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SUBCHAPTER A—PROCEDURES APPLICABLE TO THE PUBLIC

PART 1—ORGANIZATION, GENERAL COURSE AND METHODS GOVERNING MARINE SAFETY FUNCTIONS

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AUTHORITY: 5 U.S.C. 552; 14 U.S.C. 633; 46 U.S.C. 7701; 49 CFR 1.45, 1.46; §1.01–35 also issued under the authority of 44 U.S.C. 3507.

SOURCE: CGD 88–033, 54 FR 50376, Dec. 6, 1989, unless otherwise noted.

Subpart 1.01—Organization and General Flow of Functions

§1.01–05 Definitions of terms used in this part.

(a) The term *Commandant* means the Commandant of the Coast Guard.

(b) The term *District Commander* means an officer of the Coast Guard designated as such by the Commandant to command all Coast Guard activities within a district.

§1.01–10 Organization.

(a) The Commandant is the head of the agency and exercises overall direction over the policy and administration of the Coast Guard.

(b) To carry out the regulatory and enforcement aspects of marine safety, the staff officers designated in this paragraph are assigned to the Commandant. The chain of military command is from the Commandant directly to the District Commanders. The staff officers at Headquarters act only on the basis of the Commandant's authority and direction.

(1) The Chief, Marine Safety and Environmental Protection, under the general direction of the Commandant, directs, supervises and coordinates the activities of the Standards Directorate, consisting of the Office of Design and Engineering Standards, the Office of Operating and Environmental Standards, and the Office of Standards Evaluation and Development; the Field Activities Directorate, consisting of the Office of Compliance, the Office of Response, and the Office of Investigations and Analysis; and the Resource Management Directorate, consisting of the Office of Planning and Resources and the Office of Information Resources. The Port Safety and Security programs administered by the Chief, Office of Compliance and the Marine Environmental Response programs administered by the Chief, Office of Response are guided by regulations contained in 33 CFR chapter I. The Chief, Marine Safety and Environmental Protection, exercises technical control over the Director, National Maritime Center and, through the District Commander, supervises the administration of the Marine Safety Division of District Offices and Officers in Charge, Marine Inspection.

(i) The Director of Standards (G–MS), under the general direction and supervision of the Chief, Marine Safety and Environmental Protection, establishes

federal policies for development of marine safety and environmental protection treaties, laws, and regulations; develops safety, security and environmental protection standards for the maritime industry; integrates all marine safety and environmental protection regulatory programs; prepares legislation, regulations, and industry guidance for new safety and environmental protection programs; and maintains an active program for development of third party consensus industry standards.

(A) The Chief, Office of Design and Engineering Standards (G–MSE), at Headquarters, under the direction of the Chief, Marine Safety and Environmental Protection and the Director of Standards, manages the program for defining the overall regulatory approach for vessels, offshore structures, and other marine systems incorporating safety considerations regarding the role of the human element; develops policies and regulations on load line matters and supervises classification societies authorized to assign load lines on behalf of the Coast Guard; oversees the development and maintenance of programs that incorporate risk-based methods in making safety determinations and policies; and oversees technical research and development for safety and environmental protection associated with marine vessels, structures and facilities.

(B) The Chief, Office of Operating and Environmental Standards (G–MSO), at Headquarters, under the direction of the Chief, Marine Safety and Environmental Protection and the Director of Standards, coordinates and integrates program standards for personnel qualification, vessel manning, vessel and facility operations, cargo systems and handling, and environmental protection; develops and maintains standards, regulations and industry guidance for maritime industry operations to prevent deaths, injuries, property damage, and environmental harm; develops and maintains safety standards and regulations for commercial fishing industry vessels and uninspected commercial vessels; and develops and maintains health and safety standards and regulations for U.S. inspected vessels.

(C) The Chief, Office of Standards Evaluation and Development (G–MSR), at Headquarters, under the Direction of the Chief, Marine Safety and Environmental Protection and the Director of Standards, coordinates the development of new standards and programs across all technical and operational areas of marine safety and environmental protection; provides comprehensive analytical support for all standards assessment and development efforts; and coordinates development of measures of effectiveness for assessing regulatory programs and consensus standards.

(ii) The Director of Field Activities (G–MO), under the general direction and supervision of the Chief, Marine Safety and Environmental Protection, acts as Program Manager for the Marine Safety and Marine Environmental Protection Programs; directs, coordinates, and integrates the Coast Guard's marine safety and environmental protection compliance programs, contingency planning, response operations, and investigations programs; establishes and coordinates field implementation policies and priorities for all marine safety commands and units; and serves as the focal point for field support and technical guidance.

(A) The Chief, Office of Compliance (G–MOC), at Headquarters, under the direction of the Chief, Marine Safety and Environmental Protection and the Director of Field Activities, administers and balances all marine safety and environmental protection compliance programs, including direction of Coast Guard activities and oversight of third parties and industry programs; develops, publishes and maintains program policies for vessel compliance, interprets standards and regulations, and provides field guidance for execution and enforcement; administers the marine inspection program and foreign vessel boarding program for the enforcement of commercial vessel material and operational safety standards; and supervises the administration of licensing and documenting of merchant personnel, the issuance of certificates of registry to merchant marine staff officers, and the manning of U.S. vessels.

(B) The Chief, Office of Response (G–MOR), at Headquarters, under the Direction of the Chief, Marine Safety and Environmental Protection and the Director of Field Activities, coordinates and integrates field planning, preparedness, and response operations for pollution incidents, natural disasters, marine accidents, terrorism, and other threats to public safety, the marine environment, or marine transportation and commerce; develops, publishes, and maintains program policies for preparedness and response, interprets laws and regulations, and provides field guidance for execution; provides guidance regarding emergency authorities of the Captain of the Port (COTP); and administers Office programs for ports and waterway management, bridging compliance and response efforts with an active presence in the marine environment.

(C) The Chief, Office of Investigations and Analyses (G–MOA), at Headquarters, under the direction of the Chief, Marine Safety and Environmental Protection and the Director of Field Activities, reviews investigations of marine casualties; manages, develops policy for and evaluates domestic and international programs and processes associated with investigations of marine casualties and injuries; manages analysis of casualties and casualty data, civil penalties and other remedial programs (including proceedings to suspend or revoke Coast Guard licenses, documents or certificates held by mariners); and manages marine employer drug and alcohol testing programs.

(iii) The Director of Resource Management (G–MR), under the general direction and supervision of the Chief, Marine Safety and Environmental Protection, serves as Facility Manager for the marine safety programs; coordinates and integrates financial, informational, and human resources; plans, acquires, develops, and allocates resources for development and execution of the Coast Guard's marine safety programs; provides the focal point for all resource issues in support of the Standards and Operations Directorates; and oversees the development and management of the Coast Guard's direct user fee program.

(iv) The Director, Coast Guard National Maritime Center (NMC) under technical control of the Chief, Marine Safety and Environmental Protection, administers operational and administrative control of the Marine Safety Center which conducts reviews and approvals of plans, calculations, and other materials concerning the design, construction, alterations, and repair of commercial vessels to determine conformance with the marine inspection laws, regulations, and implementing directions; administers operational and administrational control over the National Vessel Documentation Center which administers U.S. vessel identification and documentation; oversees and administers the U.S. tonnage measurement program which measures U.S. naval vessels and oversees issuance of international and domestic tonnage certificates; administers merchant mariner licensing and seaman's documentation; and oversees the national pilotage program.

(2) The Chief Counsel of the Coast Guard at Headquarters, under the general direction and supervision of the General Counsel, Department of Transportation and the Commandant, considers cases involving alleged violations of navigation and vessel inspection laws or regulations prescribed thereunder and published in this chapter or in 33 CFR chapter I, and reviews appeals to the Commandant from statutory monetary penalties assessed therefor. Upon completion of such a review, the Chief Counsel prepares a proposed action for the Commandant's consideration or, in appropriate cases, takes final action on behalf of, and as directed by, the Commandant.

[CGD 88–033, 54 FR 50376, Dec. 6, 1989, as amended by CGD 95–072, 60 FR 50458, Sept. 29, 1995; CGD 95–072, 60 FR 54106, Oct. 19, 1995; CGD 96–041, 61 FR 50724, Sept. 27, 1996]

§1.01–15 Organization; districts.

(a) To assist the District Commander in carrying out the regulatory and enforcement aspects of marine safety in the Coast Guard Districts, there is assigned to each District Commander a staff officer designated as Chief, Marine Safety Division. The chain of military command is from the District Commander to each Officer in Charge,

Marine Inspection, within the district. The Chief, Marine Safety Division, is a staff officer assigned to the District Commander and acts only on the basis of the authority and by direction of the District Commander.

(1) The Chiefs, Marine Safety Division, in the District Offices, under the supervision of their respective District Commanders, direct the activities in their district relative to vessel, factory and shipyard inspections; reports and investigations of marine casualties and accidents; processing of violations of navigation and vessel inspection laws; the licensing, certificating, shipment and discharge of seaman; the investigation and institution of proceedings looking to suspension and revocation under 46 U.S.C. chapter 77 of licenses, certificates, and documents held by persons; and all other marine safety regulatory activities except those functions related to recreational boating when under the supervision of the Chiefs, Boating Safety Division, in the District Offices.

(2) Unless otherwise provided for, the Chiefs, Boating Safety Division, in the District Offices, under the supervision of their respective District Commanders, direct the activities in their districts relative to administration of the law enforcement program applicable to uninspected vessels used for recreational purposes and the imposition and collection of penalties in connection therewith; maintain liaison with Federal and State agencies having related interests; develop and coordinate agreements and arrangements with Federal and State agencies for cooperation in the enforcement of State and Federal laws related to recreational boating; and review investigative reports of recreational boating accidents.

(b) The Officers in Charge, Marine Inspection, in the Coast Guard districts, under the supervision of their respective District Commanders, are in charge of marine inspection offices and marine safety offices located in various ports and have command responsibility with assigned marine safety zones for the performance of duties with respect to the inspection, enforcement, and administration of navigation and vessel inspection laws, and rules, and regulations governing marine safety. The Officer in Charge, Marine Inspection, has been designated and delegated to give immediate direction to Coast Guard activities relating to marine safety functions consisting of inspection of vessels in order to determine that they comply with the applicable laws, rules, and regulations relating to construction, equipment, manning and operation, and to be satisfied that such vessels are in seaworthy condition for the services in which such vessels are to be operated; shipyard inspections; factory inspections of materials and equipment for vessels; the licensing, certificating, shipment and discharge of seaman; investigations of marine casualties and accidents; investigations of violations of law; negligence, misconduct, unskillfullness, incompetence or misbehavior of persons holding licenses, certificates, or documents issued by the Coast Guard; initiations of actions seeking suspension or revocation under 46 U.S.C. chapter 77 of licenses, certificates and documents held by persons, and presentation of cases at hearings before Administrative Law Judges; and the enforcement of navigation, vessel inspection and seaman laws in general.

NOTE: Licensing and Certification functions are performed only by the Officer in Charge, Marine Inspection, at the following locations:

Boston, MA
New York, NY
Baltimore, MD
Charleston, SC
Miami, FL
New Orleans, LA
Houston, TX
Memphis, TN
St. Louis, MO
Toledo, OH
Long Beach, CA
San Francisco, CA
Portland, OR
Seattle, WA
Anchorage, AK
Juneau, AK
Honolulu, HI

Where the term *Officer in Charge, Marine Inspection, Marine Inspection Office,* or *Marine Safety Office* is used within the context of parts 10, 12 or 187 of this chapter, it is understood to mean that particular *Officer* or *Office* at one of the above listed locations.

(c) For descriptions of Coast Guard districts and marine safety zones, see 33 CFR part 3.

§1.01–20 Suspension and revocation proceedings.

(a) The Commandant takes final agency action on each proceeding concerned with revocation.

(b) The Commandant has delegated authority to the Vice Commandant in 33 CFR 1.01–40 to take final agency action under subparts I, J, and K of part 5 of this chapter on each proceeding except on a petition or appeal in a case on which an order of revocation has been issued.

(c) The Commandant assigns to his staff a Chief Administrative Law Judge who is an Administrative Law Judge appointed under 5 U.S.C. 3105 and whose assignment is to:

(1) Act as adviser and special assistant to the Commandant on matters concerning the administration of hearings conducted under 46 U.S.C. chapter 77;

(2) Conduct hearings under 46 U.S.C. chapter 77;

(3) Train new Administrative Law Judges assigned to conduct hearings under 46 U.S.C. chapter 77;

(4) Review the written decisions and orders of each Administrative Law Judge assigned to conduct a hearing under 46 U.S.C. chapter 77; and

(5) Act as adviser to the Chief Counsel in preparation of the final action of proceedings conducted under subparts I, J, and K of part 5 of this chapter.

(d) The Chief Counsel of the Coast Guard, under the general direction and supervision of the Commandant, U.S. Coast Guard:

(1) Acts as an adviser and as a special assistant to the Commandant in matters of law; and

(2) Prepares for the consideration of the Commandant or the Vice Commandant, as appropriate, proposed decisions on cases on appeal or review in suspension and revocation proceedings.

§1.01–25 General flow of functions.

(a) The Officer in Charge, Marine Inspection, has final authority with respect to the functions described in §1.01–15(b) of this subpart, subject to the rights of appeal set forth in subpart 1.03 of this part.

(b) The general course and method by which the functions (other than those dealing with suspension and revocation of licenses, certificates, or documents described in paragraph (c) of this section) concerning marine safety activities are channeled begins with the Officer in Charge, Marine Inspection, at the local Marine Safety Office. From this officer the course is to the Chief, Marine Safety Division, on the staff of the District Commander and then to the District Commander. From the District Commander the course is to the Chief of one of the offices within the Marine Safety and Environmental Protection at Headquarters. In most administrative cases the channel ends at this point; however, on matters of policy and other appropriate cases, the course continues to the Chief, Marine Safety and Environmental Protection, and then to the Commandant, whose decisions are final.

(c) In proceedings involving the suspension or revocation of a Coast Guard license, certificate or document issued to an individual, the course and method by which such proceedings are channeled are as follows:

(1) In the United States, the Commonwealth of Puerto Rico, Territory of Guam, the Virgin Islands, and other possessions, the proceedings are initiated by the preferment of charges and specifications against the holder of the Coast Guard license, certificate or document. A Coast Guard Investigating Officer under the supervision of an Officer in Charge, Marine Inspection, or an Officer in Charge, Marine Inspection causes the charges and specifications to be served on the person described therein (person charged) who is a holder of a Coast Guard license, certificate or document. At a hearing the Coast Guard submits evidence to support the charges and specifications, while the person charged may submit evidence in rebuttal or mitigation. The Administrative Law Judge renders a decision on the basis of the evidence adduced at the hearing and the law. The Administrative Law Judge's decision is given to the person charged.

(i) In a case where an appeal is made by the person charged, the notice of appeal is filed with the Administrative Law Judge who heard the case or with any Officer in Charge, Marine Inspection, for forwarding to such Administrative Law Judge.

(d) In the performance of their duties, all Coast Guard Administrative Law Judges are bound by law and the regulations in this chapter or in 33 CFR chapter I. Statements of policy, clarification of points of procedure, and general administrative instructions are published in *Administrative Law Judges' Circulars* and *Administrative Law Judges' Internal Practices and Procedures Series.* The Chief Administrative Law Judge, located in the Office of the Commandant, U.S. Coast Guard, maintains a complete file of these publications for reading purposes during normal working hours.

[CGD 88–033, 54 FR 50376, Dec. 6, 1989, as amended by CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§ 1.01–30 Judicial review.

(a) Nothing in this chapter shall be construed to prohibit any party from seeking judicial review of any Commandant's decision or action taken pursuant to the regulations in this part or part 5 of this chapter with respect to suspension and revocation proceedings arising under 46 U.S.C. chapter 77.

(b) If the person found guilty of any offense fails to make a timely appeal, the decision of the Administrative Law Judge is final and binding on the person charged as of the date that the decision is delivered to the person charged or his authorized representative.

§ 1.01–35 OMB control numbers assigned pursuant to the Paperwork Reduction Act.

(a) *Purpose.* This section collects and displays the control numbers assigned to information collection and record keeping requirements in this subchapter by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). The Coast Guard intends that this section comply with the requirements of 44 U.S.C. 3507(f) which requires agencies display a current control number assigned by the Director of the OMB for each approved agency information collection requirement.

(b) *Display.*

46 CFR part or section where identified or described	Current OMB control No.
§ 2.01	2115–0007
§ 2.95–10	2115–0141
§ 3.10	2115–0053
Part 4	2115–0003
Part 6	2115–0005

Subpart 1.03—Rights of Appeal

§ 1.03–10 Definition of terms used in this subpart.

(a) The term *recognized classification society* means the American Bureau of Shipping or other classification society recognized by the Commandant.

(b) The term *new vessel* means:

(1) For vessels which require a Certificate of Inspection, a new vessel is a vessel which has not received an initial Certificate of Inspection.

(2) For vessels which do not require a Certificate of Inspection, a new vessel is a vessel which has not received a Load Line assignment.

(c) The term *existing vessel* means a vessel which is not a new vessel.

§ 1.03–15 General.

(a) Any person directly affected by a decision or action taken under this chapter, by or on behalf of the Coast Guard, except for matters covered by subpart J of part 5 of this chapter dealing with suspension and revocation hearings, shall follow the procedures contained in this section when requesting that the decision or action be reviewed, set aside or revised.

(b) When requesting that a decision or action be reconsidered or reviewed, as may be required by this subpart, such request must be made within 30 days after the decision is rendered or the action is taken.

(c) When making a formal appeal of a decision or action, as permitted by this subpart, such appeal must be submitted in writing and received by the authority to whom the appeal is required to be made within 30 days after the decision or action being appealed, or within 30 days after the last administrative action required by this subpart. Upon written request and for good cause, the 30 day time limit may be extended by the authority to whom the appeal is required to be made.

(d) A formal appeal must contain a description of the decision or action being appealed and the appellant's reason(s) why the decision or action should be set aside or revised.

(e) When considering an appeal, the Commandant or a District Commander may stay the effect of a decision or action being appealed pending determination of the appeal.

(f) While a request for reconsideration or review or a formal appeal is pending, the original decision or action remains in effect, unless otherwise stayed under paragraph (e) of this section.

(g) The Commandant may delegate authority to act on administrative appeals under this subpart to the Chief, Marine Safety and Environmental Protection, and appropriate office chiefs within Marine Safety and Environmental Protection.

(h) Formal appeals made to the Commandant shall be addressed to:

(1) Commandant (G–MOC) for appeals involving vessel inspection issues, load line issues, vessel manning issues or other personnel issues;

(2) Commanding Officer, U.S. Coast Guard Marine Safety Center, for appeals involving vessel plan review issues or vessel tonnage issues; or

(3) Director, National Maritime Center, for appeals involving measurement issues and vessel documentation issues.

(i) Failure to submit a formal appeal in accordance with the procedures and time limits contained in this subpart results in the decision or action becoming final agency action.

(j) Any decision made by the Commandant, or by the Chief, Marine Safety and Environmental Protection, or by an office chief pursuant to authority delegated by the Commandant is final agency action on the appeal.

[CGD 88–033, 54 FR 50376, Dec. 6, 1989, as amended by CGD 89–007, CGD 89–007a, 58 FR 60265, Nov. 15, 1993; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§1.03–20 Appeals from decisions or actions of an OCMI.

Any person directly affected by a decision or action of an OCMI may, after requesting reconsideration of the decision or action by the cognizant OCMI, make a formal appeal of that decision or action, via the office of the cognizant OCMI, to the District Commander of the district in which the office of the cognizant OCMI is located, in accordance with the procedures contained in §1.03–15 of this subpart.

§1.03–25 Appeals from decisions or actions of a District Commander.

Any person directly affected by a decision or action of a District Commander made pursuant to §1.03–20 of this subpart, may make a formal appeal of that decision or action, via the office of the cognizant District Commander, to the Commandant, in accordance with the procedures contained in §1.03–15 of this subpart.

§1.03–30 Appeals from decisions or actions of the Marine Safety Center.

(a) Any person directly affected by a decision or action of the Marine Safety Center which affects a new vessel or plans for a vessel to be built may, after requesting reconsideration of the decision or action by the Commanding Officer, Marine Safety Center, make a formal appeal of that decision or action, via the Commanding Officer, Marine Safety Center, to the Commandant, in accordance with the procedures contained in §1.03–15 of this subpart.

(b) Any person directly affected by a decision or action of the Marine Safety Center which affects an existing vessel, prior to initiating a formal appeal, must request review of that decision or action by the cognizant OCMI. Following review by the cognizant OCMI, the decision or action under review may be appealed to the District Commander, in accordance with the procedures contained in §1.03–20 of this subpart.

§1.03–35 Appeals from decisions or actions of a recognized classification society acting on behalf of the Coast Guard.

(a) Any person directly affected by a decision or action of a recognized classification society performing plan review on behalf of the Coast Guard may, after requesting reconsideration of the decision or action by the classification society, make a formal appeal, via the classification society headquarters, to the Commandant, in accordance with

the procedures contained in § 1.03–15 of this subpart.

(b) Any person directly affected by a decision or action of a recognized classification society acting as a marine inspector, as defined in § 30.10–43 of this chapter, on behalf of the Coast Guard, prior to initiating a formal appeal, must request review of that decision or action by the cognizant OCMI. Following review by the cognizant OCMI, the decision or action under review may be appealed to the District Commander, in accordance with the procedures contained in § 1.03–20 of this subpart.

(c) Any person directly affected by a decision or action of a recognized classification society acting as a load line assigning authority, as defined in § 42.05–10 of this chapter, may, after requesting reconsideration of the decision or action by the classification society, make a formal appeal, via the classification society headquarters, to the Commandant, in accordance with the procedures contained in § 1.03–15 of this subpart.

§ 1.03–40 Appeals from decisions or actions of a tonnage measurement authority.

(a) Any person directly affected by a decision or action of an officer or employee of the Coast Guard, when acting as a tonnage measurement authority under § 69.15 of this chapter, may make a formal appeal of that decision or action to the Commandant, in accordance with the procedures contained in § 1.03–15 of this subpart.

(b) Any person directly affected by a decision or action of an organization authorized to measure vessels on behalf of the Coast Guard, as identified in § 69.15(a) of this chapter or pursuant to a delegation of authority under § 69.27 of this chapter, may make a formal appeal of that decision or action, via the measurement organization, to the Commandant, in accordance with the procedures contained in § 1.03–15 of this subpart.

§ 1.03–45 Appeals from decisions or actions involving documentation of vessels.

Any person directly affected by a decision or action of an officer or employee of the Coast Guard acting on or in regard to the documentation of a vessel under part 67 of this chapter, may make a formal appeal of that decision or action to the Commandant in accordance with the procedures contained in §§ 1.03–15 through 1.03–25 of this subpart.

[CGD 89–007, CGD 89–007a, 58 FR 60265, Nov. 15, 1993]

PART 2—VESSEL INSPECTIONS

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AUTHORITY: 33 U.S.C. 1903; 43 U.S.C. 1333; 46 U.S.C. 3306, 3703; E.O. 12334, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46; subpart 2.45 also issued under the authority of Act Dec. 27, 1950, Ch. 1155, secs. 1, 2, 64 Stat. 1120 (see 46 U.S.C. App. note prec. 1).

SOURCE: CGFR 65–50, 30 FR 16604, Dec. 30, 1965, unless otherwise noted.

Subpart 2.01—Inspecting and Certificating of Vessels

§2.01–1 Applications for inspections.

(a) *Application forms.* (1) Applications for the inspections of vessels required to be inspected by the Coast Guard by 46 U.S.C. 362, 363, 367, 390a, 391, 391a, 392, 395, 404, 405, 526, 1333, or 50 U.S.C. 198, shall be made by the master, owner or agent on the following Coast Guard forms which are obtainable from the Officer in Charge, Marine Inspection, at any local Marine Inspection Office, U.S. Coast Guard.

(i) CG–3752—Application for Inspection of U.S. Vessel.

(ii) CG–986—Application for Inspection of Foreign Vessel.

(2) These applications require information on name and type of vessel, nature of employment and route in which to be operated, and place where and date when the vessel may be inspected.

(b) *To whom submitted.* The completed form must be submitted to the Officer in Charge, Marine Inspection, in the Marine Inspection Zone within which the inspection is to be conducted.

(c) *New vessels.* Applications for inspection of new vessels must be preceded by the submission of applicable drawings or prints in accordance with the specific requirements in subchapters D (Tank Vessels), E (Load Lines), F (Marine Engineering), H (Passenger Vessels), I (Cargo and Miscellaneous Vessels), J (Electrical Engineering), O (Certain Bulk Dangerous Cargoes), S (Subdivision and Stability), and T (Small Passenger Vessels) of this chapter applicable to that particular type of vessel or type of service in which the vessel is proposed to be operated.

(d) *Foreign-built vessels.* (1) Those foreign-built vessels which are specifically authorized by public or private laws to engage in the coastwise trade, and those foreign-built vessels which are documented to engage in the foreign trade shall be inspected and certificated as required by law and/or the regulations in this chapter which are

applicable to their class and employment.

(2) Under certain circumstances as described in law (see 46 U.S.C. 11, 13, 289, 292, 316, 808, 883, or other laws), certain foreign-built vessels are not permitted to engage in the United States coastwise trade (domestic trade) unless specifically authorized by law. Therefore, when foreign-built vessels are intended for use in the coastwise trade as defined by the Bureau of Customs, such vessels will not be inspected and certificated unless specifically authorized by law to engage in the coastwise trade.

[CG FR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 79–023, 48 FR 51006, Nov. 4, 1983; CGD 91–030, 60 FR 13563, Mar. 13, 1995]

§ 2.01–3 Notification of inspection.

(a) At least 30 days, but less than 60 days, prior to the expiration of the Certification of Inspection, a vessel's owner, charterer, managing operator, agent, master or individual in charge shall notify the Coast Guard if the vessel will be required to be reinspected for certification or will be operated in such a manner as to not require a Certificate of Inspection.

(b) the notification required by paragraph (a) shall be in writing and shall be submitted to the Officer in Charge, Marine Inspection for the Marine Inspection or Marine Safety Office of the port that:

(1) Will be reinspecting and Certificating the Vessel;

(2) Issued the vessel's current Certificate of Inspection if the vessel's schedule is such that it is not known where the next reinspection will take place; or

(3) Issued the vessel's current Certificate of Inspection if the vessel will not be requiring reinspection for the issuance of a Certificate of Inspection.

[CGD 85–015, 51 FR 19340, May 29, 1986]

§ 2.01–5 Certificate of inspection.

(a) *Issuance of certificates.* Upon completion of the inspection of a United States vessel, and on condition that the vessel and its equipment are approved by the inspector, a certificate of one or more of the following Coast Guard forms is issued by the Officer in Charge, Marine Inspection:

(1) CG–841—Certificate of Inspection.

(2) CG–854—Temporary Certificate of Inspection.

(3) CG–3753—Certificate of Inspection (for small passenger vessels).

(4) CG–4678—Barge Certificate of Inspection.

(b) *Description of certificates.* The certificates of inspection issued to United States vessels describe the vessel, the route the vessel may travel, the minimum manning requirements, the safety equipment and appliances required to be on board, the total number of persons that may be carried, and the names of the owners and operators. The period of validity is stated on the certificate. The certificate may be renewed by applying for inspection under § 2.01–1.

(c) *Amending certificates.* When because of a change in the character of the vessel or vessel's route, equipment, etc. the vessel does not comply with the requirements of the Certificate of Inspection previously issued, a certificate amending such certificate may be issued at the discretion of the Officer in Charge, Marine Inspection, to whom request is made on Coast Guard form CG–858, Certificate of Inspection Amendment.

[CGD 77–014, 44 FR 5316, Jan. 25, 1979]

§ 2.01–6 Certificates issued to foreign vessels.

(a) *Issuance of certificates.* Upon completion of an examination of a foreign vessel, one or more of the following certificates is issued by the Officer in Charge, Marine Inspection:

(1) CG–4504—Control Verification for Foreign Vessel—issued to a foreign vessel that is registered in a country which is signatory to the International Convention for the Safety of Life at Sea, 1974.

(2)(i) CG–2832A—Letter of Compliance—issued to a foreign vessel that is suitable for carriage of hazardous cargoes in bulk as defined in 46 Code of Federal Regulations, subchapter 0 and is in compliance with Tankship Cargo Venting and Handling Systems and Minimum Pollution Prevention Regulations and Transfer Procedures (33 CFR parts 155, 156, 157 and 159), and

Navigation Safety Inspection Regulations (33 CFR part 164).

(ii) Letter of Compliance—issued to Foreign Mobile Offshore Drilling Units engaged in Outer Continental Shelf activities under 33 CFR 143.210.

(3) CG–840S–1—Tank Vessel Examination Letter—issued to a foreign vessel that is suitable for carriage of cargoes as defined in 46 Code of Federal Regulations, subchapter D and is in compliance with Tankship Cargo Venting and Handling Systems and Minimum Safety Standards (SOLAS 74—46 CFR part 35), Pollution Prevention Regulations and Transfer Procedures (33 CFR parts 155, 156, 157 and 159), and Navigation Safety Regulations (33 CFR part 164).

(4) Foreign vessels of countries which are nonsignatory to the International Convention for the Safety of Life at Sea, 1974, are issued a Temporary Certificate of Inspection (CG–854) and a Certificate of Inspection (CG–841) as described in §2.01–5.

(b) *Description of Certificates.* (1) CG–4504—Control Verification for Foreign Vessels—describes the vessel, type of certificate required by the International Convention for the Safety of Life at Sea, 1974, country issued by, and its expiration date. The period of validity of a control verification for foreign vessel is stated on the certificate.

(2) CG–2832A—Letter of Compliance—describe the vessel and the period for which the letter is valid.

(3) CG–840S–1—Tank Vessel Examination Letter—describe the vessel and if there are any deficiencies as to applicable regulations at the time the vessel was examined. If there are deficiencies they are listed in an attachment to this letter (CG–840S–2). The Tank Vessel Examination Letter is valid for a period of 1 year from the date the examination is completed.

(4) Temporary Certificate of Inspection (CG–854) and Certificate of Inspection (CG–841) are amended as provided for in §2.01–5(c).

[CGD 77–014, 44 FR 5316, Jan. 25, 1979, as amended by CGD 90–008, 55 FR 30659, July 26, 1990; CGD 91–030, 60 FR 13563, Mar. 13, 1995]

§2.01–7 Classes of vessels (including motorboats) examined or inspected and certificated.

(a) The regulations in this chapter concerning inspecting and certificating vessels are applicable to vessels (including motorboats) as indicated in the following Table 2.01–7(a):

TABLE 2.01–7(a)

Method of propulsion	Size or other limitations	Classes of vessels (including motorboats) examined or inspected under various Coast Guard Regulations [1]					
		Vessels inspected and certificated under Subchapter D—Tank Vessels [2]	Vessels inspected and certificated under either Subchapter H—Passenger Vessels [2 3 4 5] or Subchapter T—Small Passenger Vessels [2 3 4]	Vessels inspected and certificated under Subchapter I—Cargo and Miscellaneous Vessels [2 5]	Vessels subject to provisions of Subchapter C—Uninspected Vessels [2 3 6 7 8]	Vessels subject to provisions of Subchapter U—Oceanographic Vessels [2 5 6 7 9]	Vessels subject to the provisions of Subchapter O—Certain Bulk Dangerous Cargoes [10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Steam	Vessels not over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	All tugboats and towboats.	All vessels except those covered by columns 3, 4, 5, and 7.	None	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.
	Vessels over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels of not over 15 gross tons which carry more than 6 passengers.[7] 3. All other vessels carrying passengers,[7] except: a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4.	None	All vessels engaged in oceanographic research.	Do.

			c. Towing and fishing vessels, in other than ocean and coastwise service, may carry persons on the legitimate business of the vessel[5] in addition to crew, but not to exceed one for each net ton of the vessel.				
Motor	Vessels not over 15 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All vessels except those covered by columns 3, 4, 5, and 7.	None	Do.
	Vessels over 15 gross tons except seagoing motor vessels of 300 gross tons and over.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels not over 65 feet in length which carry more than 6 passengers.[7] 3. All other vessels of over 65 feet in length carrying passengers for hire except documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels carrying freight for hire except those covered by columns 3 and 4.	All vessels except those covered by columns 3, 4, 5, and 7.	None	Do.

TABLE 2.01–7(a)—Continued

Method of propulsion	Size or other limitations	Classes of vessels (including motorboats) examined or inspected under various Coast Guard Regulations [1]					
		Vessels inspected and certificated under Subchapter D—Tank Vessels [2]	Vessels inspected and certificated under either Subchapter H—Passenger Vessels [2 3 4 5] or Subchapter T—Small Passenger Vessels [2 3 4]	Vessels inspected and certificated under Subchapter I—Cargo and Miscellaneous Vessels [2 5]	Vessels subject to provisions of Subchapter C—Uninspected Vessels [2 3 6 7 8]	Vessels subject to provisions of Subchapter U—Oceanographic Vessels [2 5 6 7 9]	Vessels subject to the provisions of Subchapter O—Certain Bulk Dangerous Cargoes [10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Seagoing motor vessels of 300 gross tons and over.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All other vessels carrying passengers,[7] except: a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4, and those engaged in the fishing, oystering, clamming, crabbing, or any other branch or the fishery, kelp, or sponge industry.	All vessels except those covered by columns 3, 4, 5, and 7.	All vessels engaged in oceanographic research.	Do.
Sail	Vessels not over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	None	None	Do.

	Vessels over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying passengers for hire.	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	None	None	Do.
Non-self-propelled	Vessels less than 100 gross tons.	All vessels carrying combustible or liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 49 CFR parts 171–179.	All barges carrying passengers except those covered by column 4.	None	All tank barges carrying in bulk the cargoes listed in Table 151.05 of this chapter.[1 11]
Vessels 100 gross tons or over.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying passengers for hire.	All seagoing barges except those covered by columns 3 and 4; and those inland barges carrying dangerous cargoes when required by 49 CFR parts 171–179.	All barges carrying passengers except those covered by columns 4 and 7.	All seagoing barges engaged in oceanographic research.	Do.	

[1] Where length is used in this table it means the length measured from end to end over the deck, excluding sheer. This expression means a straight line measurement of the overall length from the foremost part of the vessel to the aftermost part of the vessel, measured parallel to the centerline.

[2] Subchapters E (Load Lines), F (Marine Engineering), J (Electrical Engineering), and N (Dangerous Cargoes) of this chapter may also be applicable under certain conditions. The provisions of 49 CFR parts 171–179 apply whenever hazardous materials are on board vessels (including motorboats), except when specifically exempted by law.

[3] Public nautical schoolships, other than vessels of the Navy and Coast Guard, shall meet the requirements of part 167 of subchapter R (Nautical Schools) of this chapter, Civilian nautical schoolships, as defined by 46 U.S.C. 1331, shall meet the requirements of subchapter H (Passenger Vessels) and part 168 of subchapter R (Nautical Schools) of this chapter.

[4] Subchapter H (Passenger Vessels) of this chapter covers only those vessels of 100 gross tons or more, subchapter T (Small Passenger Vessels) of this chapter covers only those vessels of less than 100 gross tons.

