Parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), meeting at the Headquarters of the International Maritime Organization (IMO) in London, adopted a package of Amendments to STCW. The amendments will enter into force on February 1, 1997, unless a third of the parties to the Convention, or parties representing over 50 percent of the world's hipping tons, object to them by August 1, 1996. Because they were adopted unanimously by the Conference, no objections are expected. Consequently, the Coast Guard is taking the steps necessary to implement the revised requirements to ensure that U.S. documents and licenses are issued in compliance with the 1995 Amendments to STCW.

The Convention sets qualifications for masters, officers, and watchkeeping personnel on seagoing merchant ships. It was adopted in 1978 by a conference at IMO Headquarters in London and it entered into force in 1984. Currently, there are 114 State-Parties, representing almost 95 percent of the world's merchant-ship tons. The United States became a party in 1991. Over 90 percent of ships visiting U.S. waters are foreign-flag. Approximately 350 large U.S. merchant ships that routinely visit foreign ports, as well as thousands of smaller U.S. documented commercial vessels that operate on ocean or near-coastal voyages, are subject to STCW.

In 1993, IMO embarked on a comprehensive revision of STCW to establish the highest practicable standards of competence and to address human error as a major cause of maritime casualties. By 1993, significant limitations to the existing Convention had become apparent. They included requirements that were too vague and left too much to the discretion of Parties; the absence of clear, uniform standards of competence; ineffective international superintendent to verify that Parties were in fact complying with Convention requirements; limited provisions for port-State control; and outdated technical references that failed to address modern shipboard systems, job descriptions, and approaches to maritime training such as the use of simulation technology.

The amendments adopted by the Conference in July 1995 were comprehensive and detailed. They concern port-State control, communication of information to IMO to allow for mutual oversight, and responsibility of all State-Parties to ensure that seafarers meet objective standards of competence. They also require candidates for certificates (licenses and document endorsements) to establish competence through both subject-area examinations and practical demonstrations of skills. Training, assessment, and certification of competence are all to be managed

within a quality-standards system to ensure that stated objectives are being achieved.

The Coast Guard published a notice of inquiry in the Federal Register [60 FR 56970 (November 13, 1995)] to solicit information on the costs that may be associated with implementation of the 1995 Amendments to STCW. This notice is discussed in more detail under the heading ''Regulatory Evaluation.''

The Coast Guard held a public meeting on August 31, 1995, to discuss the outcome of the Conference and seek public comment on how the 1995 Amendments to STCW should be implemented by the United States. Comments received at the meeting and in response to the notice of inquiry have been taken into consideration in the development of implementing regulations. Three written comments were submitted to the docket, and they will be discussed in the appropriate sections of this preamble.

Additionally, the Coast Guard had sought comment from the public during the period leading up to the Conference that adopted the 1995 Amendments to STCW. The Coast Guard had held seven public meetings to determine what positions U.S. delegations should advocate at meetings held by IMO, and to exchange views about Amendments to STCW that were under discussion.

The Coast Guard has also taken advantage of the meetings of its advisory panels, particularly the Merchant Marine Personnel Advisory Committee (MERPAC), the Towing Safety Advisory Committee (TSAC), and the Navigational Safety Advisory Council (NAVSAC), to discuss developments relating to the amendment of STCW and the domestic implementation of these amendments.

Related Rulemakings

This proposed rulemaking has been prepared in anticipation that several other rulemakings will revise Parts 10, 12, and 15 or address related subjects.

First, in docket number CGD 95–072 [60 FR 50455 (September 29, 1995)], the Coast Guard has made technical and editorial corrections to its current rules, removing outdated references and reflecting current organizational structures.

Second, in CGD 91–045, the Coast Guard published a supplemental notice of proposed rulemaking (SNPRM) [60 FR 55904 (November 3, 1995)] that proposed operational measures to reduce spills from existing tank vessels without double hulls. This too involves subjects addressed here to implement the STCW Amendments, such as rest-period requirements and training in bridge-team procedures and bridge-resource management.

Third, in CGD 94–029, a proposed rule for modernizing examination methods was published [60 FR 10053 (February 23, 1995)]. Essentially, it would allow for the use of testing services from the private and public sectors to confirm the competency of candidates for Coast Guard licenses.

Fourth, in CGD 94–055, there is under development a proposal that concerns licensing requirements for officers of towing vessels. It stems from investigations into the Sunset Limited tragedy, when a tug and barge damaged a railroad bridge in September 1993. It may introduce into 46 CFR Part 10 new terms and concepts, such as the *designated examiner, practical demonstration, and standard of competence*, and the use of training-record books. The Coast Guard has been working with TSAC on CGD 94–055.

The Coast Guard will make every effort to coordinate these projects with a view to establishing uniform requirements except where there is a compelling need to maintain a difference in respect of a particular activity or class of vessel.

In keeping with other recent Coast Guard initiatives, this proposed rule tries to avoid unnecessary additional requirements when international standards are being implemented. Specifically, the Coast Guard has compared the rules to the international standard and has determined that it would not unnecessarily establish a requirement in excess of that standard. With this objective, the rule makes direct reference to international standards where possible. Where there is a difference in substance between the rule and the international requirement, this is noted and discussed in the section-by-section analysis. In most cases, the difference involves an exercise of discretion to address a specific class of vessel rather than an additional requirement. In some cases, clear differences with the international scheme are retained to preserve continuity in the U.S. licensing system. The Coast Guard requests comments on these differences, and the advantages that might be derived from removing them from current domestic rules.

The Coast Guard has attempted to develop a rule that would be self-implementing. In other words, it has tried to minimize the direct role the Coast Guard would need to play in overseeing routine compliance with the requirements. Ideally, it would like to minimize its direct involvement and limit its role to the following: (a) performing functions governmental in nature such as issuing certificates of competency; (b) setting standards for such certificates; (c) addressing special circumstances or exceptions to the general case clearly covered by the regulations; (d) monitoring training and assessment by spot-checks or by review of random samples to ensure that the new ''quality-standards system'' requirements are being maintained; and (e) keeping some necessary records.

Discussion of Proposed Rule

General

The following discussion proceeds in the order in which the proposed revisions to current domestic rules are presented. However, a few general comments may assist the reader and reduce repetition of a point common to many parts of the revisions.

1. *Approach.* The approach taken in this proposed rule is to retain the existing structure of the current domestic rules on licensing (46 CFR Part 10), certification of seamen (46 CFR Part 12), and manning (46 CFR Part 15), and incorporate specific requirements of the 1995 Amendments to STCW. Where possible, this Convention and its associated Seafarers' Training, Certification and Watchkeeping Code (STCW Code) have been incorporated by reference to avoid unnecessary duplication and to ensure compatibility between international and domestic requirements.

The 1995 Amendment to STCW essentially replace the current Annex to the 1978 Convention with a new Annex and an associated STCW Code. The STCW Code is divided into two separate parts (A and B), that are both is organized to parallel, exactly, the STCW Regulations in the Annex. Part A provides mandatory standards that are directly referred to in the relevant STCW Regulations in the Annex. Part B is non-mandatory guidance to assist in implementation of the requirements of Part A, and to promote uniform interpretation of the STCW Regulations. Not all of the STCW Regulations have explanatory material in both parts of the STCW Code.

Chapter I of the new Annex is expanded to include new STCW Regulations on matters such as the use of simulators in training and assessment, the qualifications of persons responsible for the training and assessment of seafarers, the establishment of a quality-standards system to ensure achievement of defined objectives, the establishment of medical-fitness standards for seafarers, and the responsibilities of companies.

The remaining part of the new Annex is enlarged from six to eight chapters. Chapters II, III, and IV have retained their application to the master and deck department, the engine department, and radiocommunications, respectively. However, material that was previously presented as appendices to the original STCW regulations is now contained in the STCW Code, and detailed standards of competence are set out in the corresponding sections of the Code. Additionally, the standards of competence are organized along functional lines, with three levels of responsibility. The amendments establish requirements for certification for the following seven functions: navigation; handling and stowage of cargo; controlling the operation of the ship and care for persons on board; marine engineering; electronic and control engineering; maintenance and repair; and radiocommunications. Three levels of responsibility are associated with each function under STCW—management level, operational level, and support level.

Chapter V, which was previously amended in 1994 and which addressed only tanker personnel, is not expanded to address personnel on roll-on/roll-off(ro-ro) passenger ships.

Chapter VI, which currently addresses only proficiency in survival craft and rescue boats, is expanded to require familiarization training or instruction for all seafarers, and basic safety-training for those who have safety or pollution-prevention duties.

Chapter VII allows for alternative-certification systems under which certificates could be issued on the basis of functions combined in ways that differ from those associated with traditional shipboard capacities under Chapters II, III, and IV. This flexibility is subject to a number of restrictions under the STCW Regulations in Chapter VII. The Coast Guard is not planning, at this time, to incorporate provisions for alternative certification without further evaluation and industry support. The Coast Guard requests comments on the application of Chapter VII to U.S. licensing and documentation.

In the 1995 Amendments to STCW, all watchkeeping provisions are consolidated under new Chapter VIII and the associated sections of the STCW Code. New STCW Regulation VIII/1 requires Administrations to establish and enforce rest-hour requirements for watchkeeping personnel to prevent fatigue.

2. *Scope of application.* STCW applies to seagong ships (except pleasure craft, fishing vessels, and ships entitled to sovereign immunity such as warships). Article II defines a *seagoing ship* as a ship other than one that ''navigate[s] exclusively in inland waters or in waters within, or closely adjacent to, sheltered waters or areas where port regulations apply.'' This proposed rule, which implements STCW, applies to any commercial vessel that operates seaward of the boundary lines established by 46 CFR part 7.

The Coast Guard does not intend to apply the requirements of STCW to vessels that operate exclusively on the inland waters of the United States. However, some of the proposals would have the effect of modifying how the Coast Guard does business and the conditions under which it would consider approving a program of training and assessment for qualifying an individual for a license, document, or endorsement. It does not intend to restrict, to ocean and near-coastal licenses and documents, procedures that may also be suitable to training for inland licenses. The Coast Guard solicits comments on the potential effects on candidates for inland licenses and documents, and on the enterprises that offer training to such candidates.

The Coast Guard does not consider STCW to apply directly to personal serving on ships that operate exclusively on the Great Lakes. However, individuals using time served on such vessels toward an ocean or near-coastal license, and those who are being trained at training institutions that serve mariners in the Great Lakes region, need to be aware of the requirements that mariners must meet to hold STCW Certificates if those mariners will be serving on ships in ocean service.

One comment submitted in response to the request for comments published in the Federal Register on August 2, 1995 [60 FR 39306], requested that the Coast Guard consider deferring implementation of the 1995 Amendments to STCW in respect of Mobile Offshore Drilling Units (MODUs). The comment pointed out a resolution adopted by the 1995 Conference of Parties to STCW, noting that time constraints had not allowed full consideration to the possibility of including provisions on the training and certification of maritime personnel employed on board MODUs. The resolution invites IMO to consider developing provisions addressing this matter under STCW, or in such other instrument as may be appropriate.

The resolution referred to in the comment recommends special training and certification for industrial personnel serving on MODUs because of the specialized nature of MODUs' operations. To the extent a MODU is a *seagoing ship* under STCW, this proposed rule would apply to seafarers serving on one. On the other hand, in approving specific training programs, the Coast Guard would take into consideration, and would use as the basis for its evaluation of training programs, any IMO resolutions that provide special guidance relating to the training of personnel on MODUs.

In this regard, the following three IMO resolutions are particularly relevant: A.538(13), ''Maritime Safety Training of Personnel on Mobile Offshore Units''; A.712(17), ''Recommended Standards of Specialized Training, Qualifications and Certification of Key Personnel Assigned Responsibility for Essential Marine Functions of Mobile Offshore Units''; and A.828(19), ''Recommendation on Maritime Safety and Emergency Preparedness Training for all Personnel on Moble Offshore Units''.

The comment also suggested that the Coast Guard accept or recognize certificates issued by another Party to STCW for service on MODUs. The Coast Guard does not consider this request to be viable at this time. The issue of recognition is complicated by citizenship requirements that apply to the following: (a) candidates for U.S. licenses and certificates of registry under 46 U.S.C. 7102, (b) crewmembers on documented vessels of the United States under 46 U.S.C. 8103, and (c) MODUs operating on the U.S. outer continental shelf under 43 U.S.C. 1356. Another issue would be the principle of reciprocity or mutual recognition between U.S. and non-U.S. certificates.

3. *License structure.* The Coast Guard would not, by this proposed rule, replace the existing license structure with the license structure presented in STCW. The 4-level license structure in Part 10 would persist (e.g., chief engineer, 1st, 2nd, and 3rd assistant engineer officer, and 3 levels of mate under the master). Although the STCW structure is less complicated than the U.S. structure, the Coast Guard does not consider it appropriate or expedient to propose a comprehensive change in this rulemaking.

Some of the STCW terms must be introduced into U.S. regulations to ensure that holders of U.S. licenses would be entitled to hold the appropriate STCW certificate. The Coast Guard is concerned, however, that the elimination of the existing categories of license might create difficulties for certain segments of the industry, or could have unintended impacts on established career patterns in the maritime industry. In addition, it may

necessitate changes in the terms used in the manning-complement section of the U.S. Certificate of Inspection.

Trying to anticipate and address all of these possibilities could unnecessarily complicate promulgation of a rule intended only to implement new STCW requirements. The requirement for promulgating a rule by February 1, 1997, has precluded the opportunity for assessing the implications at this time. However, the Coast Guard is interested in comments on adjustments to the current U.S. licensing structure, to bring it into closer alignment with the STCW structure.

4. *Documentation.* Although the 1995 Amendments to STCW will permit the use of an STCW document to serve as both an individual's certificate of competency and an endorsement that the candidate meets STCW requirements, the Coast Guard plans to retain a distinction between the U.S. license and the STCW endorsement for the time being. In other words, each licensed officer who will be serving on a seagoing vessel will be issued both a U.S. license and a separate STCW endorsement. Of course, an STCW endorsement will have no validity unless accompanied by its holder's license.

5. *Communication to IMO.* In proposing this rule, the Coast Guard has been cognizant of its future obligation to submit to IMO a detailed description of how the United States complies with the 1995 Amendments to STCW. Under new STCW Regulation I/7, each Party must prepare a report on the steps it has taken to give the Convention ''full and complete effect.''

When complete information has been provided to IMO, and the Secretary-General of IMO has confirmed that in fact full effect has been given to STCW, the Maritime Safety Committee will be invited to formally confirm and identify the Party as having done so, and other Parties will be entitled to accept certificates issued by that Party as being in compliance with Convention requirements.

It will be important for the United States to be able to satisfy the requirements that earn this international recognition. This rulemaking is an essential step toward meeting that objective.

6. *Tonnage.* Both the U.S. licensing structure and the STCW structure employ tonnage thresholds in establishing requirements for training and certification. However, the U.S. structure includes several tonnage divisions not used in STCW, particularly in respect of lower-tonnage licenses. Also, these tonnage divisions are keyed to the tonnage of ships as determined under the regulatory tonnage-measurement system, which exempts certain spaces in calculating gross register tons (GRT) and therefore can result in lower tonnage values than calculations based on the International Convention on Tonnage Measurement of Ships, 1969 (ITC).

The 1995 Amendments to STCW include adjustments in the tonnage thresholds from 200 GRT to 500 gross tons (GT); and from 1,600 GRT to 3,000 GT that reflect a relatively close alignment between the various domestic tonnage systems used around the world and the ITC tonnage-measurement system. The new STCW Regulation I/15, on Transitional Provisions, allows Parties to reissue or revalidate certificates (licenses) based on the lower tonnage values by substituting 500 GT for 200 GRT, and 3,000 GT for 1,600 GRT, at their discretion.

A number of alternatives are available for addressing tonnage in the implementation of the 1995 Amendments to STCW. A threshold of 3,000 GT can be added as a new category of licensing without deleting any existing category. Under this alternative, the requirements for the 3,000-GT license would be identical to the requirements for a 1,600-GRT license; and anyone holding a 1,600-GRT license for service on a ship on near-coastal or ocean service would be entitled to hold an STCW endorsement for service on seagoing ships of 3,000 GT. Similarly, an individual holding a 200-GRT license would be entitled to hold an STCW endorsement for service on seagoing ships of 500 GT.

Another alternative would be to add a threshold of 3,000 GT as a new category of license, and delete the threshold of 1,600 GRT. Under this alternative a transition mechanism would be implemented by regulation or by policy guidance to ensure that holders of 1,600-GRT licenses were issued 3,000-GT licenses at the time of renewal.

A different approach would be needed to align the 200-GRT and 500-GRT thresholds in 46 CFR part 10 with the 500 GT threshold in the STCW Amendments, because the 500-GRT license entails special requirements that apply to certain classes of ships (i.e., OSVs). At the present time, it appears that these thresholds must be retained, and policy guidance will be developed for issuing an STCW endorsement at the 500-GT level, with the appropriate service limitations.

Comments on these or other alternatives may be submitted to the docket and will be considered before a final rule is published. In deciding how to proceed, the Coast Guard would make every effort to avoid penalizing either the holders of existing licenses or the operators of vessels that have exercised their option to be measured under the regulatory-tonnage-measurement system.

7. *Medical fitness.* The 1995 Amendments to STCW include a requirement for Parties to establish standards of medical fitness for seafarers, particularly regarding eyesight and hearing (STCW Regulation I/9). Under STCW as amended, candidates for certification will have to provide *satisfactory proof* that they meet the standards of medical fitness; and they must each hold a document attesting their medical fitness, issued by ''a duly qualified medical practitioner recognized by the Party.''

Criteria and procedures for medical fitness are already established by 46 CFR parts 10, 12, and 13. They include the following sections: § 10.205(d), physical-examination requirements for original licenses; § 10.207(e), physical requirements for raise of grade of license; § 10.209(d), physical requirements for license renewals; § 10.709, physical-examination requirements for pilots; § 12.02–27, physical requirements for renewal of a merchant mariner's document; § 12.05–5, physical requirements for Able Seamen; § 12.15–5, physical requirements for qualified members of the engine department; and § 13.125, physical requirements for tankermen.

There are currently no internationally agreed-upon standards of medical fitness for seafarers, except in respect of eyesight (which appear in section B–I/9 of the STCW Code). The 1995 STCW Conference adopted a resolution that (a) noted that the International Labor Organization (ILO) and the World Health Organization (WHO) are undertaking research into existing medical-examination requirements for seafarers on a global basis and (b) invited IMO to develop international standards of medical fitness for seafarers, in cooperation with the ILO and WHO. This matter is now on the work program of the IMO Sub-Committee on Standards of Training and Watchkeeping (STW). It is unlikely that such standards will be established before this proposed rule would be published as a final rule.

Meanwhile, the Coast Guard has been working with MERPAC to determine whether there is a need for more explicit physical standards for entry-level personnel. The Coast Guard is also continuing to work with the Maritime Administration in promoting the

Seafarers Health Improvement Program, which includes guidance for physical examinations for both entry of seafarers into, and retention in, the U.S. merchant marine.

The Coast Guard is also in the process of reviewing and revising Navigation and Inspection Circular Number (NVIC) 6–89, ''Physical Evaluation Guidelines for Merchant Mariners' Documents and Licenses,'' which identifies disqualifying medical conditions. As noted in one comment submitted to the docket in response to the notice published on August 2, 1995, medical-fitness standards must take into account the job description for the positions to be filled by the individual concerned, and the implications for both employees and employers under the Americans with Disabilities Act (ADA).

Taking the preceeding discussion into account, the Coast Guard is not venturing into any specific new medical-fitness standards in this proposed rule. However, to ensure compliance with the requirements of new STCW Regulation I/9, this rule includes a provision stating that each applicant for an entry-level MMD must provide a document issued by a qualified medical practitioner attesting the prospective seaman's medical fitness for anticipated shipboard duties (§ 12.02–07).