[5] Vessels covered by subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter, where the principal purpose or use of the vessel is not for the carriage of liquid cargo, may be granted a permit to carry a limited amount of flammable or combustible liquid cargo in bulk. The portion of the vessel used for the carriage of the flammable or combustible liquid cargo shall meet the requirements of subchapter D (Tank Vessels) in addition to the requirements of subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter.

[6] Any vessel on an international voyage is subject to the requirements of the International Convention for Safety of Life at Sea, 1974.

[7] The meaning of the term *passenger* is as defined in the Act of May 10, 1956 (Sec. 1, 70 Stat. 151; 46 U.S.C. 390). On oceanographic vessels scientific personnel on board shall not be deemed to be passengers nor seamen, but for calculations of lifesaving equipment, etc., shall be counted as persons.

[8] Boilers and machinery are subject to examination on vessels over 40 feet in length.

[9] Under 46 U.S.C. 441 an *oceanographic research vessel* is a vessel ''* * * being employed exclusively in instruction in oceanography or linmology, or both, or exclusively in oceanographic research, * * *.'' Under 46 U.S.C. 443, ''an oceanographic research vessel shall not be deemed to be engaged in trade or commerce.'' If or when an oceanographic vessel engages in trade or commerce, such vessel cannot operate under its certificate of inspection as an oceanographic vessel, but shall be inspected and certificated for the service in which engaged, and the scientific personnel aboard then become persons employed in the business of the vessel.

[10] Bulk dangerous cargoes are cargoes specified in table 151.01–10(b), in table I of part 153, and in table 4 of part 154 of this chapter.

[11] For manned tank barges see § 151.01–10(e) of this chapter.

(b) The specific application of regulations concerning inspecting and certificating vessels is set forth in the specific subchapter governing a particular class of vessels.

(1) For passenger vessels see part 70 of subchapter H (Passenger Vessels) of this chapter.

(2) For cargo and miscellaneous vessels see part 90 of subchapter I (Cargo and Miscellaneous Vessels) of this chapter.

(3) For tank vessels see part 30 of subchapter D (Tank Vessels) of this chapter.

(4) For small passenger vessels see part 175 of subchapter T (Small Passenger Vessels) of this chapter.

(5) For uninspected vessels see part 24 of subchapter C (Uninspected Vessels) of this chapter.

(6) For vessels carrying certain bulk dangerous cargoes see subchapter O of this chapter.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGFR 67–83, 33 FR 1102, Jan. 27, 1968; CGFR 70–10, 35 FR 3706, Feb. 25, 1970; CGD 73–96, 42 FR 49022, Sept. 26, 1977; CGD 86–033, 53 FR 36023, Sept. 16, 1988; 53 FR 46871, Nov. 21, 1988; CGD 90–008, 55 FR 30659, July 26, 1990]

§ 2.01–8 Application of regulations to vessels or tankships on an international voyage.

(a) Where, in various places or portions in this chapter, requirements are stipulated specifically for *vessels on an international voyage* or *tankships on an international voyage*, it is intended that these requirements apply only to vessels or tankships, as applicable, which are subject to the International Convention for Safety of Life at Sea, 1974.

(b) For details regarding application of Convention requirements to tankships, see § 30.01–6 of this chapter; to passenger vessels, see § 70.05–10 of this chapter; to cargo ships other than tankships, see § 90.05–10 of this chapter; and to small passenger vessels, see § 176.35–1 of this chapter. (E.O. 11239, 30 FR 9671, 3 CFR, 1965 Supp.).

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 90–008, 55 FR 30659, July 26, 1990]

§ 2.01–10 Inspection requirements—domestic vessels.

(a) If during the inspection of a vessel made at the request of the master, owner, or agent, the vessel or her equipment is found not to conform to the requirements of law or regulations in this chapter, the requirements which must be met will be listed on Form CG–835, Notice of Merchant Marine Inspection Requirements, and given to the master of the vessel.

(b) The Coast Guard on its own initiative may examine or inspect or reinspect at any time any vessel subject to title 52 of the Revised Statutes (R.S. 4399–4500; 46 U.S.C. 170, 214–240, 361–498), and acts amendatory thereof or supplemental thereto. If during such examination, inspection, or reinspection, any failure to comply with any applicable requirement of law and/or applicable regulations in this chapter, or any defects or imperfections become apparent tending to render the navigation of the vessel unsafe, or that repairs have become necessary, the Coast Guard will so notify the master and state what is required.

§ 2.01–13 Inspection requirements—foreign vessels.

(a) Foreign vessels registered in countries which are parties to the effective International Convention for Safety of Life at Sea are normally subject to the examination provided for in Chapter I of that Convention. However, in the case of any vessel involving novel features of design or construction, upon which that Convention is silent or which involve potential unusual operating risks, a more extensive inspection may be required when considered necessary to safeguard the life or property in United States ports where such vessel may enter. In such a case, pertinent plans and/or calculations may be required to be submitted sufficiently in advance to permit evaluation before inspection.

(b) Foreign vessels registered in countries which are not parties to the effective International Convention for Safety of Life at Sea, or foreign vessels registered in countries which are parties to the effective Convention but which vessels are exempted from part or all of the Convention, may under

conditions specified in applicable inspection laws be subject to inspection and certification as specified in regulations governing specific categories of vessels.

(c) For details concerning application of regulations to foreign vessels, see part 30 (Tank Vessels), part 70 (Passenger Vessels), part 90 (Cargo and Miscellaneous Vessels), §146.02–2 (Dangerous Cargoes), part 148 (Bulk Solid Hazardous Materials), parts 153 and 154 (Certain Bulk Dangerous Cargoes), and part 175 (Small Passenger Vessels) of this chapter.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49022, Sept. 26, 1977]

§2.01–15 Vessel repairs.

(a) No repairs or alterations affecting the safety of a vessel or her machinery shall be made unless applicable requirements in this chapter are met. The procedures to be followed in notifying the Coast Guard about vessel repairs vary according to the type of vessel and service in which engaged. The requirements are set forth in the subchapter governing a particular class of vessels or in a subchapter governing a particular subject as follows:

(1) For passenger vessels that are 100 gross tons or more, see §§71.55–1 and 71.60–1 of subchapter H (Passenger Vessels) of this chapter.

(2) For small passenger vessels under 100 gross tons, see §176.20–1 of subchapter T (Small Passenger Vessels) of this chapter.

(3) For cargo and miscellaneous vessels, see §§91.45–1 and 91.50–1 of subchapter I (Cargo and Miscellaneous Vessels) of this chapter.

(4) For tank vessels, see §§31.10–25 and 35.01–1 of subchapter D (Tank Vessels) of this chapter.

(5) For public nautical schoolships, see §§167.30–1 and 167.30–10 of subchapter R (Nautical Schools) of this chapter.

(6) For oceanographic vessels, see §§189.45–1 and 189.50–1 of subchapter U (Oceanographic Vessels) of this chapter.

(7) For repairs to a vessel after it has been surveyed, see §42.09–50 of subchapter E (Load Lines) of this chapter.

(8) For repairs to boilers, pressure vessels, and appurtenances, see part 59 of subchapter F (Marine Engineering) of this chapter.

(9) For repairs to electrical installations or equipment, see §§111.05–5(e), 111.05–10(e), and 111.90–5 of subchapter J (Electrical Engineering) of this chapter.

(10) For vessels carrying compressed gases regulated by subchapter O (Certain Bulk Dangerous Cargoes), see §151.50 30(c) of this chapter.

(11) For repairs to a vessel that affects its subdivision or stability, see §170.005 of this chapter.

(b) If repairs to a vessel are necessary, such a vessel may be permitted to proceed to another port for repairs, if in the opinion of the marine inspector it can be done with safety. The permit is granted by the Officer in Charge, Marine Inspection, upon request in writing by the master or owner of the vessel and is issued on Coast Guard Form CG–948, Permit to Proceed to Another Port for Repairs. The requirements for such permits are set forth in the subchapter governing a particular class of vessels as follows:

(1) For passenger vessels that are 100 gross tons or more, see subpart 71.05 of subchapter H (Passenger Vessels) of this chapter.

(2) For small passenger vessels under 100 gross tons, see §176.01–27 of subchapter T (Small Passenger Vessels) of this chapter.

(3) For cargo and miscellaneous vessels, see subpart 91.05 of subchapter I (Cargo and Miscellaneous Vessels) of this chapter.

(4) For tank vessels, see §31.10–35 of subchapter D (Tank Vessels) of this chapter.

(5) For public nautical schoolships, see §167.30–5 of subchapter R (Nautical Schools) of this chapter.

(6) For oceanographic vessels, see subpart 189.05 of subchapter U (Oceanographic Vessels) of this chapter.

[CGFR 68–126, 34 FR 9010, June 5, 1969, as amended by CGD 73–96, 42 FR 49023, Sept. 26, 1977; CGD 79–023, 48 FR 51006, Nov. 4, 1983]

§ 2.01–20 Revocation of certificates of inspection.

(a) Under the authority of 46 U.S.C. 391, 391a, or 435 the certificates of inspection referred to in § 2.01–5 may be revoked if the vessel is found at a reinspection not to comply with the terms of the vessel's certificate of inspection.

(b) Under the authority of 46 U.S.C. 390c(c) the certificates of inspection referred to in § 2.01–5 for a small passenger vessel may be revoked or suspended if such a vessel is found not to comply with the terms of the vessel's certificate of inspection when carrying more than 6 passengers.

§ 2.01–25 International Convention for Safety of Life at Sea, 1974.

(a) *Certificates required.* (1) The International Convention for Safety of Life at Sea, 1974, requires one or more of the following certificates to be carried on board certain passenger, cargo or tankships engaged in international voyages:

(i) Passenger Ship Safety Certificate.

(ii) Cargo Ship Safety Construction Certificate.

(iii) Cargo Ship Safety Equipment Certificate.

(iv) Cargo Ship Safety Radiotelephony Certificate.

(v) Cargo Ship Radiotelegraphy Certificate.

(vi) Exemption Certificate.

(vii) Nuclear Passenger Ship Safety Certificate.

(viii) Nuclear Cargo Ship Safety Certificate.

(2) The U.S. Coast Guard will issue through the Officer in Charge, Marine Inspection, the following certificates after performing an inspection of the vessel and determining the vessel meets applicable requirements:

(i) Passenger Ship Safety Certificate.

(ii) Cargo Ship Safety Construction Certificate except when issued to cargo ships by American Bureau of Shipping at the option of the owner or agent.

(iii) Cargo Ship Safety Equipment Certificate.

(iv) Exemption Certificate.

(v) Nuclear Passenger Ship Safety Certificate.

(vi) Nuclear Cargo Ship Safety Certificate.

(3) When authorized by the Commandant, U.S. Coast Guard, the American Bureau of Shipping may issue to cargo and tankships which it classes the Cargo Ship Safety Construction Certificate.

(4) The Federal Communications Commission will issue the following certificates:

(i) Cargo Ship Safety Radiotelephony Certificate.

(ii) Cargo Ship Radiotelegraphy Certificate.

(iii) Exemption Certificate.

(b) *Applications.* (1) The application for inspection and issuance of a certificate or certificates is made on the appropriate form listed in § 2.01–1, or by letter, to the Officer in Charge, Marine Inspection, in or nearest the port at which the inspection is to be made and shall be signed by the master or agent of the vessel. The certificates previously issued are surrendered at the time the inspection is performed. Further details are set forth in subchapter D (Tank Vessels), subchapter H (Passenger Vessels), subchapter I (Cargo and Miscellaneous Vessels), subchapter O (Certain Bulk Dangerous Cargoes), and subchapter T (Small Passenger Vessels), of this chapter.

(2) The application for the inspection of a vessel other than a passenger vessel concerning the issuance of a Cargo Ship Safety Radiotelephony Certificate or a Cargo Ship Safety Radiotelegraphy Certificate is made by formal application on FCC Form 801 to the local office of the Federal Communications Commission.

(c) *Certificates issued.* (1) If a vessel meets the applicable requirements of the Convention, it shall be issued appropriate certificates listed in paragraph (a) of this section. These certificates describe the vessel and state the vessel is in compliance with the applicable requirements of the Convention.

(2) A Convention certificate may be withdrawn, revoked or suspended at any time when it is determined the vessel is no longer in compliance with applicable requirements. (See § 2.01–70 for appeal procedures.)

(d) *CG–969—Notice of Receipt of Application for Passenger Ship Safety Certificate.* (1) The Passenger Ship Safety Certificate is issued by the Commandant

after determining all applicable requirements of the Convention have been met. In the event the completion of the certification of any passenger vessel cannot be effected prior to the sailing of the passenger ship on a foreign voyage, or in any case where the Passenger Ship Safety Certificate is not received from the Commandant before the ship sails on a foreign voyage, the Officer in Charge, Marine Inspection, will issue a completed Form CG–969, describing the passenger ship and certifying that an application for a Passenger Ship Safety Certificate is being processed, and that in his opinion the vessel meets applicable requirements of the Convention administered by the Coast Guard.

(2) The completed Form CG–969 may be exhibited in explanation of the failure of the passenger ship to have on board a current Passenger Ship Safety Certificate. This completed form CG–969 may be accepted as prima facie evidence that the passenger ship described therein is in compliance with the applicable requirements of the Convention.

(e) *Exempted vessel.* (1) A vessel may be exempted by the Commandant from complying with certain requirements of the Convention under his administration upon request made in writing to him and transmitted via the Officer in Charge, Marine Inspection. In such case the exemptions are stated in the Exemption Certificate, which is issued by the Commandant through the appropriate Officer in Charge, Marine Inspection.

(2) The Exemption Certificate which modifies the Cargo Ship Safety Radiotelephony Certificate or the Cargo Ship Safety Radiotelegraphy Certificate is issued by the Federal Communications Commission.

(f) *Posting certificates.* The Convention certificates issued to a vessel shall be posted in a prominent and accessible place on the vessel in a manner similar to that for certificates of inspection.

(g) *Foreign flag vessels.* At the request of the government of a country in which is registered a vessel engaged in an international voyage, such a vessel may be issued the applicable certificate or certificates listed in paragraph (a) of this section. The certificate will be issued only after inspection has been made by the issuing agency, providing the vessel is found to comply with the requirements of the Convention.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49023, Sept. 16, 1977; CGD 90–008, 55 FR 30659, July 26, 1990]

§2.01–40 Passengers or persons in addition to crew on cargo or tank vessels.

(a) Under authority of 46 U.S.C. 882 a cargo vessel or a tank vessel documented under the laws of the United States and subject to inspection under applicable regulations in subchapter D (Tank Vessels) or subchapter I (Cargo and Miscellaneous Vessels) of this chapter may be allowed by its certificate of inspection to carry not to exceed 16 persons in addition to the crew: *Provided,* That such vessel subject to the applicable provisions of the effective International Convention for Safety of Life at Sea may carry not to exceed 12 persons in addition to the crew.

(b) The application for permission to carry persons in addition to the crew may be included in the application described in §2.01–1. If granted it is endorsed on the certificate of inspection.

§2.01–45 Excursion permit.

(a) Under authority of 46 U.S.C. 453 a passenger vessel may be permitted to engage in excursions and carry additional numbers of passengers. For details see part 71 of subchapter H (Passenger Vessels) of this chapter.

(b) The application for an excursion permit is made by the master, owner, or agent of the vessel to the Officer in Charge, Marine Inspection, on Coast Guard Form CG–950, Application for Excursion Permit. If, after inspection, permission is granted, it is given on Coast Guard Form CG–949, Permission to Carry Excursion Party. The permit describes the vessel, the route over which and the period during which the excursions may be made, and the safety equipment required for the additional persons indicated.

§2.01–50 Persons other than crew on towing, oyster, or fishing steam vessels.

(a) Under authority of 46 U.S.C. 458 a steam vessel engaged in towing, oyster dredging and planting, and fishing may

be permitted to carry persons in addition to its crew.

(b) The application for a permit to carry such persons may be included in the application described in § 2.01–1. If granted it is endorsed on the certificate of inspection.

§ 2.01–60 Overtime compensation.

(a) *General.* Extra compensations for overtime services performed by inspectors of vessels and their assistants, shipping commissioners and their deputies and assistants who may be required to remain on duty between the hours of 5:00 p.m. and 8:00 a.m. or on Sundays or holidays to perform services in connection with the inspection of vessels or their equipment, supplying or signing on or discharging crews of vessels is authorized by 46 U.S.C. 382b and regulations in part 143 of this chapter, together with the method of computing such extra compensation.

(b) *Application and certification of time.* Application for the performance of such overtime services and certification of services performed is made by the master, owner, or agent of a vessel to the Officer in Charge, Marine Inspection, on Form CG–830, Application for and Certificate of Overtime Service.

(c) *Collection.* The bill for the collection of the overtime compensation is submitted by the Officer in Charge, Marine Inspection to the master, owner, or agent on whose vessel overtime services are performed on Form CG–832, Bill for Collection Overtime Services. Payment is made to the Collector of Customs of the port designated.

§ 2.01–70 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50379, Dec. 6, 1989]

§ 2.01–80 Vessel inspections in Alaska.

(a) The waters of southeastern Alaska inside of the general trend of the shore from Cape Spencer, southeasterly to Cape Muzon, and thence easterly to Sitklan Island, shall be considered as bays, sounds, and lakes other than the Great Lakes, for the purpose of administering the vessel inspection laws and applicable regulations in this chapter.

Subpart 2.10—Fees

SOURCE: At 60 FR 13563, Mar. 13, 1995, unless otherwise noted.

§ 2.10–1 Applicability.

(a) This subpart establishes vessel inspection fees for all vessels required to have a Certificate of Inspection and vessel examination fees for all foreign vessels required to have either a Letter of Compliance or a Tank Vessel Examination Letter.

(b) The fees in this subpart do not apply to:

(1) Vessels being inspected for the initial issuance of a Certificate of Inspection;

(2) Foreign passenger vessels;

(3) Training vessels operated by State maritime academies; and

(4) Public vessels of the United States, except for Maritime Administration vessels.

§ 2.10–5 Exemptions.

(a) Vessels owned or operated by an organization which is charitable in nature, not for profit, and youth-oriented may be exempted from the fees required by this subpart provided that the vessels are used exclusively for training youths in boating, seamanship, and navigation skills.

(b) Vessel owners or operators must submit a written request for exemption to the Officer in Charge, Marine Inspection of the Marine Inspection Zone in which the vessel normally operates. The exemption request must provide the vessel name, the vessel identification number, and evidence that the organization and the vessel meet the criteria set forth in paragraph (a) of this section.

§ 2.10–10 Waivers.

The Commandant (G–MRP) will waive collection of vessel inspection fees in this subpart for a Federally-owned or operated vessel if the fee would be directly paid by an agency acting as the vessel owner using Federal appropriated funds. By October 1 of each year, Federal agencies shall

provide Commandant (G–MRP) with a list of the names and vessel identification numbers of vessels for which a fee waiver is requested.

[CGD 91–030, 60 FR 13563, Mar. 13, 1995, as amended by CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.10–20 General requirements.

(a) Unless otherwise specified, vessel owners must pay the fees required by this subpart before inspection or examination services are provided.

(b) Fees required by this subpart must be paid in U.S. currency by check or money order, drawn on a U.S. bank, and made payable to the U.S. Treasury.

(c) All payments must be accompanied by the vessel name and its vessel identification number.

(d) Unless otherwise specified, fees required by this subpart must be mailed to the following address: USCG Inspection Fees, PO Box 105663, Atlanta, GA 30348–5663.

(e) For purposes of this subpart, the address for Commandant (G–MRP) is: Commandant (G–MRP), United States Coast Guard, 2100 Second Street S.W., Washington, DC 20593–0001.

(f) Information concerning a vessel's user fee anniversary date may be obtained from any Coast Guard Marine Safety or Marine Inspection Office.

[CGD 91–030, 60 FR 13563, Mar. 13, 1995, as amended by CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.10–25 Definitions.

The following definitions apply to this subpart:

Drill ship MODU means a mobile offshore drilling unit with a ship shape displacement hull intended for operation in the floating condition.

Freight barge means a non-self-propelled vessel carrying freight for hire.

Freight ship means a self-propelled freight vessel.

Freight vessel means a motor vessel of more than 15 gross tons that carries freight for hire, except an oceanographic research vessel or an offshore supply vessel.

Industrial vessel means a vessel which, by reason of its special outfit, purpose, design, or function engages in certain industrial ventures. For the purposes of this subpart, this classification includes such vessels as dredges, cable layers, derrick barges, and construction and wrecking barges, but does not include vessels which carry passengers or freight for hire, OSVs, oceanographic research vessels, or vessels engaged in the fisheries.

Liquefied gas tankship means a self-propelled vessel equipped with cargo tanks primarily designed to carry liquefied or compressed gases in bulk.

Mobile offshore drilling unit (MODU) means a vessel capable of engaging in drilling operations for the exploration or exploitation of subsea resources that is: seagoing and 300 or more gross tons and self-propelled by machinery; Seagoing and 100 or more gross tons and non-self-propelled; or more than 65 feet in length and propelled by steam.

Nautical school vessel means a vessel operated by or in connection with a nautical school or an educational institution under section 13 of the Coast Guard Authorization Act of 1986, Public Law 99–640.

Oceanographic research vessel means a vessel that is being employed only in instruction in oceanography or limnology, or both, or only in oceanographic or limnological research, including those studies about the sea such as seismic, gravity meter, and magnetic exploration and other marine geophysical or geological surveys, atmospheric research, and biological research.

Offshore supply vessel means a motor vessel that is of at least 15 gross tons and less than 500 gross tons, and that regularly carries goods, supplies, individuals in addition to the crew, and equipment in support of exploration, exploitation, or production of offshore mineral or energy resources.

Passenger barge means a non-self-propelled passenger vessel, including a prison barge or a barge which carries occupied recreational vehicles.

Passenger ship means a self-propelled passenger vessel.

Passenger vessel means a vessel of at least 100 gross tons:

(1) Carrying more than 12 passengers, including at least one passenger for hire;

(2) That is chartered and carrying more than 12 passengers; or

(3) That is a submersible vessel carrying at least one passenger for hire.

Sailing school vessel means a vessel of less than 500 gross tons, carrying more than 6 individuals who are sailing school instructors or sailing school students, principally equipped for propulsion by sail even if the vessel has an auxiliary means of propulsion, and owned or demise chartered and operated by a qualified organization during such times as the vessel is operated exclusively for the purposes of sailing instruction.

Sea-going towing vessel means a seagoing commercial vessel engaged in or intending to engage in the service of pulling, pushing or hauling alongside, or any combination of pulling, pushing or hauling alongside.

Self-elevating MODU means a mobile offshore drilling unit with movable legs capable of raising its hull above the surface of the sea.

Semi-submersible MODU means a mobile offshore drilling unit with the main deck connected to an underwater hull by columns or caissons, that is intended for drilling operations in the floating condition.

Small passenger vessel means a vessel of less than 100 gross tons:

(1) Carrying more than 6 passengers, including at least one passenger for hire;

(2) That is chartered with the crew provided or specified by the owner or the owner's representative and carrying more than 6 passengers;

(3) That is chartered with no crew provided or specified by the owner or the owner's representative and carrying more than 12 passengers; or

(4) That is a submersible vessel carrying at least one passenger for hire.

Submersible MODU means a mobile offshore drilling unit intended for drilling operations in the bottom-bearing condition, having the main deck connected to an underwater hull or pontoons by way of columns or caissons.

Submersible vessel means a vessel that is capable of operating below the surface of the water.

Tank barge means any tank vessel not equipped with means of propulsion.

Tank vessel means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankship means any tank vessel propelled by power or sail, including an integrated tug and barge designed to operate together only in the pushing mode.

User fee anniversary date means the date on which a vessel's annual inspection fee is due each year. Once established by the Coast Guard, a vessel's user fee anniversary date remains fixed for as long as the vessel remains in service.

Vessel identification number (VIN) means a U.S. official number, a number assigned by a State, a number assigned by the Coast Guard, or a Lloyd's Register of Shipping identification number issued to a U.S. or foreign commercial vessel for purposes of vessel identification. For U.S. vessels, VIN means the number listed on the Certificate of Inspection. For foreign vessels, VIN means either the Lloyd's Register of Shipping identification number or the number assigned by the Coast Guard.

§ 2.10–101 Annual vessel inspection fee.

(a)(1) Unless otherwise provided by this subpart, each vessel required to have a Certificate of Inspection is subject to the annual vessel inspection fee listed in Table 2.10–101 for its vessel category.

(2) A vessel certificated for more than one service must pay only the higher of the two applicable fees in Table 2.10–101 of this section.

(b) The vessel owner or operator must pay the annual vessel inspection fee each year on or before the vessel's user fee anniversary date, unless the fee has been prepaid under § 2.10–103 of this subpart.

(c) Payment of the annual vessel inspection fee entitles a vessel to all inspection services related to compliance with its Certificate of Inspection, including but not limited to the inspection for renewal of the Certificate of Inspection, reinspections (midperiod inspections), hull (drydock) inspections, deficiency inspections, damage surveys, repair and modification inspections, change in vessel service inspections, permit to proceed inspections, drydock extension inspections,

and all inspections required for the issuance of international certificates.

(d) Entitlement to inspection services for the current year remains with the vessel if it is sold. The entitlement to inspection services may not be transferred to any other vessel.

TABLE 2.10–101.—ANNUAL VESSEL INSPECTION FEES FOR U.S. AND FOREIGN VESSELS REQUIRING A CERTIFICATE OF INSPECTION

Any inspected vessel not listed in this table	$1,030
Freight Barges:	
Length not greater than 150 feet	495
More than 150 feet but not more than 300 feet	610
More than 300 feet	955
Freight Ships:	
Length not greater than 100 feet	1,425
More than 100 feet but no more than 300 feet	1,870
More than 300 feet	5,410
Industrial Vessels:	
Length not greater than 200 feet	1,435
More than 200 feet	2,550
Mobile Offshore Drilling Units (MODUs):	
Drill ship MODUs	6,710
Submersible MODUs	4,695
Self-elevating MODUs	4,695
Semi-submersible MODUs	8,050
Nautical School Vessels:	
Length not greater than 100 feet	835
More than 100 feet but not more than 200 feet	1,450
More than 200 feet	7,205
Oceanographic Research Vessels:	
Length not greater than 170 feet	840
More than 170 feet but not more than 240 feet	1,980
More than 240 feet	3,610
Offshore Supply Vessels:	
Length not greater than 140 feet	1,135
More than 140 feet	1,470
Offshore Supply Vessels: Alternate Reinspection Program*:	
Length not greater than 140 feet	940
More than 140 feet	1,260
Passenger Barges:	
Less than 100 gross tons and:	
Certified for fewer than 150 passengers	825
Certified for 150 or more passengers	1,110
100 gross tons or more and:	
Certified for fewer than 150 passengers	2,215
Certified for 150 or more passengers	2,525
Passenger Ships:	
Length not greater than 250 feet:	
Certified for fewer than 150 passengers	3,600
Certified for 150 or more passengers	4,050
More than 250 feet but not more than 350 feet	5,330
More than 350 feet but not more than 450 feet	6,835
More than 450 feet	14,650
Sailing School Vessels:	
Length not greater than 30 feet	530
More than 30 feet but not more than 65 feet	560
More than 65 feet	980
Sea-going Towing Vessels	2,915
Small Passenger Vessels:	
DUKW vessels	450
Hydrojet boats	470
All other small passenger vessels:	
Length not greater than 30 feet	545
More than 30 feet but not more than 54 feet	670

TABLE 2.10–101.—ANNUAL VESSEL INSPECTION FEES FOR U.S. AND FOREIGN VESSELS REQUIRING A CERTIFICATE OF INSPECTION—Continued

More than 54 feet but not more than 65 feet	750
More than 65 feet but not more than 130 feet	975
More than 130 feet but not more than 160 feet:.	
Certified for fewer than 150 passengers	1,215
Certified for 150 or more passengers	2,585
More than 160 feet	2,585
Tank Barges	500
Tankships:	
Length not greater than 100 feet	1,295
More than 100 feet but not more than 300 feet	2,310
More than 300 feet	5,805
Liquefied Gas Tankships	12,120

*Note: Eligibility for the reduced annual vessel inspection fee for Offshore Supply Vessels is contingent upon the vessel's continued acceptance in the alternative reinspection program by the cognizant Officer in Charge, Marine Inspection.

§ 2.10–105 Prepayment of annual vessel inspection fees.

(a) Vessel owners may prepay the annual vessel inspection fee for any period of not less than three years, and not more than the design life or remaining expected service life of the vessel.

(b) To prepay the annual vessel inspection fee for a period of three or more years, the owner must submit a written request to Commandant (G–MRP) specifying the vessel identification number and the period for which prepayment is to be made.

(c) The total of the annual fees for the requested prepayment period will be discounted to its net present value using the following formula:

$$PV = \sum_{t=0}^{n} \frac{R_0(1+\pi)^t}{(1+i)^t}$$

Where:

PV is the Present Value of the series of annual user fees to be prepaid (the net amount to be prepaid)

R_O is the published user fee of the vessel

i is the interest rate for 10-year Treasury notes at the time of prepayment calculation

is the rate of inflation (based on projected military personnel costs at the time of prepayment calculation)

n is the total number of years to be prepaid

t is the number of years after prepayment of the fee, for each annual increment (t=0, 1, 2, 3 ... n)

(d) When the annual vessel inspection fee has been prepaid, the entitlement to inspection services for the prepayment period attaches to the vessel and remains with the vessel if it is sold. The entitlement to inspection services may not be transferred to any other vessel.

(e) If a vessel is removed from Coast Guard certification and the vessel owner surrenders the vessel's Certificate of Inspection, the owner may request a refund of the remaining prepayment amount. The annual vessel inspection fee will not be refunded for the year in which the Certificate of Inspection is surrendered. The request for refund must be submitted to the Officer in Charge, Marine Inspection to whom the Certificate of Inspection is surrendered.

[CGD 91–030, 60 FR 13563, Mar. 13, 1995, as amended by CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§ 2.10–115 Changes in vessel service.

(a) If a vessel certificated for a single service changes service, the annual vessel inspection fee is not adjusted during the year in which a change in service occurs. The annual vessel inspection fee for the new vessel category is payable on the vessel's user fee anniversary date immediately following the date of the change in service.

(b) If a change in service occurs and the annual vessel inspection fee has been prepaid, Commandant (G–MRP) will recalculate the prepayment amount based on the new vessel category and advise the owner of available prepayment options.

[CGD 91–030, 60 FR 13563, Mar. 13, 1995, as amended by CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§ 2.10–120 Overseas inspection and examination fees.

(a) In addition to any other fee required by this subpart, an overseas inspection and examination fee of $4,585 must be paid for each vessel inspection and examination conducted outside the United States and its territories. This fee does not apply to vessel inspections and examinations conducted in Canada, Mexico, or the British Virgin Islands.

(b) The overseas inspection and examination fee for each vessel must accompany each request to the cognizant Officer in Charge, Marine Inspection for an overseas inspection or examination.

§ 2.10–125 Fees for examination of foreign tankships.

Each foreign tankship of a country party to the International Convention for the Safety of Life at Sea, 1974 as amended, must pay:

(a) For examination for the issuance of a Letter of Compliance under § 2.01–6(a)(2)(i) of this part, or examination for the annual endorsement to a Letter of Compliance, a fee of $1,100.

(b) For examination for the issuance of a Tank Vessel Examination Letter under § 2.01–6(a)(3) of this part, a fee of $1,100.

§ 2.10–130 Fees for examination of foreign mobile offshore drilling units.

Each foreign mobile offshore drilling unit must pay:

(a) For examination for the issuance of a Letter of Compliance indicating compliance with the design and equipment standards of either the documenting nation or the International Maritime Organization Code for Construction and Equipment of Mobile Offshore Drilling Units, a fee of $1,830.

(b) For examination for the issuance of a Letter of Compliance indicating compliance with the design and equipment standards of 46 CFR part 108, the inspection fee listed in Table 2.10–101 of this subpart for the same type of mobile offshore drilling unit.

§ 2.10–135 Penalties.

(a) A vessel owner or operator who fails to pay a fee or charge established under this subpart is liable to the United States Government for a civil penalty of not more than $5,000 for each violation.

(b) In addition to the fees established in this subpart, the Coast Guard may recover collection and enforcement costs associated with delinquent payments of, or failure to pay, a fee. Coast Guard inspection and examination services may also be withheld pending payment of outstanding fees owed to the Coast Guard for inspection and examination services provided.

(c) Each District Commander or Officer in Charge Marine Inspection may request the Secretary of the Treasury, or the authorized representative thereof, to withhold or revoke the clearance required by 46 U.S.C. app. 91 of a vessel for which a fee or charge established under this part has not been paid or until a bond is posted for the payment.

Subpart 2.20—Reports and Forms

§ 2.20–1 Forms.

(a) *Posting.* Statutes and regulations require that certain forms be posted on vessels referred to in the statutes and regulations. The titles of the forms indicate the contents of the forms. They may be obtained from any Officer in Charge, Marine Inspection. The Coast Guard forms and the statutes or regulations which require that they be posted are listed in this section.

(b) *CG–809.* This form *Station Bills, Drills, and Reports of Masters* is required by §§ 35.10–5, 78.17–50(f), and 97.15–35(d) of this chapter.

(c) *CG–811.* This placard *Lifesaving Signals and Breeches Buoy Instructions* is required by §§ 35.12–5, 78.53–5, 97.43–5, and 167.65–50 of this chapter.

(d) *CG–3256.* This form *Atomic Attack Instructions for Merchant Vessels in Port* is required by 33 CFR 122.10.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGFR 66–33, 31 FR 15266, Dec. 6, 1966]

§2.20–40 Chief engineer's reports.

(a) Repairs to boilers and pressure vessels. The chief engineer is required to report any repairs to boilers or unfired pressure vessels in accordance with §§33.25–5, 78.33–1, and 97.30–1 of this chapter.

(b) The chief engineer of any vessel is required to report any accident to a boiler, unfired pressure vessel, or machinery tending to render the further use of the item unsafe until repairs are made by §§35.25–5, 78.33–5, and 97.30–5 of this chapter.

(c) The chief engineer shall report the renewal of fusible plugs in boilers by letter to the Officer in Charge, Marine Inspection, who issued the certificate of inspection when such fusible plugs are renewed at other than the inspection for certification and there is no marine inspector in attendance at the renewal. This letter report shall contain the following information:

(1) Name and official number of vessel.

(2) Date of renewal of fusible plugs.

(3) Number and location of fusible plugs renewed in each boiler.

(4) Manufacturer and heat number of each plug.

(5) Reason for renewal.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGFR 68–82, 33 FR 18804, Dec. 18, 1968]

§2.20–50 Repairs or alterations in lifesaving or fire prevention equipment.

No repairs or alterations shall be made to any lifesaving or fire-detecting or fire-extinguishing equipment except in an emergency without advance notice to the Officer in Charge, Marine Inspection. See §§33.01–20, 34.01–5, 78.33–10, and 97.30–10 of this chapter.

Subpart 2.45—Waivers of Navigation and Vessel Inspection Laws

§2.45–1 Authority for and limitations on issuance.