The Coast Guard invites comments on the need for and feasibility of establishing more prescriptive medical standards for entry-level personnel and particularly for personnel with duties in safety or pollution-prevention. It also invites comment on whether a licensed nurse practitioner should be considered a ''qualified medical practitioner'' for assuring medical fitness under U.S. regulations.

8. *Quality-standards system (QSS).* The 1995 Amendments to STCW include a new requirement (STCW Regulation I/8) for Parties to ensure that all training and assessment are ''continuously monitored through a quality-standards system to ensure achievement of defined objectives, including those concerning the qualifications and experience of instructors and assessors.'' Furthermore, the new STCW Regulation provides that an evaluation be conducted periodically by qualified persons, not involved in the activities concerned. The associated sections of the STCW Code expand on this STCW Regulation by outlining the requirements for a QSS in Part A, and then by additional guidance in Part B. For example, A–I/8 states that independent evaluations of assessments are to be conducted ''at intervals of not more than 5 years.'' Furthermore, the results of these evaluations are to be reported to IMO, in accordance with STCW Regulation I/7.

To a large degree, the current process of the Coast Guard for course approval meets the requirements of new STCW Regulation I/8, but this process is limited to specific required training (such as firefighting or radar), or training intended to substitute for part of a sea-service requirement. As discussed in more detail relative to 46 CFR Part 10 under *Approved training,* the 1995 Amendments to STCW expand the instances where approved training must or may be used to meet competence requirements. A QSS will be required for all such training.

This proposed rule incorporates elements that conform to the STCW requirements for a QSS for training and assessment activities, but that would at the same time take into consideration the impact on Coast Guard resources that may be needed for effective supervision. The proposed rule is intentionally drafted to allow for a variety of QSSs that may be tailored to suit particular programs of training and assessment. They are also designed to ensure that no QSS imposes unreasonable costs on small enterprises or entities that offer training programs whether limited in scope or offered only to a restricted pool of seafarers and programs that, regardless, may be conducted either on board ship or at shoreside.

The Coast Guard invites comments on the extent to which the following systems or processes, or a combination of such systems or processes, should be accepted as meeting the QSS requirements of the 1995 Amendments to STCW:

(a) Periodic accreditation under a recognized process like the regional accreditation used by high-level academic institutions in the United States, such as the Middle States Association of Colleges and Schools, provided that the process can be appropriately modified to explicitly cover maritime training and take into account guidance regarding quality-standards provided in part B–I/8 of the STCW Code.

(b) Periodic Accreditation by an independent professional agency, or a voluntary association of trade and technical schools, that has membership standards and a procedure for accreditation that takes into account guidance regarding quality-standards provided in part B–I/8 of the STCW Code.

(c) Periodic certification, by a State board of education, or other suitable regulatory body at the State level, establishing that a particular training program or institution is authorized to issue certificates of completion of training requirements in a relevant maritime field, if the supervising process takes into account guidance regarding quality-standards provided in part B–I/8 of the STCW Code.

(d) Periodic certification by an organization accepted or authorized by the Coast Guard, such as a ship-classification society, that has developed a certification process for maritime-training programs based on guidance regarding quality-standards provided in part B–I/8 of the STCW Code, or has suitably adapted such a process from the standards, guidelines, and principles contained in the ISO 9000 series, or from the equivalent Quality management and Quality Assurance Standards developed by the American National Standards Institute (ANSI).

(e) Periodic evaluation by a panel or team of maritime-education specialists, made up of professional staff from the State or Federal maritime academies, or from other recognized maritime-training institutions. The evaluation would be based on an industry standard to be developed, and guidance regarding quality-standards provided in part B–I/8 of the STCW Code.

The Coast Guard is continuing to work with MERPAC to identify how best to introduce an effective QSS. It will consider the recommendations of MERPAC that came from its first meeting in 1996 in drafting the final rule.

For further discussion on qualifications of instructors and assessors, see the section on *Approved training other than approved courses.*

9. *Simulators.* The 1995 Amendments to STCW promote the use of simulators for training and assessment by (a) requiring the proper use of radar and ARPA simulators in training, and (b) allowing the use of simulation as a tool for assessing the competence of candidates for certification. The amendments also set out performance standards for simulators used for conducting required training or assessment. An opportunity for grandfathering simulators installed or brought into use before February 1, 2002, is provided under STCW Regulation I/12.

Current domestic rules require the use of simulators for those training to qualify as radar observers (46 CFR 10.305 and 10.480) and promote the use of simulator training promoted by allowing it to count, in conjunction with approved training, as an equivalency for

up to 25 percent of required sea service (46 CFR 10.304(d)).

A new study by the Marine Board of the National Research Council (NRC) examines the role of ship-bridge simulation in the professional development and licensing of mariners responsible for vessels' navigation and piloting. The study, entitled ''Simulated Voyages'' recommends steps to increase the use of simulators in maritime training and assessment. The Coast Guard considers this proposed rule for implementing STCW to be consistent with the study and its conclusions. This rule is intended to allow introduction of the most effective use of simulators into maritime training and assessment taking place in the United States.

In this regard, the Coast Guard has also been working with the maritime academies in developing guidelines on the use of simulators there. The Maritime Academies Simulator Committee (MASC) includes representatives from the six State maritime academies, the Maritime Administration (MARAD), and the Coast Guard. The outcome of the efforts of this committee will figure in drafting the final rule.

Because of the wide variety of interpretations given to the term ''simulation,'' the Coast Guard invites comments on the need for introducing definitions, or technical performance standards, into the rules, and on the extent to which, or the conditions under which, personal computer-based training should be classified as falling within the scope of simulator training.

10. *Effective dates.* As noted earlier, the 1995 Amendments to STCW come into force on February 1, 1997. However, STCW Regulation I/15, on transitional provisions, allows some requirements to come into force more gradually. The Coast Guard will be working at IMO to establish an international agreement on precisely which requirements must come into force as of February 1, 1997. Any agreement reached at IMO will be taken into figure in drafting the final rule.

STCW Regulation I/15 provides that a Party may continue, until February 1, 2002, to issue certificates (licenses) in accordance with the domestic rules it has in place before the 1995 Amendments come into force (February 1, 1997) only in respect to seafarers who begin their sea service or their approved maritime training before August 1, 1998. Candidates who begin their service or their training after then will be subject to the full application of the revised STCW requirements.

Where options presented by this proposed rule would be to the advantage of the maritime industry in the United States, there may be no need to defer or delay implementation. Comments on the most suitable effective dates for new requirements associated with such matters as the QSS and the process for identifying qualified instructors and assessors should be submitted to the docket.

46 CFR Part 10—Licensing of Maritime Personnel

1. Purpose of Regulations

The Coast Guard would revise § 10.101(a) to reflect that the purpose of part 10 is twofold. This proposed rule is intended to provide, first, a means of determining that an applicant is qualified to hold a U.S. license and, second, a means of determining that an applicant is competent to hold an STCW certificate or endorsement to serve in a particular shipboard position. The use of the term ''STCW certificate or endorsement'' would allow the Coast Guard to combine the U.S. license and the STCW endorsement into a single document at some time in the future, for administrative convenience.

2. Approved Training

The Coast Guard would revise § 10.101(c) to indicate that Subpart C of Part 10 would apply not only to approved training used for remission of seagoing service but also to all training and assessment that must be approved as meeting the requirements of STCW. For additional discussion of approved training see the discussion of § 10.309 under *Approved training other than approved courses.*

3. Incorporation by Reference

The Coast Guard would introduce the necessary language in § 10.102 to allow technical requirements of the 1995 Amendments to STCW and to the STCW Code to be incorporated by reference into specific rules in part 10.

4. Definitions

The Coast Guard would add a number of new definitions in § 10.103. These include *approved training* because virtually all training required under STCW is subject to approval to ensure that it meets the relevant provisions of STCW. However, such training is distinct from training provided in the context of a course approved by the Coast Guard for use as a substitute for sea service. Under this proposed rule, training could be ''approved'' for the purposes of STCW if it met certain minimal conditions, as set out in § 10.309. Refer to the discussion of that section (paragraph 12) for more details.

The proposal also includes a definition for *Coast-Guard-accepted*. This term is used in a number of regulations to indicate that, although the Coast Guard would not in some cases engage in a formal approval process, it would maintain certain standards of practice by accepting materials or processes as meeting the applicable requirements, or by authorizing a third party to do so on its behalf under a Memorandum of Agreement.

This proposed rule also defines *approved instructor* as a person trained or instructed in instructional techniques and qualified to provide required training to candidates for licenses, documents, and endorsements.

A definition of *STCW endorsement* also appears in § 10.103 because that term occurs with some frequency in the proposed rule, and the definition would give this endorsement a special legal significance as a document issued under Part 10 to those found in compliance with STCW Standards of Competence.

For the purposes of this proposed rule, the Coast Guard assumes that Part 10 will also include a number of new definitions along the lines of those being developed for docket number CGD 94–055, the project on licensing requirements for officers of towing vessels, including the following:

(a) *Designated examiner* means an individual trained or instructed in assessment techniques and otherwise qualified to evaluate whether a candidate for a license, document, or endorsement has achieved the level of competence necessary to hold the license, document, or endorsement. This individual may be personally designated by the Coast Guard, or be designated within the context of a Coast-Guard-approved program of training or assessment.

(b) *Standard of competence* means the level of proficiency necessary for the proper performance of duties on board vessels in accordance with national and international criteria.

(c) *Practical demonstration* means the performance of an activity under the direct observation of a designated examiner for the purpose of establishing that the performer is sufficiently proficient in a practical skill to meet a specified standard of competence or other objective criterion.

These are not final definitions, and comments made on their applicability to STCW requirements will be taken into account in the rule on towing vessels to ensure that that final rule winds up consistent with all the changes being made to Part 10 by this. Both rules will also maintain uniformity with the definitions of identical terms used in

part 12. This will be discussed further under § 12.01–6.

5. Paperwork Approval

If this proposed rule finally results in new reporting and recordkeeping requirements, § 10.107 will refer to the appropriate OMB control numbers.

6. Eligibility for Licenses

The Coast Guard would revise paragraph (a) of § 10.207 to reflect that, in some cases, candidates must provide proof of having successfully completed practical demonstrations of certain skills. Demonstration requirements are further specified in proposals relating to §§ 10.205, 10.910, and 10.950.

7. Issuance of Licenses

The Coast Guard would revise § 10.202 to ensure that anyone qualified for an STCW certificate or endorsement is issued the appropriate documents at the same time as a license.

8. Requirements for Original Licenses

Under § 10.205, the Coast Guard would incorporate a number of new requirements from the 1995 Amendments to STCW, as follows:

(a) *Firefighting.* Under paragraph (g) of § 10.205, every candidate for a license—as master or mate of a vessel on near-coastal or ocean service, as an operator of an uninspected passenger vessel operating beyond the boundary line, for service on a MODU, and as an engineer—will have to meet the standard of competence in basic and advanced firefighting set out in STCW Regulations VI/1 and VI/3 and in Part A of the associated sections of the STCW Code. This proposed rule assumes that operators of seagoing towing vessels will be classified as masters or mates under a separate rulemaking [CGD 94–055]. If they are not, then the final rule in this will restore the reference to operators of such vessels.

A second provision would allow the Coast Guard to approve a firefighting course or training program specially designed for a particular ship or type of service. This is consistent with the exemption in STCW Regulation II/3 of the 1995 Amendments, which concerns certification of masters and mates on ships of less than 500 GT and states that

> [t]he Administration, if it considers that a ship's size and the conditions of its voyage are such as to render the application of the full requirements of this regulation and section A–II/3 of the STCW Code unreasonable or impracticable, may to that extent exempt the master and the officer in charge of a navigational watch on such a shop or class of ships from some of the requirements, bearing in mind the safety of all ships that may be operating in the same waters.

The Coast Guard expects to apply this flexibility, for instance, in approval of a firefighting course or training program for licensed personnel serving on small passenger vessels engaged in near-coastal voyages. In these cases, the Coast Guard would take into consideration the firefighting equipment whose fitting is actually required on such vessels, as well as the complexity of firefighting that may take place on such vessels. The Coast Guard invites comments on the scope, content, and skills-assessment techniques that it should include in these limited or modified courses or training programs.

(b) *Automatic Radar-Plotting Aids (ARPA).* The Coast Guard would revise § 10.205 by adding a new STCW requirement for every candidate for a license—as master or mate of vessels on near-coastal or ocean service, or as operator of uninspected passenger vessels operating beyond the boundary line—to establish competence in the use of ARPA. Candidates would have to have ARPA-simulator training. However, this requirement would not apply to those who will be serving on vessels not fitted with ARPA; in such cases, the license and STCW endorsement would state the lack of the training. (For further discussion of radar-training requirements, see the discussion of § 10.480 at page 46.)

(c) *Certificate for Operator of Radio in Global Maritime Distress and Safety System (GMDSS).* The Coast Guard would revise § 10.205 by adding a new STCW requirement that every candidate for a license—as master or mate of a vessel on near-coastal or ocean service—hold a Certificate for Operator of Radio in Global Maritime Distress and Safety System issued by the Federal Communications Commission (FCC) under its regulations (47 CFR Part 13), or a certificate of completion of an FCC-approved or Coast Guard-approved Certificate for Operator of Radio in Global Maritime Distress and Safety System. However, this requirement would not apply to those who will be serving on vessels not required to participate in the GMDSS system under FCC regulations (47 CFR Part 80) and Chapter IV of the International Convention on Safety of Life At Sea (SOLAS). Seagoing cargo ships of 300 GTs and seagoing passenger ships must meet GMDSS requirements. On the other hand, some mates or masters may have to hold GMDSS certificates before this proposed rule would become final in any form, if they are designated to serve as primary or secondary GMDSS operators under FCC regulations.

One comment submitted in response to the request for comments published in the Federal Register on August 2, 1995 [60 FR 39306], urged the Coast Guard to provide for ''maintenance of GMDSS and radio equipment in the revisions of the licensing and documentation regulations to reflect the STCW Amendments.'' The comment also said ''a communications and electronics position should be established incorporating the skills of the traditional Radio Officer and those of an electronics specialist.'' The comment also asserted that the Coast Guard, rather than the FCC, should certify training facilities and testing facilities for the GMDSS. Lastly, the comment said the Coast Guard should consider establishing standards of competence for shipboard radio-electronics personnel responsible for distress and emergency communications.

For regulatory purposes, the Coast Guard considers this comment to raise four distinct issues. Only two of these fall directly in the scope of the present rulemaking, to implement the 1995 Amendments to STCW. Qualifications of those who will be maintaining GMDSS and radio equipment, and their training and testing, are subjects within the scope of this project. A proposal for establishing an electronics-technician endorsement appears under part 12 (in new § 12.25–45).

Proposals for the establishment of a new crew position on U.S. ships, to be dedicated to communications and electronics, or modification of radio officers' role to encompass all GMDSS-related responsibilities, lie outside the scope of this rulemaking. STCW does not impose manning requirements on seagoing ships. On the other hand, the new certification standards may have implications for crew complements; therefore, the Coast Guard has included a proposal for revising part 15 concerning the ability of the electronics technician to perform at-sea maintenance of GMDSS installations when the ship is required to have that onboard-maintenance capability as one of the options under the GMDSS provisions of SOLAS. That proposal pertains to § 15.401.

With respect to the role of the Coast Guard and the FCC in regulating maritime communications, the Coast Guard currently recognizes the FCC as the agency with primary responsibility for establishing U.S. requirements for holding radiocommunications licenses or radio operators' certificates. This responsibility is complemented by the

Coast Guard's authority for issuing radio officers' licenses. This proposed rule honors the complementary roles of both agencies, while taking into account the fact that adjustments may be made in the future on how these roles are allocated and carried out. Comment to the docket is welcome on whether the Coast Guard should be involved in approving the GMDSS training program, as it is proposing to be. The Coast Guard will also be looking at this issue in light of section 365 of the Telecommunications Act of 1996 (Public Law 104–104) which will allow a vessel to operate without a radio officer if it is determined that the vessel is properly fitted with equipment to implement GMDSS, and the equipment is in good working condition.

(d) *Personal survival techniques.* The Coast Guard is proposing to revise § 10.205 by adding a new STCW requirement—for every candidate for a license as master, mate, or engineer on a vessel on near-coastal or ocean service, or for a license as operator of uninspected passenger vessels operating beyond the boundary line, or for a license for service on a MODU—to present proof of having received approval training or instruction in personal survival techniques (i.e., survival at sea in the event of abandoning ship). The object of the training is to ensure that the candidate meets the standard of competence in personal survival techniques set out in STCW Regulation VI/1 and in table VI/1–1 in section A/VI/1 of the STCW Code. The Coast Guard intends to accept training and assessment which is based on documented practical experience.

The Coast Guard is also proposing to approving a personal survival course of training especially designed for a particular ship or type of service. This is consistent with the flexibility conferred by section A–VI/1, paragraph 3, of the STCW Code that concerns familiarization and basic safety-training and states that

> [t]he Administration may, in respect of ships other than passenger ships of more than 500 gross tonnage engaged on international voyages and tankers, if it considers that a ship's size and the conditions of its voyage are such as to render the application of the full requirements of this section of the STCW Code unreasonable or impracticable, exempt to that extent the seafarers on such a ship or class of ships from some of the requirements, bearing in mind the safety of people on board, the ship and property and the protection of the environment.

The Coast Guard expects to apply this flexibility, for instance, in approval of personal survival training for licensed personnel serving on small vessels engaged in near-coastal voyages. The Coast Guard invites comment on the scope, content, and skills-assessment techniques that should be included in this limited or modified training.

(e) *Personal safety and social responsibilities.* The Coast Guard is proposing to revise § 10.205 by adding a new STCW requirement—for every candidate for a license as master, mate, or engineer on a vessel in near-coastal or ocean service, or for a license as an operator of uninspected passenger vessels operating beyond the boundary line, or for a license for service on a MODU—to present a certificate of completion of approved training in personal safety and social responsibilities (e.g., taking proper actions in emergencies, taking precautions to prevent pollution, observing safe working practices, understanding and communicating orders, and contributing to effective human relationships on board ship by being aware of employment conditions, individual rights and obligations, dangers of alcohol abuse, etc.). The object is to ensure that the candidate meets the standard of competence in personal safety and social responsibility set out in STCW Regulation VI/1 and in table A–VI/1–4 in section A/VI/1 of the STCW Code.

The Coast Guard is also proposing to let itself approve a course in personal safety and social responsibilities especially designed for a particular ship or type of service. This is consistent with the exemption in section A–VI/1, paragraph 3, of the STCW Code quoted under paragraph (d) *Personal survival techniques.*

The Coast Guard invites comments on the scope, content, and skill-assessment techniques that belong in this limited or modified training.

The Coast Guard anticipates that the requirements for firefighting, personal survival, and personal safety and social responsibility including pollution prevention can be combined into a single course of training or instruction, which also includes elementary first aid, to meet the basic safety-training requirements of section A–VI/1, paragraph 2, of the STCW Code. This will be particularly true with respect to operators of uninspected passengers vessels (OUPVs) operating seaward of the boundary line. The Coast Guard intends to develop a checklist of elementary basic safety-instruction that candidates for OUPV licenses could have confirmed by boating-safety instructor from the Coast Guard Auxiliary or the Red Cross, or by a suitable official from the local firefighting department. The Coast Guard invites comments on what belongs in this elementary basic safety checklist.