Compliance with certain of the navigation and vessel inspection laws may be waived by the Commandant under authority of the act of December 27, 1950 (Pub. L. 50–891, secs. 1, 2, 64 Stat. 1120; 46 U.S.C., note preceding section 1), and the delegation of waiver authority contained in Department of the Treasury Order CGFR 51–1, dated January 23, 1951 (16 FR 731), in any case where such waiver is deemed necessary in the interest of national defense.

§2.45–5 Policy.

(a) It is the policy of the Coast Guard, in the current administration of the laws and regulations relating to navigation and vessel inspection, to further the interests of national defense by simplifying the procedure involved therein, eliminating all causes of delay in the sailing of vessels, and by bringing about a proper balance between the factors of safety at sea and the national defense. While it is not the policy of the Coast Guard to countenance willful violations of the laws and regulations or negligence in meeting the requirements thereof, neither is it contemplated that masters who exercise all reasonable efforts to comply with the requirements in effect be cited for violations on technical grounds.

§2.45–10 Waivers issued.

(a) The waivers having general applicability are published in part 154 of this chapter, as well as in 33 CFR part 19.

§2.45–15 Specific individual waivers.

(a) Applications for waivers affecting only one vessel in any one order under the provisions of §154.01 of this chapter are made on Form CG–2633, Application for Waiver Order. The application shall state the name of the vessel, her employment, the requirements of law or

regulations, waiver of which is requested, the reasons why waiver is necessary, and shall be signed by the master, owner, or agent of the vessel, or by the representative of any interested Government agency. The application shall be made to the Coast Guard District Commander or to his designated representative at the port or place where the vessel is located. In any foreign port or place the application shall be made to the designated representative of the Commandant at such port or place or if the Coast Guard has not established facilities in such port or place to the nearest designated representative of the Commandant at a port or place where such facilities have been established.

(b) If the request is granted, the waiver order will describe the vessel, the requirements of law or regulations waived, the conditions to which the waiver is subject, and the period of time for which the waiver is effective.

§ 2.45–20 General waivers.

(a) Applications for waivers having general applicability should be addressed to the Commandant (G–MOC), U.S. Coast Guard, Washington, DC 20593–0001.

(b) Only the Commandant is authorized to issue general waivers which affect more than one vessel in one order.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

Subpart 2.50—Assessment, Mitigation or Remission of Penalties [Note]—[Reserved]

NOTE: *Enforcement:* Civil, and criminal penalty procedures appear in 33 CFR part 1.

[CGD 74–68, 39 FR 19481, June 3, 1974]

Subpart 2.75—Approvals of Safety Equipment, Materials and Installations, and Qualifications for Construction Personnel

§ 2.75–1 Approvals.

(a) Certain navigation and vessel inspection laws, or regulations in this chapter or in 33 CFR chapter I, require the Commandant's approval before specific types of safety equipment, materials, or installations may be installed or used on vessels subject to Coast Guard inspection, or on other described vessels, motorboats, artificial islands, and fixed structures.

(b) The Commandant's approvals are issued to persons, partnerships, companies, or corporations who offer for sale specific items of safety equipment, materials, or installations, or intend them for their own or others' use. These approvals are intended to provide a control over the quality of such approved items. The Commandant's approvals apply only to those items constructed or installed in accordance with applicable requirements, and the details as described in the documents granting specific approval. If a specific item when manufactured does not comply with these details, then it is not considered to be approved and the approval issued does not apply to such modified item. For example, if an item is manufactured with changes in design or material not previously approved, the approval does not apply to such modified item. The failure to comply with applicable requirements and details specified in the approval subjects the holder to immediate suspension of approval as described in § 2.75–40, and if necessary, to a public hearing seeking withdrawal of approval and removal of all such items from use or installation as provided in § 2.75–50.

(c) The Commandant's approvals are issued to qualified holders in the form of certificates of approval (Form CGHQ–10030), by appropriate description and identification in documents filed with the Office of the Federal Register and published in the FEDERAL REGISTER, or by letters, or by appropriate markings on drawings, plans, etc. Under the direction of the Commandant, the Chief, Marine Safety and Environmental Protection is delegated the authority to exercise the necessary actions relating to the granting, suspension, cancellation or revocation of approvals for special items of safety equipment, materials or installations required by law in regulation in this chapter or in 33 CFR chapter I to have the Commandant's approval. The authority delegated to the Chief, Office of

Marine Safety, Security and Environmental Protection, may be further delegated by him.

(d) The approvals granted to holders qualifying under the regulations in this chapter or in specifications, copies of which may be obtained from the Commandant (G–MSE), and to which official Coast Guard numbers are assigned, will be in the form of certificates of approval. Unless specifically provided otherwise, the approval shall be valid for a period of five years from the date on the certificate of approval, but subject to suspension and/or cancellation if it is found the item offered, sold, or used as Coast Guard approved differs in any detail from the item as described in the certificate of approval and referenced material.

(e) A specific Commandant's approval granted to anyone, which is described in a certificate of approval, or a letter, or marked plans, etc., cannot be transferred to another without a specific prior authorization from the Commandant. Such a transfer without the Commandant's authorization normally terminates such approval.

(f) A listing of current and formerly approved equipment and materials is published by the Coast Guard from time to time in ''Equipment Lists'' (COMDTINST M16714.3 series), which is available for sale from the Superintendent of Documents, Government Printing Office.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 82–063b, 48 FR 4781, Feb. 3, 1983; CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 93–055, 61 FR 13927, March 28, 1996; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.75–5 Certificates of approval.

(a) The Chief, Marine Safety and Environmental Protection, or his delelegate, will issue a certificate of approval to the manufacturer or party named therein and certify that such manufacturer or party has submitted satisfactory evidence that the item described therein complies with the applicable laws and regulations, which are outlined on the reverse side of the certificate.

(b) The approval shall be in effect for a period of 5 years from the date on the certificate of approval unless sooner canceled or suspended by proper authority, or otherwise specifically stated in the certificate.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 82–063b, 48 FR 4781, Feb. 3, 1983; CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.75–10 Procedures for obtaining approvals.

(a) The requirements for obtaining approvals of items covered by specifications and bearing official Coast Guard approval numbers are set forth in parts 159 through 164 of this chapter. For other items, the requirements are described in the regulations governing such items.

(b) Unless otherwise specified, correspondence concerning approvals should be addressed to the Commandant (G–MSE), U.S. Coast Guard, Washington, DC 20593–0001. When plans, drawings, test data, etc., are required to be submitted by the manufacturer, the material being transmitted with the application should be clearly identified.

[CGD 76–048, 44 FR 73043, Dec. 17, 1979, as amended by CGD 82–063b, 48 FR 4781, Feb. 3, 1983; CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.75–15 Requirements and tests.

(a) Approved items described in certificates of approval are usually required to meet specific requirements and/or tests, prior to obtaining the approval. Additional factory tests to determine that proper uniformity and quality controls are followed during the manufacture of the specific items may be required. These requirements governing the manufacturer in particular are set forth in the regulations in this chapter or in specifications, copies of which may be obtained from the Commandant (G–MSE). If the requirements are met, a certificate of approval will be issued.

(b) When the specific item described in an application, together with accompanying drawings, plans, etc., does not meet applicable requirements or fails to meet specified tests, the applicant will be notified accordingly. The Coast Guard may suggest changes in order

for the item to qualify and permit the issuance of an approval.

(c) For items not covered by specification requirements in parts 160 to 164, inclusive (subchapter Q—Specifications) of this chapter, the requirements in the navigation and vessel inspection laws, and applicable regulations in this chapter or in 33 CFR chapter I apply and shall be met before approvals may be issued.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 82–063b, 48 FR 4781, Feb. 3, 1983; CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§ 2.75–25 Portable fire extinguishers.

(a) The portable fire extinguishers listed and labeled as *marine type* by a recognized laboratory, as provided in subpart 162.028 of part 162 of subchapter Q (Specifications) of this chapter, will be accepted as approved for use on merchant vessels, motorboats, etc., whenever required by the regulations in this chapter, and for use on artificial islands and fixed structures on the Outer Continental Shelf whenever required by the regulations in 33 CFR parts 140 to 146, inclusive.

(b) The procedures for manufacturers to follow and the requirements governing portable fire extinguishers to qualify being listed and labeled as *marine type* by a recognized laboratory are set forth in subpart 162.028 of part 162 of subchapter Q (Specifications) of this chapter.

(c) The procedures for a laboratory to qualify as a *recognized laboratory* and to be listed in § 162.028–5 of subchapter Q (Specifications) of this chapter are as follows:

(1) The laboratory shall submit an informal application in writing on its usual letterhead paper to the Commandant (G–M), United States Coast Guard, Washington, DC 20593, requesting recognition and listing, as a recognized laboratory.

(2) Accompanying the informal application, as identified enclosures, shall be:

(i) A certification that it is a laboratory which has been and is regularly engaged in the examination, testing, and evaluation of portable fire extinguishers.

(ii) A certification that it has an established factory inspection, listing, and labeling program, together with a complete description of it and how it works.

(iii) A description of its facilities used in the examination, testing, and evaluation of portable fire extinguishers, together with its name (if different from that of submitter), and location (city, street, and state).

(iv) A list of the names and home and office addresses of its principal officers and its managing directors (if any).

(v) A description of its special standards for listing and labeling portable fire extinguishers as *marine type*, as contemplated by the specification in subpart 162.028 of part 162 of subchapter Q (Specifications) of this chapter.

(3) If the Commandant finds that a laboratory qualifies as a *recognized laboratory*, and it is subject to Coast Guard jurisdiction, the approval and listing will be published in the FEDERAL REGISTER and will be in effect until suspended, canceled or terminated by proper authority. The failure of a recognized laboratory to maintain its established factory inspection, listing and labeling program as approved by the Commandant shall be cause for terminating a listing as a *recognized laboratory*.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 82–063b, 48 FR 4781, Feb. 3, 1983]

§ 2.75–40 Suspension of approval.

(a) Whenever it is determined that a specific item is not in compliance with the applicable laws, rules, and regulations, and the requirements specified in the approval issued by the Coast Guard, the District Commander or the Officer in Charge, Marine Inspection, will immediately notify the holder of the approval wherein the specific item fails to meet applicable requirements. If the defects, deficiencies or variations in the item are deemed important, such officer is authorized and may immediately suspend the approval, may require the holder to surrender the certificate of approval (if any), and may direct the holder to cease claiming the defective items are Coast Guard approved, pending a final decision from the Commandant in the matter.

(b) The procedures for appealing the temporary suspension shall be those described in §2.01–70.

§2.75–50 Withdrawals or terminations of approvals and appeals.

(a) The Commandant may withdraw approval for any item which is found not to be in compliance with the conditions of approval, found to be unsuitable for its intended purpose, or does not meet the requirements of applicable regulations.

(b) Approvals of equipment are terminated when the manufacturer is no longer in business, or when the item is no longer being manufactured, or when the approval expires.

(c) Any person directly affected by a decision to deny, withdraw, or terminate an approval may appeal the decision to Chief, Marine Safety and Environmental Protection (Commandant (G–M)) as provided in §1.03–15 of this chapter.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 93–055, 61 FR 13927, Mar. 28, 1996; CGD 96–041, 61 FR 50725, Sept. 27, 1996]

§2.75–60 Hazardous ships' stores.

Hazardous ships' stores, as defined in §147.3 of this chapter, must not be brought on board or used on any vessel unless they meet the requirements of part 147 of this chapter.

[CGD 84–044, 53 FR 7748, Mar. 10, 1988]

§2.75–70 Welding procedure and performance qualifications.

(a) Welding procedures and welder performance utilized in the fabrication of vessels and their various systems and components subject to Coast Guard inspection shall be qualified as required by the applicable subchapter. For applicable requirements see §§32.60–1(a) of subchapter D (Tank Vessels), §72.01–15 of subchapter H (Passenger Vessels), §92.01–10 of subchapter I (Cargo and Miscellaneous Vessels), or §190.01–10 of subchapter U (Oceanographic Vessels) of this chapter. See part 57 of subchapter F (Marine Engineering) for requirements for the welding of pressure piping, boilers, pressure vessels, and nonpressure vessel type tanks, and associated secondary barriers as defined in §38.05–4 of subchapter D (Tank Vessels) of this chapter.

[CGFR 68–82, 33 FR 18804, Dec. 18, 1968]

Subpart 2.85—Load Lines

§2.85–1 Assignment of load lines.

(a) The load line marks when placed on a vessel indicate the maximum draft to which such vessel can be lawfully submerged, in the various circumstances and seasons applicable to such vessel. See subchapter E (Load Lines) of this chapter for applicable details governing assignment and marking of load lines.

(b) Merchant vessels of 150 gross tons or over and engaged in international, coastwise, or Great Lakes voyages are required to have load line marks by section 86, 88, or 88a of title 46, United States Code. The International Convention on Load Lines, 1966, applies to ships engaged in international voyages which are ships registered in countries the Governments of which are Contracting Governments; ships registered in territories to which the 1966 Convention is made applicable; and unregistered ships flying the flag of a State, the Government of which is a Contracting Government. The exceptions are (1) ships of war; (2) new ships of less than 79 feet in length; (3) existing ships of less than 150 gross tons; (4) pleasure yachts not engaged in trade; and (5) fishing vessels.

(c) The procedures for obtaining the assignment of load line marks, the issuance of load line certificates, the surveys required, the causes for cancellation of certificates, the enforcement and control exercised in administration, including the rights of appeal, and the model forms of load line certificates are set forth in parts 42 to 46, inclusive, in subchapter E (Load Lines) of this chapter.

[CGFR 68–60, 33 FR 10047, July 12, 1968, as amended by CGFR 68–126, 34 FR 9010, June 5, 1969; CGD 80–120, 47 FR 5723, Feb. 8, 1982]

Subpart 2.90—Plans, Drawings or Blueprints

§2.90–1 General requirements.

(a) Drawings, blueprints or plans showing the details of construction of

vessels subject to inspection or installations thereon are required to be submitted for approval in accordance with applicable regulations in this chapter, information as to which may be obtained at any local Marine Inspection Office.

(b) The requirements for passenger vessel construction are in parts 43–46, 70–78, of this chapter.

(c) The requirements for tank vessel construction are in parts 30–39, 43–45, of this chapter.

(d) The requirements for cargo and miscellaneous vessel construction are in parts 43–45, 90–97, of this chapter.

(e) The requirements for marine engineering installations or equipment are in parts 50–69 of this chapter.

(f) The requirements for electrical engineering installations or equipment are in parts 110–113 of this chapter.

(g) The requirements for items to be manufactured under specific approval by the Commandant are in parts 160–164 of this chapter.

(h) The requirements for vessels carrying certain bulk dangerous cargoes are in parts 148, 151, 153, and 154 of this chapter.

(i) The requirements for subdivision and stability plans and calculations are in part 170 of this chapter.

[CGFR 65–50, 30 FR 16604, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49203, Sept. 26, 1977; CGD 79–023, 48 FR 51006, Nov. 4, 1983]

Subpart 2.95—Retention of Records by the Public

§ 2.95–1 Certificates or documents issued by Coast Guard.

(a) Certificates or documents issued to the public, as required by laws, rules, or regulations, shall be retained for the applicable period of time, as follows:

(1) If the certificate or document specifies a definite period of time for which it is valid, it shall be retained for so long as it is valid unless it is required to be surrendered; or,

(2) If the certificate or document does not specify a definite period of time for which it is valid, it shall be retained for that period of time such certificate or document is required for operation of the vessel; or,

(3) If the certificate or document is evidence of a person's qualifications, it shall be retained for so long as it is valid unless it is required to be surrendered.

(b) Nothing in this section shall be construed as preventing the Coast Guard from canceling, suspending, or withdrawing any certificate or document issued at any time.

§ 2.95–5 Certificates or documents issued by others.

(a) Certificates or documents issued by other public agencies or private organizations, which are accepted as prima facie evidence of compliance with requirements administered by the Coast Guard, shall be retained for the applicable period of time as follows:

(1) If the certificate or document specifies a definite period of time for which it is valid, it shall be retained for so long as it is valid unless it is required to be surrendered; or

(2) If the certificate or document does not specify a definite period of time for which it is valid, it shall be retained for the period of time such certificate or document is required for operation of the vessel; or,

(3) If the certificate or documents is evidence of a person's qualifications, it shall be retained for so long as it is valid unless it is required to be surrendered.

§ 2.95–10 Equipment or material required to be approved.

(a) The manufacturer of any equipment or material, which must also be approved by or found satisfactory for use by the Commandant, shall keep the required drawings, plans, blueprints, specifications, production models (if any), qualification tests, and related correspondence containing evidence that the Coast Guard has found such equipment or material satisfactory, during the period of time the approval or listing is valid. Most of the specifications containing detailed descriptions of records required to be retained by the public are in parts 160 to 164, inclusive in subchapter Q (Specifications) of this chapter.

PART 3—DESIGNATION OF OCEANOGRAPHIC RESEARCH VESSELS

Subpart 3.01—Authority and Purpose

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Subpart 3.05—Definition of Terms Used in This Part

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Subpart 3.10—Designation

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3.10–5 Renewal of letter of designation.
3.10–10 Right of appeal.

AUTHORITY: 46 U.S.C. 2113, 3306; 49 CFR 1.46.

SOURCE: CGD 77–081, 46 FR 56202, Nov. 16, 1981, unless otherwise noted.

Subpart 3.01—Authority and Purpose

§3.01–1 Purpose of regulations.

The purpose of the regulations in this part is to establish standard procedures for the designation of certain vessels as oceanographic research vessels as defined in 46 U.S.C. 441.

§3.01–3 Authority for regulations.

The regulations regarding the designation of oceanographic research vessels interpret or apply title 46, United States Code, sections 441 through 445.

Subpart 3.03—Application

§3.03–1 Vessels subject to the requirements of this part.

The regulations in this subchapter are applicable to U.S. flag vessels desiring designation as oceanographic research vessels in accordance with 46 U.S.C. 441.

Subpart 3.05—Definition of Terms Used in This Part

§3.05–1 Letter of designation.

A letter issued by an Officer in Charge, Marine Inspection, designating an uninspected vessel as an oceanographic research vessel.

§3.05–3 Oceanographic research vessel.

''An oceanographic research vessel is a vessel which the U.S. Coast Guard finds is employed exclusively in one or more of the following:

(a) Oceanographic instruction;

(b) Limnologic instruction;

(c) Oceanographic research; or,

(d) Limnologic research.''

Subpart 3.10—Designation

§3.10–1 Procedures for designating oceanographic research vessels.

(a) Upon written request by the owner, master, or agent of a vessel, a determination will be made by the Officer in Charge, Marine Inspection, of the zone in which the vessel is located, whether the vessel may be designated as an oceanographic research vessel under the provisions of 46 U.S.C. 441.

(b) The request should contain sufficient information to allow the Officer in Charge, Marine Inspection, to make this determination. At a minimum, the following items must be submitted:

(1) A detailed description of the vessel, including its identification number, owner and charterer.

(2) A specific operating plan stating precisely the intended use of the vessel.

(3) Any additional information as may be requested by the Officer in Charge, Marine Inspection.

(c) If designation is granted, it shall be indicated as follows:

(1) For inspected vessels—indicated on the certificate of inspection, valid for its duration.

(2) For uninspected vessels—indicated by a letter of designation, which shall be maintained on board the vessel and remain in effect for two years from date of issuance.

(d) All designations shall remain valid for the period specified on the applicable document, provided all operating conditions remain unchanged from the date of designation.

(e) In the event of a change in operating conditions, the owner, master, or agent of the vessel shall advise the Officer in Charge, Marine Inspection who issued the designation. After reviewing the pertinent information concerning the operational changes, the Officer in Charge, Marine Inspection, shall determine if the vessel is still eligible to retain its designation as an oceanographic research vessel.

§ 3.10–5 Renewal of letter of designation.

At least 60 days prior to the expiration date of the letter of designation or certificate of inspection, a request for renewal must be submitted in the same manner as described in 3.10–1. However, if the request for renewal is submitted to the Officer in Charge, Marine Inspection, who made the initial determination and all operating conditions remain unchanged, the information required by § 3.10–1(b) need not be resubmitted with the request.

§ 3.10–10 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50379, Dec. 6, 1989]

PART 4—MARINE CASUALTIES AND INVESTIGATIONS

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4.23–1 Evidence of criminal liability.

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4.40–25 Coast Guard marine casualty investigation for the Board.
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AUTHORITY: 33 U.S.C. 1231; 43 U.S.C. 1333; 46 U.S.C. 2103, 2306, 6101, 6301, 6305; 50 U.S.C. 198; 49 CFR 1.46. Authority for subpart 4.40: 49 U.S.C. 1903(a)(1)(E); 49 CFR 1.46.

SOURCE: CGD 74–119, 39 FR 33317, Sept. 17, 1974, unless otherwise noted.

Subpart 4.01—Authority and Scope of Regulations

§4.01–1 Scope of regulation.

The regulations in this part govern the reporting of marine casualties, the investigation of marine casualties and the submittal of reports designed to increase the likelihood of timely assistance to vessels in distress.

[CGD 85–015, 51 FR 19341, May 29, 1986]

§4.01–3 Reporting exclusion.

(a) Vessels subject to 33 CFR 173.51 are excluded from the requirements of subpart 4.05.

(b) Vessels which report diving accidents under 46 CFR 197.484 regarding deaths, or injuries which cause incapacitation for greater than 72 hours, are not required to give notice under §4.05–1(d) or §4.05–1(e).

(c) Vessels are excluded from the requirements of §4.05.1(d) and (e) with respect to the death or injury of shipyard or harbor workers when such accidents are not the result of either a vessel casualty (e.g., collision) or a vessel equipment casualty (e.g., cargo boom failure) and are subject to the reporting requirements of Occupational Safety and Health Administration (OSHA) under 29 CFR 1904.

[CGD 76–170, 45 FR 77441, Nov. 24, 1980; 46 FR 19235, Mar. 30, 1981, as amended by CGD 76–170, 47 FR 39684, Sept. 9, 1982]

Subpart 4.03—Definitions

§4.03–1 Marine casualty or accident.

(a) The term *marine casualty or accident* shall mean any casualty or accident involving any vessel other than public vessels if such casualty or accident occurs upon the navigable waters of the United States, its territories or possessions or any casualty or accident

wherever such casualty or accident may occur involving any United States' vessel which is not a public vessel. (See § 4.03–40 for definition of *Public Vessel.*)

(b) The term *marine casualty or accident* includes any accidental grounding, or any occurrence involving a vessel which results in damage by or to the vessel, its apparel, gear, or cargo, or injury or loss of life of any person; and includes among other things, collisions, strandings, groundings, founderings, heavy weather damage, fires, explosions, failure of gear and equipment and any other damage which might affect or impair the seaworthiness of the vessel.

(c) The term *marine casualty or accident* also includes occurrences of loss of life or injury to any person while diving from a vessel and using underwater breathing apparatus.

[CGD 74–119, 39 FR 33317, Sept. 17, 1974, as amended by CGD 76–170, 45 FR 77441, Nov. 24, 1980]

§ 4.03–2 Serious marine incident.

The term *serious marine incident* includes the following events involving a vessel in commercial service:

(a) Any marine casualty or accident as defined in § 4.03–1 which is required by § 4.05–1 to be reported to the Coast Guard and which results in any of the following:

(1) One or more deaths;

(2) An injury to a crewmember, passenger, or other person which requires professional medical treatment beyond first aid, and, in the case of a person employed on board a vessel in commercial service, which renders the individual unfit to perform routine vessel duties;

(3) Damage to property, as defined in § 4.05–1(f) of this part, in excess of $100,000;

(4) Actual or constructive total loss of any vessel subject to inspection under 46 U.S.C. 3301; or

(5) Actual or constructive total loss of any self-propelled vessel, not subject to inspection under 46 U.S.C. 3301, of 100 gross tons or more.

(b) A discharge of oil of 10,000 gallons or more into the navigable waters of the United States, as defined in 33 U.S.C. 1321, whether or not resulting from a marine casualty.

(c) A discharge of a reportable quantity of a hazardous substance into the navigable waters of the United States, or a release of a reportable quantity of a hazardous substance into the environment of the United States, whether or not resulting from a marine casualty.

[CGD 86–067, 53 FR 47077, Nov. 21, 1988]

§ 4.03–4 Individual directly involved in a serious marine incident.

The term *individual directly involved in a serious marine incident* is an individual whose order, action or failure to act is determined to be, or cannot be ruled out as, a causative factor in the events leading to or causing a serious marine incident.

[CGD 86–067, 53 FR 47077, Nov. 21, 1988]

§ 4.03–5 Medical facility.

The term *medical facility* means an American hospital, clinic, physician's office, or laboratory, where blood and urine specimens can be collected according to recognized professional standards.

[CGD 86–067, 53 FR 47077, Nov. 21, 1988]

§ 4.03–6 Qualified medical personnel.

The term *qualified medical personnel* means a physician, physician's assistant, nurse, emergency medical technician, or other person authorized under State or Federal law or regulation to collect blood and urine specimens.

[CGD 86–067, 53 FR 47077, Nov. 21, 1988]

§ 4.03–7 Chemical test.

The term *chemical test* means a scientifically recognized test which analyzes an individual's breath, blood, urine, saliva, bodily fluids, or tissues for evidence of dangerous drug or alcohol use.

[CGD 86–067, 53 FR 47077, Nov. 21, 1988]

§ 4.03–10 Party in interest.

The term *party in interest* shall mean any person whom the Marine Board of Investigation or the investigating officer shall find to have a direct interest in the investigation conducted by it and shall include an owner, a

charterer, or the agent of such owner or charterer of the vessel or vessels involved in the marine casualty or accident, and all licensed or certificated personnel whose conduct, whether or not involved in a marine casualty or accident is under investigation by the Board or investigating officer.

§4.03–15 Commandant.

The Commandant, U.S. Coast Guard, is that officer who acts as chief of the Coast Guard and is charged with the administration of the Coast Guard.

§4.03–20 Coast Guard district.

A Coast Guard district is one of the geographical areas whose boundaries are described in 33 CFR part 3.

§4.03–25 District Commander.

The District Commander is the chief of a Coast Guard district and is charged with the administration of all Coast Guard responsibilities and activities within his respective district, except those functions of administrative law judges under the Administrative Procedure Act (60 Stat. 237, 5 U.S.C. 1001 *et seq.*) and activities of independent units of the Coast Guard, such as the Coast Guard Yard and the Coast Guard Academy.

§4.03–30 Investigating officer.

An investigating officer is an officer or employee of the Coast Guard designated by the Commandant, District Commander or the Officer in Charge, Marine Inspection, for the purpose of making investigations of marine casualties and accidents or other matters pertaining to the conduct of seamen. An Officer in Charge, Marine Inspection, is an investigating officer without further designation.

§4.03–35 Nuclear vessel.

The term *nuclear vessel* means any vessel in which power for propulsion, or for any other purpose, is derived from nuclear energy; or any vessel handling or processing substantial amounts of radioactive material other than as cargo.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

§4.03–40 Public vessels.

Except as provided in subpart 4.40 vessels within the statutory exemptions of Title LII of the Revised Statutes of the United States (R.S. 4399–4500) (as amended) relating to the inspection of vessels, are public vessels, and therefore not subject to the regulations in this part. To be deemed public vessels such vessels must:

(a) Be used for a public purpose, not in trade or commercial service; and,

(b) Be owned outright by the United States; it is not sufficient that the United States holds the vessel under a bareboat charter.

[CGD 74–119, 39 FR 33317, Sept. 17, 1974, as amended by CGD 76–149, 42 FR 61200, Dec. 1, 1977]

§4.03–45 Marine employer.

Marine employer means the owner, managing operator, charterer, agent, master, or person in charge of a vessel other than a recreational vessel.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

§4.03–50 Recreational vessel.

Recreational vessel means a vessel meeting the definition in 46 U.S.C. 2101(25) that is then being used only for pleasure.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

§4.03–55 Law enforcement officer.

Law enforcement officer means a Coast Guard commissioned, warrant or petty officer; or any other law enforcement officer authorized to obtain a chemical test under Federal, State, or local law.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

Subpart 4.04—Notice of Potential Vessel Casualty

SOURCE: CGD 85–015, 51 FR 19341, May 29, 1986, unless otherwise noted.

§4.04–1 Reports of potential vessel casualty.

A vessel owner, charterer, managing operator or agent shall immediately notify either of the following Coast Guard officers if there is reason to believe a vessel is lost or imperiled.

(a) The Coast Guard district rescue coordination center (RCC) cognizant

over the area the vessel was last operating in; or

(b) The Coast Guard search and rescue authority nearest to where the vessel was last operating.

Reasons for belief that a vessel is in distress include, but are not limited to, lack of communication with or nonappearance of the vessel.

§ 4.04–3 Reports of lack of vessel communication.

The owner, charterer, managing operator or agent of a vessel that is required to report to the United States flag Merchant Vessel Location Filing System under the authority of section 212(A) of the Merchant Marine Act, 1936 (46 App. U.S.C. 1122a), shall immediately notify the Coast Guard if more than 48 hours have passed since receiving communication from the vessel. This notification shall be given to the Coast Guard district RCC cognizant over the area the vessel was last operating in.

(Information collection requirements approved by the Office of Management and Budget under control number 2115–0551)

§ 4.04–5 Substance of reports.

The owner, charterer, managing operator or agent, notifying the Coast Guard under § 4.04–1 or § 4.04–3, shall:

(a) Provided the name and identification number of the vessel, the names of the individuals on board, and other information that may be requested by the Coast Guard (when providing the names of the individuals on board for a passenger vessel, the list of passengers need only meet the requirements of 46 U.S.C. 3502); and

(b) Submit written confirmation of that notice to the Coast Guard facility that the notice was given to within 24 hours.

(Information collection requirements approved by the Office of Management and Budget under control number 2115–0551)

Subpart 4.05—Notice of Marine Casualty and Voyage Records

§ 4.05–1 Notice of marine casualty.

(a) Immediately after the addressing of resultant safety concerns, the owner, agent, master, operator, or person in charge, shall notify the nearest Marine Safety Office, Marine Inspection Office or Coast Guard Group Office whenever a vessel is involved in a marine casualty consisting in—

(1) An unintended grounding, or an unintended strike of (allison with) a bridge;

(2) An intended grounding, or an intended strike of a bridge, that creates a hazard to navigation, the environment, or the safety of a vessel, or that meets any criterion of paragraphs (a)(3) through (7);

(3) A loss of main propulsion, primary steering, or any associated component or control system that reduces the maneuverability of the vessel;

(4) An occurrence materially and adversely affecting the vessel's seaworthiness or fitness for service or route, including but not limited to fire, flooding, or failure of or damage to fixed fire-extinguishing systems, lifesaving equipment, auxiliary power-generating equipment, or bilge-pumping systems;

(5) A loss of life;

(6) An injury that requires professional medical treatment (treatment beyond first aid) and, if the person is engaged or employed on board a vessel in commercial service, that renders the individual unfit to perform his or her routine duties; or

(7) An occurrence causing property-damage in excess of $25,000, this damage including the cost of labor and material to restore the property to its condition before the occurrence, but not including the cost of salvage, cleaning, gas-freeing, drydocking, or demurrage.

(b) Notice given as required by 33 CFR 160.215 satisfies the requirement of this section if the marine casualty involves a hazardous condition as defined by 33 CFR 160.203.

[CGD 94–030, 59 FR 39471, Aug. 3, 1994]

§ 4.05–5 Substance of marine casualty notice.

The notice required in § 4.05–1 must include the name and official number of the vessel involved, the name of the vessel's owner or agent, the nature and circumstances of the casualty, the locality in which it occurred, the nature

and extent of injury to persons, and the damage to property.

[CGD 76–170, 45 FR 77441, Nov. 24, 1980]

§4.05–10 Written report of marine casualty.

(a) The owner, agent, master, operator, or person in charge shall, within five days, file a written report of any marine casualty. This written report is in addition to the immediate notice required by §4.05–1. This written report must be delivered to a Coast Guard Marine Safety Office or Marine Inspection Office. It must be provided on Form CG–2692 (Report of Marine Accident, Injury or Death), supplemented as necessary by appended Forms CG–2692A (Barge Addendum) and CG–2692B (Report of Required Chemical Drug and Alcohol Testing Following a Serious Marine Incident).

(b) If filed without delay after the occurrence of the marine casualty, the notice required by paragraph (a) of this section suffices as the notice required by §4.05–1(a).

[CGD 94–030, 59 FR 39471, Aug. 3, 1994]

§4.05–12 Alcohol or drug use by individuals directly involved in casualties.

(a) For each marine casualty required to be reported by §4.05–10, the marine employer shall determine whether there is any evidence of alcohol or drug use by individuals directly involved in the casualty.

(b) The marine employer shall include in the written report, Form CG–2692, submitted for the casualty information which:

(1) Identifies those individuals for whom evidence of drug or alcohol use, or evidence of intoxication, has been obtained; and,

(2) Specifies the method used to obtain such evidence, such as personal observation of the individual, or by chemical testing of the individual.

(c) An entry shall be made in the official log book, if carried, pertaining to those individuals for whom evidence of intoxication is obtained. The individual must be informed of this entry and the entry must be witnessed by a second person.

(d) If an individual directly involved in a casualty refuses to submit to, or cooperate in, the administration of a timely chemical test, when directed by a law enforcement officer or by the marine employer, this fact shall be noted in the official log book, if carried, and in the written report (Form CG–2692), and shall be admissible as evidence in any administrative proceeding.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

§4.05–15 Voyage records, retention of.

(a) The owner, agent, master, or person in charge of any vessel involved in a marine casualty shall retain such voyage records as are maintained by the vessel, such as both rough and smooth deck and engine room logs, bell books, navigation charts, navigation work books, compass deviation cards, gyro records, stowage plans, records of draft, aids to mariners, night order books, radiograms sent and received, radio logs, crew and passenger lists, articles of shipment, official logs and other material which might be of assistance in investigating and determining the cause of the casualty. The owner, agent, master, other officer or person responsible for the custody thereof, shall make these records available upon request, to a duly authorized investigating officer, administrative law judge, officer or employee of the Coast Guard.

(b) The investigating officer may substitute photostatic copies of the voyage records referred to in paragraph (a) of this section when they have served their purpose and return the original records to the owner or owners thereof.

§4.05–20 Report of accident to aid to navigation.

Whenever a vessel collides with a buoy, or other aid to navigation under the jurisdiction of the Coast Guard, or is connected with any such collision, it shall be the duty of the person in charge of such vessel to report the accident to the nearest Officer in Charge, Marine Inspection. No report on Form

CG–2692 is required unless one or more of the results listed in § 4.05–1 occur.

[CGD 74–119, 39 FR 33317, Sept. 17, 1974, as amended by CGD 88–070, 53 FR 34533, Sept. 7, 1988]

§ 4.05–25 Reports when state of war exists.

During the period when a state of war exists between the United States and any foreign nation, communications in regard to casualties or accidents shall be handled with caution and the reports shall not be made by radio or by telegram.

§ 4.05–30 Incidents involving hazardous materials.

When a casualty occurs involving hazardous materials, notification and a written report to the Department of Transportation may be required. See 49 CFR 171.15 and 171.16.

[CGD 76–170, 45 FR 77441, Nov. 24, 1980]

§ 4.05–35 Incidents involving nuclear vessels.

The master of any nuclear vessel shall immediately inform the Commandant in the event of any accident or casualty to the nuclear vessel which may lead to an environmental hazard. The master shall also immediately inform the competent governmental authority of the country in whose waters the vessel may be or whose waters the vessel approaches in a damaged condition.

[CGD 84–099, 52 FR 47534, Dec. 14, 1987]

Subpart 4.06—Mandatory Chemical Testing Following Serious Marine Incidents Involving Vessels in Commercial Service

SOURCE: CGD 86–067, 53 FR 47078, Nov. 21, 1988, unless otherwise noted.

§ 4.06–1 Responsibilities of the marine employer.

(a) At the time of occurrence of a marine casualty, a discharge of oil into the navigable waters of the United States, a discharge of a hazardous substance into the navigable waters of the United States, or a release of a hazardous substance into the environment of the United States, the marine employer shall make a timely, good faith determination as to whether the occurrence currently is, or is likely to become, a serious marine incident.

(b) When a marine employer determines that a casualty or incident is, or is likely to become, a serious marine incident, the marine employer shall take all practicable steps to have each individual engaged or employed on board the vessel who is directly involved in the incident chemically tested for evidence of drug and alcohol use.

(c) The determination of which individuals are directly involved in a serious marine incident is to be made by the marine employer. A law enforcement officer may determine that additional individuals are directly involved in the serious marine incident. In such cases, the marine employer shall take all practicable steps to have these individuals tested in accordance with paragraph (b) of this section.

(d) The requirements of this subpart shall not prevent vessel personnel who are required to be tested from performing duties in the aftermath of a serious marine incident when their performance is necessary for the preservation of life or property or the protection of the environment.

(e) The marine employer shall ensure that all individuals engaged or employed on board a vessel are fully indoctrinated in the requirements of this subpart, and that appropriate vessel personnel are trained as necessary in the practical applications of these requirements.

(f) Each marine employer shall implement the testing requirements of this subpart in accordance with the implementation schedule provided in 46 CFR 16.205 and 16.207.

§ 4.06–5 Responsibilities of individuals directly involved in serious marine incidents.

(a) Any individual engaged or employed on board a vessel who is determined to be directly involved in a serious marine incident shall provide blood, breath or urine specimens for chemical tests required by § 4.06–10 when directed to do so by the marine employer or a law enforcement officer.

(b) If the individual refuses to provide blood, breath or urine specimens, this refusal shall be noted on Form CG–2692B and in the vessel's official log book, if one is required.

(c) No individual may be forcibly compelled to provide specimens for chemical tests required by this part; however, refusal is considered a violation of regulation and could subject the individual to suspension and revocation proceedings under part 5 of this chapter and removal from any duties which directly affect the safety of the vessel's navigation or operations.

§4.06–10 Required specimens.

Each individual required to submit to chemical testing shall, as soon as practicable, provide the following specimens for chemical testing:

(a) Urine specimens, collected in accordance with §4.06–20 and part 16 of this chapter.

(b) Blood or breath specimens, or both, collected in accordance with §4.06–20.

§4.06–20 Specimen collection requirements.

(a) All inspected vessels certificated for unrestricted ocean routes, and all inspected vessels certificated for restricted overseas routes, are required to have on board at all times a breath testing device capable of determining the presence of alcohol in a person's system. The breath testing device shall be used in accordance with procedures specified by the manufacturer.

(b) The marine employer shall ensure that urine specimen collection and shipping kits meeting the requirements of §16.330 of this part are readily available for use following serious marine incidents. The specimen collection and shipping kits need not be maintained aboard each vessel if they can otherwise be readily obtained within 24 hours from the time of the occurrence of the serious marine incident.

(c) The marine employer shall ensure that specimens required by §4.06–10 are collected as soon as practicable following the occurrence of a serious marine incident.

(d) When obtaining blood, breath, and urine specimens, the marine employer shall ensure that the collection process is supervised by either qualified collection personnel, the marine employer, a law enforcement officer, or the marine employer's representative.

(e) Chemical tests of an individual's breath for the presence of alcohol using a breath testing device may be conducted by any individual trained to conduct such tests. Blood specimens shall be taken only by qualified medical personnel.

§4.06–30 Specimen collection in incidents involving fatalities.

(a) When an individual engaged or employed on board a vessel dies as a result of a serious marine incident, blood and urine specimens must be obtained from the remains of the individual for chemical testing, if practicable to do so. The marine employer shall notify the appropriate local authority, such as the coroner or medical examiner, as soon as possible, of the fatality and of the requirements of this subpart. The marine employer shall provide the specimen collection and shipping kit and request that the local authority assist in obtaining the necessary specimens. When the custodian of the remains is a person other than the local authority, the marine employer shall request the custodian to cooperate in obtaining the specimens required under this part.

(b) If the local authority or custodian of the remains declines to cooperate in obtaining the necessary specimens, the marine employer shall provide an explanation of the circumstances on Form CG–2692B (Report of Required Chemical Drug and Alcohol Testing Following a Serious Marine Incident).

§4.06–40 Specimen handling and shipping.

(a) The marine employer shall ensure that blood specimens collected in accordance with §§4.06–20 and 4.06–30 are promptly shipped to a testing laboratory qualified to conduct tests on such specimens. A proper chain of custody must be maintained for each specimen from the time of collection through the authorized disposition of the specimen. Blood specimens must be shipped to the laboratory in a cooled condition by any means adequate to ensure delivery

within twenty-four (24) hours of receipt by the carrier.

(b) The marine employer shall ensure that the urine specimen collection procedures of § 16.310 of this part and the chain of custody requirements of § 16.320 are complied with. The marine employer shall ensure that urine specimens required by §§ 4.06–20 and 4. 06–30 are promptly shipped to a laboratory complying with the requirements of 49 CFR part 40. Urine specimens must be shipped by an expeditious means, but need not be shipped in a cooled condition for overnight delivery.

§ 4.06–50 Specimen analysis and follow-up procedures.

(a) Each laboratory will provide prompt analysis of specimens collected under this subpart, consistent with the need to develop all relevant information and to produce a complete analysis report.

(b) Reports shall be sent to the Medical Review Officer meeting the requirements of 49 CFR 40.33, as designated by the marine employer submitting the specimen for testing. Wherever a urinalysis report indicates the presence of a dangerous drug or drug metabolite, the Medical Review Officer shall review the report as required by 49 CFR 40.33 and submit his or her findings to the marine employer. Blood test reports indicating the presence of alcohol shall be similarly reviewed to determine if there is a legitimate medical explanation.

(c) Analysis results which indicate the presence of alcohol, dangerous drugs, or drug metabolites shall not be construed by themselves as constituting a finding that use of drugs or alcohol was the probable cause of a serious marine incident.

[CGD 86–067, 53 FR 47078, Nov. 21, 1988, as amended by CGD 90–053, 58 FR 31107, May 28, 1993]

§ 4.06–60 Submission of reports and test results.

(a) Whenever an individual engaged or employed on a vessel is identified as being directly involved in a serious marine incident, the marine employer shall complete Form CG–2692B (Report of Required Chemical Drug and Alcohol Testing Following a Serous Marine Incident).

(b) When the serious marine incident requires the submission of Form CG–2692 (Report of Marine Casualty, Injury or Death) to the Coast Guard in accordance with § 4.05–10, the report required by paragraph (a) of this section shall be appended to Form CG–2692.

(c) In incidents involving discharges of oil or hazardous substances as described in § 4.03–2 (b) and (c) of this part, when Form CG–2692 is not required to be submitted, the report required by paragraph (a) of this section shall be submitted to the Coast Guard Officer in Charge, Marine Inspection, having jurisdiction over the location where the discharge occurred or nearest the port of first arrival following the discharge.

(d) Upon receipt of the report of chemical test results, the marine employer shall submit a copy of the test results for each person listed on the CG–2692B to the Coast Guard Officer in Charge, Marine Inspection to whom the CG–2692B was submitted.

Subpart 4.07—Investigations

§ 4.07–1 Commandant or District Commander to order investigation.

(a) The Commandant or District Commander upon receipt of information of a marine casualty or accident, will immediately cause such investigation as may be necessary in accordance with the regulations in this part.

(b) The investigations of marine casualties and accidents and the determinations made are for the purpose of taking appropriate measures for promoting safety of life and property at sea, and are not intended to fix civil or criminal responsibility.

(c) The investigation will determine as closely as possible:

(1) The cause of the accident;

(2) Whether there is evidence that any failure of material (either physical or design) was involved or contributed to the casualty, so that proper recommendations for the prevention of the recurrence of similar casualties may be made;

(3) Whether there is evidence that any act of misconduct, inattention to duty, negligence or willful violation of

the law on the part of any licensed or certificated man contributed to the casualty, so that appropriate proceedings against the license or certificate of such person may be recommended and taken under title 46, U.S. Code, section 239;

(4) Whether there is evidence that any Coast Guard personnel or any representative or employee of any other government agency or any other person caused or contributed to the cause of the casualty; or,

(5) Whether the accident shall be further investigated by a Marine Board of Investigation in accordance with regulations in subpart 4.09.

§4.07–5 Investigating officers, powers of.

(a) An investigating officer investigates each marine casualty or accident reported under §§4.05–1 and 4.05–10.

(b) Such investigating officer shall have the power to administer oaths, subpoena witnesses, require persons having knowledge of the subject matter of the investigation to answer questionnaires and require the production of relevant books, papers, documents and other records.

(c) Attendance of witnesses or the production of books, papers, documents or any other evidence shall be compelled by a similar process as in the United States District Court.

[CGFR 65–50, 30 FR 17099, Dec. 30, 1965, as amended by CGD–104R, 37 FR 14234, July 18, 1972]

§4.07–7 Opening statement.

The investigating officer or the Chairman of a Marine Board of Investigation shall open the investigation by announcing the statutory authority for the proceeding and he shall advise parties in interest concerning their rights to be represented by counsel, to examine and cross-examine witnesses, and to call witnesses in their own behalf.

§4.07–10 Report of investigation.

(a) At the conclusion of the investigation the investigating officer shall submit to the Commandant via the Officer in Charge, Marine Inspection, and the District Commander, a full and complete report of the facts as determined by his investigation, together with his opinions and recommendations in the premises. The Officer in Charge, Marine Inspection, and the District Commander shall forward the investigating officer's report to the Commandant with an indorsement stating:

(1) Approval or otherwise of the findings of fact, conclusions and recommendations;

(2) Any action taken with respect to the recommendations;

(3) Whether or not any action has been or will be taken under part 5 of this subchapter to suspend or revoke licenses or certificates; and,

(4) Whether or not violations of laws or regulations relating to vessels have been reported on Form CG–2636, report of violation of navigation laws.

(b) At the conclusion of the investigation, the investigating officer shall submit the report described in paragraph (a) of this section, to the Commandant via the Merchant Marine Detail Officer or the Officer in Charge, Marine Inspection, and the Commander, Coast Guard District Activities Europe for a European port or Commander, Fourteenth Coast Guard for an Asian or Pacific port. The Merchant Marine Detail Officer or the Officer in Charge, Marine Inspection, and Commander, Coast Guard Activities Europe or Commander, Fourteenth Coast Guard District shall forward the investigating officer's report to the Commandant with the endorsement described in paragraphs (a) (1) through (4) of this section.

[CGD 74–119, 39 FR 33317, Sept. 17, 1974, as amended by CGD 75–196, 41 FR 18655, May 6, 1976]

§4.07–15 Recommendations, action on.

Where the recommendations of an investigating officer are such that their accomplishment is within the authority of the District Commander or any of the personnel under his command, immediate steps shall be taken to put them into effect and his forwarding endorsement shall so indicate.

§4.07–20 Transfer of jurisdiction.

When it appears to the District Commander that it is more advantageous

to conduct an investigation in a district other than in the district where the casualty was first reported, that officer shall transfer the case to the other district together with any information or material relative to the casualty he may have.

§ 4.07–25 Testimony of witnesses in other districts, depositions.

When witnesses are available in a district other than the district in which the investigation is being made, testimony or statements shall be taken from witnesses in the other districts by an investigating officer and promptly transmitted to the investigating officer conducting the investigation. Depositions may be taken in the manner prescribed by regulations in subpart 4.12.

§ 4.07–30 Testimony of witnesses under oath.

(a) Witnesses to marine casualties or accidents appearing before an investigating officer may be placed under oath and their testimony may be reduced to writing.

(b) Written statements and reports submitted as evidence by witnesses shall be sworn to before an officer authorized to administer oaths and such statements and/or reports shall be signed.

§ 4.07–35 Counsel for witnesses and parties in interest.

(a) All parties in interest shall be allowed to be represented by counsel, to examine and cross-examine witnesses and to call witnesses in their own behalf.

(b) Witnesses who are not parties in interest may be assisted by counsel for the purpose of advising such witnesses concerning their rights; however, such counsel will not be permitted to examine or cross-examine other witnesses or otherwise participate in the investigation.

§ 4.07–45 Foreign units of Coast Guard, investigation by.

Investigations of marine casualties conducted by foreign units of the Coast Guard shall be in accordance with the regulations in this part and all actions taken in connection with the investigations of such marine casualties entered in the official log(s) of the vessel(s) concerned.

§ 4.07–55 Information to be furnished Marine Board of Investigation.

When a Marine Board of Investigation is convened in accordance with § 4.09–1, the investigating officer shall immediately furnish the board with all testimony, statements, reports, documents, papers, a list of witnesses including those whom he has examined, other material which he may have gathered, and a statement of any findings of fact which he may have determined. The preliminary investigation shall cease forthwith and the aforementioned material shall become a part of the Marine Board of Investigation's record.

Subpart 4.09—Marine Board of Investigation

§ 4.09–1 Commandant to designate.

If it appears that it would tend to promote safety of life and property at sea or would be in the public interest, the Commandant may designate a Marine Board of Investigation to conduct an investigation.

[CGD 76–170, 45 FR 77441, Nov. 24, 1980]

§ 4.09–5 Powers of Marine Board of Investigation.

Any Marine Board of Investigation so designated shall have the power to administer oaths, summon witnesses, require persons having knowledge of the subject matter of the investigation to answer questionnaires, and to require the production of relevant books, papers, documents or any other evidence. Attendance of witnesses or the production of books, papers, documents or any other evidence shall be compelled by a similar process as in the United States District Court. The chairman shall administer all necessary oaths to any witnesses summoned before said Board.

§ 4.09–10 Witnesses, payment of.

Any witness subpoenaed under § 4.09–5 shall be paid such fees for his travel and attendance as shall be certified by

the chairman of a Marine Board of Investigation or an investigating officer, in accordance with §4.11–10.

§4.09–15 Time and place of investigation, notice of; rights of witnesses, etc.

Reasonable notice of the time and place of the investigation shall be given to any person whose conduct is or may be under investigation and to any other party in interest. All parties in interest shall be allowed to be represented by counsel, to cross-examine witnesses, and to call witnesses in their own behalf.

§4.09–17 Sessions to be public.

(a) All sessions of a Marine Board of Investigation for the purpose of obtaining evidence shall normally be open to the public, subject to the provision that the conduct of any person present shall not be allowed to interfere with the proper and orderly functioning of the Board. Sessions will not be open to the public when evidence of a classified nature or affecting national security is to be received.

§4.09–20 Record of proceedings.

The testimony of witnesses shall be transcribed and a complete record of the proceedings of a Marine Board of Investigation shall be kept. At the conclusion of the investigation a written report shall be made containing findings of fact, opinions, and recommendations to the Commandant for his consideration.

§4.09–25 U.S. Attorney to be notified.

The recorder of a Marine Board of Investigation shall notify the United States Attorney for the District in which the Marine Board of Investigation is being conducted of the nature of the casualty under investigation and time and place the investigation will be made.

§4.09–30 Action on report.

Upon approval of the report of a Marine Board of Investigation the Commandant will require to be placed into effect such recommendations as he may deem necessary for the better improvement and safety of life and property at sea.

§4.09–35 Preferment of charges.

(a) If in the course of an investigation by a Marine Board there appears probable cause for the preferment of charges against any licensed or certificated personnel, the Marine Board shall, either during or immediately following the investigation and before the witnesses have dispersed, apprise the District Commander of such evidence for possible action in accordance with part 5 of this subchapter, without waiting for the approval of the report by the Commandant. Such action or proceedings shall be independent and apart from any other action which may be later ordered by the Commandant or taken by other authorities.

Subpart 4.11—Witnesses and Witness Fees

§4.11–1 Employees of vessels controlled by Army or Navy as witnesses.

No officer, seaman, or other employee of any public vessel controlled by the Army or Navy (not including the Coast Guard) of the United States, shall be summoned or otherwise required to appear as a witness in connection with any investigation or other proceeding without the consent of the Government agency concerned.

§4.11–5 Coercion of witnesses.

Any attempt to coerce any witness or to induce him to testify falsely in connection with a shipping casualty, or to induce any witness to leave the jurisdiction of the United States, is punishable by a fine of $5,000.00 or imprisonment for one year, or both such fine and imprisonment.

§4.11–10 Witness fees and allowances.

Witness fees and allowances are paid in accordance with 46 CFR 5.401.

[CGD 79–080, 45 FR 2046, Jan. 10, 1980, as amended by CGD 96–041, 61 FR 50726, Sept. 27, 1996]

Subpart 4.12—Testimony by Interrogatories and Depositions

§ 4.12–1 Application, procedure, and admissibility.

(a) Witnesses shall be examined orally, except that for good cause shown, testimony may be taken by deposition upon application of any party in interest or upon the initiative of the investigating officer or Marine Board of Investigation.

(b) Applications to take depositions shall be in writing setting forth the reasons why such deposition should be taken, the name and address of the witness, the matters concerning which it is expected the witness will testify, and the time and place proposed for the taking of the deposition. Such application shall be made to an investigating officer or the Marine Board of Investigation prior to or during the course of the proceedings.

(c) The investigating officer or Marine Board of Investigation, shall, upon receipt of the application, if good cause is shown, make and serve upon the parties an order which will specify the name of the witness whose deposition is to be taken, the name and place of the taking of such deposition and shall contain a designation of the officer before whom the witness is to testify. Such deposition may be taken before any officer authorized to administer oaths by the laws of the United States.

(d) The party desiring the deposition may submit a list of interrogatories to be propounded to the absent witness; then the opposite party after he has been allowed a reasonable time for this purpose, may submit a list of cross-interrogatories. If either party objects to any question of the adversary party, the matter shall be presented to the investigating officer or Marine Board of Investigation for a ruling. Upon agreement of the parties on a list of interrogatories and cross-interrogatories (if any) the investigating officer or Marine Board of Investigation may propound such additional questions as may be necessary to clarify the testimony given by the witness.

(e) The subpoena referred to in subpart F of this subchapter together with the list of interrogatories and cross-interrogatories (if any) shall be forwarded to the officer designated to take such deposition. This officer will cause the subpoena to be served personally on the witness. After service the subpoena shall be endorsed and returned to the investigating officer or Marine Board of Investigation.

(f) When the deposition has been duly executed it shall be returned to the investigating officer or Marine Board of Investigation. As soon as practicable after the receipt of the deposition the investigating officer or Marine Board of Investigation shall present it to the parties for their examination. The investigating officer or Marine Board of Investigation shall rule on the admissibility of the deposition or any part thereof and of any objection offered by either party thereto.

[CGD 74–119, 39 FR 33317, Sept. 17, 1974, as amended by CGD 96–041, 61 FR 50726, Sept. 27, 1996]

Subpart 4.13—Availability of Records

§ 4.13–1 Public availability of records.

Coast Guard records are made available to the public in accordance with 49 CFR part 7.

[CGD 73–43R, 40 FR 13501, Mar. 27, 1975]

Subpart 4.19—Construction of Regulations and Rules of Evidence

§ 4.19–1 Construction of regulations.

The regulations in this part shall be liberally construed to insure just, speedy, and inexpensive determination of the issues presented.

§ 4.19–5 Adherence to rules of evidence.

As hearings under this part are administrative in character, strict adherence to the formal rules of evidence is not imperative. However, in the interest of orderly presentation of the facts of a case, the rules of evidence should be observed as closely as possible.

Subpart 4.21—Computation of Time

§4.21–1 Computation of time.

The time, within which any act, provided by the regulation in this subchapter, or an order of the Marine Board of Investigation is to be done, shall be computed by excluding the first day and including the last unless the last day is Sunday or a legal holiday, in which case the time shall extend to and include the next succeeding day that is not a Sunday or legal holiday: *Provided, however,* That where the time fixed by the regulations in this subchapter or an order of the Board is five days or less all intervening Sundays or legal holidays, other than Saturdays, shall be excluded.

Subpart 4.23—Evidence of Criminal Liability

§4.23–1 Evidence of criminal liability.

If as a result of any investigation or other proceeding conducted hereunder, evidence of criminal liability on the part of any licensed officer or certificated person or any other person is found, such evidence shall be referred to the U.S. Attorney General.

Subpart 4.40—Coast Guard—National Transportation Safety Board Marine Casualty Investigations

SOURCE: CGD 76–149, 42 FR 61200, Dec. 1, 1977, unless otherwise noted.

§4.40–1 Purpose.

This subpart prescribes the joint regulations of the National Transportation Safety Board and the Coast Guard for the investigation of marine casualties.

[CGD 82–034, 47 FR 45882, Oct. 14, 1982]

§4.40–3 Relationship to Coast Guard marine investigation regulations and procedures.

(a) The Coast Guard's responsibility to investigate marine casualties is not eliminated nor diminished by the regulations in this subpart.

(b) In those instances where the National Transportation Safety Board conducts an investigatio in which the Coast Guard also has responsibility under R.S. 4450 (46 U.S.C. 239), the proceedings are conducted independently but so as to avoid duplication as much as possible.

§4.40–5 Definitions.

As used in this subpart:

(a) *Act* means title III of Public Law 93–633, the Independent Safety Board Act of 1974, (49 U.S.C. 1901, *et seq.*).

(b) *Board* means the National Transportation Safety Board.

(c) *Chairman* means the Chairman of the National Transportation Safety Board.

(d) *Major marine casualty* means a casualty involving a vessel, other than a public vessel, that results in:

(1) The loss of six or more lives:

(2) The loss of a mechanically propelled vessel of 100 or more gross tons;

(3) Property damage initially estimated at $500,000 or more; or

(4) Serious threat, as determined by the Commandant and concurred in by the Chairman, to life, property, or the environment by hazardous materials.

(e) *Public vessel* means a vessel owned by the United States, except a vessel to which the Act of October 25, 1919, c.82, (41 Stat. 305, 46 U.S.C. 363) applies.

(f) *Vessel of the United States* means a vessel:

(1) Documented or required to be documented under the laws of the United States;

(2) Owned in the United States; or

(3) Owned by a citizen or resident of the United States and not registered under a foreign flag.

§4.40–10 Preliminary investigation by the Coast Guard.

(a) The Coast Guard conducts the preliminary investigation of marine casualties.

(b) The Commandant determines from the preliminary investigation whether:

(1) The casualty is a major marine casualty; or

(2) The casualty involves a public and a non-public vessel and at least one fatality or $75,000 in property damage; or

(3) The casualty involves a Coast Guard and a non-public vessel and at

least one fatality or $75,000 in property damage; or

(4) The casualty is a major marine casualty which involves significant safety issues relating to Coast Guard safety functions, e.g., search and rescue, aids to navigation, vessel traffic systems, commercial vessel safety, etc.

(c) The Commandant notifies the Board of a casualty described in paragraph (b) of this section.

[CGD 76–149, 42 FR 61200, Dec. 1, 1977, as amended by CGD 82–034, 47 FR 45882, Oct. 14, 1982]

§ 4.40–15 Marine casualty investigation by the Board.

(a) The Board may conduct an investigation under the Act of any major marine casualty or any casualty involving public and non-public vessels. Where the Board determines it will convene a hearing in connection with such an investigation, the Board's rules of practice for transportation accident hearings in 49 CFR part 845 shall apply.

(b) The Board shall conduct an investigation under the Act when:

(1) The casualty involves a Coast Guard and a non-public vessel and at least one fatality or $75,000 in property damage; or

(2) The Commandant and the Board agree that the Board shall conduct the investigation, and the casualty involves a public and a non-public vessel and at least one fatality or $75,000 in property damage; or

(3) The Commandant and the Board agree that the Board shall conduct the investigation, and the casualty is a major marine casualty which involves significant safety issues relating to Coast Guard safety functions.

[CGD 82–034, 47 FR 45882, Oct. 14, 1982]

§ 4.40–20 Cause or probable cause determinations from Board investigation.

After an investigation conducted by the Board under § 4.40–15, the Board determines cause or probable cause and issues a report of that determination.

§ 4.40–25 Coast Guard marine casualty investigation for the Board.

(a) If the Board does not conduct an investigation under § 4.40–15 (a), (b) (2) or (3), the Coast Guard, at the request of the Board, may conduct an investigation under the Act unless there is an allegation of Federal Government misfeasance or nonfeasance.

(b) The Board will request the Coast Guard to conduct an investigation under paragraph (a) of this section within 48 hours of receiving notice under § 4.40–10(c).

(c) The Coast Guard will advise the Board within 24 hours of receipt of a request under paragraph (b) of this section whether the Coast Guard will conduct an investigation under the Act.

[CGD 82–034, 47 FR 45882, Oct. 14, 1982]

§ 4.40–30 Procedures for Coast Guard investigation.

(a) The Coast Guard conducts an investigation under § 4.40–25 using the procedures in 46 CFR 4.01–1 through 4.23–1.

(b) The Board may designate a person or persons to participate in every phase of an investigation, including on scene investigation, that is conducted under the provisions of subpart 4.40–25 of this part.

(c) Consistent with Coast Guard responsibility to direct the course of the investigation, the person or persons designated by the Board under paragraph (b) of this section may:

(1) Make recommendations about the scope of the investigations.

(2) Call and examine witnesses.

(3) Submit or request additional evidence.

(d) The Commandant provides a record of the proceedings to the Board of an investigation of a major marine casualty under paragraph (a) of this section.

(e) The Board, under the Act, makes its determination of the facts, conditions, circumstances, and the cause or probable cause of a major marine casualty using the record of the proceedings provided by the Commandant under paragraph (d) of this section, and any additional evidence the Board may acquire under its own authority.

(f) An investigation by the Coast Guard under this section is both an investigation under the Act and under R.S. 4450 (46 U.S.C. 239).

§ 4.40–35 Records of the Coast Guard and the Board.

(a) Records of the Coast Guard made under § 4.40–30 are available to the public under 49 CFR part 7.

(b) Records of the Board made under §§ 4.40–20 and 4.40–30 are available to the public under 49 CFR part 801.

PART 5—MARINE INVESTIGATION REGULATIONS—PERSONNEL ACTION

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AUTHORITY: 46 U.S.C. 2103, 7101, 7301, 7701; 49 CFR 1.46.

SOURCE: CGD 82–002, 50 FR 32184, Aug. 9, 1985, unless otherwise noted.

Subpart A—Authority and Purpose

§ 5.1 Authority for regulations.

(a) The basic authority governing administrative actions against a person's license, certificate or document is set forth in title 46 U.S.C. chapter 77. The Administrative Procedure Act, title 5 U.S.C. section 551, *et seq.*, requires hearings held in conjunction with these administrative actions to be presided over by an Administrative Law Judge.

(b) Title 46, U.S.C., section 7704 requires revocation of a license, certificate or document of any person who has been shown at a hearing to be a user of or addicted to the use of a dangerous drug or to have been convicted of violating a dangerous drug law of the United States, District of Columbia, or any state or territory of the United States.

§ 5.3 Purpose of regulations.

The regulations in this part establish policies and procedures for administrative actions against mariners' licenses, certificates or documents issued by the Coast Guard.

§ 5.5 Purpose of administrative actions.

The administrative actions against a license, certification or document are remedial and not penal in nature. These actions are intended to help maintain standards for competence and conduct essential to the promotion of safety at sea.

Subpart B—Definitions

§ 5.11 Commandant.

For the purpose of this part, *Commandant* means the Commandant of the Coast Guard. In subparts I, J, and K of this part, the term Commandant includes the Vice Commandant of the Coast Guard acting on behalf of the Commandant in any proceeding involving final agency action on a petition to reopen a hearing or an appeal from a decision of an Administrative Law Judge not involving an order of revocation.

§5.13 Coast Guard District.

A *Coast Guard District* is a geographical area as described in 33 CFR part 3 which is under the command of a Coast Guard officer designated by the Commandant as the Coast Guard District Commander.

§5.15 Investigating Officer.

An *investigating officer* is a Coast Guard official designated by the Commandant, District Commander, or the Officer In Charge, Marine Inspection, for the purpose of conducting investigations of marine casualties or matters pertaining to the conduct of persons issued a license, certificate or document by the Coast Guard. An Officer in Charge, Marine Inspection is an investigating officer without further designation.

§5.19 Administrative Law Judge.

(a) An *Administrative Law Judge* shall mean any person designated by the Commandant pursuant to the Administrative Procedure Act (5 U.S.C. 556(b) for the purpose of conducting hearings arising under 46 U.S.C. 7703 or 7704.

(b) The Commandant has delegated to Administrative Law Judges the authority to admonish, suspend with or without probation or revoke a license, certificate or document issued to a person by the Coast Guard under any navigation or shipping law.

§5.23 Charge.

(a) A *charge* is the designation in general terms of an act or offense within the purview of 46 U.S.C. 7703 or 7704. A charge must be supported by one or more *specifications*. Under no circumstances does a *charge* constitute evidence nor may any inference be drawn from the fact that the holder of a license, certificate or document has been the subject of a *charge*.

(b) A charge must be stated as one of the following:

(1) Misconduct;

(2) Negligence;

(3) Incompetence;

(4) Violation of law or regulation;

(5) Conviction for a dangerous drug law violation, use of a dangerous drug, or addiction to the use of dangerous drugs.

§5.25 Specification.

A *specification* sets forth the facts which form the basis of a *charge* and enables the respondent to identify the act or offense so that a defense can be prepared. Each specification shall state:

(a) Basis for jurisdiction;

(b) Date and place of act, or offense; and

(c) The facts constituting the alleged act or offense.

§5.27 Misconduct.

Misconduct is human behavior which violates some formal, duly established rule. Such rules are found in, among other places, statutes, regulations, the common law, the general maritime law, a ship's regulation or order, or shipping articles and similar sources. It is an act which is forbidden or a failure to do that which is required.

§5.29 Negligence.

Negligence is the commission of an act which a reasonable and prudent person of the same station, under the same circumstances, would not commit, or the failure to perform an act which a reasonable and prudent person of the same station, under the same circumstances, would not fail to perform.

§5.31 Incompetence.

Incompetence is the inability on the part of a person to perform required duties, whether due to professional deficiencies, physical disability, mental incapacity, or any combination thereof.

§5.33 Violation of law or regulation.

Where the proceeding is based exclusively on that part of title 46 U.S.C. section 7703, which provides as a basis for suspension or revocation a violation or failure to comply with 46 U.S.C. subtitle II, a regulation prescribed under that subtitle, or any other law or regulation intended to promote marine safety or protect navigable waters, the *charge* shall be *violation of law* or *violation of regulation*. The *specification* shall state the specific statute or regulation by title and section number, and the

particular manner in which it was allegedly violated.

§ 5.35 Conviction for a dangerous drug law violation, use of, or addiction to the use of dangerous drugs.

Where the proceeding is based exclusively on the provisions of title 46, U.S.C. 7704, the *charge* will be *conviction for a dangerous drug law violation* or *use of dangerous drugs* or *addiction to the use of dangerous drugs*, depending upon the circumstances. The *specification* will allege jurisdiction by stating the elements as required by title 46, U.S.C. 7704, and the approximate time and place of the offense.

Subpart C—Statement of Policy and Interpretation

§ 5.51 Construction of regulations.

The regulations in this part shall be construed so as to obtain a just, speedy, and economical determination of the issues presented.

§ 5.53 Initiating suspension and revocation proceedings.

Suspension and revocation proceedings are initiated upon service of charges preferred by an investigating officer.

§ 5.55 Time limitations for service of charges and specifications.

(a) The time limitations for service of various charges and specifications upon the holder of a license, certificate or document are as follows:

(1) When based exclusively on 46 U.S.C. 7704, service shall be within 10 years after the date of conviction, or at anytime if the person charged is a user of or addicted to the use of a dangerous drug.

(2) For one of the misconduct offenses specified in § 5.59(a) or § 5.61(a), service shall be within five years after commission of the offense alleged therein.

(3) For an act or offense not otherwise provided for, the service shall be within three years after the commission of the act or offense alleged therein.

(b) When computing the period of time specified in paragraphs (a) (2) and (3) of this section there shall be excluded any period or periods of time when the respondent could not attend a hearing or be served charges by reason of being outside of the United States or by reason of being in prison or hospitalized.

§ 5.57 Acting under authority of license, certificate or document.

(a) A person employed in the service of a vessel is considered to be acting under the authority of a license, certificate or document when the holding of such license, certificate or document is:

(1) Required by law or regulation; or

(2) Required by an employer as a condition for employment.

(b) A person is considered to be acting under the authority of the license, certificate or document while engaged in official matters regarding the license, certificate or document. This includes, but is not limited to, such acts as applying for renewal of a license, taking examinations for upgrading or endorsements, requesting duplicate or replacement licenses, certificates or documents, or when appearing at a hearing under this part.

(c) A person does not cease to act under the authority of a license, certificate or document while on authorized or unauthorized shore leave from the vessel.

§ 5.59 Offenses for which revocation of licenses, certificates or documents is mandatory.

An Administrative Law Judge enters an order revoking a respondent's license, certificate or document when—

(a) A charge of misconduct for wrongful possession, use, sale, or association with dangerous drugs is found proved. In those cases involving marijuana, the Administrative Law Judge may enter an order less than revocation when satisfied that the use, possession or association, was the result of experimentation by the respondent and that the respondent has submitted satisfactory evidence that he or she is cured of such use and that the possession or association will not recur.

(b) The respondent has been a user of, or addicted to the use of, a dangerous

drug, or has been convicted for a violation of the dangerous drug laws, whether or not further court action is pending, and such charge is found proved. A conviction becomes final when no issue of law or fact determinative of the respondent's guilt remains to be decided.

§5.61 Acts or offenses for which revocation of licenses, certificates, or documents is sought.

(a) An investigating officer seeks revocation of a respondent's license, certificate or document when one of the following acts or offenses is found proved:

(1) Assault with a dangerous weapon.

(2) Misconduct resulting in loss of life or serious injury.

(3) Rape or sexual molestation.

(4) Murder or attempted murder.

(5) Mutiny.

(6) Perversion.

(7) Sabotage.

(8) Smuggling of aliens.

(9) Incompetence.

(10) Interference with master, ship's officers, or government officials in performance of official duties.

(11) Wrongful destruction of ship's property.

(b) An investigating officer may seek revocation of a respondent's license, certificate or document when the circumstances of an act or offense found proved or consideration of the respondent's prior record indicates that permitting such person to serve under the license, certificate or document would be clearly a threat to the safety of life or property, or detrimental to good discipline.

§5.63 Standard of proof.