After receiving the basic safety-training or instruction, the license-holder must every 5 years provide evidence of having maintained the required standard of competence, by providing evidence at the time of renewal that he or she has demonstrated competence and has been examined or continuously assessed as part of an approved training program, in accordance with the tables in section A–VI/1, paragraph 2, of the STCW Code. This matter gets closer scrutiny in the discussion under paragraph 9, *Requirements for renewal of licenses.*

(f) *Procedures for bridge team-work.* The Coast Guard would revise § 10.205 by adding a new STCW requirement for every candidate for a license as master, or mate, on a vessel on near-coastal or ocean service to know effective bridge-team-work procedures as an essential element of the competence to maintain a safe navigational watch. The Coast Guard understands bridge-team-work procedures to encompass the processes by which the watchkeeping personnel work together efficiently and effectively to maintain a continuously safe watch. The concepts applied in training and assessment to that end should reflect the principles of bridge-resource management that contribute to the most effective performance of watchkeeping duties. In this regard, refer to the principles of bridge-resource management outlined in section B–VIII of the STCW Code.

(g) *Practical demonstration.* The Coast Guard would add a new subsection to § 10.205 to require that, when a practical demonstration of a skill is called for under this section or under a provision of STCW referred to in this section the candidate must provide sufficient evidence that the skill has been demonstrated properly in the presence of a designated examiner. A written record, including skills demonstrated, identity of the designated examiner, and the results of the demonstration, must be maintained in the applicant's license file. The Coast Guard invites comments on the best format for maintaining this record. For related proposals, refer to the discussion on tables 10.910 and 10.950.

9. Requirements for Raise in Grade of License

The Coast Guard would revise § 10.207 to require proof that candidates for a raise in grade of license have been examined and otherwise assessed, to establish that they meet standards of competence. In many cases, STCW will

require assessment by examination and by demonstration of practical skills, which will be in addition to any basic qualifications such as age, seagoing experience, and training.

10. Requirements for Renewal of Licenses

The Coast Guard is proposing to add a new subsection under § 10.209 to indicate that after July 31, 1998, applicants for renewals will have to meet new requirements for holding the original licenses at the grades concerned.

Candidates for renewal of licenses as masters or mates for service on vessels in ocean or near-coastal service, or as operators of uninspected passenger vessels operating beyond the boundary line, will have to have the appropriate training or instruction in firefighting, personal survival techniques, and personal safety and social responsibility. If the instruction took place more than 5 years ago, the candidates will also have to provide proof that competence was assessed and validated within the last 5 years. Regardless of the schedule under which a candidate's license is renewed, he or she will need to receive basic safety training in accordance with dates of compliance established in paragraph (b) of § 15.403 for service on a seagoing vessel. The Coast Guard intends to accept training and assessment which is based on documented practical experience.

Candidates for renewal of licenses will also need to be trained in ARPA if they will be serving on vessels fitted with ARPA and they will need to hold a Certificate for Operator of Radio in Global Maritime Distress and Safety System if they will be serving on vessels that participate in GMDSS.

The proposed deadline of July 31, 1998, derives from the transitional provisions of the 1995 Amendments to STCW, which allow for a phase-in of new requirements up to August 1, 1998. STCW Regulation I/15 permits a Party to renew certificates (licenses) until February 1, 2002, in accordance with rules that will be in effect before February 1, 1997. However, to meet the target for full implementation in 2002, it is necessary to process renewals in accordance with new requirements beginning in 1998.

With these changes, the renewal process will conform to the requirements of new STCW Regulation I/11 (Revalidation of Certificates) of the 1995 Amendments.

11. Required use of Training—And Assessment—record Books

As noted, the 1995 Amendments to STCW require the use of a training- and assessment-record book under some circumstances. The Coast Guard is proposing to revise § 10.304 to require use of Coast-Guard-accepted training- and assessment-record books when candidates for deck licenses are using training to substitute of service, and when candidates for engineer licenses need onboard training to meet the requirements of STCW. A training- and assessment-record book must provide certain basic information including an indication, by means of the initials or signature of a clearly identified, designated examiner, that the candidate has established, through practical demonstrations, that he or she is competent in each of the subjects of knowledge, understanding, and proficiency set forth in the tables of the appropriate section in Part A of the STCW Code.

The Coast Guard proposes to require the designated examiner to certify that he or she has in fact personally witnessed the practical demonstration by the candidate.

STCW requires the training- and assessment-record book to be ''approved.'' The Coast Guard plans to issue a NVIC or suitable regulation in due course that would set out the format or formats that it will consider approved (i.e., Coast-Guard-accepted) for the purposes of complying with this regulation. Formal approval would take place when the record book is submitted as proof that competence has been assessed.

12. Approved Training Other Than Approved Courses

The 1995 Amendments to STCW refer to ''approved training'' in the following eight contexts:

(a) STCW Regulation II/1 states that a candidate for certification as officer in charge of a navigational watch must have approved seagoing service of not less than 1 year ''as part of an approved training program which includes onboard training which meets the requirements of section A–II/1 of the STCW Code and is documented in an approved training-record book.'' In the absence of an approved training program, the candidate must have at least 3 years of approved seagoing service.

(b) STCW Regulation III/1 states that a candidate for officer in charge of an engineering watch, or for designated duty engineer, must have completed ''approved education and training of at least 30 months which includes onboard training documented in an approved training-record book and meets the standards of competence specified in section A–II/1 of the STCW Code.''

(c) STCW Regulation IV/2 states that candidates for certification as persons in charge of or performing radio duties on a ship required to participate in the GMDSS must have completed ''approved education and training and meet the standard of competence specified in section A–IV/2 of the STCW Code.''

(d) STCW Regulation V/1 requires certain personnel on tankers to have completed ''an approved tanker familiarization course'' and ''an approved specialized training program.''

(e) STCW Regulation V/2 requires certain personnel on ro-ro passenger ships to have completed ''approved training in crisis management and human behavior.''

(f) Section A–VI of the STCW Code refers to ''approved familiarization training'' for all persons employed or engaged on seagoing ships other than passengers, and to ''approved basic training or instruction'' for seafarers with designated safety or pollution-prevention duties.

(g) The table of competence for deck officers (A–II/1) refers to ''approved radar simulator and ARPA simulator training.''

(h) The tables of competence throughout part A of the STCW Code refer to ''approved training,'' ''approved simulator training'' and ''approved laboratory equipment training'' as alternative methods constituting evidence to prove a candidate's competence.

The Coast Guard's current course-approval system, as provided in §§ 10.301 to 10.307, applies only to specific mandatory courses such as firefighting, radar, and first aid or cardiopulmonary resuscitation, and to training used as a substitute for required service or for a written examination. There are almost 400 Coast-Guard-approved courses. (The procedures necessary to process course approvals appear (as outlined in NVIC 5–95, ''Marine Licensing Program's Quality Standards System for Approved Training''). An alternative system may be needed to regulate approved training conducted to meet STCW requirements but not used for remission of seagoing service under Part 10.

The Coast Guard is working with MERPAC to identify the criteria for instructors of approved courses. MERPAC is also looking at the relationship of these criteria to the overall requirements for monitoring

training under a quality-standards system that ensures the meeting of training objectives. Preliminarily, the MERPAC working groups engaged in these efforts have settled on a concept under which the Coast Guard would individually certify instructors and examiners whom it finds to meet professional and instructional experience. The status and content of MERPAC's recommendations on these criteria will influence the final rule.

The Coast Guard is including in this proposed rule an alternative to its current course-approval system. Proposed new § 10.309 rests on the principle of self-certification with minimum Coast Guard oversight based on acceptance by the Coast Guard of certain materials and procedures to maintain standards. In other words, completion certificates issued by training programs that meet the conditions stated in that section could be accepted as meeting the ''approved training'' requirements of STCW when such training is not being used for remission of seagoing service.

This could be done by a process like that used to credit ''approved seagoing service'' after the fact, on sufficient documentary proof. If the Coast Guard learned that the conditions set out in new § 10.309 were not being met by a particular training program, it would not accept certificates of completion as proof that the necessary training had been completed. The conditions for conducting approved training other than approved courses are set out in new § 10.309.

This proposal is intended to comply with the requirements of new STCW Regulations I/6 and I/8 of the 1995 Amendments. STCW Regulation I/6 concerns qualifications of those who train or assess the competence of seafarers; and STCW Regulation I/8 requires that training and assessment of seafarers be continuously monitored through a quality-standards system to ensure achievement of defined objectives, including those concerning the qualifications and experience of instructors and assessors.

The Coast Guard welcomes comments on this alternative approach, particularly with respect to (a) Coast Guard involvement in conducting oversight and maintenance of standards through a Coast-Guard-acceptance procedure and (b) specific training or instruction in instruction or assessment that those who instruct or assess candidates for STCW certificates or endorsements should be proficient in.

13. Radar Training

The Coast Guard would revise § 10.480 to require that radar simulators used in radar training meet the performance standards set out in section A–I/12 of the STCW Code.

14. Requirements for Radio Operators' Certificates

The Coast Guard would expand §§ 10.601 and 10.603 to cover certification or radio operators for service on ships required to participate in GMDSS. Candidates must meet the standard of competence set forth in STCW Regulation IV/2 of the 1995 Amendments.

This proposal is intended to complement that under § 10.205, which would require masters and mates to hold a Certificate for Operator of Radio in Global Maritime Distress and Safety System (GMDSS) if they serve on vessels that participate in GMDSS, and with FCC regulations in 47 CFR parts 13 and 80 also allows persons other than masters and mates to acquire radio operators certificates from the Coast Guard if they have the necessary training and have met standards of competence by means of an examination and practical demonstration.

The Coast Guard invites comment on the most effective process for implementing the Certificate requirements for GMDSS radio operator, particularly in light of section 365 of the Telecommunications Act of 1996 which promotes implementation of GMDSS on U.S. vessels.

15. Practical Demonstration

Subpart I of part 10 (§§ 10.901 through 10.950) is currently limited to identification of subjects in which candidates must be examined to qualify for certain licenses. Because qualification for STCW certificates or endorsements under the 1995 Amendments to the Convention will typically require candidates to prove their competence by means of both an examination and a demonstration of skills, the Coast Guard is proposing to expand § 10.901 to cover practical demonstrations.

Proposed new § 10.901 provision would incorporate by reference the tables in Part A of the STCW Code, with the effect of permitting candidates for U.S. licenses to demonstrate their competence by any of the methods authorized under those tables.

The table of subjects (a) adds subjects that will be treated under STCW; (b) highlights those subjects for which candidates must perform practical demonstrations; and (c) suggests subjects that can be removed from the table because not treated under STCW.

The Coast Guard is also proposing a new subsection to require that simulators used in assessment of competency or demonstration of continued proficiency must meet the appropriate performance standards set out in section A–I/12 of the STCW Code. However, simulators installed or brought into use before February 1, 2002, would be exempt from full compliance with these standards to the extent that they remained capable of meeting the objectives of the assessment of competence or demonstration of continued proficiency.

16. Ro-Ro Passenger Ships

The 1995 Amendments to STCW include new special provisions for personnel serving on ro-ro passenger ships. New STCW Regulation V/2 in Chapter V of the Annex, and section A–V/2 of the STCW Code, establish mandatory minimum standards for the training and certification of masters, officers, ratings (i.e., unlicensed seamen with certain ratings), and other personnel on ro-ro passenger ships.

Because there are a number of ro-ro passenger ships documented in the United States, of which six operate on international voyages between the United States and Canada, the Coast Guard is proposing to add a new subpart J in part 10, on ''Professional requirements for officers serving on ro-ro passenger ships,'' to implement STCW Regulation V/2 in the U.S. licensing system. Primarily, the new subpart would incorporate by reference STCW Regulation V/2 and section A–V/2 of the STCW Code. This proposed rule would apply only to U.S. Ro-Ro passenger ships to which SOLAS Certificates are issued. Comments on whether application should be expanded to other classes of U.S. ro-ro passenger ships may be submitted to the docket.

The International Maritime Organization (IMO) will be undertaking further work to clarify certain requirements under STCW Regulation V/2. In particular, the STCW of IMO will consider training in crisis management for masters and senior officers. Any recommendations that IMO ultimately adopts in this regard will influence the Coast Guard in approving training programs or course materials on this subject.

46 CFR Part 12—Certification of Seamen

1. Purpose of Regulations

The Coast Guard would revise § 12.01–1 to reflect that the purpose of part 12 is twofold. Part 12 is intended to provide, first, a means of determining the qualifications an applicant must possess to be eligible for certification to serve on U.S. merchants vessels and, second, a means of determining whether an applicant is competent under STCW to serve in a particular shipboard position. The Coast Guard is also proposing to indicate that new subpart 12.03 prescribes the requirements applicable to training and assessment associated with meeting the standards of competence under amended STCW.

2. Incorporation by Reference (§ 12.01–3)

The Coast Guard would introduce the necessary language in § 12.01–3 to allow technical requirements of the 1995 Amendments to STCW and to the STCW Code to be incorporated by reference into specific rules in Part 12.

3. Definitions

As noted in the discussion of § 10.103, the Coast Guard intends to maintain consistency in the definitions for identical terms used in parts 10 and 12. Consequently, the Coast Guard is proposing for § 12.01–6 a number of new definitions that correspond with those proposed for § 10.103. These comprise *approved training, Coast-Guard-accepted, designated examiner, practical demonstration, qualified instructor, STCW endorsement,* and *standard of competence.*

4. When Documents are Required

The Coast Guard would revise § 12.02–7 to require individuals serving in certain capacities on seagoing ships to hold STCW certificates or endorsement stating that they are so qualified.

5. General Provisions Respecting Merchant Mariner's Document (MMD)

The Coast Guard is proposing to revise § 12.02–11 to ensure that everyone qualified for an STCW certificate or endorsement is issued the appropriate certificate or endorsement when he or she is issued an MMD, or when the MMD is renewed or endorsed. One may be qualified to hold an endorsement for a rating forming part of a navigation or engineering watch, under STCW Regulation II/4 or III/4 and the corresponding section of the STCW Code (A–II/4 or A–III/4), without being qualified as an AB or QMED.

The Coast Guard is also proposing to allow the endorsement of an MMD to indicate that the holder has received the familiarization or basic safety-training required by chapter VI of STCW as amended. This would not be mandatory, but it should be a convenience to those who move from ship to ship, or company to company. As in the relevant parts of § 10.205, the Coast Guard would be able to approve courses which are designed for particular ships or types of service, within the limits allowed by STCW.

6. Medical Fitness

The Coast Guard is proposing to add a new subsection to § 12.02–17, requiring an applicant for an MMD to present documents issued by a qualified medical practitioner attesting the applicant's medical fitness to perform the functions for which the document is issued. There are currently no medical-fitness requirements for entry-level seamen.

This proposal is intended to comply with new STCW Regulation I/9 of the 1995 Amendments, which states that ''each party shall establish standards of medical fitness for seafarers, particularly regarding eyesight and hearing.'' For further discussion of medical fitness, refer to *General,* at page 9.

The Coast Guard invites comments on whether additional procedures or criteria belong in the rule to regulate medical fitness of entry-level seamen.

7. Approved Training Other Than Approved Courses

As discussed under § 10.309, the Coast Guard is proposing an alternative to the course-approval system, for accepting training programs as ''approved'' to satisfy STCW as amended. The proposal in § 12.03–1 is almost identical to the proposal in § 10.309 (with necessary editorial adjustments to fit in the context of Part 12). The conditions are intended to meet the quality-standards provisions of STCW as amended.

8. Able Seaman

The Coast Guard is proposing to revise the able seamen qualifications in Subpart 12.05 to conform with the requirements of the 1995 Amendments to STCW.

Section 12.05–3 would expand the reference to ''lifeboatman'' to include everyone with ''proficiency in survival craft and rescue boats.''

This section would also add a new subsection to require candidates for AB certificates for service on seagoing vessels to receive approved basic safety-training as set out in STCW Regulation VI/1 and section A–VI/1 of the STCW Code (i.e., personal survival techniques; firefighting and fire prevention; elementary first aid; and personal safety and social responsibilities). As in the relevant parts of § 10.205, the Coast Guard would be able to approve courses designed for particular ships or types of service, within the limits allowed by STCW. Also, as in § 10,209, an applicant for renewal of an MMD with an AB endorsement would have to prove that competency was assessed within the last 5 years, if instruction took place more than 5 years ago.

Section 12.05–3 would also require a candidate for an AB certificate for service on seagoing ships of 500 GT or more to meet the requirements of STCW Regulation II/4, and be qualified to hold an STCW certificate or endorsement for a rating forming part of a navigational watch. The standard of competence set out in section A–II/4 of the STCW Code would be incorporated by reference.

The table in section A–II/4 of the STCW Code includes a number of subjects areas (such as use of gyro compasses, change-over from auto-pilot, maintenance of a safe watch, knowledge of EPIRBs, and avoidance of false alerts) that are not currently required under § 12.05–9 (examination and demonstration of ability). That section would refer to the STCW table.

Also, each candidate would have to prove that he or she had a stated minimum of seagoing service including training and experience associated with navigational watchkeeping under the direct supervision of the Master, the officer in charge of the navigational watch, or a qualified rating.

The Coast Guard is also proposing to revise § 12.05–11 (general provisions respecting MMDs endorsed for able seaman) to indicate that, on seagoing ships of 500 GT ton and more, ABs who serve in navigational watchkeeping must hold STCW certificates or endorsements for a rating forming part of a navigational watch and be qualified in accordance with STCW Regulation II/4.

9. Lifeboatman

The Coast Guard is proposing to revise the lifeboatman qualifications in subpart 12.10 to conform with the requirements of the 1995 Amendments to STCW.

Section 12.10–3 would expand the reference to ''lifeboatman'' to include every mariner with ''proficiency in survival craft and rescue boats.'' This section would require candidates to (a) be at least 18 years of age and (b) have a minimum of 6 months of seagoing

service when associated with approved training.

This section would also add a new subsection to require a candidate for a certificate for lifeboatman or survival craft to receive approved basic safety-training as set out in STCW Regulation VI/1 and section A–VI/1, paragraph 2, of the STCW Code (i.e. personal survival techniques; firefighting and fire prevention; elementary first aid; and personal safety and social responsibilities). As in the relevant parts of § 10.205, the Coast Guard would be able to approve courses designed for particular ships or types of service, within the limits allowed by the STCW. Also, a candidate for renewal of an MMD with a lifeboatman endorsement would have to prove that competence was established within the last 5 years if instruction took place more than 5 years ago.

Section 12.10–5 would incorporate by reference the standard of competence set out in STCW Regulation VI/2 and section A–VI/2 of the STCW Code. This would expand the coverage under this section to such subjects as methods of starting survival-craft engines use of the fire extinguisher provided method of helicopter rescue, effects of hypothermia, use of rescue boats for persons in the sea, use of EPIRBS and pyrotechnic distress signals, and first aid for survivors. The Coast Guard would be able to approve courses designed for a particular class of ship or type of service, to take into account such conditions as small ships required only to carry liferafts. It would place an appropriate limitation on the certificate issued on the basis of such training.

The Coast Guard is proposing to delete § 12.10–7. Individuals qualified under STCW Regulation VI/2 must hold certificates stating they are qualified. However, by policy, the Coast Guard proposes to grandfather those who currently hold AB endorsements. Until August 1, 1998, it would issue to holders of MMDs with AB endorsements, endorsements for proficiency in survival craft when they renew their MMDs.

The Coast Guard is proposing to add a new § 12.10–9 on certificates of proficiency in fast rescue boats. This section would incorporate by reference both the requirements of STCW Regulation VI/2, paragraph 2, and the relevant portions of section A–VI/2 of the STCW Code, including table A–VI/2–2. Fast rescue boats are those that can sustain speeds of over 20 knots with crews of 3, and over 8 knots with full complements of persons and equipment.

The Coast Guard is also proposing to add a new § 12.10–11 for those designated to provide medical care on board ship. This section would incorporate by reference the requirements of STCW Regulation VI/4 and those of section A–VI/4 of the STCW Code. This allows individuals not already having to be trained in first aid under other regulations (e.g., § 10.205(h) for licenses and certificates of registry) to acquire endorsements to provide medical care on board ship.

10. Qualified Member of the Engine Department

The Coast Guard is proposing to revise the qualifications for qualified members of the engine department (QMEDs) in subpart 12.15 to conform with the requirements of the 1995 Amendments to STCW.

Section 12.15–3 would get a new subsection to require candidates for QMED certificates for service on seagoing vessels driven by main propulsion machinery of 750 kW [1,000 hp] of propulsion power or more to receive approved basic safety-training as set out in STCW Regulation VI/1 and section A–VI/1 of the STCW Code (i.e., personal survival techniques; firefighting and fire prevention; elementary first aid, and personal safety and social responsibilities, including pollution prevention). As in the relevant parts of §§ 10.205 and 12.05–3, the Coast Guard would be able to approve courses designed for particular ships or types of service, within the limits allowed by the STCW. Also, as in § 12.05–3, an applicant for renewal of an MMD with a QMED endorsement would have to prove that competency was assessed within the last 5 years if instruction took place more than five years ago.

Section 12.15–3 would also require candidates for QMED certificates for service on seagoing vessels driven by main propulsion machinery of 750 kW [1,000 hp] of propulsion power or more to meet the requirements of STCW Regulation III/4, and either be qualified to hold an STCW certificate or endorsement for a rating forming part of a watch in a manned engine-room or be designated to perform duties in a periodically unmanned engine-room. The standard of competence set out in section A–III/4 of the STCW Code would be incorporated by reference.

The table in section A–III/4 of the STCW Code includes a number of subjects (such as engine-room watchkeeping and knowledge of escape routes from machinery spaces) not currently covered under § 12.15–9.

Section 12.15–7 would require a minimum of seagoing service performing duties associated with engine-room watchkeeping under the direct supervision of a qualified engineer officer or of a member of a qualified rating.

Section 12.15–9 would refer to table A–III/4 of the STCW Code, and would require practical demonstration of abilities.

Section 12.15–11 would indicate that, on seagoing vessels driven by main propulsion machinery of 750 kW [1,000 hp] of propulsion power or more, QMEDs who serve in a watchkeeping capacity in a manned engine-room or are designated to perform duties in a periodically unmanned engine-room must hold STCW certificates or endorsements stating that they are qualified in accordance with STCW Regulation III/4.

11. Electronics Technician

The Coast Guard would establish a new rating under part 12 by adding a section to Subpart 12.25 (Certificates of service for ratings other than AB or QMED). New § 12.25–45 would allow an individual to hold a certificate or MMD stating that he or she is qualified to serve as an electronics technician on board a vessel.

Section 12.25–45 would require candidates for this endorsement to provide sufficient proof of competence. This would comprise (a) a certificate of completion from a Coast Guard-approved training program that includes instruction and assessment by qualified instructors and designated examiners, and makes the student complete appropriate examinations and practical demonstrations to establish competence in the basic skills, knowledge, and understanding necessary to perform maintenance, diagnosis, and repair of electronic equipment and installations on board ships, in accordance with the manuals normally provided for such equipment and installations and (b) a certificate of completion from a course approved by the FCC or Coast Guard and covering at least the scope and content of training outlines in the relevant sections of B–IV/2 of the STCW Code relating to maintenance of GMDSS installations on board ships.

Under § 12.25–45 an individual could receive an electronic-technician rating without completing the GMDSS course. However, in that case, the endorsement would contain a limitation to the effect that the individual could not serve as the person designated to perform at-sea maintenance of GMDSS installations when such a person was necessary to meet the maintenance requirements imposed by SOLAS Regulation IV/15 (i.e., ''electronics technician—non-GMDSS)''. When at-sea maintenance is

to be used as a means of meeting the SOLAS requirement for maintenance of GMDSS, the person designated to perform the maintenance must have an electronics-technician endorsement, without the limitation. While this proposed rule would establish an electronics-technician endorsement in part 12, the intent is not that there be any restriction on the ability of a licensed engineer to acquire the endorsement. The Coast Guard solicits comments on whether Part 10 should include additional requirements on electronics as a shipboard skill or responsibility, particularly in light of section 365 of the Telecommunications Act of 1996 which promotes the implementation of GMDSS on U.S. vessels.

12. Qualifications for Service on Ro-Ro Passenger Ships

The Coast Guard would add a new subpart (§ 12.30) under part 12 to establish requirements for certification (i.e., by endorsement of an MMD) of unlicensed seamen for service on ro-ro passenger ships. The requirements would essentially incorporate by reference the provisions of STCW Regulation V/2 as they relate to personnel with specific duties on such ships, and those with duties for care of passengers. The proposed rule would apply only to U.S. ro-ro passenger ships to which SOLAS certificates are issued. Comments on whether application should be expanded to other classes of ro-ro passenger ships may be submitted to the docket.

46 CFR Part 15—Manning Requirements

The 1995 Amendments to STCW contain a number of provisions that affect manning and watchkeeping on seagoing vessels, as well as conditions that must be met before crewmembers can be assigned to duties. The Coast Guard is proposing to revise part 15 to incorporate these new requirements on U.S. merchant vessels that operate seaward of the boundary line.

1. Incorporation by Reference (§ 15.105)

The Coast Guard would introduce the necessary language in § 15.105 to allow technical requirements of the 1995 Amendments to STCW and to the STCW Code to be incorporated by reference into specific rules in part 15.

2. Definitions (§ 15.301)

The Coast Guard would revise this section to reflect changes proposed in parts 10 and 12. For example, a reference to *GMDSS radio operator, electronics technician—non-GMDSS*, and *electronics technician* must each be added to paragraph (b) or (c).

3. Employment and Service Within Restrictions of License or Document (§ 15.401)

The Coast Guard would expand this section to include references to STCW certificates and endorsements. The section would also propose that, as of February 1, 2002, only persons with the appropriate training and certification as GMDSS radio operators be employed or engaged as masters, chief mates, or officers in charge of navigational watches on ships required to participate in the GMDSS system under SOLAS Chapter IV. Additionally, only persons trained in the use of ARPA could be employed or engaged as masters, chief mates, officers in charge of navigational watches, or operators of uninspected passenger vessels on vessels fitted with ARPA. These requirements would complement those for §§ 10.205 and 10.209.

Section 15.401 would also, as of February 1, 2002, let only persons holding electronic-technician endorsements not limited to non-GMDSS electronics installations be designated to perform at-sea maintenance of GMDSS installations, when such designation is used to meet the maintenance requirements imposed by SOLAS Regulation IV/15. This would complement the proposal for § 12.25–45.

Section 15.401 would also allow only those with proper training under subpart J of part 10 and § 12.24–30 of part 12 to be employed or engaged on ro-ro passenger ships.

4. Familiarization and Basic Safety-Training (§ 15.403)

The Coast Guard would implement STCW Regulation VI/1 of the 1995 Amendments by adding new § 15.403 to Part 15 on familiarization and basic safety-training. The section would propose that after February 1, 1997 no person may be assigned to perform any duties on a seagoing vessel unless he or she has received approved familiarization training in personal survival or has received sufficient information and instruction in a number of subjects affecting personal safety, in accordance with A–VI/1 of the STCW Code.

This section would also state that no person may be employed or engaged in any capacity on board a seagoing vessel in the business of that vessel as part of the crew with designated duties for safety or pollution prevention in the operation of the ship unless he or she has received approved basic safety-training or instruction in accordance with A–VI/1 of the STCW Code. Designated duties for safety include those associated with fire-team emergency squads and with assisting passengers in emergencies.

Additionally, this section would provide that no person may perform duties on board a seagoing vessel unless he or she has received the required familiarization training or instruction, or has achieved the required standard of competence through basic safety-training, as appropriate.

Under the relevant parts of §§ 10.205 and 12.02–11, the Coast Guard would be able to approve training designed for particular ships or types of service, within the limits allowed by STCW.

One comment submitted to the docket following the public meeting in August expressed concern about the application of these requirements of familiarization and basic safety-training to personnel serving on MODUs. Again, to the extent a MODU was a seagoing ship under STCW, the implementing regulations being proposed at this time would apply to its personnel. On the other hand, in approving specific training, the Coast Guard will take into consideration, and use as the basis for its evaluation, any IMO resolutions that provide special guidance on the training of personnel on MODUs.

5. Maintenance of Seamen's Records by Owner or Operator (§ 15.411)

STCW Regulation I/14 of the 1995 Amendments requires Administrations to impose certain responsibilities on companies that own or operate seagoing vessels. These responsibilities are fundamental to good management, are consistent with the principles reflected in the International Management Code for Safe Operation of Ships (ISM Code), and are to a large extent already covered by domestic regulations.

For example, the obligation under item 1.1 of STCW Regulation I/14, concerning the need to ensure that each seafarer holds the appropriate STCW certificate, is addressed by 46 CFR 15.401. The obligation in item 1.2 of STCW Regulation I/14, concerning compliance with manning requirements, is addressed by 46 CFR 15.401 and 15.515, and to some extent by 46 CFR 15.801, with statutory support (e.g., 46 U.S.C. 8101 (c) and (f) and 8104(j)). Similarly, the object of item 1.4 of STCW Regulation I/14, ensuring that seafarers are familiar with ship-specific arrangements, equipment, and so forth, before being assigned to duties, is already addressed in 46 CFR 15.405.

But, because § 15.405 does not explicitly require companies to ensure

that a level of familiarity has been achieved, the Coast Guard is inviting comment on whether it should be revised. If so, the Coast Guard also invites comments on whether the term *company* (or, alternatively, the term *owner or operator*) should be defined in Part 15. The Coast Guard also invites comments on how § 15.405 should be revised to effectively implement paragraph 2 of section A.I/14 of the STCW code, which states the following:

> The company shall provide written instructions to the master of each ship to which the Convention applies, setting forth the policies and the procedures to be followed to ensure that all seafarers who are newly employed on board the ship are given a reasonable opportunity to become familiar with the shipboard equipment, operating procedures and other arrangements needed for the proper performance of their duties, before being assigned to those duties.

To some extent, the requirements for maintaining certain records, as set out in item 1.3 of STCW Regulation I/14, are already addressed by statutory and regulatory provisions on shipping articles and other records of seamen (e.g., 46 U.S.C. 10302, 10320, and 10502 and 46 CFR part 14). Additionally, it is considered routine practice for U.S. companies that employ seaman to maintain a personnel record for each employee, or to ensure that one is maintained by an agency acting on behalf of the company in such matters (such as a labor union that has entered into a collective-bargaining agreement).

Taking the above into account, the rule proposed as § 15.411 focuses on the recordkeeping requirements in STCW Regulation I/14 of the 1995 Amendments. The object is to allow companies a suitable range of flexibility for complying with these requirements in a manner most consistent with good management. Furthermore, the policy of the Coast Guard will be to presume, in the absence of information to the contrary, that companies holding valid ISM certificates, issued in accordance with the appropriate international, and domestic regulations, are fulfilling their obligations under STCW Regulation I/14.

One comment submitted in response to the notice published on August 2, 1995 [60 FR 39306], asked that the requirements of item 1.4 of STCW Regulation I/14 (on familiarization with specific equipment and procedures) not be extended to apply to duties of industrial personnel on industrial vessels (e.g., MODUs) or research crew on research vessels. The Coast Guard would not expect this proposed rule to impose an unreasonable obligation on companies that employ such personnel. However, in keeping with earlier statements in this preamble, the Coast Guard recognizes that IMO will be giving further consideration to issues of industrial personnel. Therefore, the proposals relating to paragraph 1.4 of STCW Regulation 1/14 should be understood not to apply to industrial personnel on MODUs or research personnel on research vessels. Such personnel, however, would be subject to the familiarization and basis safety training requirements, of STCW Regulation VI/I, as described in section 4.

6. Watchkeeping Arrangements

The Coast Guard is proposing to revise § 15.705 (Watches) by requiring masters on seagoing vessels to observe the principles on watchkeeping arrangements set out in STCW Regulation VIII/2 of the 1995 Amendments.

7. Workhours and Rest Periods

The Coast Guard is proposing to implement the rest-hour requirements of STCW Regulation VIII/1 of the 1995 Amendments, and of section A–VIII/1 of the STCW Code, by adding new subparagraphs to § 15.710. Essentially, the STCW Amendments will require that every person assigned duty as an officer in charge of a watch or as a rating forming part of a watch shall receive a minimum of 10 hours of rest in any 24-hour period. These 10 hours of rest may be divided into two parts as long as one segment is at least 6 hours.

Deviation from the requirement for 10 total and 6 continuous hours of rest is permissible in the case of ''an emergency or drill or in other overriding operational conditions.'' Additionally, the 10 hours of rest in a 24-hour period may drop to 6 consecutive hours in a 24-hour period over 2 days, as long as the watch-keeper receives 70 hours of rest in each 7-day period. Watch schedules that ensure compliance with these rest-hour requirements must be posted when they are easily accessible to watchkeeping personnel and to port-control officers in foreign ports.

Section B–VIII/1 of the STCW Code provides some guidance on the meaning of the terms used in section A–VIII/1, and on the correct interpretation of the rest-hour requirements when calculating workhours outside of the periods of watchkeeping responsibility. For instance, it construes the phrase ''overriding operational conditions'' to mean ''only essential shipboard work which cannot be delayed for safety or environmental reasons or which could not reasonably have been anticipated at the commencement of the voyage.''

The guidance in section B–VIII/1 of the STCW Code also states that the minimum rest periods should not be interpreted as implying that all other hours may be devoted to watchkeeping or other duties. It also invites administrations to consider a requirement for recordkeeping to ensure compliance with that for hours of the rest.

One comment submitted in response to the notice published on August 2, 1995 [60 FR 39306], expressed concern that an individual serving in a two-watch rotation on a towing vessel would be considered unfit for duty if he or she got only 5 hours of sleep in one 6-hour off-duty period, and 2 hours of sleep in the next off-duty period. The Coast Guard does not view the rest-hour requirements of STCW as mandating a period in which the individual concerned is actually in his or her bunk asleep. However, over any period of 24 hours, the watchkeeping personnel must be provided the opportunity for an uninterrupted period of rest for at least 6 hours, and an additional 4-hour period during which no duties are assigned or performed. The operative word is ''opportunity''. This would not prevent a person from attending to routine personal affairs, or engaging in recreational or other off-duty activities.

Another comment submitted on this matter suggested that the rest-hour requirements of STCW could have an adverse impact on the operation of towing vessels and small passenger vessels because it would permit a 14-hour workday or a 98-hour workweek, in violation of U.S. statutory and regulatory provisions that limit the number of hours a seaman may be required to work.

Note, however, that the introduction of a rest-hour requirement into U.S. regulations would not change any existing work-hour limits or rest-hour requirements that apply to personnel on U.S. vessels. Limits that apply to seagoing ships under 46 U.S.C. 8104 and 46 CFR 15.705 and 15.710 would remain fully in effect. Additionally, operators of towing vessels and tankers already have to comply with both the work-hour limits under 46 U.S.C. 8104(h) and 8104(n), respectively, and the rest-hour requirements under STCW and 46 U.S.C. 8104(a).

In any specific set of circumstances, the stricter rule would apply. For example, although the rest-hour requirements proposed here would technically permit the operator of a seagoing towing vessel to stand watch for up to 14 hours a day, 46 U.S.C. 8104(h) would limit the operator to no more than 12 hours in a 24-hour period.

Similarly, although 46 U.S.C. 8104(n) technically permits a mate on a tanker to work up to 15 hours in a 24-hour period, the rest-hour requirements proposed here would limit his or her periods of duty to not more than 14 hours in that same 24-hour period, unless there were an emergency or other overriding operational condition; and then an adjustment would subsequently be necessary to ensure that the mate received 70 hours of rest in 7 days.

Although calculating work and rest may be complex under some non-routine circumstances, the Coast Guard considers the STCW rest-hour requirements of STCW and the existing work-hour limits in U.S. statutes and regulations to be compatible and enforceable, and in keeping with the object of safe watchkeeping.

Further comment to the docket is welcome, on the implementation of the rest-hour requirement, and particularly on the extent to which the terms *rest hours and overriding operational conditions* should be clarified or interpreted either in this proposed rule itself or in the policy on its enforcement. Comment is also welcome on the kinds of shipboard activity (such as personal housekeeping) that should be allowed to watchkeeping personnel who are off duty and on the need for recordkeeping to ensure compliance with the rest-hour requirements.

Incorporation by Reference

The following material would be incorporated by reference in §§ 10.102, 12.01–3, and 15.105: Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, and the associated Seafarers' Training, Certification and Watchkeeping (STCW) Code, as adopted under resolutions 1 and 2, respectively, by the Conference of Parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, held at IMO from June 26 to July 7, 1995.

Copies of the material are available for inspection where indicated under **ADDRESSES**. Copies of the material are also available from IMO, 4 Albert Embankment, London, SE1 7SR, England, telephone in London 0171–735–7611.

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

Regulatory Evaluation

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866 and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. It has not been reviewed by the Office of Management and Budget under that Order. It is not significant under the regulatory policies and procedures of the Department of Transportation (DOT) [44 FR 11040 (February 26, 1979)].

A preliminary regulatory assessment has been prepared and is available for inspection where indicated under **ADDRESSES.**

The regulatory assessment is preliminary at this stage. The Coast Guard published a notice of inquiry on November 13, 1995 [60 FR 56970], to solicit information that would be useful in calculating the costs and benefits of implementing the 1995 Amendments to STCW. Some of those calling the Coast Guard to discuss the notice said they could not give a detailed or accurate assessment of impacts until they had seen the specific proposals. Others indicated they did not foresee a cost impact since they felt that their current practices and procedures generally conformed with the requirements of the amendments to STCW.

To a great extent, the STCW revisions are introducing, as requirements, practices already successfully promoted through the current U.S. regulations (e.g., use of approved training, and the use of simulators in training as predicates of remission of seagoing service). In most cases, the new requirements would involve modification or enhancement of existing training and oversight rather than establishment of new programs.

The Coast Guard estimates that the proposal will affect approximately 19,500 seafarers over a 5-year period. The estimated composition of this group is 10,335 deck and other officers, 1,755 engineering officers, 3,900 able seamen, and 3,510 qualified members of the engineering department.

The approximate vessel population that operate outside the boundary line and may be affected by the proposed regulation are 136 MODUs; 95 industrial vessels; 271 freight ships; 103 oil recovery vessels; 696 offshore supply vessels; 20 passenger vessels; 2,112 small passenger vessels; 14 research vessels; 14 maritime school ships; 162 tank ships; 15 towboats and tugboats; 462 tank barges; 3 ferries; and 486 freight barges.

Costs

The Coast Guard estimates that costs fall into the following categories: medical fitness, training costs, training infrastructure costs, company and/or owner/operator costs, and government costs.

The Coast Guard estimates that approximately 12,000 seafarers apply for MMDs annually. Approximate costs of $1,900,000 annually are estimated for mariners certifying their medical fitness when applying for an MMD.

Deck, radio, and other officers will be required to demonstrate competency and knowledge in a combination of courses including GMDSS, ARPA, Personal Survival, Personal Safety and Social Responsibility, and Bridge Teamwork. The Coast Guard estimates that as many as 4,091 officers may be affected annually while the proposed regulation has a high level of flexibility built into it for mariners, the Coast Guard has assumed that mariners will attend formal, classroom courses to comply with the requirements. Annual training costs for deck, radio, and other officers are estimated at $21,804,580.

Engineering officers will be required to demonstrate competence and knowledge in a combination of courses including Personal Survival, Personal Safety and Social Responsibility, and Electronic and Control Engineering. The Coast Guard estimates that as many as 645 engineering officers may be affected annually. Annual training costs for engineering officers are estimated at $3,247,575.

ABs will be required to demonstrate competence and knowledge in a combination of courses including Personal Survival, Personal Safety and Social Responsibility, Shipboard Orientation, Firefighting and Fire Prevention, and estimates that as many as 1,369 ABs may be affected annually. Annual training costs for ABs are estimated at $11,568,050.