In proceedings conducted pursuant to this part, findings must be supported by and in accordance with the reliable, probative, and substantial evidence. By this is meant evidence of such probative value as a reasonable, prudent and responsible person is accustomed to rely upon when making decisions in important matters. This includes *admitted* or *no contest* answers.

§5.65 Commandant's decisions in appeal or review cases.

The decisions of the Commandant in cases of appeal or review of decisions of Administrative Law Judges are officially noticed and the principles and policies enunciated therein are binding upon all Administrative Law Judges, unless they are modified or rejected by competent authority.

§5.67 Physician-patient privilege.

For the purpose of these proceedings, the physician-patient privilege does not exist between a physician and a respondent.

§5.69 Evidence of criminal liability.

Evidence of criminal liability discovered during an investigation or hearing conducted pursuant to this part will be referred to the Attorney General's local representative or other appropriate law enforcement authority having jurisdiction over the matter.

§5.71 Maritime labor disputes.

Under no circumstances will the Coast Guard exercise its authority for the purpose of favoring any party to a maritime labor controversy. However, if the situation affecting the safety of the vessel or persons on board is presented, the matter shall be thoroughly investigated and when a violation of existing statutes or regulations is indicated, appropriate action will be taken.

Subpart D—Investigations

§5.101 Conduct of investigations.

(a) Investigations may be initiated in any case in which it appears that there are reasonable grounds to believe that the holder of a license, certificate or document issued by the Coast Guard may have:

(1) Committed an act of incompetency, misconduct, or negligence while acting under the authority of a license, certificate or document;

(2) Violated or failed to comply with subtitle II of title 46, U.S.C., a regulation prescribed under this subtitle, or any other law or regulations intended to promote marine safety or to protect the navigable waters, while acting under the authority of a license, certificate or document;

(3) Been convicted of a dangerous drug law violation, or has been a user

of, or addicted to the use of, a dangerous drug, so as to be subject to the provisions of 46 U.S.C. 7704.

(b) In order to promote full disclosure and facilitate determinations as to the cause of marine casualties, no admission made by a person during an investigation under this part or part 4 of this title may be used against that person in a proceeding under this part, except for impeachment.

§ 5.103 Powers of investigating officer.

During an investigation, the investigating officer may administer oaths, issue subpenas in accordance with subpart F of this title, and require persons having knowledge of the subject matter of the investigation to answer questions.

§ 5.105 Course of action available.

During an investigation, the investigating officer may take appropriate action as follows:

(a) Prefer charges.

(b) Accept voluntary surrender of a license, certificate or document.

(c) Accept voluntary deposit of a license, certificate or document.

(d) Refer the case to others for further action. The investigating officer may refer the case to the Commandant or to an Officer in Charge, Marine Inspection, at any port for completion of administrative action if an adequate basis for action is found and the person under investigation and/or witnesses are not locally available.

(e) Give a written warning. The investigating officer may give a warning to any person holding a license, certificate or document. Refusal to accept the written warning will normally result in a withdrawal of the warning and the preferral of charges. An unrejected warning will become a part of the person's record.

(f) Close the case.

§ 5.107 Preparation and service of charges and specifications.

(a) When preferring charges, the investigating officer prepares charges and specifications, together with a notice of the time, date and place of the hearing.

(b) The original of the charges and specifications and the notice of the time, date and place of hearing are served upon the respondent, either by personal service or certified mail, return receipt requested; restricted delivery (receipt to be signed by the addressee only).

(c) Service will be made sufficiently in advance of the time set for the hearing so as to give the respondent a reasonable opportunity to prepare a defense.

(d) At the time of service, whether personal or by certified mail, the respondent will also be advised with respect to:

(1) The nature of suspension and revocation proceedings and the possible results thereof;

(2) The right to have representation by counsel at the hearing, and that counsel may be, but need not be, a lawyer;

(3) The right to have witnesses, records or other evidence subpenaed and that

(4) Failure to appear at the time, date and place specified may result in the hearing being in his absence.

(e) If the alleged act involves mental incompetence, it is recommended to the respondent, at the time of service of charges, that he procure counsel.

(f) If the alleged act involves mental or physical incompetence, the respondent is advised that evidence of medical examination may be submitted.

Subpart E—Deposit or Surrender of License, Certificate or Document

§ 5.201 Voluntary deposits in event of mental or physical incompetence.

(a) A holder may deposit a license, certificate, or document with the Coast Guard in any case where there is evidence of mental or physical incompetence. A voluntary deposit is accepted on the basis of a written agreement, the original of which will be given to the holder, which specifies the conditions upon which the Coast Guard will return the license, certificate, or document to the holder.

(b) Where the mental or physical incompetence of a holder of a license, certificate, or document is caused by use of or addiction to dangerous drugs,

a voluntary deposit will only be accepted contingent on the following circumstances:

(1) The holder is enrolled in a bona fide drug abuse rehabilitation program;

(2) The holder's incompetence did not cause or contribute to a marine casualty,

(3) The incompetence was reported to the Coast Guard by the individual or any other person and was not discovered as a result of a Federal, State or local government investigation; and

(4) The holder has not voluntarily deposited or surrendered a license, certificate, or document, or had a license, certificate, or document revoked for a drug related offense on a prior occasion.

(c) Where the mental or physical incompetence of a holder of a license, certificate, or document is caused by use or addiction to alcohol, a voluntary deposit will only be accepted contingent on the following circumstances:

(1) The holder is enrolled in a bona fide alcohol abuse rehabilitation program;

(2) The holder's incompetence did not cause or contribute to a marine casualty; and

(3) The incompetence was reported to the Coast Guard by the individual or any other person and was not discovered as a result of a Federal, State, or local government investigation.

(d) Where the conditions of paragraphs (b) and (c) of this section are not met, the holder may only surrender such license, certificate, or document in accordance with §5.203.

[CGD 84–099, 52 FR 47535, Dec. 14, 1987]

§5.203 Voluntary surrender to avoid hearing.

(a) Any holder may surrender a license, certificate or document to the Coast Guard in preference to appearing at a hearing.

(b) A holder voluntarily surrendering a license, certificate or document shall sign a written statement containing the stipulations that:

(1) The surrender is made voluntarily in preference to appearing at a hearing;

(2) All rights to the license, certificate or document surrendered are permanently relinquished; and,

(3) Any rights with respect to a hearing are waived.

(c) A voluntary surrender of a license, certificate or document to an investigating officer in preference to appearing at a hearing is not to be accepted by an investigating officer unless the investigating officer is convinced that the holder fully realizes the effect of such surrender.

§5.205 Return or issuance of a license, certificate of registry, or merchant mariners document.

(a) A person may request the return of a voluntarily deposited license, certificate, or document at any time, provided he or she can demonstrate a satisfactory rehabilitation or cure of the condition which caused the incompetence; has complied with any other conditions of the written agreement executed at the time of deposit; and complies with the physical and professional requirements for issuance of a license, certificate, or document.

(b) Where the voluntary deposit is based on incompetence due to drug abuse, the deposit agreement shall provide that the license, certificate, or document will not be returned until the person:

(1) Successfully completes a bona fide drug abuse rehabilitation program;

(2) Demonstrates complete non-association with dangerous drugs for a minimum of six months after completion of the rehabilitation program; and

(3) Is actively participating in a bona fide drug abuse monitoring program.

(c) Where the voluntary deposit is based on incompetence due to alcohol abuse, the deposit agreement shall provide that the license, certificate, or document will not be returned until the person:

(1) Successfully completes a bona fide alcohol abuse rehabilitation program; and

(2) Is actively participating in a bona fide alcohol abuse monitoring program.

(d) The voluntary surrender of a license, certificate, or document is the equivalent of revocation of such papers. A holder who voluntarily surrenders a license, certificate, or document must comply with provisions of §§5.901

and 5.903 when applying for the issuance of a new license, certificate, or document.

[CGD 84–099, 52 FR 47535, Dec. 14, 1987]

Subpart F—Subpenas

§ 5.301 Issuance of subpenas.

(a) Every subpena shall command the person to whom it is directed to appear at a specified time and place to give testimony or to produce books, papers, documents, or any other evidence, which shall be described with such particularity as necessary to identify what is desired.

(b) The investigating officer may issue subpenas for the attendance of witnesses or for the production of books, papers, documents, or any other relevant evidence needed by the investigating officer or by the respondent.

(c) After charges have been served upon the respondent the Administrative Law Judge may, either on the Administrative Law Judge's own motion or the motion of the investigating officer or respondent, issue subpenas for the attendance and the giving of testimony by witnesses or for the production of books, papers, documents, or any other relevant evidence.

§ 5.303 Service of subpenas on behalf of the respondent.

Service of subpenas issued on behalf of the respondent is the responsibility of the respondent. However, if the Administrative Law Judge finds that the respondent or respondent's counsel is physically unable to effect the service, despite diligent and bona fide attempts to do so, and if the Administrative Law Judge further finds that the existing impediment to the service of the subpena is peculiarly within the authority of the Coast Guard to overcome, the Administrative Law Judge will have the subpena delivered to an investigating officer participating in the case for the purpose of effecting service.

§ 5.305 Quashing a subpena.

(a) Persons subpenaed to appear in person or produce evidence at a hearing may, prior to or during the hearing, apply in writing to the Administrative Law Judge conducting the hearing requesting that the subpena be quashed or modified.

(b) Upon receipt of any application requesting quashing or modification of a subpena the Administrative Law Judge notifies the party for whom the subpena was issued. The Administrative Law Judge may quash or modify the subpena if it is unreasonable or requires evidence not relevant to any matter in issue, or may deny the request.

§ 5.307 Enforcement.

Upon application and for good cause shown, or upon its own initiative, the Coast Guard will seek judicial enforcement of subpenas issued by investigating officers or Administrative Law Judges. This is done by making application to the United States District Court, through the office of the appropriate U.S. Attorney, to issue an order compelling the attendance of, and/or giving of testimony by, witnesses, or for the production of books, papers, documents, or any other relevant evidence.

§ 5.309 Proof of service.

(a) The person serving a subpena shall make a written statement setting forth the date, time and manner of service and shall return such report with or on a copy of the subpena to the investigating officer or Administrative Law Judge who issued it. In case of failure to make service of a subpena, the person assigned to serve such subpena shall make a written statement setting forth the reasons the subpena was not served. The statement should be placed on the subpena or attached to it and returned to the investigating office or Administrative Law Judge who issued the subpena.

(b) When service of a subpena is made by certified mail with return receipt to be signed by the addressee only, the person mailing the subpena shall make a written statement on a copy of the subpena or attached to it, setting forth the date, time and location of the post office where mailed, the post office number assigned thereto. If delivered, the receipt requested shall be returned, by the person receiving the receipt, to

the investigating officer or Administrative Law Judge who issued the subpena. In case the subpena is not delivered, any information reported by the post office regarding non-delivery shall be given to the investigating officer or Administrative Law Judge who issued the subpena.

Subpart G—Witness Fees

§5.401 Payment of witness fees and allowances.

(a) Duly subpenaed witnesses, other than Federal government employees, may apply for payment of their attendance as witnesses at an investigation or hearing conducted pursuant to this part by submitting a request for payment (Standard Form 1157) accompanied by any necessary receipts.

(b) Fees and allowances will be paid as provided by 28 U.S.C. 1821, except that a person called to testify as an expert witness may be paid a higher fee to be fixed by the District Commander.

[CGD 82–002, 50 FR 32184, Aug. 9, 1985; 50 FR 35228, Aug. 30, 1985]

Subpart H—Hearings

§5.501 General.

(a) A hearing in a suspension and revocation proceeding conducted under 46 U.S.C. chapter 77, is the adjudication of the case. It is presided over and is conducted under the exclusive control of an Administrative Law Judge in accordance with applicable requirements in 5 U.S.C. 551, *et seq.* (Administrative Procedure Act), and the regulations in this part. The Administrative Law Judge shall regulate and conduct the hearing in such a manner so as to bring out all the relevant and material facts, and to insure a fair and impartial hearing.

(b) The Administrative Law Judge shall be governed by 5 U.S.C. 557(d)(1) of the Administrative Procedure Act regarding ex parte communications relative to these proceedings.

(c) With the consent of the investigating officer and respondent, the Administrative Law Judge may hold a prehearing conference for the settlement or simplification of the issues involved in the case. A prehearing conference may be requested by the investigating officer, respondent, or the Administrative Law Judge and is subject to the following provisions:

(1) The Administrative Law Judge sets the time and place for the conference, or conference telephone call. The conference shall not be convened unless both the investigating officer and the respondent or their authorized representative are present.

(2) Admissions or statements made at a conference are not admissible in evidence at a hearing for any reason.

(3) The Administrative Law Judge, in his opening statement at the hearing, shall enter into the hearing record the time, date, place, and persons present at any prehearing conference held.

(4) If the investigating officer and the respondent agree at the prehearing conference to stipulate to facts or amend the charge sheet, either may introduce the stipulation at the hearing which, upon the consent of the other, will become a part of the hearing record.

(d) The procedures below are usually followed:

(1) Administrative Law Judge's opening statement.

(2) Appearances of persons at the hearing.

(3) Verification of currently valid license, certificate and/or document held by respondent.

(4) The Administrative Law Judge advises the respondent of his or her rights.

(5) Exclusion of witnesses from the hearing room.

(6) Preliminary motions, objections and/or corrections to the charges and specifications.

(7) A reading of the charges with respondent's answer.

(8) Opening statement of investigating officer.

(9) Opening statement by or on behalf of the respondent or statements in mitigation if the respondent has admitted to the charge and specification or has answered *no contest.*

(10) Submission of evidence.

(11) Argument by the investigating officer and argument by or on behalf of the respondent.

(12) The investigating officer and respondent are given the opportunity to

submit proposed findings and conclusions.

(13) The Administrative Law Judge renders findings and conclusions.

(14) Submission of prior record of the respondent and evidence in aggravation or mitigation.

(15) The Administrative Law Judge renders an order.

(16) The Administrative Law Judge serves complete written decision.

(17) The Administrative Law Judge advises the respondent of the right to appeal.

(18) The Administrative Law Judge declares that the hearing is closed.

§ 5.503 Record of the hearing.

(a) The Administrative Law Judge designates an official reporter for the hearing. The reporter shall prepare the record of the hearing, including the transcript if so directed by the Administrative Law Judge.

(b) The testimony and exhibits presented, together with all papers, requests, and rulings filed in the proceedings constitute the record of the hearing.

§ 5.505 Public access to hearings.

All hearings conducted pursuant to this part are open to the public, including representatives of the press, except when the Administrative Law Judge finds that the subject matter to be, or being, brought out in the evidence concerns classified material relating to national security, or when other circumstances exist which have been held to warrant a limitation or exception to the right of a public hearing in a United States District Court.

§ 5.507 Disqualification of Administrative Law Judge.

(a) In any suspension and revocation proceeding conducted under this part, the Administrative Law Judge may withdraw voluntarily from a particular case for reasons of a possbile conflict of interest. In such event, the Administrative Law Judge shall immediately notify the Commandant of the desire to withdraw and the reasons therefor.

(b) In any case the investigating officer or the respondent may, in good faith, request the Administrative Law Judge to withdraw on the grounds of personal bias or other disqualification. The party seeking the Administrative Law Judge's disqualification shall file with the Administrative Law Judge a timely affidavit or statement sworn to before a Coast Guard officer of other official authorized to administer oaths, setting forth in detail the facts alleged to constitute the grounds for disqualification. The investigating officer or the respondent may present testimony of witnesses or, at minimum, an offer of proof to support these grounds. The Administrative Law Judge rules whether or not disqualification is warranted.

(c) If the person seeking disqualification takes exception to the Administrative Law Judge's ruling, that person may appeal such ruling to the Commandant. When such appeal is made, the Administrative Law Judge immediately forwards the affidavit or sworn statement with the decision thereon to the Commandant. The Administrative Law Judge may proceed with the hearing unless it can be shown that a delay in the hearing pending a determination of the appeal will not be detrimental to the matters being adjudicated. The Administrative Law Judge ensures that all matters relating to such claims of disqualification appear affirmatively in the record.

§ 5.509 Opening the hearing.

The Administrative Law Judge opens the hearing at the time and place specified in the notice, administers all necessary oaths, and causes a complete record of the proceedings to be kept. The time and place of opening the hearing may be changed by the Administrative Law Judge by written notice served on the investigating officer and the respondent, either on the Administrative Law Judge's own motion or upon application of the investigating officer or respondent. Such change must be consistent with the rights of the respondent to a fair, impartial and timely hearing and the availability of witnesses.

§ 5.511 Continuance of a hearing.

The Administrative Law Judge may, either on the Administrative Law Judge's own motion or the motion of the investigating officer or respondent,

continue the hearing from day to day or adjourn such hearing to a later date or to a different place by announcement at the hearing or by other appropriate notice. When determining whether to grant a continuance, the Administrative Law Judge gives careful consideration to the future availability of witnesses, the schedule of the vessel or vessels on which the respondent and/or witnesses may be employed, and to the nature of the charge and gravity of the offense.

§5.513 Appearances.

The appearances of the investigating officer and respondent and their representatives are entered in the record.

§5.515 Failure of respondent to appear at hearing.

(a) In any case in which the respondent, after being duly served with the original of the notice of the time and place of the hearing and the charges and specifications, fails to appear at the time and place specified for the hearing, the hearing may be conducted *in absentia*.

(b) The Administrative Law Judge ensures that the record contains the facts concerning the service of the charges, specifications and notice of hearing.

§5.517 Witnesses excluded from hearing room.

After appearances are entered and prior to proceeding with the hearing, all witnesses are excluded from the hearing room. The Administrative Law Judge may order witnesses to be separated from each other while waiting to testify or admonish them to not discuss the case among themselves or with any other person, with the exception of the investigating officer, the respondent or the respondent's counsel.

§5.519 Rights of respondent.

(a) The Administrative Law Judge advises the respondent, on the record, of the right to:

(1) Be represented by professional counsel, or any other person desired;

(2) Have witnesses and relevant evidence subpenaed;

(3) Examine witnesses, cross-examine witnesses, and introduce relevant evidence into the record; and

(4) Testify or remain silent.

§5.521 Verification of license, certificate or document.

(a) The Administrative Law Judge shall require the respondent to produce and present at the opening of the hearing, and on each day the hearing is in session thereafter, all valid licenses, certificates, and/or documents issued by the Coast Guard to the respondent. In the event that the respondent alleges that such license, certificate or document has been lost, misplaced, stolen, destroyed, or is otherwise beyond his ability to produce, the respondent shall execute a lost document affidavit (Form CG–4363). The Adminstrative Law Judge shall warn the respondent that a willful misstatement of any material item in such affidavit is punishable as a violation of a federal criminal statute. (See 18 U.S.C. 1001).

(b) When a hearing is continued or delayed, the Administrative Law Judge returns the license, certificate, or document to the respondent: unless a prima facie case has been established that the respondent committed an act or offense which shows that the respondent's service on a vessel would constitute a definite danger to public health, interest or safety at sea.

§5.523 Motions or objections.

Any motion or objection shall be heard and disposed of, on the record, by the Administrative Law Judge.

§5.525 Correction or amendment of charges and/or specifications.

(a) The Administrative Law Judge examines the charges and specifications to determine their correctness as to form and legal sufficiency.

(b) The Administrative Law Judge may, either on the Administrative Law Judge's own motion or motion by either the investigating officer or respondent, amend the charges and specifications to correct harmless errors by deletion or substitution of words or figures as long as a legal charge and specification remains.

(c) When errors of substance are found in charges and specifications, the

Administrative Law Judge shall allow that the defective charge or specification be withdrawn without prejudice to the service of a new charge and specification in the matter. The investigating officer may then prepare and serve a new charge and specification.

§ 5.527 Answer.

(a) The Administrative Law Judge reads each charge and specification to the respondent and obtains a specific answer to each charge and specification. If the respondent fails to answer a charge or specification, the Administrative Law Judge enters a denial and proceeds with the hearing.

(b) A specific answer shall be one of the following:

(1) Deny;

(2) No contest; or

(3) Admit.

(c) For purposes of proceedings under this part, an admission or *no contest* answer is sufficient to support a finding of *proved* by the Adminstrative Law Judge.

(d) When the hearing is conducted *in absentia,* the Administrative Law Judge enters a denial to all charges and specifications.

§ 5.529 Opening statement of investigating officer.

(a) If a denial is entered, the investigating officer makes a brief statement outlining the matters expected to be proved.

(b) If the respondent admits the truth of the charges and specifications or answers *no contest,* the opening statement of the investigating officer shall contain a summary of the evidence upon which the charges and specifications are based.

§ 5.531 Opening statement by or on behalf of the respondent.

The respondent or the respondent's counsel is afforded an opportunity to state what is intended to be established. This may be waived or deferred at the option of the respondent.

§ 5.533 Presentation of case where there is an admission or no contest answer.

(a) If the respondent admits to any charge and specification or answers *no contest,* evidence in mitigation may be presented, and the investigating officer may present a prima facie case and evidence in aggravation even in those cases where revocation is mandatory.

(b) Should the respondent's presentation be inconsistent with an admission or answer of *no contest,* the Administrative Law Judge will reject the answer, enter a denial and continue with the hearing.

§ 5.535 Witnesses.

(a) All witnesses are sworn, duly examined, and may be cross examined. A witness on the stand may be questioned at any time by the Administrative Law Judge.

(b) The person who calls a witness shall begin direct examination by identifying the witness.

(c) Witnesses may be called to establish matters of aggravation or matters of mitigation.

(d) Any witness may have the benefit and advice of personal counsel, but such counsel shall not otherwise participate in the hearing.

(e) Any attempt to coerce or induce a witness to testify falsely is an offense under federal law which may be punishable by fine or imprisonment or both. (See 18 U.S.C. 1505.)

(f) Upon motion by the investigating officer or respondent, the Administrative Law Judge may order that testimony of a witness be taken by telephone conference call, when testimony would otherwise be taken by deposition. The telephone conference will be arranged so that all participants can listen to and speak to each other in the hearing of the Administrative Law Judge. The Administrative Law Judge insures that all participants in the telephone conference are properly identified to allow a proper record to be made by the reporter. Participants shall speak clearly and avoid extraneous conversation. Telephone conferences are governed by the procedural rules and decorum observed during in-person proceedings.

(g) A witness may be subpenaed to testify by telephone conference. The subpena in such instances is issued under the procedures in subpart F.

§5.537 Evidence.

(a) In these proceedings, strict adherence to the rules of evidence is not required. However, the Federal Rules of Evidence, as amended, shall be the primary guide for evidentiary matters, where applicable.

(b) Rules 410, 606, 706, and 1101 of the Federal Rules of Evidence shall not be applicable to these proceedings.

(c) In conducting a hearing the Administrative Law Judge will extend reasonable latitude to the respondent who does not have professional counsel to represent him. Investigating officers and counsel should be required to conform to the the rules of evidence to a greater degree than respondents without counsel.

§5.539 Burden of proof.

The investigating officer has the burden of proof.

§5.541 Official notice by Commandant and Administrative Law Judge.

(a) In addition to other rules providing for judicial notice, the Commandant and the Administrative Law Judges will consider the following without requiring the investigating officer or the respondent to submit them in evidence:

(1) *Federal Law.* The Constitution; Congressional Acts, Resolutions, Records, Journals and Committee Reports; Decisions of Federal Courts; Executive Orders and Proclamations; and rules, regulations, orders and notices published in the FEDERAL REGISTER.

(2) *State law.* The Constitution and public laws of each State.

(3) *Governmental organizations.* The organization, territorial limitations, officers, departments, and general administration of the Government of the United States, its States, territories, possessions and the Commonwealth of Puerto Rico.

(4) *Commandant's decisions.* The Commandant's decisions in all appeal and review cases under this part. (See §5.65.)

(b) Matters officially noticed by the Commandant or the Administrative Law Judge are specified on the record. The investigating officer and the respondent shall be afforded an opportunity, on the record, to rebut such matters.

§5.543 Certification of extracts from shipping articles, logbooks, etc.

(a) In addition to other rules providing for authentication and certification, extracts from records in the custody of the Coast Guard, shipping articles, and logbooks, may be identified and authenticated by certification of an investigating officer or custodian of such records, or by any commissioned officer of the Coast Guard.

(b) Certification must include a statement that the certifying individual has seen the original and compared the copy with it and found it to be a true copy. The individual so certifying shall sign name, rank or title, and duty station.

§5.545 Weight of entries from logbooks.

(a) An entry in an official logbook of a vessel concerning an offense enumerated in 46 U.S.C. 11501, made in substantial compliance with the procedural requirements of 46 U.S.C. 11502, is admissible in evidence and constitutes prima facie evidence of the facts recited.

(b) An entry in any logbook kept on a vessel may be admitted into evidence as an exception to the hearsay rule, under the Federal Rules of Evidence, as a record of a regularly conducted activity.

(c) An entry in any logbook made in compliance with the procedural requirements of 46 U.S.C. 11502 may be given added weight by the Administrative Law Judge.

§5.547 Use of judgment of conviction.

(a) A judgment of conviction by a Federal court is conclusive in proceedings under this part concerning incidents described in 46 U.S.C. 7703, where acts or offenses forming the basis of the charges in the Federal court are the same.

(b) Where the acts involved in a judgment of conviction of a State court are the same as those involved in proceedings under this part concerning incidents described in 46 U.S.C. 7703, the judgment of conviction is not conclusive of the issues decided. However,

such judgment of conviction is admissible in evidence and constitutes substantial evidence adverse to the respondent.

(c) The judgment of conviction for a dangerous drug law violation by a Federal or State court is conclusive in proceedings under this part. If as part of a state expungement scheme the respondent pleads guilty or no contest or is required by the court to attend classes, make contributions of time or money, receive treatment or submit to any manner of probation or supervision or forego appeal of the trial court finding, the respondent will be considered, for the purposes of 46 U.S.C. 7704, to have received a final conviction. A later expungement of the record will not be considered unless it is proved that the expungement is based on a showing that the court's earlier *conviction* was in error.

(d) The respondent may not challenge the jurisdiction of a Federal or State court in proceedings under 46 U.S.C. 7703 and 7704.

§ 5.549 Admissibility of respondent's Coast Guard records prior to entry of findings and conclusions.

(a) The prior disciplinary record of the respondent is admissible when offered by the respondent.

(b) In addition to the use of a judgment of conviction as provided in § 5.547, the prior record of the respondent, as defined in § 5.565, is admissible when offered by the investigating officer for the limited purposes of impeaching the credibility of evidence offered by the respondent regarding a disciplinary record.

§ 5.551 Admissions by respondent.

No person shall be permitted to testify with respect to admissions made by the respondent during or in the course of an investigation under this part or part 4 of this title except for the purpose of impeachment.

§ 5.553 Testimony by deposition.

(a) Testimony may be taken by deposition upon application of either party or upon the initiative of the Administrative Law Judge. The application of a party must be in writing and must contain the reasons for the deposition, the name and whereabouts of the witness and an approximate date, time and place for the deposition hearing. The applicant may request that it be by oral examination, or upon written interrogatories, or a combination thereof. The deposition may be taken before any person authorized to administer oaths.

(b) Upon good cause appearing therefor, the Administrative Law Judge enters and serves upon the parties an order designating the person before whom the deposition is to be taken, together with such other information, directions and orders as will enable the person so designated to obtain the testimony of the deponent. The Administrative Law Judge issues a subpena in accordance with subpart F of this part which, along with his order and a list of interrogatories and cross-interrogatories, if any, is forwarded to the person designated to take the deposition. This person shall have the subpena served upon the witness.

(c) The investigating officer and respondent and/or their representatives may attend the taking of a deposition.

(d) After the deposition has been taken and transcribed it is presented to the witness for examination, correction and signature unless such a procedure is waived by the deponent, on the record. The person taking the deposition shall certify to the signature of the witness. If, for any reason, the deposition or interrogatory is not signed by the witness, the person taking the deposition shall recite (under oath) thereon the reason it is not signed.

(e) A deposition upon oral examination may be taken by telephone conference upon such terms, conditions, and arrangements as are prescribed in the order of the Administrative Law Judge.

(f) The testimony at a deposition hearing may be recorded on videotape, upon such terms, conditions, and arrangements as are prescribed in the order of the Administrative Law Judge, at the expense of the party requesting the recording. The video recording may be in conjunction with an oral examination by telephone conference held pursuant to paragraph (e) of this section. After the deposition has been taken, the person taking the deposition

shall immediately seal the videotape in an envelope, attaching thereto a statement identifying the proceeding and the deponent and certifying as to the authenticity of the deposition, and return the videotape by accountable means to the Administrative Law Judge. Such deposition becomes a part of the record of proceedings in the same manner as a transcribed deposition. The videotape, if admitted in evidence, will be played during the hearing and transcribed into the record by the reporter.

(g) The Administrative Law Judge rules on the admissibility of the deposition or any part thereof and on any objections.

§5.555 Treatises.

(a) Treatises, periodicals, or pamphlets relating to nautical practices are admissible in evidence without the use of expert witnesses.

(b) The Administrative Law Judge evaluates such materials based on the facts and circumstances of the case. The materials may not be considered conclusive of an issue.

§5.557 Medical examination of respondent.

(a) In a hearing in which the physical or mental condition of the respondent is in controversy, the Administrative Law Judge may order the respondent to submit to a medical examination.

(b) An examination ordered by an Administrative Law Judge will be conducted at government expense by a physician designated by the Administrative Law Judge.

(c) If the respondent fails, or refuses, to submit to an ordered examination such failure is accorded due weight in determining the facts alleged in the specifications.

§5.559 Argument.

After all the evidence has been presented, the investigating officer and the respondent may present oral or written argument.

§5.561 Submission of proposed findings and conclusions.

The Administrative Law Judge affords the investigating officer and the respondent reasonable opportunity to submit proposed findings and conclusions with supporting reasons. If either desires to submit such matter, the Administrative Law Judge fixes the time within which it shall be filed. Failure to comply within the time fixed by the Administrative Law Judge shall be regarded as a waiver of the right.

§5.563 Administrative Law Judge's findings and conclusions.

(a) The Administrative Law Judge renders ultimate findings and conclusions.

(b) A separate conclusion is made by the Administrative Law Judge on each charge and specification. A specification may be found *not proved, proved in part,* or *proved.* A charge may be found *not proved* or *proved.*

(c) The testimony and exhibits presented, together with all papers, requests, and rulings filed in the proceedings are the exclusive basis for the issuance of the Administrative Law Judge's findings and conclusions.

§5.565 Submission of prior record and evidence in aggravation or mitigation.

(a) Except as provided in §5.547 and §5.549, the prior record of the respondent may not be disclosed to the Administrative Law Judge until after conclusions have been made as to each charge and specification, and then only if at least one charge has been found proved. The prior record must include only information concerning the respondent and is limited to the following items less than 10 years old:

(1) Written warnings issued by Coast Guard investigating officers and accepted by the respondent;

(2) Final agency action on Coast Guard suspension and revocation hearings wherein one or more charges was found proved;

(3) Voluntary surrender agreements entered into by the respondent;

(4) Any final judgments of conviction in State or Federal courts;

(5) Final agency action resulting in civil penalties or warnings being imposed against the respondent in proceedings administered by the Coast Guard under 33 CFR 1.07; and,

(6) Any official commendatory information concerning the respondent of

which the investigating officer is aware.

(b) The investigating officer may offer evidence and argument in aggravation of the charge or charges found proved.

(c) The respondent is allowed to comment on or offer evidence regarding prior maritime service including the prior record introduced by the investigating officer and any commendatory information.

(d) The respondent may offer evidence and argument in mitigation of the charge or charges found proved.

(e) The investigating officer may offer evidence and argument in rebuttal of the evidence and argument introduced by the respondent in mitigation.

§ 5.567 Order.

(a) The Administrative Law Judge enters an order which recites the disposition of the case. When a charge has been found *not proved,* the order will state the charge is *dismissed* with or without prejudice. When a charge is found *proved,* the Administrative Law Judge may order an *admonition, suspension* with or without probation, or *revocation*.

(b) The order is directed against all licenses, certificates or documents, except that in cases of negligence or professional incompetence, the order is made applicable to specific licenses, certificates or documents. If the Administrative Law Judge determines that the respondent is professionally incompetent in the grade of the license, certificate or document held, but is considered competent in a lower grade, the license, certificate or document may be revoked and the issuance of one of a lower grade ordered.

(c) An order must specify whether the license, certificate or document affected is:

(1) Revoked;

(2) Suspended outright for a specified period after surrender;

(3) Suspended for a specified period, but placed on probation for a specific period; or

(4) Suspended outright for a specified period, followed by a specified period of suspension on probation.

(d) The order will normally state, *that the license, certificate or document is to be surrendered to the Coast Guard immediately,* if the order is one of revocation or includes a period of outright suspension. In cases involving special circumstances, the order may provide for surrender on a certain date.

(e) The time of any period of outright suspension ordered does not commence until the license, certificate or document is surrendered to the Coast Guard. The time of any period of suspension on probation begins at the end of any period of outright suspension or the effective date of the order if there is no outright suspension.

§ 5.569 Selection of an appropriate order.

(a) This section addresses orders in a general manner. The selection of an appropriate order is the responsibility of the Administrative Law Judge, subject to appeal and review. The investigating officer and the respondent may suggest an order and present argument in support of this suggestion during the presentation of aggravating or mitigating evidence.

(b) Except for acts or offenses for which revocation is mandatory, factors which may affect the order include:

(1) Remedial actions which have been undertaken independently by the respondent;

(2) Prior record of the respondent, considering the period of time between prior acts and the act or offense for which presently charged is relevant; and

(3) Evidence of mitigation or aggravation.

(c) After an order of revocation is entered, the respondent will be given an opportunity to present relevant material on the record for subsequent consideration by the special board convened in the event an application is filed in accordance with subpart L of this part.

(d) Table 5.569 is for the information and guidance of Administrative Law Judges and is intended to promote uniformity in orders rendered. This table should not affect the fair and impartial adjudication of each case on its individual facts and merits. The orders are expressed by a range, in months of outright suspension, considered appropriate for the particular act or offense

prior to considering matters in mitigation or aggravation. For instance, without considering other factors, a period of two to four months outright suspension is considered appropriate for *Failure to Obey a master's written instructions.* An order within the range would not be considered excessive. Mitigating or aggravating factors may make an order greater or less than the given range appropriate. Orders for repeat offenders will ordinarily be greater than those specified.

TABLE 5.569—SUGGESTED RANGE OF AN APPROPRIATE ORDER

Type of offense	Range of order (in months)
Misconduct:	
Failure to obey master's/ship officer's order.	1–3.
Failure to comply with U.S. law or regulations.	1–3.
Possession of intoxicating liquor.	1–4.
Failure to obey master's written instruction.	2–4.
Improper performance of duties related to vessel safety.	2–5.
Failure to join vessel (required crew member).	2–6.
Violent acts against other persons (without injury).	2–6.
Failure to perform duties related to vessel safety.	3–6.
Theft	3–6.
Violent acts against other persons (injury).	4-Revocation.
Use, possession, or sale of dangerous drugs.	Revocation (Note: see §5.59).
Negligence:	
Negligently performing duties related to vessel navigation.	2–6.
Negligently performing non-navigational duties related to vessel safety.	1–3.
Neglect of vessel navigation duties.	3–6.
Neglect of non-navigational safety related duties.	2–4.
Incompetence	The only proper order for a charge of incompetence found proved is revocation.
Violation of Regulation:	
Refusal to provide specimens for required chemical test..	12–24.
Dangerous drugs (46 U.S.C. 7704).	The only proper order for a charge under 46 U.S.C. 7704 found proved is revocation.