QMEDs will be required to demonstrate competence and knowledge in a combination of courses including Personal Survival, Personal Safety and Social Responsibility, Shipboard Orientation, and Firefighting and Fire Prevention. The Coast Guard estimates that as many as 1,253 QMEDs may be affected annually. Annual training costs for QMEDs are estimated at $7,580,650.

Ro/Ro personnel will be required to attend specialized training including crowd management, passenger safety, cargo safety, and hull integrity. The Coast Guard estimates that this may affect 225 Seafarers every 5 years. Estimated annual cost is $67,500.

The Coast Guard has estimated a new electronics technician rating for vessels equipped with GMDSS. Electronic technicians will be required to demonstrate competence and knowledge to perform maintenance,

diagnosis and repair of electronic equipment and installations. The Coast Guard estimates that this may affect 1,128 Seafarers. The Coast Guard has estimated this as a one-time cost of $6,204,000.

The Coast Guard has determined that training infrastructure costs include QSS, Approved Instructor, Designated Examiner, Capital Investments, and Course Development.

For QSS, the Coast Guard estimates that 100 training institutions may be affected at an initial cost of $7,500, $1,000 annual maintenance costs, and an independent evaluation estimated at $5,000. Total cost is estimated at $1,750,000.

For Approved Instructors, the Coast Guard estimates that 1,500 instructors at 100 training institutions may be affected. Annual approved instructor costs are estimated at $1,500,000.

For Designated Examiners, the Coast Guard estimates each will be required to provide 20 hours of service. Annual designated examiner costs are estimated at $3,900,000 for 1997 through 2001 and $780,000 for 2002 through 2003.

The Coast Guard has determined that there are likely to be some GMDSS and ARPA Capital Investments necessary by training institutions to accommodate the anticipated annual through-put of deck and other officers. A one-time cost of $3,160,000 is estimated.

The Coast Guard has determined that there are likely to be some course-development costs associated with the proposed rulemaking. A one-time cost of $889,000 is estimated.

The Coast Guard has determined that costs for companies and for owners and operators are likely to include those associated with rest-hour and recordkeeping requirements.

The Coast Guard has determined that rest-hour requirements are likely to affect 83 vessels annually. Crew augmentation costs for these vessels is estimated at $2,120,650 annually.

The Coast Guard has determined that records on Seafarer training and competence, medical fitness, and rest hour requirements will be required. The Coast Guard estimates that this will likely affect 19,500 seafarers annually at an estimated cost of $1,462,500.

The Coast Guard does not anticipate any additional costs in implementing the regulation at this time.

Total Costs

Costs of the proposal are forecast to 2003. The Coast Guard estimates that these requirements will be fully integrated into the marine infrastructure by 2003 and, thus, a regular part of doing business. Costs are estimated at $45,789,021 in 1997, $36,218,521 in 1998, $35,568,521 in 1999 through 2001, $12,767,724 in 2002, and $13,200,224 in 2003. The present value of the costs of this proposed regulation discounted at 7 percent to 1997 would total $172,685,673.

Benefits

The Coast Guard has determined that the proposed rule has potential economic benefits and a potential to reduce marine casualties.

Economics play a significant role in safety. While the U.S. commercial fleet has long been among the safest in the world, differences between U.S. standards and those of other maritime nations put our vessels at a competitive disadvantage. Responsible operators can be forced to operate with lower profit margins and less capital to invest in safe operations, and in some cases forced out of the market entirely. More aggressively holding all ships to the same standards set for U.S. ships is key to shifting the balance. This proposal would allow the U.S. to hold mariners aboard all vessels entering its ports to the same competency standards which the U.S. holds its own vessels, without foreign retaliation. Consequently, U.S. vessels visiting foreign ports would not be faced with increased scrutiny that could result in costly vessel delays. Such delays would otherwise likely decrease the value of trade carried in U.S. bottoms. Conversely, under this proposal, the U.S. could expect to increase its market share of cargo carried which could result from the more even competitive playing field accorded U.S. and foreign fleets because of this proposal. Appendix F provides a summary of the value of U.S. international trade and ocean trade worldwide.

U.S. ships only carry about 8 percent of the value of U.S. export trade and 7 percent of the value of U.S. import trade. If, as a result of complying with international standards proposed in this rulemaking, U.S. vessels gain one tenth of one percent of the value of U.S. international trade in any given year of implementation (approximately $56,000,000), the annual benefits will outweigh the costs.

On average, there were 29 fatalities and 76 injuries annually as a result of errors that potentially could be linked to training deficiencies. The training required by this proposal has the potential to significantly decrease the number of fatalities and injuries in maritime transportation. Based on the $27,700,000 value of a human life, if this proposal causes a reduction in the number of fatalities by 17 in 1997, 13 in 1998–2001, and 55 in 2002–2003, the benefits will exceed the costs.

The complex cumulative effect of human error makes it difficult to quantify the exact benefits of the proposed rulemaking. One way to reduce the risks associated with human error in operating seagoing ships is to ensure that seafarers maintain the highest practicable standards of training, certification, and competence. The proposal is intended to reduce the risk of maritime casualties and pollution incidents caused by human error. Benefits are expected to accrue from a reduction of shipboard accidents and injuries because personnel will have an increased awareness of safe shipboard practices. As the Coast Guard reviews comments resulting from the proposal and formulates a final rule, further review of benefits based on risk is anticipated.

Small Entities

Under the Regulatory Flexibility Act [5 U.S.C. 601 *et seq.*], the Coast Guard must consider whether this proposal, if adopted, would have a significant economic impact on a substantial number of small entities. ''Small entities'' may include independently owned and operated small businesses that are not dominant in their field and that otherwise qualify as ''small business concerns'' under Section 3 of the Small Business Act (15 U.S.C. 632). ''Small entities'' also include small not-for-profit organizations and small governmental jurisdictions.

The proposed rule has built in sufficient flexibility and options to allow small entities to comply with its proposed requirements at modest cost. For the most part, it is expected to affect only large business enterprises and individuals mariners. There is no requirement that one entity perform all the STCW training and assessment requirements that are being proposed.

Those small entities engaged in training may choose to obtain assessment from individual qualified assessors who may also be organized as small entities. The Coast Guard does not limit the arrangements as to who may offer instruction or assessment. Any combination may be used by a mariner to achieve the desired qualifications licenses, or certificates.

The proposed rule applies to individual mariners and allows for small entities to remain in and actively compete in the maritime-training sector of the maritime industry with options to teach and assess as many courses or functions as any entity chooses. The proposal covers requirements that

would not begin to go into effect until early 1997, through the phase-in period.

Because of these accommodations and characteristics, the Coast Guard certifies under 5. U.S.C. 605(b) that this proposal will not have a significant economic impact on a substantial number of small entities.

Collection of Information

Under the Paperwork Reduction Act [44 U.S.C. 3501 *et seq.*], the Office of Management and Budget (OMB) reviews each proposed rule that contains a collection-of-information requirement to determine whether the practical value of the information is worth the burden imposed by its collection. Collection-of-information requirements include reporting, recordkeeping, notification, and other, similar requirements.

This proposal contains collection-of-information requirements in the following sections: 10.304 (training and assessment-record books); 10.309 and 12.03–1 (approved training); and 15.411 (maintenance of seamen's records by owner or operator). The following particulars apply:

Training conducted on board ships, when part of an approved program based on 1 year of seagoing service for deck licenses (6 months for engineer licenses), would have to make use of a training- and assessment-record book to document that required training and assessment of competency has been completed properly. The books would be submitted to the Coast Guard as part of an application for a license.

The QSS that would monitor training and assessment to ensure that they were meeting objectives would compel organizations offering training to document certain information and to maintain records for 1 year. The records would cover such matters as the course syllabus, students performance, and the qualifications of instructors and examiners. Additionally, an independent evaluation would need to be documented periodically. Records would be subject to review by the Coast Guard in its oversight function to ensure that training and assessment satisfy minimum conditions.

The proposed rule would allow for wide variation in the means for complying with new requirements to ensure that the scope of the QSS is reasonably related to the scope of training and assessment conducted by the entity concerned.

Companies owning or operating U.S.-documented seagoing vessels would have to arrange for the maintenance of certain records concerning the medical fitness, experience, training, and competence, of the seamen employed or engaged on their ships. The records could be maintained by a third party on behalf of the company, but they would need to be readily accessible to those in management responsible for the safety of vessel operations and the prevention of marine pollution. The recordkeeping requirement would be in effect only during the period of service of the seaman concerned.

The proposed rest-hour schedule would require documentation necessary for the safe operation of the vessel. This would ensure that the crew was informed of rest-hour requirements.

The proposed recordkeeping generally reflects routine practices for U.S. ship-operating companies and training institutions. However, the international rules in STCW were drafted to apply to companies and training programs worldwide. In due course, by its obligation under STCW as amended, the United States must demonstrate to the IMO that it has in place certain specific regulations that implement the international rules.

Dot No: 2115.

Administration: U.S. Coast Guard.

Title: Implementation of the 1995 Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW).

Need for Information: To ensure compliance with international requirements, and to maintain an acceptable level of quality in the training and assessment of merchant mariners.

Proposed use of Information: The Coast Guard would have access to information to monitor compliance with regulations and to identify where corrective action may be needed. Coast Guard officials involved in issuing licenses, documents, and STCW certificates would have a reliable source for determining whether training and assessment had been completed by candidates in accordance with domestic and international rules.

Frequency of Response: Under this proposed rule, records would have to be maintained for 1 year. In one case a certification of continued compliance would have to be provided to the Coast Guard once a year.

Burden Estimate: 40,215 hours.

Respondents: 28,645.

Form(s): N/A.

Average Burden-Hours per Respondent: 1.4 hours.

The Coast Guard has submitted the requirements to OMB for review under § 3504(h) of the Paperwork Reduction Act. Persons submitting comments on the requirements should submit their comments both to OMB and to the Coast Guard where indicated under **ADDRESSES**.

Federalism

The Coast Guard has analyzed this proposal under the principles and criteria contained in Executive Order 12612 and has determined that this proposal does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

This rulemaking should not have a direct impact on State, local, or tribal governments. However, States that operate or charter maritime-training institutions would have to bring the relevant training programs into line with the new requirements. For the most part, the existing State-sponsored maritime-training institutions have programs that would need little adjustment to meet the new requirements. And the accreditation process for these institutions should satisfy the new quality-assurance provisions.

Environment

The Coast Guard considered the environmental impact of this proposed rule proposal and concluded that, under paragraph 2.B.2.e(34)(C) of Commandant Instruction M16475.1B, this rulemaking is categorically excluded from further environmental documentation.

This rulemaking would have no direct environmental impact. The implementation of the 1995 Amendments to STCW should reduce the risk that human error will result in a maritime casualty or pollution incident by ensuring that seafarers on seagoing ships are meeting the highest practicable standards of competence. However, there are few objective criteria for quantifying the reduction in this risk. A ''Categorical Exclusion Determination'' is available in the docket for inspection or copying where indicated under **ADDRESSES**.

List of Subjects

46 CFR Part 10

Fees, Marine safety, Incorporation by reference, Reporting and recordkeeping requirements, Schools, Seamen, Vessels.

46 CFR Part 12

Fees, Marine safety, Incorporation by reference, Reporting and recordkeeping requirements, Schools, Seamen, Vessels.

46 CFR Part 15

Marine safety, Navigation (water), Incorporation by reference, Reporting and recordkeeping requirements,

Schools, Seamen, Vessel manning, Vessels.

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

PART 10—LICENSING OF MARITIME PERSONNEL

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

Authority: 31 U.S.C. 9701; 46 U.S.C. 2103, 7101, 7106, 7107; 49 CFR 1.45, 1.46; § 10.107 also issued under the authority of 44 U.S.C. 3507.

2. Section 10.101 is amended by revising paragraphs (a) and (c) to read as follows:

§ 10.101 Purpose of regulations.

(a) The purpose of the regulations in this part are to provide—

(1) A comprehensive means of determining the qualifications an applicant must possess to be eligible for a license as deck officer, engineer, pilot, radio officer, or radio operator on merchant vessels, or for a license to operate uninspected towing vessels or uninspected passenger vessels, or for a certificate of registry as staff officer; and

(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, officer in charge of an engineering watch, designated duty engineer, or radio operator, in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW), and to receive the appropriate certificate or endorsement as required by STCW.

* * * * *

(c) The regulations in subpart C of this part prescribe the requirements applicable to—

(1) Each approved training course if the training course is to be acceptable as a partial substitute for service or for a required examination, or as training required for a particular license or license endorsement; and

(2) All training and assessment associated with meeting the standards of competence established by STCW.

3. Section 10.102 is added to read as follows:

§ 10.102 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 paragraph (b) of 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 Office of the Federal Register, 800 North Capitol Street NW., Suite 700, Washington, DC, and at the U.S. Coast Guard, Operating and Environmental Standards Division, 2100 Second Street SW., Washington, DC 20593–0001, and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are as follows:

International Maritime Organization (IMO)

4 Albert Embankment, London, SE1 7SR, England.

Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), and the associated Seafarers' Training, Certification and Watchkeeping Code (STCW Code), as adopted under resolutions 1 and 2, respectively, by the Conference of Parties to the International Convention of Standards of Training, Certification and Watchkeeping for Seafarers, 1978, held at IMO from June 26 to July 7, 1995—10.103; 10.205; 10.304; 10.480; 10.602; 10.901.

4. Section 10.103 is amended by adding in alphabetical order the following new definitions to read as follows:

§ 10.103 Definitions of terms used in this part.

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

* * * * *

Coast-Guard-accepted means that the Coast Guard has officially acknowledged in writing that the material or process at issue meets the applicable requirements; that the Coast Guard has issued an official policy statement listing or describing the material or process as meeting the applicable requirements; or that an entity acting on behalf of the Coast Guard under a Memorandum of Agreement has determined that the material or process meets the applicable requirements.

* * * * *

Designated examiner means an individual who has been trained or instructed in techniques of training or assessment and is otherwise qualified to evaluate whether a candidate for a license, document, or endorsement has achieved the level of competence required to hold the license, document, or endorsement. This individual may be designated by the Coast Guard or by a Coast-Guard-approved program of training or assessment.

* * * * *

Practical demonstration means the performance of an activity under the direct observation of a designated examiner for the purpose of establishing that the performer is sufficiently proficient in a practical skill to meet a specified standard of competence or other objective criterion.

Qualified instructor means an individual who has been trained or instructed in instructional techniques and is otherwise qualified to provide required training to candidates for licenses, documents, and endorsements.

* * * * *

Standard of competence means the level of proficiency to be achieved for the proper performance of duties on board vessels in accordance with national and international criteria.

STCW endorsement means a certificate or endorsement issued in accordance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW). An STCW endorsement issued by the Officer in Charge, Marine Inspection, will be valid only when accompanied by the appropriate U.S. license or document; and, if the license or document is revoked, then the associated STCW endorsement will no longer be valid for any purpose.

* * * * *

5. In § 10.107, paragraph (b)(3) is added to read as follows:

§ 10.107 Paperwork approval.

* * * * *

(b) * * *

(3) OMB 2115—46 CFR 10.304, 10.309.

6. In § 10.201, paragraph (a) is revised to read as follows:

§ 10.201 Eligibility for licenses and certificates of registry, general.

(a) The applicant shall establish to the satisfaction of the Officer in Charge, Marine Inspection (OCMI), that he or she possesses all of the qualifications necessary (e.g., age, experience, character references and recommendations, physical examination, citizenship, approved training, passage of a professional examination, as appropriate, and, when required by this part, a practical demonstration of skills) before the OCMI will issue a license or certificate of registry.

* * * * *

7. In § 10.202, paragraph (j) is added to read as follows:

§ 10.202 Issuance of licenses and certificates of registry.

* * * * *

(j) When an original license is issued, renewed, upgraded, or otherwise modified, the Officer in Charge, Marine Inspection (OCMI), will determine whether the holder of the license must hold an STCW certificate or endorsement for service on a seagoing vessel and, if so, and if the holder is qualified, will issue the appropriate certificate or endorsement. The OCMI will also issue an STCW certificate or endorsement at other times, if circumstances so require and if the holder of the license is qualified to hold the certificate or endorsement.

8. In § 10.205, paragraph (g) is revised, and paragraphs (k), (l), (m), (n), (o), and (p) are added, to read as follows:

§ 10.205 Requirements for original licenses and certificates of registry.

* * * * *

(g) *Firefighting certificate.* (1) Applicants for licenses in the following categories shall each present a certificate of completion from an approved course or approved training in firefighting. The course must be sufficient to establish that the applicant meets the standard of competence in basic and advanced firefighting set forth in STCW Regulations VI/1 and VI/3. The course must have been completed 5 years or less before the date of application for the license requested:

(i) All masters' or mates' licenses for service on vessels in ocean or near-coastal service.

(ii) All licenses for operators of uninspected passenger vessels for service beyond the boundary line.

(iii) All licenses for service on mobile offshore drilling units.

(iv) all engineers' licenses.

(2) The officer in charge, Marine Inspection (OCMI), may accept a certificate of completion from an approved course or approved training in firefighting designed for a particular ship or type of service; however, in that case, the OCMI will limit the endorsement by indicating the ship or type of service.

* * * * *

(k) *Competence in the use of Automatic Radar-Plotting Aids (ARPA).* (1) Subject to paragraph (j)(2) of this section, all candidates for masters' or mates' licenses for service on vessels in ocean or near-coastal service, or for licenses for operators of uninspected passenger vessels for service beyond the boundary line, shall each present a certificate of completion from an approved course or approved training on an ARPA simulator. The course must be sufficient to establish that the applicant is competent to maintain safe navigation through the proper use of ARPA, by correctly interpreting and analyzing the information obtained from that device and taking into account both the limitations of the equipment and the prevailing circumstances and conditions. The simulator used in the course must meet or exceed the performance standards established under STCW Regulation I/12 of the 1995 Amendments.

(2) Training and assessment in the use of ARPA is not required for those who serve exclusively on ships not fitted with ARPA. However, when the simulator training has not been completed, the license must be endorsed to indicate this limitation.

(l) *Certificate for operator of radio in the Global Maritime Distress and Safety System (GMDSS).* (1) Subject to paragraph (l)(2) of this section, candidates for all masters' or mates' licenses for service on vessels in ocean or near-coastal service shall each present either a certificate for operator of radio in the GMDSS issued by the Federal Communication Commission (FCC) or a certificate of completion from a Coast-Guard- or an FCC-approved course for operator of radio in the GMDSS. The course must be sufficient to establish that the applicant is competent to perform radio duties on a ship participating in the GMDSS and meets the standard of competence under STCW Regulation IV/2 of STCW.

(2) Candidates intending to serve only on ships not required to comply with the provisions of the GMDSS in Chapter IV of SOLAS need not comply with those of paragraph (k)(1) of this section.

(m) *Personal survival techniques.* (1) Applicants for licenses in the following categories shall each present a certificate of completion from an approved course or approved training in personal survival techniques. The course must be sufficient to establish that the applicant meets the standard of competence under STCW Regulation VI/1 and table A–VI/1–1 of the STCW Code. The course must have been completed 5 years or less before the date of application for the license requested:

(i) All masters' or mates' licenses for service on vessels in ocean or near-coastal service.

(ii) All licenses for operators of uninspected passenger vessels for service beyond the boundary line.

(iii) All licenses for service on mobile offshore frilling units.

(iv) All engineers' licenses.

(2) The officer in charge, Marine Inspection (OCMI), may accept a certificate of completion from an approved course or approved training in firefighting designed for a particular ship or type of service; however, in that case the OCMI will limit the endorsement by indicating the ship or type of service.

(n) *Personal safety and social responsibilities.* (1) Applicants for licenses in the following categories shall each present a certificate of completion from an approved course or approved training in personal safety and social responsibilities. The course must be sufficient to establish that the applicant meets the standard of competence under STCW Regulation VI/1 and table A–VI/1–4 of the STCW Code. The course must have been completed 5 years or less before the date of application for the license requested:

(i) All masters' or mates' licenses for service on vessels in ocean or near-coastal service.

(ii) All licenses for operators of uninspected passenger vessels for service beyond the boundary line.

(iii) All licenses for service on mobile offshore drilling units.

(iv) All engineers' licenses.

(2) The officer in charge, Marine Inspection (OCMI), may accept a certificate of completion from an approved course or approved training in firefighting designed for a particular ship or type of service; however, in that case, the OCMI will limit the endorsement by indicating the ship or type of service.

(o) *Procedures for bridge team-work.* Candidates for all masters' or mates' licenses for service on vessels in ocean or near-coastal service shall each present sufficient documentary proof that they understand and can effectively apply procedures for bridge team-work as an essential aspect of maintaining a safe navigational watch, taking into account the principles of bridge-resource management enumerated in section B–VIII/2 of the STCW Code.

(p) *Practical demonstration of skills.* Candidates for original licenses must each successfully complete any practical demonstrations required under this part and appropriate to the particular licenses concerned, to prove that they are sufficiently proficient in skills required under subpart I of this part. The OCMI must be satisfied as to the authenticity and acceptability of all evidence that each candidate has successfully completed those demonstrations in the presence of a designated examiner. The OCMI will place in each candidate's file a written record of the skills required, the results

of the practical demonstrations, and the identification of the designated examiner in whose presence those occurred.

9. In § 10.207, the section heading, the heading for paragraph (c), and paragraph (c)(1) are revised to read as follows:

§ 10.207 Requirements for raise in grade of license.

* * * * *

(c) *Age, experience, training, and assessment.* (1) Applicants for a raise of grade of licenses shall establish that they possess the age, experience, and training qualifications necessary, and that they have been examined and otherwise assessed as may be required by this part to establish competence to hold the particular license requested, before they are entitled to a raise in grade of license.

* * * * *

10. In § 10.209, paragraphs (k), (l), and (m) are added to read as follows:

§ 10.209 Requirements for renewal of licenses and certificates of registry.

* * * * *

(k) After July 31, 1998, each applicant for renewal of a license in any of the following categories shall meet the applicable requirements of §§ 10.205(g), 10.205(l), and 10.205(m) unless he or she has previously done so:

(1) All masters' or mates' licenses for service on vessels in ocean or near-coastal service.

(2) All licenses for operators of uninspected passenger vessels for service beyond the boundary line.

(3) All licenses for service on mobile offshore drilling units.

(4) All engineers' licenses.

(l) After July 31, 1998, each applicants for renewal of a license in any of the following categories of license shall provide evidence of having both demonstrated competence in firefighting, personal survival techniques, and personal safety and social responsibility and been examined or continuously assessed in these areas as part of an approved training program, within the previous 5 years:

(1) All masters' or mates' licenses for service on vessels in ocean or near-coastal service.

(2) All licenses for operators of uninspected passenger vessels for service beyond the boundary line.

(3) All licenses for service on mobile offshore drilling units.

(4) All engineers' licenses.

(m) After July 31, 1998, each applicant for renewal of any master's or mate's license for service on vessels in ocean or near-coastal service, or any license for operator of an uninspected passenger vessel for service beyond the boundary line, shall meet the applicable requirements of §§ 10.205(k), 10.205(l), and 10.205(o) if he or she has not previously done so.

11. In § 10.304, the heading is revised and paragraphs (e), (f), and (g) are added to read as follows:

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

* * * * *

(e) Where a candidate for ocean and near-coastal deck licenses uses completion of approved training to substitute for required service, then not less than 1 year of the remaining service must be part of approved training that meets the appropriate requirements of Chapter II of STCW and the requirements of subpart C of this part. The candidate's training must be documented in a Coast-Guard-accepted training- and assessment-record book.

(f) Each candidate for an engineer's licenses for service on seagoing vessels shall complete onboard training as part of approved training that meets the appropriate requirements of Chapter III of STCW and the requirements of subpart C of this part. The training must be documented in a Coast-Guard-accepted training- and assessment-record book.

(g) The training- and assessment-record book referred to in paragraphs (e) and (f) of this section must contain at least the following:

(1) Identification of the candidate, including full name, home address, photograph or photo-image, and personal signature.

(2) The objectives of the training and assessment.

(3) The tasks to be performed or the skills to be demonstrated, based on the standards of competence set forth in the tables of the appropriate sections in Part A of the STCW Code.

(4) The criteria to be used in determining that the tasks or skills have been performed properly, based on the standards of competence set forth in the tables of the appropriate sections in Part A of the STCW Code.

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

(6) A place for a qualified examiner to indicate by his or her initials that the candidate has successfully completed a practical demonstration and has proved competent in the task or skill under the criteria.

(7) Identification of each qualified instructor by full name, home address, employer, job title, ship name or business address, number of any Coast Guard license or document held, and personal signature.

(8) Identification of each designated examiner by full name, home address, employer, job title, ship name or business address, number of any Coast Guard 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 candidate.

12. Section 10.309 is added to read as follows:

§ 10.309 Approved training other than approved courses.

(a) When the training and assessment of competence required by these regulations are not subject to § 10.302 of this part and are not being used to substitute for seagoing service, they must meet the following requirements:

(1) The training and assessment program must have written, clearly defined objectives that emphasize specific knowledge, skills, and abilities, and include criteria to use in establishing a candidate's successful achievement of the objectives.

(2) The training must be set out in a written syllabus that conforms to a Coast-Guard-accepted outline for such training and includes—

(i) The sequence of subjects to be covered;

(ii) The number of classroom hours in the presence of a qualified instructor to be spent on each subject;

(iii) The identity and professional qualifications of the instructor(s) to be conducting the training;

(iv) The identification of other media or facilities to be used in conducting training; and

(v) Measurements at appropriate intervals of each candidate's progress toward acquisition of the specific knowledge, skills, and abilities stated in the objectives.

(3) Except as provided in paragraphs (a)(4) and (a)(5) of this section, documentary evidence must be readily available to establish that all instructors—

(i) Have experience, training, or instruction in effective instructional techniques;

(ii) Are qualified in the task for which the training is being conducted; and

(iii) Hold the level of license, endorsement, or other professional credential required of those who would apply, on board a vessel, the relevant level of knowledge, abilities, and skills described in the training objectives.

(4) Neither a specialist in a particular field of non-maritime education, such as

mathematics or first aid, nor an individual with at least 3 years of service as a member of the Armed Forces of the United States specializing in the field in which he or she is to conduct training, need hold a maritime license or document to conduct training in that field.

(5) A simulator may be used in training if—

(i) The simulator meets applicable performance standards;

(ii) The instructor has gained practical operational experience on the particular type of simulator being used; and

(iii) The instructor employing the simulator has received appropriate guidance in instructional techniques involving the use of simulators.

(6) Essential equipment and instructional materials must afford all candidates adequate opportunity to participate in exercises and acquire practice in performing required skills.

(7) A process or routinely assessing the effectiveness of the instructors, including the use of confidential evaluations by candidates, must be in place.

(8) Records of candidates' performance must be maintained for at least a year.

(9) To ensure that the training is meeting its objectives and the requirements of paragraph (a) of this section, its offeror must monitor it at suitable intervals in accordance with a Coast-Guard-accepted quality-standards system, which must include the following features:

(i) Those monitoring the trading, shall be persons knowledgeable about the subjects being monitored and about the national and international requirements that apply to the training, and they shall not themselves be involved in the training.

(ii) Those monitoring the training must enjoy convenient access to all appropriate documents and facilities, and opportunities both to observe all appropriate activities and to conduct confidential interviews when necessary.

(iii) Arrangements must be such as to ensure that persons monitoring the training are not penalized or rewarded, directly or indirectly, by the sponsor of the training for making any particular observations or for reaching any particular conclusions.

(10) Those monitoring the training shall communicate their conclusions to the Coast Guard within 1 month of the completion of the monitoring.

(11) Upon prior notice by the Coast Guard, those providing the training shall let the Coast Guard observe the training and review documentation relating to paragraphs (a)(1) through (a)(10) of this section.

(b) The Coast Guard will maintain a list of training each of whose providers annually submits a certificate, signed by the provider or its authorized representative, starting that the training fully complies with requirements of this section. Training on this list will presumptively offer the training necessary for licenses and STCW endorsements under this part. The Coast Guard will update this list periodically and make it available to members of the public on request.

(c) If the Coast Guard determines, on the basis of observations or conclusions either of its own or by those monitoring the training, that 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 provider of the training by letter enclosing a report of the observations and conclusions;

(2) The provider will have a specified period to appeal the conclusions to the appropriate official at Coast Guard Headquarters, or to 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 held by the Coast Guard, considering progress toward compliance, to be appropriate—the Coast Guard will remove the training from the list referred to in paragraph (b) of this section until it can verify full compliance; and it may deny applications based in whole or in part on training not on the list until additional training or assessment can be documented.

13. In § 10.480, paragraph (d)(1) is added and paragraph (d)(20 is added and reserved to read as follows:

§ 10.480 Radar observer.

* * * * *

(d) * * *

(1) Each applicant for an STCW certificate or endorsement as master or deck officer must complete approved radar-simulator training that meets the appropriate requirements of sections A–I/12 and A–II of the STCW Code.

* * * * *

14. Section 10.601 is revised to read as follows:

§ 10.601 Applicability.

This subpart provides for the licensing of radio officers for employment on vessels, and for the certification of radio operators for service on ships subject to the provisions on the Global Maritime Distress and Safety System (GMDSS) of Chapter IV of SOLAS.

15. In § 10.603, the heading is revised, and paragraphs (d) and (e) are added to read as follows:

§ 10.602 Requirements for radio offices' licenses and radio operators' certificates.

* * * * *

(d) Each applicant for a radio operator's certificate required for service on ships subject to the Global Maritime Distress and Safety System (GMDSS) shall provide evidence that he or she meets the standard of competence set out in STCW Regulation IV/2 including the competence to transmit and receive information using subsystems of GMDSS, to fulfill the functional requirements of GMDSS, and to provide radio services in emergencies.

(e) Evidence required by paragraph (d) of this section must include a certificate of completion of a Coast Guard-approved or FCC-approved course on the GMDSS.

16. In § 10.901, paragraphs (c) and (d) are added to read as follows:

§ 10.901 General provisions.

* * * * *

(c) Each applicant for a license for service in the following capacities on vessels that operate beyond the boundary line must also provide sufficient documentary evidence that he or she has successfully performed practical demonstrations using one or more of the methods for demonstrating competence authorized under the tables set out under the appropriate regulations of STCW:

(1) *Deck Department*—(i) Officer in charge of the navigational watch on seagoing ships of 500 gross tons or more.

(ii) Officer in charge of the navigational watch on seagoing ships of less than 500 gross tons not engaged on near-coastal voyages.

(iii) Officer in charge of the navigational watch on seagoing ships of less than 500 gross tons engaged on near-coastal voyages.

(iv) Master and chief mate on seagoing ships of 3,000 gross tons or more.

(v) Master and chief mate on seagoing ships of between 500 and 3,000 gross tons or more.

(vi) Master on seagoing ships of less than 500 gross tons not engaged on near-coastal voyages.

(vii) Master on seagoing ships of less than 500 gross tons engaged on near-coastal voyages.

(2) *Engine Department*—(i) Officer in charge of the an engineering watch in a manned engine-room on a seagoing ship.

(ii) Designated duty engineer in a periodically unmanned engine-room on a seagoing ship.

(iii) Chief engineer officer of a seagoing ship driven by main propulsion machinery of 3,000 kW [4,000 hp] of propulsion power or more.

(iv) Second engineer officer of a seagoing ship driven by main propulsion machinery of 3,000 kW [4,000 hp] of propulsion power or more.

(v) Chief engineer officer of a seagoing ship powered by main propulsion machinery of between 750 kW [1,000 hp] and 3,000 kW [4,000 hp] of propulsion power or more.

(vi) Second engineer officer of a seagoing ship driven by main propulsion machinery of between 750 kW [1,000 hp] and 3,000 kW [4,000 hp] of propulsion power or more.

(d) Simulators used in assessment of competence under paragraph (c) of this section must meet the appropriate performance standards set out in section A–I/12 of the STCW Code. However, simulators installed or brought into use before February 1, 2002, need not meet them so far as they fulfill the objectives of the assessment of competence or demonstration of proficiency.

17. In § 10.910, the introductory text and table 10.910–2 are revised to read as follows:

§ 10.910 Subjects for deck licenses.

On each topic indicated by an ''X'', each applicant for an ocean or near-coastal license is subject to an assessment of his or her command of the practical skills included within each professional topic, as well as to a written test of his or her knowledge. On each topic indicated by a ''T'' he or she is subject only to an assessment of evidence obtained from his or her completion of approved training. On each topic indicated by an ''A'' he or she is subject only to an assessment of his or her command of those practical skills.

* * * * *

BILLING CODE 4910–14–M

TABLE 10.910-2 - LICENSE CODES

Examination topics	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Navigation and position determination:																											
Ocean Track Plotting:																											
Middle-Latitude Sailing	1	1		1	1																						
Mercator Sailing	X	X		1	1																						
Great-Circle Sailing	1	1		1																							
Parallel Sailing	1	1		1	1																						
ETA	X	X	1	X	X																						
Piloting:																											
Distance Off		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Bearing Problems		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Fix or Running Fix		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Chart Navigation		X	X	X	X	X	X	X	X	X	X	2	X	X	X	X	X	2	2	2	2	X	X	X			
Dead Reckoning		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Celestial Observations:																											
Special Cases (h/lo Alt., Backsight)	1																										
Latitude by Polaris	1	1	1	1																							
Latitude by Meridian Transit	1																										
Lat. by Meridian Transit (Sun Only)	X	X	1	X	X	1	1			1												1	1				
Fix or Running fix (Any body)	X	X	1	X																		1					
Fix or Running Fix (Sun Only)					X	1	1			1												1	1				
Star Identification	1	1	1	1																							
Star Selection	1	X	1	X																		1	1				
Times of Celestial Phenomena:																											
Time of Meridian Transit	1																										
Time of Meridian Transit (Sun Only)		X	1	X	X	1	1		1													1	1				
Second Estimate Meridian Transit	1																										
Zone Time Sun Rise/Set/Twilight	X	X	1	1	1	1	1			1												1	1				
Zone Time Moon Rise/Set	X	X		1																							
Speed by RPM	X	X		X									3														
Fuel Conservation	X	X											3														
Electronic Navigation	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Instruments and Accessories	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Aids to Navigation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Charts, Navigation Pubs. & Notices to Mariners	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Naut. Astronomy and Nav. Definitions	X	X		X	X																						
Chart Sketch																								4			
Seamanship:																											
Marlinelike Seamanship			X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X			
Purchases, Blocks and Tackle			X	X	X		X			X	X	X		X		X	X	X	X	X	X	X	X	X			
Small-Boat Handling Under Oars or Sail				X	X								X	X													
Watchkeeping:																											
COLREGS	X	X	X	X	X	X	X	X	5	X	5		5	5	5	5	5					X	X	5			
Inland navigational Rules	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Basic Principles, Watchkeeping	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X						
Navigation Safety Regs. (33 CFR 164)	X	X		X	X								X	X				X				6	6	6			

TABLE 10.910-2 - 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	22	23	24	25	26	27
Compass-Magnetic and Gyro:																											
Principles of Gyro Compass	X	X	X	X	X	X							X	X	X	X						X	X				
Principles of Magnetic Compass	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X			
Magnetic-Compass Adjustment	X	X											X	X													
Gyro-Compass Error/Correction	X	X	X	X	X	X	7			X			X	X	X	X	7					X	X	X			
Magnetic-Compass Error/Correction	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Determination of Compass Error:																											
Azimuth (Any Body)	X	X		1																							
Azimuth (Sun Only)			1		X	1	1			1												1	1				
Amplitude (Any Body)	X																										
Amplitude (Sun Body)		X	1	X	X	1	1			1												1	1				
Deviation Table construction	X	X	1	X	X		X			X			3		X		X					X					
Terrestrial Observation		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Gyro-Controlled Systems	X	X	X	X		X																					
Operation & Care of Main Gyro Systems	X	X	X	X		X																					
Meteorology and Oceanography:																											
Characteristics of Weather Systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Ocean-Current Systems		X	X	X	X																	X	X				
Weather Charts and Reports		X	X	X	X		X			X												X					
Tides and Tidal Currents:																											
Extensive Tidal Effects	X	X	X																								
Terms and Definitions		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Publications		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X	X			
Calculations		X	X	X	X	X	X	X	X	X			X	X	X	X	X					X	X	X			
Ship Maneuvering and Handling:																											
Approaching Pilot Vessel or Station	X	X	X			X																		X			
Shiphandling in Rivers, Estuaries	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
Maneuvering in Shallow Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
Interaction with Bank/Passing Ship	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
Berthing and Unberthing	X	X	X			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	X	X	X	X					X	X	X				
Dragging Cleaning Fouled Anchors	X	X	X	X	X	X	X						X	X	X	X	X					X					
Drydocking with & without Prior Damage		X	X																								
Heavy-Weather Operations	X	X	X				X	X	X				X		X		X					X					
Maneuvering for Launching of Life boats and Liferafts in Heavy Weather	X	X	X				X			X			X		X							X	X				
Receiving Survivors From Lfbts/Lfrts		X	X				X			X	X																
General Turn Circle, Pivot Point, Advance and Transfer	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Determine Maneuvering Characteristics of Major Vessel Types	X	X		X	X																						
Wake Reduction		X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
Ice Operations/Ice Navigation	X	X	X			X				X	X	X	X	3	X	3											
Towing Operations		X	X	X	X	X	X			X	X	X		X		X	X	X	X	X	X						

TABLE 10.910-2 - 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	22	23	24	25	26	27
Ship Stability, Const, & Damage Control:																											
Principles of Ship Construction		X	X	X	X		7						X	3	X	3	7	X	X								
Vessel Structural Mem. IMO Ship Stability Recommendations	X	X																									
Trim and Stability	X	X	X	X	X	X	X			X	X	X	X	3	X	3	X	X	X		X	X	X				
Use of Stability Letter			X				X								X		X	X	X	X	X						
Stability, Trim, and Stress Calculation	X	X	X	X			7						3									X	X				
Damage Trim and Stability	X	X	X			X	7						X		X		X					X	X				
Damage Control	X	X	X			X	7						X		X		7										
Ship Power Plants:																											
Marine Power Plants Operations & Principles		X	X				7						X		X		7	X	X								
Ships' Auxiliary Machinery		X	X										X		X			X	X								
Marine Engineering Terms		X	X				7						X		X		7	X	X								
Small-Engine Operations and Maintenance							X	X	X								X			X							
Cargo handling and Stowage:																											
Cargo Stowage and Security, including Cargo Gear		X	X	X	X	X	X						X	X	X	X	7	X	X	X							
Loading and Discharging Operations		X	X	X	X	X							X	X	X	X		X	X	X							
Dangerous/Hazardous Cargo Regulations	X	X	X	X	X	X							X	X	X	X		X	X	X							
Tank Vessel Safety		X	X	X	X	X							X	X	X	X											
Cargo Piping and Pumping Systems				X	X	X								X		X											
Cargo Oil Terms and Definitions				X	X	X								X		X											
Ballasting, Tank Clean., & Gas free Ops.		X	X	X	X	X						X	X	X	X		X	X	X								
Load-on-Top Procedures Barge Regs. (Operations)							X			X	X	X					X	X	X	X	X						
Fire Prevention and Firefighting Appliances:																											
Organization of Fire Drills		X	X	T	T	T	T			X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Classes and Chemistry of Fire		X	X	T	T	T	T	T	X	X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Firefighting Systems		X	X	T	T	T	T			X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Firefighting Equip.		X	X	T	T	T	T	T	X	X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Basic Firefighting and Prevention		X	X	T	T	T	T	T	X	X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Emergency Procedures:																											
Ship Beaching Precautions	X	X	X										X		X												
Actions Prior to/After Grounding	X	X	X										X		X			X	X								
Refloating a Grounded Ship	X	X	X										X		X			X	X								
Collision	X	X	X				X	X		X	X	X	X		X		X	X	X		X						
Temporary Repairs		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Passenger/Crew Safety in Emergency		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Fire or Explosion		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Abandon Ship		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X								
Man Overboard		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Emergency Towing		X	X				X			X			X														