[CGD 82-002, 50 FR 32184, Aug. 9, 1985, as amended by CGD 86–067, 53 FR 47079, Nov. 21, 1989]

§5.571 Delivery of decision.

(a) Whenever possible, the Administrative Law Judge's decision is delivered in writing to the respondent or to the respondent's authorized representative at the final hearing session. If it is not possible for the Administrative Law Judge to deliver a complete written decision at the final session of the hearing, an oral decision is rendered on the record, with a written order prepared and served on the respondent or the respondent's authorized representative. The decision, including the order, is effective upon service of the written order.

(b) If a complete written decision is not delivered at the final hearing session, the Administrative Law Judge prepares and has served on the respondent or the respondent's authorized representative a complete written decision within 30 days, when possible, after completion of the hearing. This delivery may be by personal service or certified mail, return receipt requested. The signed acknowledgment of personal service or the return receipt becomes a part of the hearing record.

(c) As used in this section, the phrase, *authorized representative* means any person who has been authorized by the respondent, as shown by the hearing record, to receive service and take an appeal on behalf of the respondent.

[CGD 82–002, 50 FR 32184, Aug. 9, 1985; 50 FR 35228, Aug. 30, 1985]

§5.573 Notification of right to appeal.

The respondent is advised by the Administrative Law Judge of the right to appeal in accordance with subpart J of this part.

§5.577 Modification of Administrative Law Judge's decision and order.

(a) After an Administrative Law Judge renders the decision and order, it may be modified or changed pursuant to procedures set forth in paragraph (b) of this section, in subpart I of this part for reopening of hearings; in subpart J of this part for appeals; or in subpart K of this part for review of Administrative Law Judge's decision by the Commandant. In the absence of any such actions, the decision of the Administrative Law Judge is final.

(b) When the proceeding is based on a conviction for a dangerous drug law violation, recision of the order affecting the license, certificate or document will not be granted, unless the applicant submits a specific court order to the effect that the conviction has been unconditionally set aside for all purposes. An order of revocation will not be rescinded as the result of any law which provides for a subsequent conditional setting aside, modification or expungement of the court conviction in the nature of granting of clemency or other relief after the conviction has become final, without regard to whether punishment was imposed.

Subpart I—Reopening of Hearings

§ 5.601 Petition to reopen hearing.

(a) A respondent may petition to reopen the hearing on the basis of newly discovered evidence or on the basis of being unable to present evidence due to the respondent's inability to appear at the hearing through no fault of the respondent and due to circumstances beyond the respondent's control.

(b) The filing of a petition does not stay an existing order of the Administrative Law Judge. However, if filed within 30 days after the effective date of the Administrative Law Judge's decision, it will toll or defer the running of the 30-day statutory period of appeal as provided in subpart J of this part until the Administrative Law Judge has acted on the petition.

[CGD 82–002, 50 FR 32184, Aug. 9, 1985; 50 FR 35228, Aug. 30, 1985]

§ 5.603 Procedures for submitting petition.

(a) The procedures for submitting a petition based on newly discovered evidence are as follows:

(1) A petition to reopen the hearing may be submitted at any time prior to a final decision on appeal or within one year of the effective date of the Administrative Law Judge's decision.

(2) If an appeal to the Commandant from the Administrative Law Judge's decision has not been filed, the petition must be addressed to the Administrative Law Judge. If an appeal to the Commandant has been filed, the petition must be submitted to the Commandant.

(3) The petition must be in letter form, typewritten or written legibly, and shall contain:

(i) The name of the petitioner, the number and description of the license, certificate and/or document involved, nature of the charge, the decision rendered including the order, and the name of the Administrative Law Judge who heard the case;

(ii) A statement setting forth a description of the newly discovered evidence; and

(iii) A statement as to whether or not this additional evidence was known to the petitioner at the time of the hearing, and reasons why the petitioner, with due diligence, could not have discovered such new evidence prior to the completion of the hearing.

(b) The procedures for submitting a petition on the basis of inability to appear at the hearing are as follows:

(1) A petition to reopen the hearing may be submitted within 30 days of the effective date of the Administrative Law Judge's decision.

(2) If an appeal to the Commandant from the Administrative Law Judge's decision has not been filed, the petition must be addressed to the Administrative Law Judge. If an appeal to the Commandant has been filed, the petition must be submitted to the Commandant.

(3) The petition must be in letter form, typewritten or written legibly, and shall contain:

(i) The name of the petitioner, the number and description of the license, certificate and/or document involved, nature of the charge, the decision rendered including the order, and the name of the Administrative Law Judge who heard the case;

(ii) A statement setting forth a description of the evidence the petitioner would have offered at the hearing; and

(iii) A statement as to why the petitioner was unable to appear at the hearing including why the petitioner did not seek a change in the time or place for opening of the hearing.

§ 5.605 Action on petition.

(a) The Administrative Law Judge, or Commandant, as appropriate, forwards

a copy of the petition to the investigating officer. The investigating officer is afforded a reasonable time within which to submit written comments as to the merits of the petition.

(b) The Administrative Law Judge, or the Commandant, renders a decision either granting or denying the petition. The decision on the petition will be based on a consideration of the petition, the record of the hearing, and the investigating officer's comments, if any.

(c) If the Administrative Law Judge grants the petition, the hearing is reopened to allow the offer of the new evidence described in the petition.

(d) If the Commandant grants the petition, the case is remanded to the Administrative Law Judge with directions to reopen the hearing.

(e) When the petition is granted, the Administrative Law Judge withdraws the original decision and renders a new one based on the record of the original hearing and the new evidence received.

(f) The petition, the investigating officer's comments, the Administrative Law Judge's or Commandant's decision on the petition, and the additional evidence will be appended to the original hearing record.

§5.607 Appeal from action on petition.

(a) If the petition to reopen the hearing is denied by the Administrative Law Judge, the respondent may appeal to the Commandant within 30 days from the date of service of the denial of the petition. The review by the Commandant on this appeal will be limited to the issues raised by the petition. Other grounds on appeal must be in accordance with subpart J of this part.

(b) If the petition to reopen the hearing is granted and a previous finding of *proved* is affirmed by the Administrative Law Judge, the respondent may appeal the decision as provided for in subpart J of this part.

Subpart J—Appeals

§5.701 Appeals in general.

(a) A respondent against whom a finding of *proved* has been rendered may appeal such decision to the Commandant.

(b) The hearing transcript, together with all papers and exhibits filed, shall constitute the record for decision on appeal. The only matters which will be considered by the Commandant on the appeal are:

(1) Rulings on motions or objections which were not waived during the proceedings;

(2) Clear errors on the record;

(3) Jurisdictional questions.

(c) In the preparation of an appeal, the investigating officer's and the Administrative Law Judge's assistance to the appellant will extend only to the point of providing information as to the applicable regulations.

(d) If the respondent requests a copy of the transcript in the notice of appeal and the hearing was recorded or transcribed at government expense, the transcript will be provided upon payment of the fees prescribed in 49 CFR 7.95. If the services of a government contractor were utilized, the transcript must be obtained under the provisions of 49 CFR 7.99.

§5.703 Procedures for appeal.

(a) An appeal may be taken only by filing a written notice of appeal within 30 days after service of the complete written decision. This notice of appeal must be filed with the Administrative Law Judge who heard the case or with any Officer in Charge, Marine Inspection for forwarding to the Administrative Law Judge.

(b) The notice of appeal must:

(1) Be typewritten or written legibly;

(2) Be addressed to the Commandant; and

(3) Set forth the name of the appellant, the number and description of the license, certificate and/or document involved, and the name of the Administrative Law Judge who heard the case.

(c) The completed appeal must be submitted to the Commandant, U.S. Coast Guard (G–MOA), 2100 2nd St. SW., Washington, DC, 20593 within sixty days after service of the complete written decision, or if a transcript was requested, within 60 days after receipt of the transcript. After this time has elapsed, anything received will not be considered as a part of the appeal record unless an extension of time has

been granted in writing by the Commandant and the extended time limit has been met.

(d) The appeal must contain a brief or memorandum setting forth legal and other authorities relied upon. All grounds for appeal or exceptions to the Administrative Law Judge's decision must be described with particularity.

(e) No appeal will be accepted in the case of a revocation or outright suspension if the respondent has not complied with the order of the Administrative Law Judge to deposit the license or document with the Coast Guard.

[CGD 82–002, 50 FR 32184, Aug. 9, 1985, as amended by CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§ 5.705 Action on appeal.

(a) The Commandant may affirm, reverse, alter, or modify the decision of the Administrative Law Judge, or may remand the case for further proceedings. The Decision of the Commandant on Appeal is the final agency action in the absence of a remand.

(b) Failure to file a brief containing grounds and justification for relief sought on appeal of the Administrative Law Judge's decision will result in either:

(1) Termination of the case by written notice to the appellant or appellant's counsel that the decision of the Administrative Law Judge constitutes the final agency action on the merits of the case; or

(2) Consideration of the appeal on the merits of the case and publication of the Commandant's decision without prior notice to the appellant or appellant's counsel. This will only be done when some clear error appears in the record or when the case presents some novel policy consideration.

§ 5.707 Stay of effect of decision and order of Administrative Law Judge on appeal to the Commandant; temporary license, certificate, or document.

(a) A person who has appealed from a decision suspending outright or revoking a license, certificate or document, except for revocation resulting from an offense enumerated in § 5.59, may file a written request for a temporary license, certificate or document. This request must be submitted to the Administrative Law Judge who presided over the case, or to any Officer in Charge, Marine Inspection for forwarding to the Administrative Law Judge.

(b) Action on the request is taken by the Administrative Law Judge unless the hearing transcript has been forwarded to the Commandant, in which case, the request is forwarded to the Commandant for final action.

(c) A determination as to the request will take into consideration whether the service of the individual is compatible with the requirements for safety at sea and consistent with applicable laws. If one of the offenses enumerated in § 5.61(a) has been found proved, the continued service of the appellant will be presumed not compatible with safety at sea, subject to rebuttal by the appellant. A temporary document or license may be denied for that reason alone.

(d) All temporary documents will provide that they expire not more than six months after issuance or upon service of the Commandant's decision on appeal, whichever occurs first. If a temporary document expires before the Commandant's decision is rendered, it may be renewed, if authorized by the Commandant.

(e) If the request for a temporary document is denied by the Administrative Law Judge, the individual may appeal the denial, in writing, to the Commandant within 30 days after notification of such denial. Any decision by the Commandant to deny is the final agency action.

(f) Copies of the temporary documents issued become a part of the record on appeal.

§ 5.709 Appeal cases remanded for further proceedings.

(a) When the Commandant renders a decision remanding a case for further proceedings, the remand is directed to the Administrative Law Judge. If a reopening of the former hearing or a new hearing is necessary, the Administrative Law Judge notifies the investigating officer and the respondent and sets a date for the hearing.

(b) If the hearing is reopened, the evidence in the prior hearing shall be

evaluated together with the new evidence submitted.

(c) In a new hearing, the evidence in the prior hearing may be used for purposes of impeachment. Evidence in the prior hearing may be stipulated as a part of the record of the new hearing.

(d) The Administrative Law Judge renders either an entirely new decision or a decision incorporating by reference the original decision, as appropriate.

§5.711 Commandant's Decisions on Appeal.

(a) The Commandant's Decisions on Appeal are the final agency action taken in appeals under the suspension and revocation proceedings provided by this part. These Decisions are issued seriatim and are public records.

(b) The Commandant's Decisions on Appeal are available for reading purposes at Coast Guard Headquarters, Offices of District Commanders, and at Marine Safety Offices and Marine Inspection Offices. (See 33 CFR subpart 1.10.)

§5.713 Appeals to the National Transportation Safety Board.

(a) The rules of procedure for appeals to the National Transportation Safety Board from decisions of the Commandant, U.S. Coast Guard, affirming orders of suspension or revocation of licenses, certificates, or documents are in 49 CFR part 825. These rules give the party adversely affected by the Commandant's decision 10 days after service upon him or his attorney of the Commandant's decision to file a notice of appeal with the Board.

(b) In all cases under this part which are appealed to the National Transportation Safety Board under 49 CFR part 825, the Chief Counsel of the Coast Guard is designated as the representative of the Commandant for service of notices and appearances. Communications should be addressed to Commandant (G–L), U.S. Coast Guard, 2100 2nd St. SW., Washington, DC 20593.

(c) In cases before the National Transportation Safety Board the Chief Counsel of the Coast Guard may be represented by others designated *of counsel.*

§5.715 Stay of effect of Decision of the Commandant on Appeal: Temporary document and/or license pending appeal to National Transportation Safety Board.

(a) A Decision of the Commandant on Appeal affirming an order of revocation, except a revocation resulting from an offense enumerated under §5.59 or suspension that is not placed entirely on probation, which is appealed to the National Transportation Safety Board, may be stayed if, in the Commandant's opinion, the service of the appellant on board a vessel at that time or for the indefinite future would be compatible with the requirements of safety at sea and consistent with applicable laws. If one of the offenses enumerated in §5.61(a) has been found proved, the continued service of the appellant will be presumed not compatible with safety at sea, subject to rebuttal by the appellant; in cases of offenses under §5.61(a), a temporary document or license may be denied for that reason alone.

(b) A stay of the effect of the Decision of the Commandant on Appeal may be granted by the Commandant upon application by the respondent filed with the notice served on the Commandant under 49 CFR 825.5(b).

(c) An Officer in Charge, Marine Inspection, on presentation of an original stay order, issues a temporary document and/or license as specified in the stay order. This document is effective for not more than six months, renewable until such time as the National Transportation Safety Board has completed its review.

Subpart K—Review of Administrative Law Judge's Decisions in Cases Where Charges Have Been Found Proved

§5.801 Commandant's review.

Any decision of an Administrative Law Judge, in which there has been a finding of *proved,* may be called up for review by the Commandant without procedural formality.

§5.803 Record for decision on review.

The transcript of hearing, together with all papers and exhibits filed, shall

constitute the record for consideration and review.

§ 5.805 Action on review.

(a) The Commandant may adopt in whole or in part the findings, conclusions, and basis therefor stated by the Administrative Law Judge, may make entirely new findings on the record, or may remand the case to the Administrative Law Judge for further proceedings.

(b) In no case will the review by the Commandant be followed by any order increasing the severity of the Administrative Law Judge's original order.

(c) The Decision of the Commandant on Review, shall be the final agency action in the absence of a remand.

§ 5.807 Commandant's Decision on Review.

The Commandant's Decisions on Review are available for reading purposes at Coast Guard Headquarters, at Offices of District Commanders, Marine Safety Offices and Marine Inspection Offices. (See 33 CFR subpart 1.10.)

Subpart L—Issuance of New Licenses, Certificates or Documents After Revocation or Surrender

§ 5.901 Time limitations.

(a) Any person whose license, certificate or document has been revoked or surrendered for one or more of the offenses described in § 5.59 and § 5.61(a) may, three years after compliance with the Administrative Law Judge's decision and order or the date of voluntary surrender, apply for the issuance of a new license, certificate or document.

(b) The three year time period may be waived by the Commandant upon a showing by the individual that, since the occurrence upon which the revocation or surrender was based, the individual has demonstrated his good character in the community for a period exceeding three years.

(c) Any person whose license, certificate or document has been revoked or surrendered for one or more offenses which are not specifically described in §5.59 or § 5.61(a) may, after one year, apply for the issuance of a new license, certificate or document.

(d) For a person whose license, certificate, or document has been revoked or surrendered for the wrongful simple possession or use of dangerous drugs, the three year time period may be waived by the Commandant upon a showing that the individual:

(1) Has successfully completed a bona fide drug abuse rehabilitation program;

(2) Has demonstrated complete non-association with dangerous drugs for a minimum of one year following completion of the rehabilitation program and;

(3) Is actively participating in a bona fide drug abuse monitoring program.

(e) For a person whose license, certificate or document has been revoked or surrendered for offenses related to alcohol abuse, the waiting period may be waived by the Commandant upon a showing that the individual has successfully completed a bona fide alcohol abuse rehabilitation program and is actively participating in a bona fide alcohol abuse monitoring program.

(f) The waivers specified under subparagraphs (d) or (e) of this section may only be granted once to each person.

[CGD 82–002, 50 FR 32184, Aug. 9, 1985, as amended by CGD 84–099, 52 FR 47535, Dec. 14, 1987]

§ 5.903 Application procedures.

(a) An application form for a new license, certificate or document may be obtained from any Officer in Charge, Marine Inspection.

(b) The completed application and letter must be addressed to the Commandant, U.S. Coast Guard, 2100 2nd St. SW., Washington, DC 20593, and must be delivered in person to the nearest Officer in Charge, Marine Inspection.

(c) The letter is an informal request for the issuance of a new license, certificate or document and should include the following:

(1) A letter from each employer during the last three years attesting to the individual's work record;

(2) Information supportive of rehabilitation or cure when the license, certificate or document was revoked because of incompetency or association with dangerous drugs; and

(3) Any other information which may be helpful in arriving at a determination in the matter.

(d) The Officer in Charge, Marine Inspection, forwards the letter and application, together with an evaluation and recommendation, to the Commandant.

§5.905 Commandant's decision on application.

(a) The applicant's letter and application form, as well as the evaluation and recommendation, are referred to a special board appointed by the Commandant. The board examines all the material submitted with the application and such other information as may, in the judgment of the board, be considered appropriate. The board shall submit its findings and recommendation to the Commandant.

(b) The Commandant shall determine whether or not a new license, certificate or document will be issued. The applicant will be notified by letter of such determination.

PART 6—WAIVERS OF NAVIGATION AND VESSEL INSPECTION LAWS AND REGULATIONS [1]

Sec.

6.01 Procedures for effecting individual waivers of navigation and vessel inspection laws and regulations.
6.04 Vessels requisitioned by the United States for emergency evacuation.
6.06 Vessels operated by or chartered to Military Sealift Command.
6.07 Chronological record of seaman's previous employment.
6.15 Permits for commercial vessels handling explosives at military installations.

AUTHORITY: Act Dec. 27, 1950, Ch. 1155, secs. 1, 2, 64 Stat. 1120 (see 46 U.S.C. App. note prec. 1); 49 CFR 1.46.

§6.01 Procedures for effecting individual waivers of navigation and vessel inspection laws and regulations.

(a) It is hereby found necessary in the interest of national defense to waive compliance with the navigation and vessel inspection laws administered by the Coast Guard, as well as the regulations issued thereunder and published in 33 CFR chapter I or in this chapter, to the extent and in the manner and upon the terms and conditions as set forth in this section.

(b) An application requesting that a waiver be made effective with respect to a particular vessel may be made by any authorized representative of an agency of the United States Government or any other interested person (including the master, agent, or owner of the vessel involved). Except as provided in paragraph (d) of this section, the application shall be in writing. The application shall be delivered to the Coast Guard District Commander or to his designated representative at the port or place where the vessel is located. In the case of a vessel in any foreign port or place, the application shall be made to the designated representative of the Commandant at such port or place, or if the Coast Guard has not established facilities in such port or place, to the nearest designated representative of the Commandant at a port or place where such facilities have been established. Every application shall contain a statement of the particular provisions of law with respect to which waiver of compliance is requested, a certification that the waiver of compliance with such laws with respect to the vessel involved is necessary in the interest of national defense and, an outline of the facts upon which such certification is based. The Coast Guard District Commander (or his designated representative or the designated representative of the Commandant, as the case may be) shall promptly examine every application for the purpose of determining whether the necessity for prompt action is such as to require that the waiver be made effective by him without reference to the Commandant. In any case in which it appears to the Coast Guard officer

[1] This is also codified in 33 CFR part 19.

concerned that reference of the application to the Commandant for action would not delay the sailing of the vessel or otherwise be contrary to the interest of national defense, the application shall be so referred. In all other cases such Coast Guard officer shall give immediate consideration to the application and if he reaches the conclusion that the urgency of the situation outweighs the marine hazard involved, then such waiver shall be made effective in regard to such vessel to the extent and under the circumstances specified by him.

(c) The Coast Guard officer making such a waiver effective pursuant to paragraph (b) of this section shall immediately prepare, in triplicate, an order setting forth the name of the vessel involved, the laws (also regulations, if any) with respect to which the waiver is effective, the extent to which compliance with such laws (also regulations, if any) is waived, and the period for which the waiver shall be effective. If practicable, one copy of this order shall be delivered to the master of the vessel involved before such vessel sails. In any case where the order is not delivered to the master, it shall be delivered to the owner, operator, or agent of the vessel without delay. One copy of the order shall be transmitted to the Commandant and the remaining copy kept on file.

(d) In any case of extreme urgency the application for a waiver may be made orally and if the Coast Guard District Commander (or his designated representative or the designated representative of the Commandant, as the case may be) reaches the conclusion referred to in paragraph (b) of this section, the waiver shall be made effective without further delay, subject to the condition that the application be reduced to writing and delivered within such period after the date of the oral request as the Coast Guard officer making the waiver effective shall specify in the order.

(e) No penalty shall be imposed because of failure to comply with any provision of law (or regulation, if any), the waiver of which has been made effective pursuant to the requirements in this section.

[CGFR 51–10, 16 FR 1959, Mar. 1, 1951. Redesignated by CGFR 69–123, 34 FR 19076, Dec. 2, 1969; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§ 6.04 Vessels requisitioned by the United States for emergency evacuation.

Pursuant to the request of the Acting Secretary of Defense, dated November 21, 1951, made under the provisions of section 1 of Public Law 891, 81st Congress, approved December 27, 1950, compliance with the provisions of the navigation and vessel inspection laws administered by the United States Coast Guard is hereby waived, as well as the regulations issued thereunder and published in 33 CFR codeter I or in this chapter, to the extent necessary to permit the operation of vessels which might be requisitioned by the United States for the purpose of emergency evacuation.

[CGFR 51–61, 16 FR 12792, Dec. 20, 1951. Redesignated by CGFR 69–123, 34 FR 19076, Dec. 2, 1969]

§ 6.06 Vessels operated by or chartered to Military Sealift Command.

(a) Pursuant to the request of the Deputy Secretary of Defense, dated August 6, 1958, and to the request of the Assistant Secretary of Defense, Installations and Logistics, dated May 23, 1964, made under the provisions of section 1 of Public Law 891, 81st Congress, approved December 27, 1950 (64 Stat. 1120; 46 U.S.C., note preceding section 1), and their findings that a waiver is necessary in the interest of national defense, compliance with the provisions of the navigation and vessel inspection laws administered by the United States Coast Guard, as well as the regulations issued thereunder and contained in 33 CFR chapter I, or in this chapter, is hereby waived to the extent and upon the terms and conditions as set forth in this section, in order to permit vessels operated by or chartered to the Military Sealift Command to carry out their assigned missions.

(b) An application requesting that this waiver be made effective with respect to a particular vessel may be

made by the Commander, Military Sealift Command, or any one of his duly designated representatives. Except as provided in paragraph (e) of this section, the application shall be in writing. The application shall be delivered to the Coast Guard District Commander or to his designated representative at the port or place where the vessel is located. In the case of a vessel in any foreign port or place, the application shall be made to the designated representative of the Commandant at such port or place, or if the Coast Guard has not established facilities in such port or place, to the nearest designated representative of the Commandant at a port or place where such facilities have been established, or to the Commandant (G–MOC), U.S. Coast Guard, Washington, DC 20593–0001. Every application shall:

(1) Describe the laws and/or regulations by appropriate references and/or subjects with respect to which the waiver of compliance is desired;

(2) Contain a certification that the waiver of compliance with such laws and/or regulations with respect to the vessel involved is necessary in the interest of national defense and is necessary for the Military Sea Transportation Service to carry out an assigned mission;

(3) The name and official number of the vessel involved (including the names of master, agent, and owner of the vessel involved); and,

(4) For how long the waiver is needed.

(c) The Coast Guard officer making the waiver in paragraph (a) of this section effective for a particular vessel shall immediately prepare, in quadruplicate, an order setting forth:

(1) The name and official number of the vessel involved;

(2) The laws and/or regulations with respect to which the waiver is effective;

(3) The extent to which compliance with such laws and/or regulations is waived; and,

(4) The period for which the waiver shall be effective.

(d) If practicable, one copy of this waiver order shall be delivered to the master of the vessel involved before such vessel sails. In any case where the waiver order is not delivered to the master, it shall be delivered to the owner, operator, or agent of the vessel without delay. One copy of the waiver order shall be delivered to the Commander, Military Sealift Command, or his duly designated representative, who submitted the application. One copy of the waiver order shall be transmitted to the Commandant (G–MOC) and the remaining copy kept on file.

(e) In any case of extreme urgency, the application for a waiver order may be made orally and if the Coast Guard District Commander (or his designated representative, or the designated representative of the Commandant, or the Commandant, as the case may be), determines that the conditions in this section have been met, the waiver order shall be made effective without further delay, subject to the condition that the application be reduced to writing and delivered within such period after the date of the oral request as the Coast Guard officer making the waiver effective shall specify in the confirming written waiver order.

(f) No penalty shall be imposed because of failure to comply with any provision of law and/or regulation, the waiver of which has been made effective pursuant to the requirements of this section.

(g) This waiver order shall remain in effect until terminated by proper authority and notice of cancellation is published in the FEDERAL REGISTER.

[CGFR 64–86, 30 FR 89, Jan. 6, 1965. Redesignated by CGFR 69–123, 34 FR 19076, Dec. 2, 1969, and amended by CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 88–070, 54 FR 3038, Jan. 23, 1989; CGD 95–072, 60 FR 50459, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§6.07 Chronological record of seaman's previous employment.

(a) Compliance is hereby waived with regard to the provisions of subsection (h) of R.S. 4551, as amended (46 U.S.C. 643), to the extent necessary to permit the Commandant of the United States Coast Guard to issue a chronological record of a seaman's previous employment on a single document, in lieu of making individual entry in a duplicate continuous discharge book or furnishing individual certificates of discharge.

(b) It is hereby found that the waiving of the provisions of R.S.

4551(h), as amended (46 U.S.C. 643), is necessary in the interest of national defense.

[CGFR 51–9, 16 FR 1830, Feb. 27, 1951, as amended by CGFR 59–4a, 24 FR 3055, Apr. 21, 1959. Redesignated by CGFR 69–123, 34 FR 19076, Dec. 2, 1969]

§ 6.15 Permits for commercial vessels handling explosives at military installations.

Pursuant to the request of the Secretary of Defense in a letter dated October 19, 1955, made under the provisions of section 1 of the act of December 27, 1950 (64 Stat. 1120; 46 U.S.C., note prec. 1), I hereby waive in the interest of national defense compliance with the provisions of R.S. 4472, as amended (46 U.S.C. 1970), and the regulations promulgated thereunder in part 146 of this chapter to the extent that no quantitative restrictions, based on considerations of isolation and remoteness, shall be required by the Coast Guard for commercial vessels loading or unloading explosives at the Department of Defense waterfront installations. This waiver shall not relieve a commercial vessel loading or unloading explosives at the Department of Defense waterfront installations from the requirement of securing a permit from the Coast Guard for such operations with respect to quantitative or other restrictions imposed by the Coast Guard on the basis of each vessel's ability to meet prescribed stowage and handling requirements.

[CGFR 55–49, 20 FR 8638, Nov. 23, 1955. Redesignated by CGFR 69–123, 34 FR 19076, Dec. 2, 1969]

PART 7—BOUNDARY LINES

GENERAL

Sec.
7.1 General purpose of boundary lines.
7.5 Rules for establishing boundary lines.

ATLANTIC COAST

7.10 Eastport, ME to Cape Ann, MA.
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7.20 Nantucket Sound, Vineyard Sound, Buzzards Bay, Narragansett Bay, MA, Block Island Sound and easterly entrance to Long Island Sound, NY.
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7.75 Savannah River/Tybee Roads.
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7.90 St. Johns River, FL.
7.95 St. Johns Point, FL to Miami Beach, FL.
7.100 Florida Reefs and Keys from Miami, FL to Marquesas Keys, FL.

GULF COAST

7.105 Marquesas Keys, FL to Rio Grande, TX.

HAWAII

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PACIFIC COAST

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7.120 Mexican/United States border to Point Fermin, CA.
7.125 Point Vincente, CA to Point Conception, CA.
7.130 Point Conception, CA to Point Sur, CA.
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ALASKA

7.150 Canadian (BC) and United States (AK) Borders to Cape Spencer, AK.
7.155 Cape Spencer, AK to Cape St. Elias, AK.
7.160 Point Whitshed, AK to Aialik Cape, AK.
7.165 Kenai Peninsula, AK to Kodiak Island, AK.
7.170 Alaska Peninsula, AK to Aleutian Islands, AK.
7.175 Alaska Peninsula, AK to Nunivak, AK.
7.180 Kotzebue Sound, AK.

AUTHORITY: 14 U.S.C. 633; 33 U.S.C. 151; 49 CFR 1.46.

SOURCE: CGD 81–058, 50 FR 25230, June 18, 1985, unless otherwise noted.

GENERAL

§7.1 General purpose of boundary lines.

The lines in this part delineate the application of the following U.S. statutes: 33 U.S.C. 152 relating to the length of towing hawsers; 33 U.S.C. 1201 *et seq.*, the Vessel Bridge-to-Bridge Radiotelephone Act; 46 U.S.C. 88, the Coastwise Loadline Act; 46 U.S.C. 3301(6) requiring the inspection of seagoing barges which are defined in 46 U.S.C. 2101(32); 46 U.S.C. 3301(7) requiring the inspection of seagoing motor vessels which are defined in 46 U.S.C. 2101(33); 46 U.S.C. 3302(d) which exempts from inspection requirements certain vessels under 150 gross tons that operate within the waters of southeastern Alaska and the State of Washington; and 46 U.S.C. 8304, ''Implementing the Officers' Competency Certificates Convention, 1936.''

§7.5 Rules for establishing boundary lines.

(a) For application of the Vessel Bridge-to-Bridge Radiotelephone Act, 33 U.S.C. 1201 *et seq.*, the line is 3 miles seaward of the baseline from which the territorial sea is measured.

(b) Barges of 100 gross tons and over operating on the sheltered waters of British Columbia as defined in the United States-Canada treaty of 1933 (49 Stat. 2685, TS 869) are not required to be inspected as seagoing barges under 46 U.S.C. 3301.

(c) Except as otherwise described in this part, Boundary Lines are lines drawn following the general trend of the seaward, highwater shorelines and lines continuing the general trend of the seaward, highwater shorelines across entrances to small bays, inlets and rivers.

ATLANTIC COAST

§7.10 Eastport, ME to Cape Ann, MA.

(a) A line drawn from the easternmost extremity of Kendall Head to latitude 44°54′45″ N. longitude 66°58′30″ W.; thence to the range marker located in approximate position latitude 44°51′45″ N. longitude 66°59″ W.

(b) A line drawn from West Quoddy Head Light to latitude 44°48.5′ N. longitude 66°56.4′ W. (Sail Rock Lighted Whistle Buoy ''1''); thence to latitude 44°37.5′ N. longitude 67°09.8′ W. (Little River Lighted Whistle Buoy ''2LR''); thence to latitude 44°14.5′ N. longitude 67°57.2′ W. (Frenchman Bay Approach Lighted Whistle Buoy ''FB''); thence to Mount Desert Light; thence to Matinicus Rock Light; thence to Monhegan Island Light; thence to latitude 43°31.6′ N. longitude 70°05.5′ W. (Portland Lighted Horn Buoy ''P''); thence to Boon Island Light; thence to latitude 42°37.9′ N. longitude 70°31.2′ W. (Cape Ann Lighted Whistle Buoy ''2'').

§7.15 Massachusetts Bay, MA.

A line drawn from latitude 42°37.9′ N. longitude 70°31.2′ W. (Cape Ann Lighted Whistle Buoy ''2'') to latitude 42°22.7′ N. longitude 70°47.0′ W. (Boston Lighted Horn Buoy ''B''); thence to Race Point Light.

§7.20 Nantucket Sound, Vineyard Sound, Buzzards Bay, Narragansett Bay, MA, Block Island Sound and easterly entrance to Long Island Sound, NY.

(a) A line drawn from Chatham Light to latitude 41°36.1′ N. longitude 69°51.1′ W. (Pollack Rip Entrance Lighted Horn Buoy ''PR''); thence to latitude 41°26.0′ N. longitude 69°46.2′ W. (Great Round Shoal Channel Lighted Buoy ''2''); thence to Sankaty Head Light.

(b) A line drawn from the westernmost extremity of Nantucket Island to the southwesternmost extremity of Wasque Point, Chappaquiddick Island.

(c) A line drawn from Gay Head Light to Block Island Southeast Light; thence to Montauk Point Light on the easterly end of Long Island.

§7.25 Montauk Point, NY to Atlantic Beach, NY.

(a) A line drawn from Shinnecock East Breakwater Light to Shinnecock West Breakwater Light.

(b) A line drawn from Moriches Inlet East Breakwater Light to Moriches Inlet West Breakwater Light.

(c) A line drawn from Fire Island Inlet Breakwater Light 348° true to the southernmost extremity of the spit of land at the western end of Oak Beach.

(d) A line drawn from Jones Inlet Light 322° true across the southwest

tangent of the island on the north side of Jones Inlet to the shoreline.

§ 7.30 New York Harbor, NY.

A line drawn from East Rockaway Inlet Breakwater Light to Ambrose Light; thence to Highlands Light (north tower).

§ 7.35 Sandy Hook, NJ to Cape May, NJ.

(a) A line drawn from Shark River Inlet North Breakwater Light ''2'' to Shark River Inlet South Breakwater Light ''1''.

(b) A line drawn from Manasquan Inlet North Breakwater Light to Manasquan Inlet South Breakwater Light.

(c) A line drawn along the submerged Barnegat Inlet North Breakwater to Barnegat Inlet North Breakwater Light ''2''; thence to Barnegat Inlet Light ''5''; thence along the submerged Barnegat Inlet South Breakwater to shore.

(d) A line drawn from the seaward tangent of Long Beach Island to the seaward tangent of Pullen Island across Beach Haven and Little Egg Inlets.

(e) A line drawn from the seaward tangent of Pullen Island to the seaward tangent of Brigantine Island across Brigantine Inlet.

(f) A line drawn from the seaward extremity of Absecon Inlet North Jetty to Atlantic City Light.

(g) A line drawn from the southernmost point of Longport at latitude 39°18.2′ N. longitude 74°32.2′ W. to the northeasternmost point of Ocean City at latitude 39°17.6′ N. longitude 74°33.1′ W. across Great Egg Harbor Inlet.

(h) A line drawn parallel with the general trend of the seaward, highwater shoreline across Corson Inlet.

(i) A line formed by the centerline of the Townsend Inlet Highway Bridge.

(j) A line formed by the shoreline of Seven Mile Beach and Hereford Inlet Light.

§ 7.40 Delaware Bay and tributaries.