TABLE 10.910-2 - 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	22	23	24	25	26	27
Medical Care:																											
Int'l. Medical Guide for Ships		X	X																								
Ship Med. Chest and Med. Aid at Sea		X	X																								
Medical Sec., Inter. Code of Signals		X	X	X	X																						
1st Aid Guide: Accidents with Dangerous Goods		X	X																								
First Aid		X	X	T	T	T	T	T	X	X	X	X	X	X	X	X	X	X	X	X	X	X	T				
Maritime Law:																											
International Maritime Law: Int'l. Convention on Load Lines	A	A	A																								
SOLAS	A	A	A				7																				
MARPOL 73/78	A	A	A	X	X																						
International Health Regulations	A	A	A																								
Other Int'l Instruments for Ships/Pass/Crew/Cargo Safety	A	A	A																								
National Maritime Law:																											
Load Lines	X	X	X			X	X			X	X		3	3	3	3	7										
Cert. and Documentation of Vessels	X	X	X				X	X	X	X	X	X	X		X		X	X	X		X	X					
Rules & Regs. for Inspected Vessels	X	X	X	X	X	X	7						X	X	X	X	7	X	X	X	7						
Rules & Regs. for T-Boats							X										X				X						
Rules and Regs for Uninsp. Fish. Vsls																						X	X				
Rules and Regs for Uninsp. Vessels							X	X	X	X	X	X					X				X						
Pollution Prevention Regulations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Pilotage	X	X	X																					X			
Licensing & Certification of Seamen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Shipment and Discharge, Manning	X		X				X			X			X		X												
Title 46 U.S. Code	X	X	X										X		X			X	X								
Captain of the Port Vessel Traffic Service for the Route Desired																								X			
Shipboard Management and Training:																											
Personnel Management	X	X	X										X		X			X	X								
Shipboard Organization	X	X	X										X		X			X	X								
Required Crew Training	X	X	X										X		X			X	X								
Ship sanitation	X	X	X				X	X	X	X	X	X	X		X		X	X	X		X	X					
Vessel Alteration/Repair- Hot Work	X	X	X				X						X		X			X	X								
Safety	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Ship's Business:																											
Charters	X	X	X																								
Liens, Salvage	X	X	X																								
Insurance	X	X	X																								
Entry, Clearance	X	X	X																								
Certificates and Documents Required	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

TABLE 10.910-2 - 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	22	23	24	25	26	27
Communications:																											
Flashing Light	X	X		T	T																						
Radiotelephony		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Radiotelegraphy Emerge. Dist. Signals		X		X	X																						
Signals: Wreck/Special		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X					X	X				
International Code of Signals		X	X	X	X																						
Lifesaving:																											
Survival at Sea		X	X	T	T	T	T			X												X	T				
Lifesaving appliance		X	X	T	T	T	T	T		X	X	X		X	X	X	7	X	X	X	7	X	T				
Search and Rescue:																											
Search and Rescue Procedures	X	X	X																								
AMVER	X	X	X																								
Operation of Sail/Aux																											
Any other subject considered necessary to establish the applicant's proficiency	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

1 - For ocean routes only.

2 - River chart navigation only.

3 - Topic covered only on Great Lakes specific module(s) taken for "Great Lakes and inland" routes.

4 - Including recommended courses, distances, prominent aids to navigation, depths of waters in channels and over hazardous shoals, other important features of the routes, such as character of the bottom. The OMCI may accept chart sketching of only a portion or portions of the route for long or extended routes.

5 - Take COLREGS if license not limited to non-COLREG waters.

6 - For licenses over 1600 gross tons.

7 - For licenses over 100 gross tons.

8 - Applicants for a sail/auxiliary sail endorsement to a master's or mate's license are tested on a sail vessel safety, rules of the road, operations, heavy-weather operations, navigation, Maneuvering, and terminology.

BILLING CODE 4910–14–C

18. Section 10.950 is revised to read as follows:

§ 10.950 Subjects for engineer licenses.

(a) On each topic indicated by an ''X'', each applicant for an engineering license is subject to a written test of his or her knowledge. On each topic indicated by a ''T'', he or she is subject only to an assessment of evidence obtained from his or her completion of approved training. On each topic indicated by an ''A'' he or she is subject only to an assessment of his or her practical skills assessed by an established regime of on-board practical factors, simulator demonstration, or a combination.

(b) A distinct engineering license for steam-driven vessels of limited power or tonnage is no longer practicable, because of the small number of these vessels. When such a license is necessary for these vessels, the owner or operator is responsible for the engineer's competence in the operation of steam propulsion. Engineer licenses endorsed for steam must first hold a comparable license for motor-driven vessels and attend a course approved for limited steam engines.

BILLING CODE 4910–14–M

TABLE 10.950 SUBJECTS FOR ENGINEER LICENSES

	UNLIMITED POWER/TONNAGE								LIMITED POWER/TONNAGE							
											UNIN. IND.	FISH VSL.	DESIGNATED DUTY ENG.		MODU	
	CH/ENG STM	CH/ENG MTR	1/A ENG STM	1/A ENG MTR	2/A ENG STM	2/A ENG MTR	3/A ENG STM	3/A ENG MTR	CH ENG	ASST ENG	CH ENG	ASST ENG	UNLTD	LTD	CH ENG	ASST ENG
General Subjects:																
Engineering Theory	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Thermodynamics	X/T	X/T	X/T	X/T	A	A	X/T	X/T								
Prints & Tables	X/T	X/T	X/T	X/T	A	A	T	T	T	T	T	T	T	T	T	T
Machine Shop	T	T	T	T	A	A	T	T	T	T	T	T	T	T	T	T
Pipes, Fittings, Valves	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Bilge Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Sanitary/Sewage Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Freshwater Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Distilling Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Cooling Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Lubricants	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Lubrication Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Bearings	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Pumps	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Compressors	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Hydraulics	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Steering Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Deck Machinery	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Automation Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Control Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Instrumentation	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A
Ship Construction & Repairs	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Propellers & Shafting Systems	T/A	T/A	T/A	T/A	A	A	T/A	T/A	T/A	T/A	T/A	T/A	T/A	T/A		
Administration	T/A	T/A	T/A	T/A					T/A		T/A		T/A	T/A	T/A	
Watch-Standing Duties					A	A	T/A	T/A		T/A		T/A				T/A
Refrigeration, Air Conditioning, Heating & Ventilation:																
Theory	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Air-Conditioning Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Refrigeration Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Heating Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Ventilation Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
System Controls	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Trouble-Shooting	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T
Safety	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T		X/T

TABLE 10.950 SUBJECTS FOR ENGINEER LICENSES

	UNLIMITED POWER/TONNAGE								LIMITED POWER/TONNAGE							
											UNIN. IND.	FISH VSL.	DESIGNATED DUTY ENG.		MODU	
	CH/ENG		1/A ENG		2/A ENG		3/A ENG		CH	ASST	CH	ASST			CH	ASST
	STM	MTR	STM	MTR	STM	MTR	STM	MTR	ENG	ENG	ENG	ENG	UNLTD	LTD	ENG	ENG
Electricity:																
Theory	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Batteries	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Generators/Alternators	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Motors-AC/DC	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
General Maintenance	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Motor Controllers	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Distribution Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Propulsion Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Communication Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Electronic Systems	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Safety	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Trouble-Shooting	X/T	X/T	X/T	X/T	A	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Steam Generation:																
Theory	X/T		X/T		A		X/T		T*	T*			T*	T*		
Main Boilers	X/T		X/T		A		X/T		T*	T*			T*	T*		
Feedwater Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Condensate Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Control Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Automation Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Fuel Oil	X/T		X/T		A		X/T		T*	T*			T*	T*		
Fuel Oil Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Boiler Water	X/T		X/T		A		X/T		T*	T*			T*	T*		
Safety	X/T		X/T		A		X/T		T*	T*			T*	T*		
Trouble-Shooting	X/T		X/T		A		X/T		T*	T*			T*	T*		
Steam Engines:																
Propulsion Turbines	X/T		X/T		A		X/T		T*	T*			T*	T*		
Auxiliary Turbines	X/T		X/T		A		X/T		T*	T*			T*	T*		
Governors	X/T		X/T		A		X/T		T*	T*			T*	T*		
Control Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Automation Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Bearings & Lubrication Systems	X/T		X/T		A		X/T		T*	T*			T*	T*		
Auxiliary Diesels	X/T		X/T		A		X/T		T*	T*			T*	T*		
Safety	X/T		X/T		A		X/T		T*	T*			T*	T*		
Trouble-Shooting	X/T		X/T		A		X/T		T*	T*						

TABLE 10.950 SUBJECTS FOR ENGINEER LICENSES

	UNLIMITED POWER/TONNAGE				LIMITED POWER/TONNAGE							
					UNIN. IND.	FISH VSL.	DESIGNATED DUTY ENG.				MODU	
	CH/ENG STM MTR	1/A ENG STM MTR	2/A ENG STM MTR	3/A ENG STM MTR	CH ENG	ASST ENG	CH ENG	ASST ENG	UNLTD	LTD	CH ENG	ASST ENG
Motor:												
Propulsion Engines	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Auxiliary Engines	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Starting Systems												
Bearings	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Lubrication Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Cooling Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Fuel	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Fuel Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Combustion	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Intake Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Exhaust Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Scavenging & Super-charging Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Automation Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Control Systems	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Governors	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Auxiliary Boilers	X/T	X/T	A	X/T								
Safety	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Trouble-Shooting	X/T	X/T	A	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T	X/T
Engineering Safety:												
Fire Theory	T	T	T	T	T	T	T	T	T	T	T	T
Fire Prevention	T	T	T	T	T	T	T	T	T	T	T	T
Fire Fighting	T	T	T	T	T	T	T	T	T	T	T	T
Stability & Trim	T	T	T	T	T	T	T	T	T	T	T	T
Flooding	T	T	T	T	T	T	T	T	T	T	T	T
Dewatering	T	T	T	T	T	T	T	T	T	T	T	T
Damage Control	T	T	T	T	T	T	T	T	T	T	T	T
Emergency Equipment	T	T	T	T	T	T	T	T	T	T	T	T
Life Saving Appliances	T	T	T	T	T	T	T	T	T	T	T	T
General Safety	T	T	T	T	T	T	T	T	T	T	T	T
First Aid	T	T	T	T	T	T	T	T	T	T	T	T
Dangerous Materials	T	T	T	T	T	T	T	T	T	T	T	T
Pollution Prevention	T	T	T	T	T	T	T	T	T	T	T	T
U.S. Rules & Regs.	T	T	T	T	T	T	T	T	T	T	T	T
Internat'l Rules & Regs.	T	T	T	T	T	T	T	T	T	T	T	T

* Note: Engineer licenses endorsed for steam propulsion must first hold a comparable license for motor-driven vessels and attend a course approved for limited power steam plants.

BILLING CODE 4910–14–C

19. Subpart J, consisting of §§ 10.1001 through 10.1005, is added to read as follows:

Subpart J—Ro-Ro Passenger Ships

Sec.
10.1001 Purpose or regulations.
10.1003 Definitions.
10.1005 General requirement for license-holders.

Subpart J—Ro-Ro Passenger Ships

§ 10.1001 Purpose of regulations.

The purpose of the regulations in this subpart is to establish requirements for officers serving on roll-on/roll-off (ro-ro) passenger ships.

§ 10.1003 Definitions.

Roll-on/roll-off (ro-ro) passenger ship means a passenger ship with ro-ro cargo spaces or special-category spaces as defined in the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), and to which a SOLAS certificate is issued.

§ 10.1005 General requirement for license-holders.

To serve on a ro-ro passenger ship after January 30, 1997, a person licensed as master, chief mate, licensed mate, chief engineer, or licensed engineer shall meet the appropriate requirements of STCW Regulation V/2 and section A–V/2 of the STCW Code, and hold documentary evidence to show his or her meeting these requirements.

PART 12—CERTIFICATION OF SEAMEN

1. The authority citation for part 12 continues to read as follows:

Authority: 31 U.S.C. 9701; 46 U.S.C. 2101, 2103, 2110, 7301, 7302, 7503, 7505, 7701; 49 CFR 1.46.

2. Section 12.01–1 is revised to read as follows:

§ 12.01–1 Purpose of regulations.

(a) The purposes of the regulations in this part are to provide—

(1) A comprehensive and adequate means of determining the identity or the qualifications an applicant must possess to be eligible for certification to serve on merchant vessels of the United States; and

(2) A means of determining that an applicant is competent to serve in a ''rating forming part of a navigational watch'' or a ''rating forming part of an engine-room watch'', or is otherwise ''designated to perform duties in a periodically unmanned engine-room'', on a seagoing ship, in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW), and to receive the certificate or endorsement required by STCW.

(b) The regulations in subpart 12.03 of this part prescribe the requirements applicable to all training and assessment associated with meeting the standards of competence established by STCW.

3. Section 12.01–3 is added to read as follows:

§ 12.01–3 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 paragraph (b) of 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 Office of the Federal Register, 800 North Capitol Street NW., Suite 700, Washington, DC, and at the U.S. Coast Guard, Operating and Environmental Standards Division, 2100 Second Street SW., Washington, DC, and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are as follows:

International Maritime Organization (IMO)

4 Albert Embankment, London, SE1 7SR, England.

Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), and the associated Seafarers' Training, Certification and Watchkeeping Code (STCW Code), as adopted under resolutions 1 and 2, respectively, by the Conference of Parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, held at IMO from June 26 to July 7, 1995—12.01–1; 12.01–6; 12.02–7; 12.02–11; 12.05–3; 12.05–7; 12.10–3; 12.10–9; 12.10–11; 12.15–3; 12.15–7; 12.25–45; 12.30–5.

4. Section 12.01–6 is amended by adding in alphabetical order the following new definitions to read as follows:

§ 12.01–6 Definitions of terms used in this part.

Approved training means training that is approved by the Coast Guard or otherwise meets the requirements of § 12.03–1.

Coast-Guard-accepted means that the Coast Guard has officially acknowledged in writing that the material or process at issue meets the applicable requirements; that the Coast Guard has issued an official policy statement listing or describing the material or process as meeting the applicable requirements; or that an entity acting on behalf of the Coast Guard under a Memorandum of Agreement has determined that the material or process meets the applicable requirements.

Designated examiner means an individual who is trained or instructed in assessment techniques and is otherwise qualified to evaluate whether a candidate for a license, document, or endorsement has achieved the level of competence required to hold the license, document, or endorsement. This individual may be designated by the Coast Guard, or is designated as part of a Coast Guard-approved training or assessment program.

* * * * *

Practical demonstration means the performance of an activity under the direct observation of a designated examiner for the purpose of establishing that the performer is sufficiently proficient in a practical skill to meet a specified standard of competence or other objective criterion.

Qualified Instructor means an individual who has been trained or instructed in instructional techniques and is otherwise qualified to provide required training to candidates for licenses, documents, and endorsements.

* * * * *

Standard of competence means the level of proficiency to be achieved for the proper performance of duties on board vessels in accordance with national and international criteria.

STCW endorsement means a certificate or endorsement issued in accordance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW). An STCW endorsement issued by the Officer in Charge, Marine Inspection shall be valid only when accompanied by the appropriate U.S. license or document; and if the license or document is revoked, then the associated STCW endorsement is no longer valid for any purpose.

5. In § 12.02–7, paragraphs (d) and (e) are added to read as follows:

§ 12.02–7 When documents are required.

* * * * *

(d) Every individual serving as a rating forming part of a navigational watch on a seagoing ship of 500 gross tons or more shall hold an STCW

endorsement certifying him or her as qualified to perform the navigational function at the support level, in accordance with STCW.

(e) Every individual who are serving in 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 ship driven by main propulsion machinery of 750 kW [1,000 hp] of propulsion power or more, shall hold an STCW endorsement certifying him or her as qualified to perform the marine-engineering function at the support level, in accordance with STCW.

6. In § 12.02–11, the heading is revised, and paragraphs (h) and (i) are added, to read as follows:

§ 12.02–11 General provisions respecting merchant mariners' documents.

* * * * *

(h) When a merchant mariner's document is issued, renewed, or endorsed, the Officer in Charge, Marine Inspection (OCMI), will determine whether the holder of the document is required to hold an STCW endorsement for service on a seagoing vessel and, if so, and if the holder is qualified, will issue the appropriate endorsement. The OCMI will also issue an STCW endorsement at other times, if circumstances so require if the holder of and the document is qualified to hold the endorsement. The OCMI will issue an STCW endorsement for the following ratings:

(1) A rating forming part of a navigational watch on a seagoing ship of 500 gross tons or more if the holder of the document is qualified in accordance with STCW Regulation II/4 and section A–II/4 of the STCW Code, to perform the navigational function at the support level.

(2) A rating forming part of a watch in a manned engine-room, if the holder of the document is designated to perform duties in a periodically unmanned engine-room, on a seagoing ship driven by main propulsion machinery of 750 kW [1,000 hp] of propulsion power or more and if the holder is qualified in accordance with STCW Regulation III/4 and section A–III/4 of the STCW Code, to perform the marine-engineering function at the support level.

(i) At the request of the holder of the document, the OCMI may add an endorsement to indicate that the holder has received familiarization or basic safety-training required under, Chapter VI of STCW.

7. In § 12.02–17, paragraph (e) is added to read as follows:

§ 12.02–17 Rules for the preparation and issuance of documents.

* * * * *

(e) An applicant for a merchant mariner's document shall provide a document issued by a qualified medical practitioner attesting the applicant's medical fitness to perform the functions for which the document is issued.

* * * * *

8. Subpart 12.03, consisting of § 12.03–1, is added to read as follows:

Subpart 12.03—Approved Training

Sec.
12.03–1 Approved training other than approved courses.

Subpar 12.03—Approved Training

§ 12.03–1 Approved training other than approved courses.

(a) When training and assessment of competence required by these regulations is not subject to the course-approval provisions of § 10.302 of this chapter, such training and assessment must meet the following requirements:

(1) The program must have written, clearly defined objectives that emphasize specific knowledge, skills, and abilities, and include criteria to be used in establishing a student's successful achievement of the training objectives.

(2) The course of training must be set out in a written syllabus which conforms to a Coast-Guard-accepted outline for such training and includes—

(i) The sequence of subjects to be covered;

(ii) The number of classroom hours (i.e., in the presence of a qualified instructor) to be spent on each subject;

(iii) The identify and professional qualifications of the instructor(s) to be conducting the training;

(iv) Identification of other media or facilities to be used in conducting the training; and

(v) Measurements at appropriate intervals of each student's progress toward acquisition of the specific knowledge, skills and abilities stated in the training objectives.

(3) Documentary evidence must be readily available to establish that all instructors—

(i) Have experience, training, or instruction in effective instructional techniques;

(ii) Are qualified in the task for which the training is being conducted; and

(iii) Hold the level of license, endorsement, or other professional credential required of those who would apply, on board a vessel, the relevant level of knowledge, abilities, and skills described in the training objectives; provided, however—

(A) A specialist in a particular field of non-maritime education, such as mathematics or first-aid, and an individual with at least 3 years of service as a member of the Armed Forces of the United States specializing in the field in which he or she is to conduct training, need not hold a maritime license or document to conduct training in that field; and

(B) A simulator may be used in training if—

(*1*) The instructor employing the simulator has received appropriate guidance in instructional techniques involving the use of simulators;

(*2*) The instructor has gained practical operational experience on the particular type of simulator being used; and

(*3*) The simulator meets applicable performance standards.

(4) Essential equipment and instructional materials must be conveniently available to allow all students adequate opportunity to participate in exercises and acquire practice in performing required skills.

(5) A process of routinely assessing the effectiveness of the instructors, including the use of confidential student evaluations, must be in place.

(6) Records of student performance must be maintained for a period of not less than 1 year.

(7) A process must be in place for monitoring at suitable intervals that the training program is meeting its training objectives and is consistently applying the requirements in accordance with a Coast Guard-accepted quality-standards system, which shall include, as a minimum, the following:

(i) Those monitoring the training program shall be individuals who are knowledgeable about the subject area being monitored and about the national and international requirements which apply to the training program, and they shall not themselves be involved in the activities being monitored.

(ii) Persons engaged to conduct monitoring of training programs must be provided convenient access to all appropriate documents and facilities, as well as opportunities to observe all appropriate activities, and to conduct confidential interviews when necessary.

(iii) Arrangements shall be such as to ensure that persons performing monitoring activities shall not be directly or indirectly penalized or rewarded by the sponsor of the training program being monitored for making any particular observations or for reaching any particular conclusions.

(8) The results of the monitoring must be communicated to the Coast Guard within 1 month of completion of those activities.

(9) Upon prior notification by the Coast Guard, an opportunity must be provided for the Coast Guard to observe training activities and review documentation relating to paragraphs (a)(1) through (a)(10) of this section.

(b) The Coast Guard will maintain a list of training programs which annually submit a certification, signed by the sponsor or an authorized representative of the sponsor, stating that the program is conducted in a manner which fully complies with the requirements in offering a specified course of approved training. Programs on this list will be presumptively considered to offer approved training for the purposes of evaluating materials supporting applications for licenses and STCW endorsements under this part. This list shall be updated periodically and made available to members of the public on request.

(c) If the Coast Guard determines, on the basis of an observation of training activities or a review of relevant documentation, that a particular program does not meet one or more of the conditions described in paragraph (a) of this section—

(1) The Coast Guard will so notify the managers or sponsors of the program by letter enclosing a report of the Coast Guard's observations and its conclusions;

(2) The managers or sponsors of the program will have a specified period to appeal the Coast Guard's conclusions to the appropriate official at Coast Guard Headquarters, or to come into compliance with the requirement where the program has been found to be deficient; and

(3) If the appeal is denied, or the deficiency is not corrected in the allotted time, or within any additional period considered by the Coast Guard to be appropriate considering progress toward compliance, the training program shall be removed from the list referred to in paragraph (b) of this section until full compliance can be established by the Coast Guard, and applications which are based in whole or in part on training received from a program at a time when it was not on the list may be denied until additional training or assessment can be documented.

9. In § 12.05–3, paragraph (d) is revised, paragraph (e) is amended by removing the period at the end and adding a semicolon in its place, and paragraphs (f) and (g) are added to read as follows:

§ 12.05–3 General requirements.

* * * * *

(d) Pass an examination demonstrating ability as an able seaman and lifeboatman with proficiency in survival craft and rescue boats;

* * * * *

(f) Complete approved basic safety-training as set out in STCW Regulation VI/1 and section a–VI/1 of the STCW Code. This training must encompass personal survival, firefighting and fire prevention, elementary first aid, and personal safety and social responsibilities. The Coast Guard may approve a basic safety-training program designed for a particular ship or type of service; however, in that case, the Coast Guard will limit the endorsement by indicating the ship or type of service. The training must have been completed 5 years or less before the date of application for the endorsement. For renewal, the applicant shall prove that his or her competence in all the subjects encompassed by the training has been assessed and established within the last 5 years; and

(g) Meet the requirements of STCW Regulation II/4 and section A–11/4 of the STCW Code, if the applicant will be serving in a rating forming part of a navigational watch on a seagoing ship of 500 gross tons or more.

10. In § 12.05–7, paragraph (a)(5) is added before the note to read as follows:

§ 12.05–7 Service or training requirements.

(a) * * *

(5) For a candidate to qualify to receive an STCW endorsement for service in a ''rating forming part of a navigational watch'' on a seagoing ship of 500 gross tons or more, the candidate's seagoing service must include training and experience associated with navigational watchkeeping and involve the performance of duties carried out under the direct supervision of the master, the officer in charge of the navigational watch, or a qualified rating. The training and experience must be sufficient to establish that the candidate has achieved the required standard of competence prescribed in table A–II/4 of the STCW Code, in accordance with the methods of demonstrating competence and the criteria for evaluating competence specified in that table.

* * * * *

11. In § 12.05–11, the heading and paragraph (a) are revised to read as follows:

§ 12.05–11 General provisions respecting merchant mariner's document endorsed for service as able seaman.

(a) The holder of a merchant mariner's document endorsed for the rating of able seaman may serve in any unlicensed rating in the deck department without obtaining an additional endorsement; provided, however, that the holder shall hold the appropriate STCW endorsement when serving in a ''rating forming part of a navigational watch'' on a seagoing ship of 500 gross tons or more.

* * * * *

12. In § 12.10–3, the heading, paragraph (a) introductory text, and paragraph (a)(6) are revised, and paragraph (c) is added, to read as follows:

§ 12.10–3 General requirements.

(a) To be eligible for certification as lifeboatman with proficiency in survival craft and rescue boats, an applicant shall be at least 18 years of age, shall meet the requirements of STCW Regulation VI/2, paragraph 1, and the appropriate provisions of section A–VI/2 of the STCW Code, and shall meet one of the following requirements:

* * * * *

(6) Successful completion of a training course, approved by the Commandant, that includes a minimum of 30 hours' actual lifeboat training; provided that the applicant produces evidence of having served a minimum of 6 months at sea aboard ocean or coastwise vessels.

* * * * *

(c) To be eligible for certification as lifeboatman with proficiency in survival craft and rescue boats, an applicant shall receive approved basic safety-training as set out in STCW Regulation VI/1 and section A–VI/1 of the STCW Code. This training must encompass personal survival, firefighting and fire prevention, elemental first aid, and personal safety and social responsibilities. The Officer in Charge, Marine Inspection (OCMI), may approve a basic safety-training program designed for a particular ship or type of service; however, in that case, the OCMI will limit the endorsement by indicating the particular ship or type of service. The training must have been completed 5 years or less before the date of application for the endorsement. For renewal, an applicant shall prove that his or her competence has been assessed and established within the last 5 years.

§ 12.10–7 [Reserved].

13. Section 12.10–7 is removed and reserved.

14. Section 12.10–9 is added to read as follows:

§ 12.10–9 Certificates of proficiency in fast rescue boats.

(a) Every person engaged or employed in a rating as a lifeboatman with proficiency in fast rescue boats shall hold a certificate of proficiency in these boats or a merchant mariner's document endorsed for proficiency in them.

(b) To be eligible for a certificate of proficiency in fast rescue boats or a merchant mariner's document endorsed for proficiency in these boats, an applicant must—

(1) Be qualified as a lifeboatman with proficiency in survival craft and rescue boats under this subpart; and

(2) Provide sufficient 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.

15. Section 12.10–11 is added to read as follows:

§ 12.10–11 Requirements for those designated to provide medical care on board ship.

(a) Every person designated to provide medical first aid on board ship, or to take charge of medical care on board ship, shall hold documentary evidence indicating that the holder has attended a course of training in medical first aid or medical care, as appropriate.

(b) The Coast Guard will issue such documentary evidence to the person, or endorse his or her license or document, on being satisfied that the training required under paragraph (a) of this section was sufficient to establish that he or she meets the standards of competence set out in STCW Regulation VI/4 and the provisions of section A–VI/4 of the STCW Code.

16. In § 12.15–3, paragraphs (d) and (e) are added to read as follows:

§ 12.15–3 General requirements.

* * * * *

(d) To be eligible for certification as qualified member of the engine department, an applicant shall complete approved basic safety-training as set out in STCW Regulation VI/1 and section A–VI/1 of the STCW Code. This training must encompass personal survival, firefighting and fire prevention, elementary first aid, and personal safety and social responsibilities. The Officer in Charge, Marine Inspection (OCMI), may approve a basic safety-training program designed for a particular ship or type of service; however, in that case, the OCMI will limit the endorsement by indicating the particular ship or type of service. The training must have been completed within 5 years or less before the date of application for the endorsement. For renewal, the applicant shall prove that his or her competence in all the subjects encompassed by the training has been assessed and established within the last 5 years.

(e) To be eligible for certification as qualified member of the engine department, an applicant shall meet the requirements of STCW Regulation III/4 and section A–II/4 of the STCW Code, if he or she will be either serving in 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 ship driven by main propulsion machinery of 750 kW [1,000 hp] propulsion power or more.

17. in § 12.15–7, paragraph (c) is added to read as follows:

§ 12.15–7 Service or training requirements.

* * * * *

(c) To qualify to receive an STCW endorsement as ''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 750 kW [1,000 hp] propulsion power or more, an applicant shall prove seagoing service that includes training and experience associated with engine-room watchkeeping and involves the performance of duties carried out under the direct supervision of a qualified engineer officer or a member of a qualified rating. The training must be sufficient to establish that the applicant has achieved the standard of competence prescribed in table A–I/4 of the STCW Code, in accordance with the methods of demonstrating competence and the criteria for evaluating competence specified in that table.

18. in § 12.15–11, the heading is revised, paragraphs (a) through (j) are redesignated as paragraphs (1) through (10), the introductory text is designated as paragraph (a), and paragraph (b) is added, to read as follows:

§ 12.15–11 General provisions respecting merchant mariner's document endorsed for service as qualified member of the engine department.

* * * * *

(b) The holder of a merchant mariner's document endorsed for the rating of qualified member of the engine department shall hold the appropriate STCW endorsement when either serving in 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 750 kW [1,000 hp] propulsion power or more.

19. Section 12.25–45 is added to read as follows:

§ 12.25–45 Electronics technician.

(a) An applicant is eligible to have his or her merchant mariner's document endorsed for the rating of electronics technician if he or she holds a certificate of completion from—

(1) Approved training that includes instruction and assessment by qualified instructors and designated examiners, and requires the student both to complete appropriate examinations and practical demonstrations to establish competence in the basic knowledge, understanding, and skills necessary to perform maintenance, diagnosis, and repair of electronic equipment and installations on board ships and to make practical use of maintenance and repair manuals provided for such equipment and installations; or

(2) An FCC- or Coast-Guard-approved course that covers at least the scope and content of training outlined in section B–IV/2 of the STCW Code for training in maintenance of GMDSS installations on board ships.

(b) Only an applicant fulfilling the requirements of paragraph (a)(2) of this section may be designated to perform at-sea maintenance requirements imposed by SOLAS Regulation IV/15.

(c) An applicant fulfilling only the requirements of paragraph (a)(1) of this section will have his or her document endorsed as follows: ''electronics technician—non-GMDSS.'' No one whose document bears this endorsement may be designated to perform at-sea maintenance of GMDSS installations when such a designation is used to meet the maintence requirements imposed by SOLAS Regulation IV/15.

20. Subpart 12.30, consisting of 12.30–1 through 12.30–5, is added to read as follows:

Subpart 12.30—Ro-Ro Passenger Ships

Sec.
12.30–1 Purpose of regulations.
12.30–3 Definitions.
12.30–5 General requirements.

Subpart 12.30—Ro-Ro Passenger Ships

§ 12.30–1 Purpose of regulations.

The purpose of the regulations in this subpart is to establish requirements for certification of seamen serving on roll-on/roll-off (Ro-Ro) passenger ships.

§ 12.30–3 Definitions.

Roll-on/roll-off (Ro-Ro) passenger ship means a passenger ship with ro-ro cargo

spaces or special-category spaces as defined in the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), and to which a SOLAS Certificate is issued.

MMD means merchant mariner's document.

12.30–5 General requirements.

To serve on a ro-ro passenger ship after January 30, 2002, a person holding an MMD and performing duties toward safety, cargo-handling, or care for passengers shall meet the appropriate requirements of STCW Regulation V/2 and section A–V/2 of the STCW Code, and have his or her MMD endorsed to show his or her meeting those requirements.

PART 15—MANNING REQUIREMENTS

1. The authority citation for part 15 continues to read as follows:

Authority: 46 U.S.C. 3703, 8105; 49 CFR 1.46.

2. Section 15.105 is added to subpart A to read as follows:

§ 15.105 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 paragraph (b) of 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 Office of the Federal Register, 800 North Capitol Street NW., Suite 700, Washington, DC and at the U.S. Coast Guard, Operating and Environmental Standards Division, 2100 Second Street SW., Washington, DC 20593–0001, and is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are as follows:

International Maritime Organization (IMO)

4 Albert Embankment, London, SE1 7SR, England.

Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW), and the associated Seafarers' Training, Certification and Watchkeeping Code (STCW Code), as adopted under resolutions 1 and 2, respectively, by the Conference of parties to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, held at IMO from June 26 to July 7, 1995—15.401; 15.403; 15.705.

3. In § 15.301, the periods at the ends of paragraphs (b)(7) and (b)(10) are removed, a semicolon is added in each place, the word ''and'' is added after the semicolon after paragraph (b)(10), and paragraph (b)(11) is added; and paragraphs (c)(7) and (c)(8) are added to paragraph (c) as that paragraph will stand after the revision effective on March 31, 1996, all to read as follows:

§ 15.301 Definitions of terms used in this part.

* * * * *

(b)* * *

(11) GMDSS radio operator.

(c) * * *

(7) Electronics technician.

(8) Electronics technician—Non-GMDSS.

* * * * *

4. In § 15.401, the heading is revised, the existing text is designated as paragraph (a), and paragraphs (b), (c), (d), (e), (f), (g), (h), and (i) are added, to read as follows:

§ 15.401 Employment and service within restrictions of license, document, and STCW endorsement.

* * * * *

(b) On a vessel operating beyond the boundary line, no person may employ or engage any person to serve, and no person may serve, in a position in which a person shall hold an STCW endorsement, including master, chief mate, chief engineer, second engineer, officer of the navigational or engineering watch, or radio operator, unless the person serving holds an appropriate, valid STCW certificate or endorsement issued in accordance with part 10 or 12 of this chapter.

(c) On a seagoing vessel of 500 gross tons or more, no person may employ or engage any person to serve, and no person may serve, in a rating forming part of the navigational watch, except for training, unless the person serving holds an appropriate, valid STCW certificate or endorsement issued in accordance with part 12 of this chapter.

(d) After January 31, 1997, no person may either be engaged or employed to serve on a roll-on/roll-off (ro-ro) passenger ship to which a SOLAS certificate has been issued, or perform duties on such a ship, unless he or she holds a license or document endorsed for service on ro-ro passenger ships in accordance with § 10.1005 or § 12.30–5, of this chapter, whichever is appropriate to the service or the duties.

(e) On a seagoing vessel driven by main propulsion machinery of 750 kW [1,000 hp] 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 certificate or endorsement issued in accordance with part 12 of this chapter.

(f) After January 31, 2002, on a seagoing vessel required to comply with provisions of the Global Maritime Distress and Safety System (GMDSS) in Chapter IV of SOLAS, no person may employ or engage any person to serve, and no person may serve, as the master, chief mate, or officer of the navigational watch, unless the person serving holds the appropriate Certificate for Operator of Radio in Global Maritime Distress and Safety System (GMDSS).

(g) After January 31, 1997, on a seagoing vessel required to comply with provisions of the GMDSS in Chapter IV of SOLAS, no person may employ or engage any person to serve, and no person may serve, as the person designated to perform at-sea maintenance of GMDSS installations, when such designation is used to meet the maintenance requirements imposed by STCW Regulation IV/15, unless the person serving holds an electronic-technician endorsement not limited to non-GMDSS electronic installations.

(h) After January 31, 2002, on a seagoing vessel fitted with an Automatic Radar-Plotting Aid (ARPA), no person may employ or engage any person to serve, and no person may serve, as the master, chief mate, or officer of the navigational watch, unless the person serving has been trained in the use of ARPA in accordance with § 10.205 or § 10.209 of this chapter.

(i) The provisions of paragraphs (b) through (g) of this section are effective as of August 1, 1998.

5. Section 15.403 is added to read as follows:

§ 15.403 Familiarization and basic safety-training.

(a) After January 31, 1997, on 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) Familiarization training in personal survival techniques as set out in the standard of competence under STCW Regulation VI/1; or

(2) Sufficient training or instruction, to be able to—

(i) Communicate with other persons on board on elementary safety matters and understand information symbols, signs, and alarm signals covering information on safety;

(ii) Know what to do if a person falls overboard; if fire or smoke is detected; or if the fire or abandon-ship alarm sounds;

(iii) Identify stations for muster and embarkation, and emergency-escape routes;

(iv) Locate and don life-jackets;

(v) Raise the alarm and know the use of portable fire extinguishers;

(vi) Take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance on board; and

(vii) Close and open the fire, weathertight, and watertight doors fitted in the particular ship other than those for hull openings.

(b) After January 31, 1997, on a seagoing vessel, no person may assign any person on board a ship, as part of the complement with designated safety or pollution-prevention duties in the operation of the ship, to perform shipboard duties, and no person may perform those duties, unless the person performing them has—

(1) Received approved basic safety-training or instruction as set out in the standards of competence under STCW Regulation VI/1, particularly with respect to personal survival techniques, fire prevention and fire-fighting, elementary first aid, and personal safety and social responsibilities; and

(2) Established competence within the last 5 years as part of an approved training program, in accordance with the methods and criteria prescribed under STCW Regulation VI/1.

(c) Each person who has met the requirements of either §§ 10.205 and 10.209 of this chapter or §§ 12.05–3, 12.10–3, and 12.15–3 of this chapter meets the requirements of this section without further training or assessment.

6. Section 15.411 is added to read as follows:

§ 15.411 Maintenance of seamen's records by owner or operator.

Each owner or operator of a U.S.-documented vessel that operates beyond the boundary line shall ensure that procedures are in place, in respect of licensed and unlicensed seamen who serve on each such vessel, to ensure that the following information is maintained throughout their service, and is readily accessible to those in management responsible for the safety of vessels and prevention of marine pollution:

(a) Medical fitness.

(b) Experience and training relevant to assigned shipboard duties.

(c) Assessment of competence in performance of assigned shipboard duties.

7. In § 15.705, paragraph (f) is revised to read as follows:

§ 15.705 Watches.

* * * * *

(f) Masters of vessels that operate beyond the boundary line shall observe the principles concerning watchkeeping as set out in STCW Regulation VIII/2 and section A–VIII/2 of the STCW Code.

8. In § 15.710, the heading is revised, paragraphs (a) through (d) are redesignated as paragraphs (1) through (4), respectively, the introductory text is designated as paragraph (a), and paragraphs (b) and (c) are added to read as follows:

§ 15.710 Working hours and rest periods.

* * * * *

(b) After January 31, 1997, each person assigned duty as officer in charge of a navigational or engineering watch, or duty in a rating forming part of a navigational or engineering watch, on any vessel that operates beyond the boundary line shall receive a minimum period of 10 hours of rest in any 24-hour period, except in an emergency, a drill, or any other overriding operation condition, provided—

(1) The hours of rest are divided into no more than two periods, one of which must be at least 6 hours in length; and

(2) The minimum period of 10 hours of rest may be reduced to not less than 6 consecutive hours as long as—

(i) No reduction extends beyond 2 days; and

(ii) He or she receives at least 70 hours of rest in each 7-day period.

(c) The Master shall post watch schedules where they are easily accessible. Each schedule must include each affected person.

(d) For purposes of applying this section—

(1) *Rest period* means a period of time during which no tasks are assigned to the person concerned, the person is not scheduled to perform any duty, and the person is allowed to sleep without being interrupted; and

(2) *Overriding operational conditions* means circumstances in which essential shipboard work cannot be delayed for reasons of safety or environment or for reasons not foreseeable at the commencement of the voyage.

Dated: 5 March 1996.

Joseph J. Angelo,

Acting Chief, Office of Marine Safety, Security and Environmental Protection.

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