A line drawn from Cape May Inlet East Jetty Light to latitude 38°55.8′ N. longitude 74°51.4′ W. (Cape May Harbor Inlet Lighted Bell Buoy ''2CM''); thence to latitude 38°48.9′ N. longitude 75°02.3′ W. (Delaware Bay Entrance Channel Lighted Buoy ''8''); thence to the northernmost extremity of Cape Henlopen.

§ 7.45 Cape Henlopen, DE to Cape Charles, VA.

(a) A line drawn from the easternmost extremity of Indian River Inlet North Jetty to latitude 38°36.5′ N. longitude 75°02.8′ W. (Indian River Inlet Lighted Gong Buoy ''1''); thence to Indian River Inlet South Jetty Light.

(b) A line drawn from Ocean City Inlet Light ''6'' to latitude 38°19.4′ N. longitude 75°05.0′ W. (Ocean City Inlet Entrance Lighted Buoy ''4''); thence to latitude 38°19.3′ N. longitude 75°05.1′ W. (Ocean City Inlet Entrance Lighted Buoy ''5''); thence to the easternmost extremity of the south breakwater.

(c) A line drawn from Assateague Beach Tower Light to latitude 37°50.2′ N. longitude 75°24.9′ W. (Chincoteague Inlet Lighted Bell Buoy ''CI''); thence to the tower charted at latitude 37°52.6′ N. longitude 75°26.7′ W.

(d) A line drawn from the southernmost extremity of Cedar Island to latitude 37°34.7′ N. longitude 75°36.0′ W. (Wachapreague Inlet Entrance Lighted Buoy ''1''); thence due south to shore at Parramore Beach.

(e) A line drawn from the seaward tangent of Parramore Beach to the lookout tower on the northern end of Hog Island chartered in approximate position latitude 37°27.2′ N. longitude 75°40.5′ W.

§ 7.50 Chesapeake Bay and tributaries.

A line drawn from Cape Charles Light to latitude 36°56.8′ N. longitude 75°55.1′ W. (North Chesapeake Entrance Lighted Gong Buoy ''NCD''); thence to latitude 36°54.8′ N. longitude 75°55.6′ W. (Chesapeake Bay Entrance Lighted Bell Buoy ''CBC''); thence to latitude 36°55.0′ N. longitude 75°58.0′ W. (Cape Henry Buoy ''1''); thence to Cape Henry Light.

§ 7.55 Cape Henry, VA to Cape Fear, NC.

(a) A line drawn from Rudee Inlet Jetty Light ''2'' to latitude 36°50′ N. longitude 75°56.7′ W.; thence to Rudee Inlet Jetty Light ''1''.

(b) A line drawn from Bodie Island Light to latitude 35°49.3′ N. longitude 75°31.9′ W. (Oregon Inlet Approach Lighted Whistle Buoy ''OI''); thence to Oregon Inlet Radiobeacon.

(c) A line drawn from Hatteras Inlet Light 255° true to the eastern end of Ocracoke Island.

(d) A line drawn from the westernmost extremity of Ocracoke Island at latitude 35°04′ N. longitude 76°00.8′ W. to the northeasternmost extremity of Portsmouth Island at latitude 35°03.7′ N. longitude 76°02.3′ W.

(e) A line drawn across Drum Inlet parallel with the general trend of the seaward, highwater shoreline.

(f) A line drawn from the southernmost extremity of Cape Lookout to latitude 34°38.4′ N. longitude 76°40.6′ W. (Beaufort Inlet Lighted Bell Buoy ''2BI''); thence to the seaward extremity of the Beaufort Inlet west jetty.

(g) A line drawn from the seaward extremity of Masonboro Inlet north jetty to latitude 34°10.3′ N. longitude 77°48.0′ W. (Masonboro Inlet Lighted Whistle Buoy ''A''); thence to the beach in approximate position latitude 34°10′ N. longitude 77°49.4′ W.

§7.60 Cape Fear, NC to Sullivans Island, SC.

(a) A line drawn from the southernmost extremity to Cape Fear to latitude 33°49.5′ N. longitude 78°03.7′ W. (Cape Fear River Entrance Lighted Bell Buoy ''2CF''); thence to Oak Island Light.

(b) A line drawn from the southernmost extremity of Bird Island at approximate position latitude 33°51.2′ N. longitude 78°32.6′ W. to latitude 33°50.3′ N. longitude 78°32.5′ W. (Little River Inlet Entrance Lighted Whistle Buoy ''2LR''); thence to the northeasternmost extremity of Waties Island at approximate position latitude 33°51.2′ N. longitude 78°33.6′ W.

(c) A line drawn from the seaward extremity of Murrells Inlet north jetty to latitude 33°31.5′ N. longitude 79°01.6′ W. (Murrells Inlet Lighted Bell Buoy ''MI''); thence to Murrells Inlet South Jetty Light.

(d) A line drawn from Georgetown Light to latitude 33°11.6′ N. longitude 79°05.4′ W. (Winyah Bay Lighted Bell Buoy ''2WB''); thence to the southernmost extremity of Sand Island.

§7.65 Charleston Harbor, SC.

A line drawn from Charleston Light on Sullivans Island to latitude 32°40.7′ N. longitude 79°42.9′ W. (Charleston Lighted Whistle Buoy ''2C''); thence to Folly Island Loran Tower (latitude 32°41.0′ N. longitude 79°53.2′ W.).

§7.70 Folly Island, SC to Hilton Head Island, SC.

(a) A line drawn from the southernmost extremity of Folly Island to latitude 32°35′ N. longitude 79°58.2′ W. (Stono Inlet Lighted Whistle Buoy ''1S''); thence to Kiawah Island bearing approximately 307° true.

(b) A line drawn from the southernmost extremity of Kiawah Island to latitude 32°31′ N. longitude 80°07.8′ W. (North Edisto River Entrance Lighted Whistle Buoy ''2NE''); thence to Botany Bay Island in approximate position latitude 32°33.1′ N. longitude 80°12.7′ W.

(c) A line drawn from the microwave antenna tower on Edisto Beach charted in approximate position latitude 32°29.3′ N. longitude 80°19.2′ W. across St. Helena Sound to the abandoned lighthouse tower on Hunting Island charted in approximate position latitude 32°22.5′ N. longitude 80°26.5′ W.

(d) A line drawn from the abandoned lighthouse on Hunting Island in approximate position latitude 32°22.5′ N. longitude 80°26.2′ W. to latitude 32°18′ N. longitude 80°25′ W.; thence to the standpipe on Fripp Island in approximate position latitude 32°19′ N. longitude 80°28.7′ W.

(e) A line drawn from the westernmost extremity of Bull Point on Capers Island to latitude 32°04.8′ N. longitude 80°34.9′ W. (Port Royal Sound Lighted Whistle Buoy ''2PR''); thence to the easternmost extremity of Hilton Head at latitude 32°13.2′ N. longitude 80°40.1′ W.

§7.75 Savannah River/Tybee Roads.

A line drawn from the southwesternmost extremity of Braddock Point to latitude 31°58.3′ N. longitude 80°44.1′ W. (Tybee Lighted Whistle Buoy ''T''); thence to the southeasternmost extremity of Little Tybee Island bearing approximately 269° true.

§ 7.80 Tybee Island, GA to St. Simons Island, GA.

(a) A line drawn from the southernmost extremity of Savannah Beach on Tybee Island 255° true across Tybee Inlet to the shore of Little Tybee Island south of the entrance to Buck Hammock Creek.

(b) A line drawn from the southernmost extremity of Little Tybee Island at Beach Hammock to the easternmost extremity of Wassaw Island.

(c) A line drawn from Wassaw Island in approximate position latitude 31°52.5′ N. longitude 80°58.5′ W. to latitude 31°48.3′ N. longitude 80°56.8′ W. (Ossabaw Sound North Channel Buoy ''OS''); thence to latitude 31°39.3′ N. longitude 81°02.3′ W. (St. Catherines Sound Buoy ''St. C.''); thence to latitude 31°31.2′ N. longitude 81°03.8′ W. (Sapelo Sound Buoy ''S''); thence to the easternmost extremity of Blackbeard Island at Northeast Point.

(d) A line drawn from the southernmost extremity of Blackbeard Island to latitude 31°19.4′ N. longitude 81°11.5′ W. (Doboy Sound Lighted Buoy ''D''); thence to latitude 31°04.1′ N. longitude 81°16.7′ W. (St. Simons Lighted Whistle Buoy ''ST S'').

§ 7.85 St. Simons Island, GA to Little Talbot Island, FL.

(a) A line drawn from latitude 31°04.1′ N. longitude 81°16.7′ W. (St. Simons Lighted Whistle Buoy ''ST S'') to latitude 30°42.7′ N. longitude 81°19.0′ W. (St. Mary's Entrance Lighted Whistle Buoy ''1''); thence to Amelia Island Light.

(b) A line drawn from the southernmost extremity of Amelia Island to latitude 30°29.4′ N. longitude 81°22.9′ W. (Nassau Sound Approach Buoy ''6A''); thence to the northeasternmost extremity of Little Talbot Island.

§ 7.90 St. Johns River, FL.

A line drawn from the southeasternmost extremity of Little Talbot (Spike) Island to latitude 30°23.8′ N. longitude 81°20.3′ W. (St. Johns Lighted Whistle Buoy ''2 STJ''); thence to St. Johns Light.

§ 7.95 St. Johns Point, FL to Miami Beach, FL.

(a) A line drawn from the seaward extremity of St. Augustine Inlet north jetty to latitude 29°55′ N. longitude 81°15.3′ W. (St. Augustine Lighted Whistle Buoy ''ST. A.''); thence to the seaward extremity of St. Augustine Inlet south jetty.

(b) A line formed by the centerline of the highway bridge over Matanzas Inlet.

(c) A line drawn from the seaward extremity of Ponce de Leon Inlet north jetty to latitude 29°04.7′ N. longitude 80°54′ W. (Ponce de Leon Inlet Lighted Bell Buoy ''2''); thence to Ponce de Leon Inlet Approach Light.

(d) A line drawn from Canaveral Harbor Approach Channel Range Front Light to latitude 28°23.7′ N. longitude 80°32.2′ W. (Canaveral Bight Wreck Lighted Buoy ''WR6''); thence to the radio tower on Canaveral Peninsula in approximate position latitude 28°22.9′ N. longitude 80°36.6′ W.

(e) A line drawn across the seaward extremity of the Sebastian Inlet Jetties.

(f) A line drawn from the seaward extremity of the Fort Pierce Inlet North Jetty to latitude 27°28.5′ N. longitude 80°16.2′ W. (Fort Pierce Inlet Lighted Whistle Buoy ''2''); thence to the tank located in approximate position latitude 27°27.2′ N. longitude 80°17.2′ W.

(g) A line drawn from the seaward extremity of St. Lucie Inlet north jetty to latitude 27°10′N. longitude 80°08.4′ W. (St. Lucie Inlet Entrance Lighted Whistle Buoy ''2''); thence to Jupiter Island bearing approximately 180° true.

(h) A line drawn from the seaward extremity of Jupiter Inlet North Jetty to the northeast extremity of the concrete apron on the south side of Jupiter Inlet.

(i) A line drawn from the seaward extremity of Lake Worth Inlet North Jetty to latitude 26°46.4′ N. longitude 80°01.5′ W. (Lake Worth Inlet Lighted Bell Buoy ''2LW''); thence to Lake Worth Inlet Lighted Buoy ''3''; thence to the seaward extremity of Lake Worth Inlet South Jetty.

(j) A line drawn across the seaward extremity of the Boynton Inlet Jetties.

(k) A line drawn from Boca Raton Inlet North Jetty Light ''2'' to Boca Raton Inlet South Jetty Light ''1''.

(l) A line drawn from Hillsboro Inlet Light to Hillsboro Inlet Entrance Light ''2''; thence to Hillsboro Inlet Entrance

Light ''1''; thence west to the shoreline.

(m) A line drawn from the tower located in approximate position latitude 26°06.9′ N. longitude 80°06.4′ W. to latitude 26°05.5′ N. longitude 80°04.8′ W. (Port Everglades Lighted Whistle Buoy ''1''); thence to the signal tower located in approximate position latitude 26°05.5′ N. longitude 80°06.5′ W.

(n) A line drawn from the seaward extremity of Bakers Haulover Inlet north jetty 090° true to longitude 80°07.2′ W.; thence to the seaward extremity of Bakers Haulover Inlet south jetty.

§7.100 Florida Reefs and Keys from Miami, FL to Marquesas Keys, FL.

(a) A line drawn from the tower located in approximate position latitude 25°46.7′ N. longitude 80°08′ W. to latitude 25°46.1′ N. longitude 80°05.0′ W. (Miami Lighted Whistle Buoy ''M''); thence to Fowey Rocks Light (latitude 25°35.4′ N. longitude 80°05.8′ W.); thence to Pacific Reef Light (latitude 25°22.3′ N. longitude 80°08.5′ W.) thence to Carysfort Reef Light (latitude 25°13.3′ N. longitude 80°12.7′ W.); thence to Molasses Reef Light ''10'' (latitude 25°00.7′ N. longitude 80°22.6′ W.); thence to Alligator Reef Light (latitude 24°51.1 N. longitude 80°37.1′ W.); thence to Tennessee Reef Light (latitude 24°44.7′ N. longitude 80°46.9′ W.); thence to Sombrero Key Light (latitude 24°37.6′ N. longitude 81°06.6′ W.); thence to American Shoal Light (latitude 24°31.5′ N. longitude 81°31.2′ W.); thence to latitude 24°27.7′ N. longitude 81°48.1′ W. (Key West Entrance Lighted Whistle Buoy); thence to Cosgrove Shoal Light (latitude 24°27.5′ N. longitude 82°11.2′ W.); thence due north to a point 12 miles from the baseline from which the territorial sea is measured in approximate position latitude 24°47.5′ N. longitude 82°11.2′ W.

GULF COAST

§7.105 Marquesas Keys, FL to Rio Grande, TX.

(a) A line drawn from Marquesas Keys, Florida at approximate position latitude 24°47.5′ N. longitude 82°11.2′ W. along the 12-mile line which marks the seaward limits of the contiguous zone (as defined in 33 CFR part 2.05–15) to Rio Grande, Texas at approximate position latitude 25°58.6′ N. longitude 96°55.5′ W.

HAWAII

§7.110 Mamala Bay, HI.

A line drawn from Barbers Point Light to Diamond Head Light.

PACIFIC COAST

§7.115 Santa Catalina Island, CA.

(a) A line drawn from the northernmost point of Lion Head to the north tangent of Bird Rock Island; thence to the northernmost point of Blue Cavern Point.

(b) A line drawn from White Rock to the northernmost point of Abalone Point.

§7.120 Mexican/United States border to Point Fermin, CA.

(a) A line drawn from the southerly tower of the Coronado Hotel in approximate position latitude 32°40.8′ N. longitude 117°10.6′ W. to latitude 32°39.1′ N. longitude 117°13.6′ W. (San Diego Bay Channel Lighted Bell Buoy ''5''); thence to Point Loma Light.

(b) A line drawn from Mission Bay South Jetty Light ''2'' to Mission Bay North Jetty Light ''1''.

(c) A line drawn from Oceanside South Jetty Light ''4'' to Oceanside Breakwater Light ''3''.

(d) A line drawn from Dana Point Jetty Light ''6'' to Dana Point Breakwater Light ''5''.

(e) A line drawn from Newport Bay East Jetty Light ''4'' to Newport Bay West Jetty Light ''3''.

(f) A line drawn from Anaheim Bay East Jetty Light ''6'' to Anaheim Bay West Jetty Light ''5''; thence to Long Beach Breakwater East End Light ''1''. A line drawn from Long Beach Entrance Light ''2'' to Long Beach Light. A line drawn from Los Angeles Main Channel Entrance Light ''2'' to Los Angeles Light.

§7.125 Point Vincente, CA to Point Conception, CA.

(a) A line drawn from Redondo Beach East Jetty Light ''2'' to Redondo Beach West Jetty Light ''3''.

(b) A line drawn from Marina Del Rey Light ''4'' to Marina Del Rey Breakwater South Light ''1''. A line drawn from Marina Del Rey Breakwater North Light ''2'' to Marina Del Rey Light ''3''.

(c) A line drawn from Port Hueneme East Jetty Light ''4'' to Port Hueneme West Jetty Light ''3''.

(d) A line drawn from Channel Islands Harbor South Jetty Light ''2'' to Channel Islands Harbor Breakwater South Light ''1''. A line drawn from Channel Islands Harbor Breakwater North Light to Channel Islands Harbor North Jetty Light ''5''.

(e) A line drawn from Ventura Marina South Jetty Light ''6'' to Ventura Marina Breakwater South Light ''3''. A line drawn from Ventura Marina Breakwater North Light to Ventura Marina North Jetty Light ''7''.

(f) A line drawn from Santa Barbara Harbor Light ''4'' to latitude 34°24.1′ N. longitude 119°40.7′ W. (Santa Barbara Harbor Lighted Bell Buoy ''1''); thence to Santa Barbara Harbor Breakwater Light.

§ 7.130 Point Conception, CA to Point Sur, CA.

(a) A line drawn from the southernmost extremity of Fossil Point at longitude 120°43.5′ W. to the seaward extremity of Whaler Island Breakwater.

(b) A line drawn from the outer end of Morro Bay Entrance East Breakwater to latitude 35°21.5′ N. longitude 120°52.3′ W. (Morro Bay Entrance Lighted Bell Buoy ''1''); thence to Morro Bay West Breakwater Light.

§ 7.135 Point Sur, CA to Cape Blanco, OR.

(a) A line drawn from Monterey Harbor Light ''6'' to latitude 36°36.5′ N. longitude 121°53.2′ W. (Monterey Harbor Anchorage Buoy ''A''); thence to the northernmost extremity of Monterey Municipal Wharf No. 2.

(b) A line drawn from seaward extremity of the pier located 0.3 mile south of Moss Landing Harbor Entrance to the seaward extremity of the Moss Landing Harbor North Breakwater.

(c) A line drawn from Santa Cruz Light to the southernmost projection of Soquel Point.

(d) A straight line drawn from Point Bonita Light across Golden Gate through Mile Rocks Light to the shore.

(e) A line drawn from the northwestern tip of Tomales Point to latitude 38°15.1′ N. longitude 123°00.1′ W. (Tomales Point Lighted Horn Buoy ''2''); thence to latitude 38°17.2′ N. longitude 123°02.3′ W. (Bodega Harbor Approach Lighted Gong Buoy ''BA''); thence to the southernmost extremity of Bodega Head.

(f) A line drawn from Humboldt Bay Entrance Light ''4'' to Humboldt Bay Entrance Light ''3''.

(g) A line drawn from Crescent City Outer Breakwater Light ''5'' to the southeasternmost extremity of Whaler Island at longitude 124°11′ W.

§ 7.140 Cape Blanco, OR to Cape Flattery, WA.

(a) A line drawn from the seaward extremity of the Coos Bay South Jetty to latitude 43°21.9′ N. longitude 124°21.7′ W. (Coos Bay Entrance Lighted Bell Buoy ''1''); thence to the seaward extremity of the Coos Bay North Jetty.

(b) A line drawn from the lookout tower located in approximate position latitude 46°13.6′ N. longitude 124°00.7′ W. to latitude 46°12.8′ N. longitude 124°08.0′ W. (Columbia River Entrance Lighted Whistle Buoy ''2''); thence to latitude 46°14.5′ N. longitude 124°09.5′ W. (Columbia River Entrance Lighted Bell Buoy ''1''); thence to North Head Light.

(c) A line drawn from latitude 46°52.8′ N. longitude 124°12.6′ W. (Grays Harbor Light to Grays Harbor Entrance Lighted Whistle Buoy ''2''); thence to latitude 46°55.0′ N. longitude 124°14.7′ W. (Grays Harbor Entrance Lighted Whistle Buoy ''3''); thence to Grays Harbor Bar Range Rear Light.

§ 7.145 Strait of Juan de Fuca, Haro Strait and Strait of Georgia WA.

(a) A line drawn from the northernmost point of Angeles Point to latitude 48°21.1′ N. longitude 123°02.5′ W. (Hein Bank Lighted Bell Buoy); thence to latitude 48°25.5′ N. longitude 122°58.5′ W. (Salmon Bank Lighted Gong Buoy ''3''); thence to Cattle Point Light on San Juan Island.

(b) A line drawn from Lime Kiln Light to Kellett Bluff Light on Henry Island; thence to Turn Point Light on

Stuart Island; thence to Skipjack Island Light; thence to latitude 48°46.6′ N. longitude 122°53.4′ W. (Clements Reef Bouy ''2''); thence to International Boundary Range B Front Light.

ALASKA

§7.150 Canadian (BC) and United States (AK) Borders to Cape Spencer, AK.

(a) A line drawn from the northeasternmost extremity of Point Mansfield, Sitklan Island 040° true to the mainland.

(b) A line drawn from the southeasternmost extremity of Island Point, Sitklan Island to the southernmost extremity of Garnet Point, Kanagunut Island; thence to Lord Rock Light; thence to Barren Island Light; thence to Cape Chacon Light; thence to Cape Muzon Light.

(c) A line drawn from Point Cornwallis Light to Cape Bartolome Light; thence to Cape Edgecumbe Light; thence to the westernmost extremity of Cape Cross.

(d) A line drawn from Surge Bay Entrance Light to Cape Spencer Light.

§7.155 Cape Spencer, AK to Cape St. Elias, AK.

(a) A line drawn from the westernmost extremity of Harbor Point to the southernmost extremity of LaChaussee Spit at Lituya Bay.

(b) A line drawn from Ocean Cape Light to latitude 59°31.9′ N. longitude 139°57.1′ W. (Yakutat Bay Entrance Lighted Whistle Buoy ''2''); thence to the southeasternmost extremity of Point Manby.

(c) A line drawn from the northernmost extremity of Point Riou to the easternmost extremity of Icy Cape.

§7.160 Point Whitshed, AK to Aialik Cape, AK.

(a) A line drawn from the southernmost extremity of Point Whitshed to the easternmost extremity of Hinchinbrook Island.

(b) A line drawn from Cape Hinchinbrook Light to Schooner Rock Light ''1''.

(c) A line drawn from the southwesternmost extremity of Montague Island to Point Elrington Light; thence to the southernmost extremity of Cape Puget.

(d) A line drawn from the southernmost extremity of Cape Resurrection to the Aialik Cape.

§7.165 Kenai Peninsula, AK to Kodiak Island, AK.

(a) A line drawn from the southernmost extremity of Kenai Peninsula at longitude 151°44.0′ W. to East Amatuli Island Light; thence to the northwesternmost extremity of Shuyak Island at Party Cape; thence to the easternmost extremity of Cape Douglas.

(b) A line drawn from the southernmost extremity of Pillar Cape on Afognak Island to Spruce Cape Light; thence to the easternmost extremity of Long Island; thence to the northeasternmost extremity of Cape Chiniak.

(c) A line drawn from Cape Nunilak at latitude 58°09.7′ N. to the northernmost extremity of Raspberry Island. A line drawn from the westernmost extremity of Raspberry Cape to the northernmost extremity of Miners Point.

§7.170 Alaska Peninsula, AK to Aleutian Islands, AK.

(a) A line drawn from the southernmost extremity of Cape Kumlium to the westernmost extremity of Nakchamik Island; thence to the easternmost extremity of Castle Cape at Chignik Bay.

(b) A line drawn from Second Priest Rock to Ulakta Head Light at Iliuliuk Bay entrance.

(c) A line drawn from Arch Rock to the northernmost extremity of Devilfish Point at Captains Bay.

(d) A line drawn from the easternmost extremity of Lagoon Point to the northwesternmost extremity of Cape Kutuzof at Port Moller.

§7.175 Alaska Peninsula, AK to Nunivak, AK.

(a) A line drawn from the northernmost extremity of Goose Point at Egegik Bay to Protection Point.

(b) A line drawn from the westernmost extremity of Kulukak Point to the northernmost extremity of Round Island; thence to the southernmost extremity of Hagemeister Island; thence

to the southernmost extremity of Cape Peirce; thence to the southernmost extremity of Cape Newenham.

(c) A line drawn from the church spire located in approximate position latitude 59°45′ N. longitude 161°55′ W. at the mouth of the Kanektok River to the southernmost extremity of Cape Avinof.

§ 7.180 Kotzebue Sound, AK.

A line drawn from Cape Espenberg Light to latitude 66°52′ N. longitude 163°28′ W.; and thence to Cape Krusenstern Light.

PART 9—EXTRA COMPENSATION FOR OVERTIME SERVICES

Sec.

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AUTHORITY: 46 U.S.C. 2103; 49 CFR 1.46.

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§ 9.1 Extra compensation; Coast Guard civilian personnel.

Civilians assigned to the duties formerly assigned to local inspectors and their assistants, United States shipping commissioners and their deputies and assistants prior to Reorganization Plan No. 3 of 1946 (3 CFR, 1946 Supp.), and customs officers and employees, while performing duties in connection with the inspection of vessels or their equipment, supplying or signing on or discharging crews of vessels, at night or on Sundays and holidays, shall receive extra compensation to be paid by the master, owner, or agent of the vessel to the local United States collector of customs or his representative. (See § 9.16.)

§ 9.2 Payment although no actual service performed.

The rates of extra compensation are payable in cases where the services of officers or employees have been duly requested and the officers or employees have reported for duty, even though no actual service may be performed.

§ 9.3 Overtime earnings not basis for overtime under Federal Employees Pay Act of 1945.

Overtime, Sunday, and holiday services which are covered by payments under this part shall not also form a basis for overtime or extra pay under the Federal Employees Pay Act of 1945.

§ 9.4 Waiting time; actual report for duties.

Extra compensation for *waiting time* will not be allowed unless and until an officer or employee actually reports for duty.

§ 9.5 Night, Sunday, and holiday defined.

(a) For the purpose of this part the word *night* shall mean the time between 5 p.m. of any day and 8 a.m. of the following day.

(b) The term *holiday* shall mean only national legal public holidays, viz., January 1, February 22, May 30, July 4, the 1st Monday in September, November 11, the 4th Thursday in November, December 25, and such other days as may be declared legal public holidays by an act of Congress or by an Executive order of the President of the United States.

(c) The term *Sunday* shall include the first day of each calendar week.

§ 9.6 Rate for night service.

The rate of extra compensation for authorized overtime services performed at night on any week day is hereby fixed at one half the gross daily rate of regular pay of the employee who performs the services for each 2 hours of compensable time, any fraction of 2 hours amounting to at least one hour

to be counted as 2 hours. In computing the amount earned, each 2 hours is the time period for the purpose of computation, at least one hour means the minimum service in each period for which extra pay may be granted. If service continues beyond a 2 hour period, it must extend for at least one hour into the following 2 hour period to be entitled to extra pay for the second period. When the overtime extends beyond 5 p.m., payment of extra compensation from 5 p.m. for services consisting of at least one hour is authorized, even though such services may not actually begin until 7 p.m., 9 p.m., or later: *Provided,* That the officer rendering the service remained on duty from 5 p.m., in which case the time between 5 p.m., and the time of beginning the actual service shall be computed as waiting time; and where the actual services begin as late as 9 p.m., there should be an affirmative statement that the officer was required to remain on duty between 5 p.m. and 9 p.m., if a charge for waiting time is made. The maximum amount of extra compensation which may be paid an employee for services during one night shall not exceed two and one-half times the gross daily rate of his regular pay.

§9.7 Rate for Sunday or holiday services.

The rate of extra compensation for Sunday or holiday services is hereby fixed at twice the gross daily rate of regular pay of the employee who performs the service, for any and all services totaling an aggregate of not more than nine hours, with one hour for food and rest, during the 24 hours from midnight to midnight of the Sunday or holiday including actual waiting time and time required for travel between posts of duty but not including other time not spent at the post of duty. This rate shall apply regardless of the length of time served within the aggregate of the aforesaid 9 hours, whether it is served continuously or in broken periods, and whether it is served for one or more applicants. Services in excess of an aggregate of the aforesaid 9 hours performed during the 24 hours of a Sunday or holiday shall be compensated on the same basis as overtime services performed at night on a weekday, the time between the completion of the aggregate of the aforesaid 9 hours and midnight being considered as the hours of a night. The maximum amount which may be paid an employee for services performed during the 24 hours of a Sunday or holiday shall not exceed four and one-half times the gross daily rate of his regular pay.

§9.8 Broken periods.

In computing extra compensation where the services rendered are in broken periods and less than 2 hours intervene between such broken periods the time served should be combined with the waiting time and computed as continuous service.

§9.9 Two hours between broken periods.

Where 2 hours or more intervene between broken periods, one-half day's extra pay will be allowed for each distinct 2-hour period or part of a 2–hour period, if waiting time and actual service rendered within each period consists of at least 1 hour.

§9.10 Waiting time.

The same construction should be given the act when charging for waiting time as governs the charge for services actually rendered. No charge should be made unless after having reported for duty the waiting time amounts to at least one hour.

§9.11 Proration of charges.

If services are performed for two or more applicants during one continuous tour of overtime duty, the charge for the extra compensation earned shall be prorated equitably according to the time attributable to the services performed for each applicant.

§9.12 Travel status overtime.

When employees are in travel status, overtime shall apply the same as at official station.

§9.13 Congressional appropriations necessary.

Payment of extra compensation for overtime services shall be subject to appropriations being made therefor by Congress.

§ 9.14 Assessment and collection of fees.

Assessment and collection of fees against steamship companies for overtime services shall be made even though the payment to employees for such services may not be made until funds are appropriated for that purpose.

§ 9.15 Application form.

An application on a form prescribed by the Commandant of the Coast Guard, shall be filed with the office being requested to furnish overtime services before such assignment can be made.

§ 9.16 Billing for services.

Overtime services shall be billed to the steamship companies on collection voucher provided for that purpose. Remittance shall be made by postal money order or certified check payable to the *Collector of Customs, Treasury Department* and forwarded to that officer at the port indicated on the voucher, who shall in turn deposit such remittance to a properly designated receipt account.

§ 9.17 Protests.

Protests against the exaction of extra compensation shall be forwarded to the Commandant of the Coast Guard.

SUBCHAPTER B—MERCHANT MARINE OFFICERS AND SEAMEN

PART 10—LICENSING OF MARITIME PERSONNEL

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10.427 Service requirements for mate of near coastal steam or motor vessels of not more than 200 gross tons.
10.428 Service requirements for master of near coastal steam or motor vessels of not more than 100 gross tons.
10.429 Service requirements for limited master of near coastal steam or motor vessels of not more than 100 gross tons.
10.430 Licenses for the Great Lakes and inland waters.

10.431 Tonnage requirements for Great Lakes and inland licenses for vessels of over 1600 gross tons.
10.433 Service requirements for master of Great Lakes and inland steam or motor vessels of any gross tons.
10.435 Service requirements for master of inland steam or motor vessels of any gross tons.
10.437 Service requirements for mate of Great Lakes and inland steam or motor vessels of any gross tons.
10.442 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.
10.444 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.
10.446 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 500 gross tons.
10.448 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 500 gross tons.
10.450 Tonnage limitations and qualifying requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 200 gross tons.
10.452 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.
10.454 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.
10.455 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.
10.456 Service requirements for limited master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.
10.457 Service requirements for master of inland steam or motor vessels of not more than 100 gross tons.
10.459 Service requirements for master or mate of rivers.
10.462 Licenses for master or mate of uninspected fishing industry vessels.
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10.520 Service requirements for chief engineer (limited-near coastal) of steam and/or motor vessels.
10.522 Service requirements for assistant engineer (limited-oceans) of steam and/or motor vessels.
10.524 Service requirements for designated duty engineer of steam and/or motor vessels.
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10.701 Scope of pilot licenses and endorsements.
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AUTHORITY: 31 U.S.C. 9701, 46 U.S.C. 2103, 2110; 46 U.S.C. Chapter 71; 49 CFR 1.45, 1.46; §10.107 also issued under the authority of 44 U.S.C. 3507.

SOURCE: CGD 81–059, 52 FR 38623, Oct. 16, 1987 (interim) and CGD 81–059, 54 FR 132, Jan. 4, 1989 (final), unless otherwise noted.

Subpart A—General

§10.101 Purpose of regulations.

(a) The purpose of the regulations in this part is to provide a comprehensive means of determining the qualifications an applicant must possess in order to be eligible for a license as deck, engineer, pilot, or radio officer on merchant vessels, or a license to operate uninspected towing vessels or uninspected passenger vessels, or for a certificate of registry as staff officer.

(b) With few exceptions, these regulations do not specify or restrict licenses to particular types of service such as tankships, freight vessels or passenger vessels. However, all licensed personnel shall become familiar with the relevant characteristics of each vessel prior to assuming their duties. As appropriate, these characteristics include but are not limited to: general arrangement of the vessel; maneuvering characteristics; proper operation of the installed navigation equipment; firefighting and lifesaving equipment; stability and loading characteristics; emergency duties; and main propulsion and auxiliary machinery, including steering gear systems and controls.

(c) The regulations in subpart C of this part prescribe the requirements applicable to all approved training courses if the training course is to be acceptable as a partial substitute for service, for an examination requirement, or as training required for a particular license or license endorsement.

§10.103 Definitions of terms used in this part.

Assistant engineer means a qualified officer in the engine department.

Assistance towing means towing a disabled vessel for consideration.

Ballast control operator (BCO) is a licensed officer restricted to service on MODUs. The duties involve the operation of the complex ballast system found on many MODUs. A ballast control operator, when assigned to a MODU, is the equivalent of a conventionally licensed mate.

Barge supervisor (BS) is a licensed officer restricted to service on MODUs. The duties involve support to the OIM in marine related matters including, but not limited to, maintaining watertight integrity, inspecting and maintaining mooring and towing components, and the maintenance of emergency and other marine related equipment. A barge supervisor, when assigned to a MODU is the equivalent of a conventionally licensed mate.

Boatswain means the leading seaman and immediate supervisor of unlicensed deck personnel who supervises the maintenance of deck gear.

Chief engineer means any person responsible for the mechanical propulsion of a vessel and who is the holder of a valid license as chief engineer.

Chief mate means the deck officer next in seniority to the master and upon whom the command of the vessel will fall in the event of the incapacity of the master.

Conviction means the applicant for a license or certificate of registry has been found guilty by judgment or plea by a court of record of the United States, the District of Columbia or any State or territory of the United States of a criminal felony or misdemeanor or of an offense described in section 205 of the National Driver Register Act of 1982 (49 U.S.C. 30304). Conviction of more than one offense at a single trial will be considered to be multiple convictions. If an applicant pleads guilty or no contest, is granted deferred adjudication, or is required by the court to attend classes, make contributions of time or money, receive treatment, submit to any manner of probation or supervision, or forego appeal of a trial court's conviction, then the applicant

will be considered to have received a conviction. A later expungement of the conviction will not negate a conviction unless it is proved to the OCMI that the expungement is based upon a showing that the court's earlier conviction was in error.

Day means, for the purpose of complying with the service requirements of this part, eight hours of watchstanding or day-working not to include overtime. On vessels where a 12 hour working day is authorized and practiced, such as on a six-on, six-off watch schedule, each work day may be creditable as one and one half days of service. On vessels of less than 100 gross tons, a day is considered as eight hours unless the Officer in Charge, Marine Inspection determines that the vessel's operating schedule makes this criteria inappropriate, in no case will this period be less than four hours.

Designated duty engineer means a qualified engineer, who may be the sole engineer on vessels with a periodically unattended engine room.

Employment assigned to is the total period a person is assigned to work on MODUs, including time spent ashore as part of normal crew rotation.

Endorsement means a provision added to a license which alters its scope or application. An example of an endorsement is a tonnage limitation increase within a general tonnage category, a pilot license route addition, or a radar observer qualification.

Evaluation means processing an application, from the point of receipt to approval or rejection of the application, including review of all documents and records submitted with an application as well as those obtained from public records and databases.

Fails a chemical test for dangerous drugs means that the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''positive'' for the presence of dangerous drugs or drug metabolites in an individual's system by a Medical Review Officer in accordance with that part.

First assistant engineer means the engineer officer next in seniority to the chief engineer and upon whom the responsibility for the mechanical propulsion of the vessel will fall in the event of the incapacity of the chief engineer.

Great Lakes means the Great Lakes and their connecting and tributary waters including the Calumet River as far as the Thomas J. O'Brien Lock and Controlling Works (between mile 326 and 327), the Chicago River as far as the east side of the Ashland Avenue Bridge (between mile 321 and 322), and the Saint Lawrence River as far east as the lower exit of Saint Lambert Lock.

Horsepower means, for the purpose of this part, the total maximum continuous shaft horsepower of all the vessel's main propulsion machinery.

Inland Waters means the navigable waters of the United States shoreward of the Boundary Lines as described in 46 CFR part 7, excluding the Great Lakes. For the purposes of establishing sea service credit, the waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska, are considered as inland.

Lower level means a category of deck and engineer licenses established for assessment of fees. Lower level licenses are all licenses, other than those defined as upper level, for which the requirements are listed in subparts D, E, and G of this part.

Master means the officer having command of a vessel.

Mate means a qualified officer in the deck department other than the master.

Mobile offshore drilling unit (MODU) means a vessel capable of engaging in drilling operations for the exploration for or exploitation of subsea resources. MODU designs include:

(a) *Bottom bearing units* which include:

(1) *Self-elevating (or jack-up) units* with moveable, bottom bearing legs capable of raising the hull above the surface of the sea; and,

(2) *Submersible units* of ship shape, barge type or novel hull design, other than a self-elevating unit, intended for operating while bottom bearing.

(b) *Surface units* with a ship shape or barge type displacement hull of single or multiple hull construction intended for operating in a floating condition, including semi-submersibles and drillships.

Month means 30 days, for the purpose of complying with the service requirements of this part.

National Driver Register (NDR) means the nationwide repository of information on drivers maintained by the National Highway Traffic Safety Administration as provided under 49 U.S.C. Chapter 303.

NDR listed convictions means a conviction of any of the following motor vehicle-related offenses or comparable offenses:

(a) Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance; or

(b) A traffic violation arising in connection with a fatal traffic accident, reckless driving, or racing on the highways.

Near coastal means ocean waters not more than 200 miles offshore.

Oceans means the waters seaward of the Boundary Lines as described in 46 CFR part 7. For the purposes of establishing sea service credit, the waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska, are not considered oceans.

Officer in Charge, Marine Inspection (OCMI) for the purposes of part 10 means the officer or individual so designated at one of the locations of the regional examination centers listed in §10.105.

Offshore installation manager (OIM) is a licensed officer restricted to service on MODUs. An assigned offshore installation manager is equivalent to a conventionally licensed master and is the person designated by the owner or operator to be in complete and ultimate command of the unit.

On location means that a mobile offshore drilling unit is bottom bearing or moored with anchors placed in the drilling configuration.

Operator means an individual licensed to operate certain uninspected vessels.

Orally assisted examination means a license examination as described in subpart I of this part verbally administered and documented by an examiner.

Original license means the first deck, engineer or radio officer license issued to any person by the Coast Guard.

Passes a chemical test for dangerous drugs means the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''negative'' by a Medical Review Officer in accordance with that part.

Raise of grade means an increase in the level of authority and responsibility associated with a license.

Rivers means any river, canal, or other similar body of water designated by the Officer in Charge, Marine Inspection.

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

Service as when computing the required service for MODU licenses, is the time period, in days, a person is assigned to work on MODUs, excluding time spent ashore as part of crew rotation. A day, for the purposes of this definition, is a minimum of four hours, and no additional credit is received for periods served over eight hours.

Underway means that a mobile offshore drilling unit is not in an on location or laid up status. Underway includes that period of time when the MODU is deploying or recovering its mooring system.

Undocumented vessel means a vessel not required to have a document issued under the laws of the United States.

Upper level means a category of deck and engineer licenses established for assessment of fees. Upper level licenses are those licenses for which the requirements are listed in §§10.404 to 10.407 of subpart D of this part and §§10.510, 10.512, 10.514, and 10.516 of subpart E of this part.

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

Year means 360 days, for the purpose of complying with the service requirements of this part.

[CGD 81–059 and CGD 81–059a, 52 FR 38623 and 38666, Oct. 16, 1987, as amended by CGD 87–017, 53 FR 18562, May 24, 1988; CGD 81–059, 54 FR 132, Jan. 4, 1989; CGD 81–059a, 55 FR 14798, Apr. 18, 1990; CGD 91–002, 58 FR 15237, Mar. 19, 1993; CGD 91–223, 60 FR 4524, Jan. 23, 1995; CGD 91–212, 60 FR 65483, Dec. 19, 1995]

§ 10.105 Regional examination centers.

Licensing and certification functions are performed only by the Officer in Charge, Marine Inspection, at the following locations:

Boston, MA	Toledo, OH
New York, NY	Long Beach, CA
Baltimore, MD	San Francisco, CA
Charleston, SC	Portland, OR
Miami, FL	Seattle, WA
New Orleans, LA	Anchorage, AK
Houston, TX	Juneau, AK
Memphis, TN	Honolulu, HI
St. Louis, MO	

§ 10.107 Paperwork approval.

(a) This section lists the control numbers assigned by the Office of Management and Budget under the Paperwork Reduction Act of 1980 (Pub. L. 96–511) for the reporting and record keeping requirements in this part.

(b) The following control numbers have been assigned to the sections indicated:

(1) OMB 2115–0514—46 CFR 10.201, 10.202, 10.205, 10.207, 10.209, 10.470, 10.472, 10.474, 10.542, and 10.544.

(2) OMB 2115–0111—46 CFR 10.302, 10.303, 10.304, 10.480.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 133, Jan. 4, 1989; CGD 81–059a, 55 FR 14799, Apr. 18, 1990]

§ 10.109 Fees.

The following fees are required for license and registration activities in this part:

(a) For licenses.

(1) Upper level:

(i) For evaluation for an original license, $87.

(ii) For evaluation for a license other than an original, including a raise in grade in a license, $70.

(iii) For administration of an examination, including allowable retests, $150.

(iv) For administration of a limited examination required under subpart D of this part, including allowable retests, $55.

(v) For issuance of a license, $35.

(2) Lower level:

(i) For evaluation for an original license, $82.

(ii) For evaluation for a license other than an original, including a raise in grade of a license, $65.

(iii) For administration of an examination, including allowable retests, $80.

(iv) For administration of a limited examination required under subpart D of this part, including allowable retests, $55.

(v) For issuance of a license, $35.

(3) Radio Officer:

(i) For evaluation for an original license, $62.

(ii) For evaluation for a license other than an original license, $45.

(iii) For issuance of a license, $35.

(b) For endorsements, except the radar observer endorsement, subsequent to the issuance of the license.

(1) For evaluation for single or multiple endorsements, $45.

(2) For administration of examinations, including allowable retests, $55.

(3) For issuance of single or multiple endorsements to an existing license, $35.

(c) For renewal of a license.

(1) For evaluation for renewal of a license, $45.

(2) For administration of an open-book exercise if required under § 10.209 of this part, $55.

(3) For issuance of a renewed license, $35.

(4) For issuance of a renewed license, without evaluation or examination, for continuity purposes only, $35.

(d) For Certificates of Registry.

(1) For Chief Purser, Purser, and Senior Assistant Purser:

(i) For evaluation of an unlicensed applicant for a certificate of registry, $62.

(ii) For evaluation of an applicant who holds a license or certificate of registry issued under this part, $45.

(iii) For issuance of a certificate of registry, $35.

(2) For Junior Assistant Purser, Medical Doctor, and Professional Nurse:

(i) For evaluation of an unlicensed applicant for a certificate of registry, $17.

(ii) For evaluation of an applicant who holds a license or certificate of registry issued under this part, no fee.

(iii) For issuance of a certificate of registry, $35.

(3) For renewal of a Certificate of Registry:

(i) For evaluation for renewal of a certificate of registry, no fee.

(ii) For issuance of a renewed certificate of registry, $35.

(e) For reissue of a license or certificate or registry issued in this part where a fee is required in § 10.219, $35.

(f) For endorsements to existing license, a raise in grade of a license, an additional license, or certificate of registry where further evaluations are not required, no evaluation fee.

(g) For endorsements to an existing license, a raise in grade of a license, or an additional license where further examinations are not required, no examination fee.

[CGD 91–002, 58 FR 15237, Mar. 19, 1993; 58 FR 15901, Mar. 24, 1993, as amended by CGD 91–211, 59 FR 49297, Sept. 27, 1994]

§ 10.110 Fee payment procedures.

(a) Unless otherwise directed, the prescribed fee must be paid as follows:

(1) If an evaluation fee, at the time of application.

(2) If an examination fee, prior to taking the first examination section.

(3) If an issuance fee, prior to receiving the license or certificate of registry.

(b) For examinations administered at locations other than a Regional Examination Center, the examination fee must be received by the Regional Examination Center at least one week in advance of the scheduled examination date, unless otherwise directed.

(c) Prescribed fees must be paid by one of the following options:

(1) *Mail-in*. Payment by check or money order only, made payable to one of the following:

(i) U.S. Coast Guard;

(ii) U.S. Government;

(iii) U.S. Treasury;

(iv) U.S. Department of Transportation.

Fee payment by check or money order must have the applicant's (payor's) social security number included thereon.

(2) *In-person*. Fee payment will be accepted by cash, check, or money order at Coast Guard units where Regional Examination Centers are located. Where an applicant makes payment by cash, payment must be in the exact amount. A check or money order must be payable as specified in paragraph (c)(1) of this section.

[CGD 91–002, 58 FR 15237, Mar. 19, 1993]

§ 10.111 Penalties.

(a) Anyone who fails to pay a fee or charge established under this subpart is liable to the United States Government for a civil penalty of not more than $5,000 for each violation.

(b) The Coast Guard may assess additional charges to anyone to recover collection and enforcement costs associated with delinquent payments of, or failure to pay, a fee. Coast Guard licensing services may also be withheld from anyone pending payment of outstanding fees owed to the Coast Guard for services already provided by Regional Examination Centers.

[CGD 91–002, 58 FR 15237, Mar. 19, 1993]

§ 10.112 No-fee license for certain applicants.

(a) For the purpose of this section, a no-fee license applicant is a person who is a volunteer, or part-time or full-time employee of an organization which is:

(1) Charitable in nature;

(2) Not for profit; and

(3) Youth oriented.

(b) An organization may submit a written request to Commandant (G–MRP), 2100 Second Street SW., Washington, DC 20593–0001 in order to be considered an eligible organization under the criteria set forth in paragraph (a) of this section. With the written request, the organization must provide evidence of its status as a youth oriented, not for profit, charitable organization.

NOTE: The following organizations are accepted by the Coast Guard as meeting the requirements of paragraph (a) of this section and need not submit evidence of their status: Boy Scouts of America, Sea Explorer Association, Girl Scouts of the United States of

America, and Young Men's Christian Association of the United States of America.

(c) A letter from an organization determined eligible under paragraph (b) of this section must also accompany the person's license application to the Coast Guard. The letter must state that the purpose of the person's application is solely to further the conduct of the organization's maritime activities. The applicant then is eligible under this section to obtain a no-fee license if other requirements for the license are met.

(d) A marine license issued to a person under this section is endorsed restricting its use to vessels owned or operated by the sponsoring organization.

(e) The holder of a no-fee license issued under this section may have the restriction removed by paying the appropriate evaluation, examination, and issuance fees that would have otherwise applied.

[CGD 91–002, 58 FR 15238, Mar. 19, 1993, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

Subpart B—General Requirements for All Licenses and Certificates of Registry

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

(a) In order to receive a license or certificate of registry, each applicant shall establish to the satisfaction of the Officer in Charge, Marine Inspection (OCMI), that he or she meets all the qualifications (respecting age, experience, training, citizenship, character references, recommendations, physical health, chemical testing for dangerous drugs, and professional competence) required by this part before the OCMI issues a license or certificate of registry.

(b) No person who has been convicted by a court of record of a violation of the dangerous drug laws of the United States, the District of Columbia, or any State or territory of the United States is eligible for a license or certificate of registry, except as provided by the provisions of paragraph (h) of this section. No person who has ever been the user of, or addicted to the use of, a dangerous drug, or has ever been convicted of an offense described in section 205 of the National Driver Register Act of 1982 (49 U.S.C. 30304) due to the addiction or abuse of alcohol is eligible for a license or certificate of registry unless he or she furnishes satisfactory evidence of suitability for service in the merchant marine as provided in paragraph (j) of this section.

(c) Except as provided in § 10.464(i) of the part, an applicant for a license must demonstrate an ability to speak and understand English as found in the navigation rules, aids to navigation publications, emergency equipment instructions, machinery instructions, and radiotelephone communications instructions.

(d) An applicant for a license must meet the requirements for recent service specified in § 10.202(e).

(e) No license or certificate of registry may be issued to any person who is not a citizen of the United States with the exception of operator of uninspected passenger vessels limited to vessels not documented under the laws of the United States.

(f) Except as specified in this paragraph, no license or certificate of registry may be issued to a person who has not attained the age of 21 years.

(1) A license as master of near coastal, Great Lakes and inland, inland, or river vessels of 25–200 gross tons, third mate, third assistant engineer, mate of vessels of 200–1600 gross tons, ballast control operator, assistant engineer (MODU), assistant engineer of fishing industry vessels, second-class operator of uninspected towing vessel, radio officer, assistant engineer (limited-oceans), or designated duty engineer of vessels of not more than 4000 horsepower may be granted to an applicant who has reached the age of 19 years.

(2) A license as limited master of near coastal vessels of not more than 100 gross tons, limited master of Great Lakes and inland vessels of not more than 100 gross tons, mate of Great Lakes and inland vessels of 25–200 gross tons, mate of near coastal vessels of 25–200 gross tons, operator of uninspected passenger vessels, or designated duty engineer of vessels of not more than 1000 horsepower, may be granted to an applicant who has reached the age of 18 years.

(g) Persons serving or intending to serve in the merchant marine service are recommended to take the earliest opportunity of ascertaining, through examination, whether their visual acuity, and color vision where required, are such as to qualify them for service in that profession. Any physical impairment or medical condition which would render an applicant incompetent to perform the ordinary duties of an officer at sea is cause for denial of a license.

(h) *Criminal Record Review*. The OCMI may review the criminal record of an applicant for the issuance of a license or certificate of registry issued as an original or reissued with a new expiration date. An applicant conducting simultaneous merchant mariner's credential transactions shall undergo only one criminal record check. Applicants must provide written disclosure of all prior convictions at the time of application.

(1) If the applicant is advised that a criminal record check is required by the OCMI, applicants shall provide their fingerprints at the time of application. The fingerprints will be used to determine whether the applicant has a record of a criminal conviction. An application may be disapproved if a criminal record review leads the OCMI to determine that the applicant's habits of life and character are such that the applicant cannot be entrusted with the duties and responsibilities of the license or certificate of registry for which application is made. If an application is disapproved, the OCMI will notify the applicant in writing of the reason(s) for disapproval and advise the applicant that the reconsideration and appeal procedures in §1.03 of this chapter apply. No examination will be given pending decision on appeal.

(2) The OCMI may use Table 10.201(h) to evaluate applicants for licenses and certificates of registry who have criminal convictions. The table lists major categories of criminal activity and is not to be construed as an all-inclusive list. If an applicant is convicted of an offense that does not appear on the list, the OCMI will establish an appropriate assessment period using the list as a guide. The assessment period commences when an applicant is no longer incarcerated. The applicant must establish proof of the time incarcerated and periods of probation and parole to the satisfaction of the OCMI. The assessment period may include supervised or unsupervised probation or parole. A conviction for a drug offense more than 10 years prior to the date of application will not alone be grounds for denial.

(3) When an applicant has convictions for more than one offense, the minimum assessment period will be the longest minimum in Table 10.201(h) and Table 10.201(i) based upon the applicant's convictions; the maximum assessment period will be the longest shown in Table 10.201(h) and Table 10.201(i) based upon the applicant's convictions.

(4) If a person with a criminal conviction applies for a license or certificate of registry before the minimum assessment period shown in Table 10.201(h), or established by the OCMI under paragraph (h)(2) of this section has elapsed, then the applicant must provide evidence of suitability for service in the merchant marine. Factors which are evidence of suitability for service in the merchant marine are listed in paragraph (j) of this section. The OCMI will consider the applicant's evidence and may issue the license or certificate of registry in less than the listed minimum assessment period if the OCMI is satisfied that the applicant is suitable to hold the license or certificate of registry for which he or she has applied. If an applicant does not provide evidence of suitability for service in the merchant marine, then the application will be considered incomplete and will not be processed by the OCMI.

(5) If a person with a criminal conviction applies for a license or certificate of registry during the time between the minimum and maximum assessment periods shown in Table 10.201(h) or established by the OCMI under paragraph (h)(2) of this section, the OCMI will consider the conviction and, unless there are offsetting factors, may grant the applicant the license or certificate of registry for which he or she has applied. Offsetting factors include multiple convictions, failure to comply with court orders (e.g., child support

orders), previous failures at rehabilitation or reform, inability to maintain steady employment, or any connection between the crime and the safe operation of a vessel. If the OCMI considers the applicant unsuitable for service in the merchant marine at the time of application, the OCMI will disapprove the application.

(6) If a person with a criminal conviction applies for a license or certificate of registry after the maximum assessment period shown in Table 10.201(h) or established by the OCMI under paragraph (h)(2) of this section has elapsed, then the OCMI will grant the applicant the license or certificate of registry for which he or she has applied unless the OCMI has reason to believe the applicant is still unsuitable for service in the merchant marine. If the OCMI disapproves an application based upon a conviction older than the maximum assessment period, the OCMI will notify the applicant in writing of the reason(s) for the disapproval. The OCMI will also inform the applicant, in writing, that the reconsideration and appeal procedures contained in § 1.03 of this chapter apply.

TABLE 10.201(h)—GUIDELINES FOR EVALUATING APPLICANTS FOR LICENSES AND CERTIFICATES OF REGISTRY WHO HAVE CRIMINAL CONVICTIONS

Crime[1]	Assessment periods	
	Minimum	Maximum
Crimes Against Persons		
Homicide (intentional)	7 years	20 years.
Homicide (unintentional)	5 years	10 years.
Assault (aggravated)	5 years	10 years.
Assault (simple)	1 year	5 years.
Sexual Assault (rape, child molestation)	5 years	10 years.
Robbery	5 years	10 years.
Other crimes against persons[2].		
Crimes Against Property		
Burglary	3 years	10 years.
Larceny (embezzlement)	3 years	5 years.
Other crimes against property[2].		
Vehicular Crimes		
Conviction involving fatality	1 year	5 years.
Reckless Driving	1 year	2 years.
Racing on the Highways	1 year	2 years.
Other vehicular crimes[2].		
Crimes Against Public Safety		
Destruction of Property	5 years	10 years.
Other crimes against public safety[2].		
Crimes Involving National Security		
Terrorism, Acts of Sabotage, Espionage and related offenses	7 years	20 years.
Criminal Violations of Environmental Laws		
Criminal violations of environmental laws involving improper handling of pollutants or hazardous materials.	1 year	10 years.
Dangerous Drug Offenses[3, 4, 5]		
Trafficking (sale, distribution, transfer)	5 years	10 years.
Dangerous drugs (Use or possession)	1 year	10 years.

TABLE 10.201(h)—GUIDELINES FOR EVALUATING APPLICANTS FOR LICENSES AND CERTIFICATES OF REGISTRY WHO HAVE CRIMINAL CONVICTIONS—Continued

Crime[1]	Assessment periods	
	Minimum	Maximum
Other dangerous drug convictions[6].		

[1] Conviction of attempt, solicitation, aiding and abetting, accessory after the fact, and conspiracy to commit the criminal conduct listed in this table carry the same minimum and maximum assessment periods provided in the table.

[2] Other crimes are to be reviewed by the OCMI to determine the minimum and maximum assessment periods depending on the nature of the crime.

[3] Applicable only to original applications for licenses or CORs. Any applicant who has ever been the user of, or addicted to the use of, a dangerous drug shall meet the requirements of paragraph (b) of this section. Note: Applicants for reissue of a license or COR with a new expiration date including a renewal or a raise of grade, who have been convicted of a dangerous drug offense while holding a license or COR, may have their applications withheld until appropriate action has been completed by the OCMI under the regulations which appear in 46 CFR part 5 governing administrative actions against merchant mariner credentials.

[4] The OCMI may consider dangerous drug convictions more than 10 years old only if there has been a dangerous drug conviction within the past 10 years.

[5] Applicants must demonstrate rehabilitation under paragraph (j) of this section, including applicants with dangerous drug use convictions more than ten years old.

[6] Other dangerous drug convictions are to be reviewed by the Officer in Charge, Marine Inspection on a case by case basis to determine the appropriate assessment periods depending on the nature of the offense.

(i) *National Driver Register*. A license or certificate of registry will not be issued as an original or reissued with a new expiration date unless the applicant consents to a check of the NDR for offenses described in section 205(a)(3) (A) or (B) of the NDR Act (i.e., operation of a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance; and any traffic violations arising in connection with a fatal traffic accident, reckless driving, or racing on the highways). The OCMI will not consider NDR listed civil convictions that are more than 3 years old from the date of request unless that information relates to the current suspension or revocation of the applicant's license to operate a motor vehicle. The OCMI may determine minimum and maximum assessment periods for NDR listed criminal convictions using Table 10.201(h). An applicant conducting simultaneous merchant mariner's credential transactions is subject to only one NDR check.

(1) Any application may be disapproved if information from the NDR check leads the OCMI to determine that the applicant cannot be entrusted with the duties and responsibilities of the license or certificate of registry for which the application is made. If an application is disapproved, the OCMI will notify the applicant in writing of the reason(s) for disapproval and advise the application that the appeal procedures in § 1.03 of this chapter apply. No examination will be given pending decision on appeal.

(2) Prior to disapproving an application because of information received from the NDR, the OCMI will make the information available to the applicant for review and written comment. The applicant may submit records from the applicable State concerning driving record and convictions to the Coast Guard Regional Examination Center (REC) processing the application. The REC will hold an application with NDR listed convictions pending the completion of the evaluation and delivery by the individual of the underlying State records.

(3) The guidelines in Table 10.201(i) will be used by the OCMI in evaluating applicants for licenses and certificates of registry who have drug or alcohol related NDR listed convictions. Non-drug or alcohol related NDR listed convictions will be evaluated by the OCMI under Table 10.201(h) as applicable.

(4) An applicant may request an NDR file check for *personal* use in accordance with the Federal Privacy Act of 1974 (Pub. L. 93–579) by contacting the NDR at the following address: National Driver Register, Nassif Building, 400 7th Street, SW., Washington, DC 20590.

(i) Applicants should request Form NDR–PRV or provide the following information on a notarized letter:

(A) Full legal name;

(B) Other names used;

(C) Complete mailing address;

(D) Driver license number;

(E) Eye color;

(F) Social security number;

(G) Height;

(H) Weight; and

(I) Sex.

(ii) The NDR will respond to every valid inquiry including requests which produce no record(s) on the NDR file. Records can be made available, within a reasonable amount of time after the request, for personal inspection and copying during regular working hours at 7:45 a.m. to 4:15 p.m., each day except Federal holidays.

TABLE 10.201(i)—GUIDELINES FOR EVALUATING APPLICANTS FOR LICENSES AND CERTIFICATES OF REGISTRY WHO HAVE NDR MOTOR VEHICLE CONVICTIONS INVOLVING DANGEROUS DRUGS OR ALCOHOL [1]

No. of convictions	Date of conviction	Assessment period
1	Less than 1 year	1 year from date of conviction.
1	More than 1, less than 3 years	Application will be processed, unless suspension or revocation [2] is still in effect. Applicant will be advised that additional conviction(s) may jeopardize merchant mariner credentials.
1	More than 3 years old	Not necessary unless suspension or revocation is still in effect.
2 or more	Any less than 3 years old	1 year since last conviction and at least 3 years from 2nd most recent conviction, unless suspension or revocation is still in effect.
2 or more	All more than 3 years old	Application will be processed unless suspension or revocation is still in effect.

[1] Any applicant who has ever been the user of, or addicted to the use of, a dangerous drug shall meet the requirements of paragraph (b) of this section.

[2] Suspension or revocation, when referred to in Table 10.201(i), means a State suspension or revocation of a motor vehicle operator's license.

(j) If an applicant has one or more alcohol or dangerous drug related criminal or NDR listed convictions; if the applicant has ever been the user of, or addicted to the use of, a dangerous drug; or if the applicant applies before the minimum assessment period for his or her conviction has elapsed; the OCMI may consider the following factors, as applicable, in assessing the applicant's suitability to hold a license or certificate of registry. This list is intended as a guide for the OCMI. The OCMI may consider other factors which he or she judges appropriate to a particular applicant, such as:

(1) Proof of completion of an accredited alcohol- or drug-abuse rehabilitation program.

(2) Active membership in a rehabilitation or counseling group, such as Alcoholics Anonymous or Narcotics Anonymous.

(3) Character references from persons who can attest to the applicant's sobriety, reliability, and suitability for employment in the merchant marine including parole or probation officers.

(4) Steady employment.

(5) Successful completion of all conditions of parole or probation.

[CGD 81–059 and CGD 81–059a, 52 FR 38623 and 38666, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 133, Jan. 4, 1989; CGD 81–059a, 55 FR 14799, Apr. 18, 1990; CGD 91–223, 60 FR 4524, Jan. 23, 1995; CGD 91–212, 60 FR 65484, Dec. 19, 1995]

§ 10.202 Issuance of licenses and certificates of registry.

(a) Applications for original licenses, original certificates of registry, raises of grade, extensions of route, or endorsements must be current and up-to-date with respect to service and the physical examination, as appropriate. Physical examinations and approved applications are valid for 12 months.

(b) Any person who is found qualified under the requirements set forth in this part is issued an appropriate license or certificate of registry valid for a term of 5 years from date of issuance. Any license or certificate of registry which is renewed or upgraded prior to its expiration date automatically becomes void upon issuance of the replacement license or certificate of registry.

(c) A license or certificate of registry is not valid until signed by the applicant and the OCMI (or the OCMI's designated representative).

(d) Every person who receives an original license or certificate of registry shall take an oath before a designated Coast Guard official that he or she will faithfully and honestly, according to his or her best skill and judgment, without concealment or reservation, perform all the duties required by law and obey all lawful orders of superior officers. Such an oath remains binding for all subsequent licenses or certificates of registry issued to that person unless specifically renounced in writing.

(e) The applicant for any original license, endorsement, or raise of grade of license must have at least three months' qualifying service on vessels of appropriate tonnage or horsepower within the three years immediately preceding the date of application. Prior to December 1, 1988, this section is not applicable when all the qualifying service was military sea service.

(f) Any applicant whose uncorrected vision exceeds 20/40 in either eye for deck licenses or 20/50 in either eye for engineer, radio officer, offshore installation manager, barge supervisor, or ballast control operator licenses may not serve under the authority of the license unless corrective lenses are worn and spare lenses are carried on board a vessel while serving. (Not applicable to staff officers).

(g) If an Officer in Charge, Marine Inspection, refuses to grant an applicant the license or certificate of registry for which applied, the OCMI will furnish the applicant, if requested, a written statement setting forth the cause of denial.

(h) The Officer in Charge, Marine Inspection, may modify the service and examination requirements in this part to satisfy the unique qualification requirements of an applicant. The Officer in Charge, Marine Inspection, may also lower the age requirement for operator of uninspected passenger vessels license applicants. The authority granted by a license will be restricted on its face to reflect any modifications made under the authority of this paragraph. Such restrictions shall not be removed without the approval of the OCMI issuing the license.

(i) To obtain an original issuance or a renewal of a license or a certificate of registry, a raise in grade of a license, or a higher grade of certificate of registry each applicant shall produce evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in §16.220 of this subchapter. An applicant who fails a chemical test for dangerous drugs will not be issued a license or certificate of registry.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 53 FR 133, Jan. 4, 1989; CGD 91–211, 59 FR 49297, Sept. 27, 1994; CGD 91–223, 60 FR 4524, Jan. 23, 1995]

§10.203 Quick reference table for license and certificate of registry requirements.

Table 10.203 provides a guide to the requirements for various licenses and certificates of registry. Provisions in the reference section are controlling.

TABLE 10.203

License category	Minimum age	Citizenship requirement	Physical required	Experience requirements	Recommendations and character check	Firefighting certificate	Professional exam requirements	Recency of Service	First aid and CPR requirements
Masters/mates and operators of uninspected passenger vessels (original license).	21; 10.201(f); Note: exceptions.	Yes, 10.201(e); Note: exception.	Yes, 10.205(d); Note: (d)(2).	Yes, 10.205(e); subpart D.	Yes, 10.205(f)	Yes, 10.205(g); Note: exceptions.	Yes, 10.205(i), 10.910; Note: 10.903(b).	Yes, 3 months past 36 months, 10.202(e).	Yes, in 10.205(h).
Engineers (original license)	21;10.201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(3).	10.205(e); subpart E.	Yes, 10.205(f);	Yes, 10.205(g)	Yes, 10.205(i) 10.950.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).
All raises of grade	21; 10.201(f); Note: exceptions.	Yes	10.207(e); Note: (e)(1).	10.207(c); subparts D & E.	N/A	Yes, Note: 10.207(f).	10.207(d). 10.910. 10.920. 10.950.	Yes, 3 months in past 36 months 10.202(e).	N/A.
License renewals	N/A	Yes	10.209(d)	10.209(c)	N/A	N/A	10.209(c)	10.209(c)	N/A.
COR renewals	N/A	Yes	No	10.209(c)(5)	N/A	N/A	N/A	N/A	N/A.
Pilot	21	Yes	Yes, 10.709	10.703, 10.706(a), 10.715.	Yes, 10.205(f)	N/A	10.707, 10.910	Yes, 10.703, 10.705(e), 10.713.	Yes, 10.205(h).
Uninspected fishing industry vessels.	21; 10.201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(2) or (d)(3).	Deck: 10.462, Eng: 10530, 10.205(f).	Yes, 10.205(f)	Yes, 10.205(g)	Yes, 10.205(i). 10.910. 10.950(oral).	Yes, 3 months in past 36 months 10.202(e).	Yes, 10.205(h).
Uninspected towing vessels	Operator:21; 2/c operator: 19.	Yes	Yes, 10.205(d); Note: (d)(2).	10.464	Yes, 10.205(f)	Yes, 10.205(g) oceans.	Yes, 10.205(i). 10.910.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).
Radio officer	19	Yes	Yes, 10.205(d); Note: (d)(3).	10.603	Yes, 10.205(f)	N/A	N/A	N/A	Yes, 10.205(h).
Staff officer	21	Yes	No	10.807	Yes, 10.205(f)	N/A	N/A	N/A	N/A.
Offshore installation manager, barge supervisor, ballast control operator.	21; 10201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(3).	Deck: 10.468, Eng: 10.540.	Yes, 10.205(f)	Yes, 10.205(g)	Yes, 10.205(i). 10.920.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).

[CGD 91–211, 59 FR 49297, Sept. 27, 1994; CGD 91–211, 59 FR 50964, Oct. 6, 1994]

§10.204 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50379, Dec. 6, 1989]

§10.205 Requirements for original licenses and certificates of registry.

(a) *General.* The applicant for an original license or certificate of registry shall present satisfactory documentary evidence of eligibility in respect to the requirements of this section. Each applicant shall make written application on a Coast Guard furnished form and, unless exempted under §10.112, submit the evaluation fee set out in §10.109.

(b) *Minimum age.* The applicant shall present satisfactory proof of age as prescribed in §10.201(f). This evidence may be any of the items submitted to establish citizenship.

(c) *Citizenship.* (1) The OCMI may reject any evidence of citizenship that is not believed to be authentic. Acceptable evidence of citizenship may be an original or certified copy of the following:

(i) Birth certificate or birth registration.

(ii) Certificate of naturalization (original must be presented; photocopies are unlawful).

(iii) Baptismal certificate or parish record recorded within one year after birth.

(iv) Statement of a practicing physician certifying attendance at the birth and who possesses a record showing the date and location at which it occurred.

(v) State Department passport.

(vi) A merchant mariner's document issued by the Coast Guard which shows the holder as a United States citizen.

(vii) Delayed certificate of birth issued under a state seal in the absence of any collateral facts indicating fraud in its procurement.

(viii) Certificate of Citizenship issued by the United States Immigration and Naturalization Service.

(2) If none of the requirements set forth in paragraphs (c)(1)(i) through (c)(1)(viii) of this section can be met by the applicant, the individual shall make a statement to that effect, and may submit data of the following character for consideration:

(i) Report of the Census Bureau showing the earliest available record of age or birth. Request for such information should be addressed to the Personal Census Service Branch, Bureau of the Census, Pittsburgh, KS 66762. In making such request, the use of Form BC–600, Application for Search of Census Records, furnished by the Bureau is required.

(ii) Affidavits of parents, relative, or two or more responsible citizens of the United States stating citizenship.

(iii) School records, immigration records, or insurance policies.

(d) *Physical examination.* (1) All applicants for an original license must pass an examination given by a licensed physician or a licensed physician assistant and present to the OCMI a completed Coast Guard physical examination form, or the equivalent, executed by the physician. This form must provide information on the applicant's acuity of vision, color sense, and general physical condition. This examination must have been completed prior to submission of the application and not more than 12 months prior to issuance of the license. (Physical examinations are not required for staff officers.)

(2) For an original license as master, mate, pilot, or operator, the applicant must have vision correctable to at least 20/40 in each eye and uncorrected vision of at least 20/200 in each eye. The color sense must be determined to be satisfactory when tested by any of the following methods, without the use of color sensing lenses:

(i) Pseudoisochromatic Plates (Dvorine, 2nd Edition; AOC; revised edition or AOC–HRR; Ishihara 16-, 24-, or 38-plate editions).

(ii) Eldridge—Green Color Perception Lantern.

(iii) Farnsworth Lantern.

(iv) Keystone Orthoscope.

(v) Keystone Telebinocular.

(vi) SAMCTT (School of Aviation Medicine Color Threshold Tester).

(vii) Titmus Optical Vision Tester.

(viii) Williams Lantern.

(3) For an original license as engineer, radio officer, offshore installation manager, barge supervisor or ballast

control operator, the applicant must have correctable vision of at least 20/50 in each eye and uncorrected vision of at least 20/200 in each eye. Applicants need only to have the ability to distinguish the colors red, green, blue and yellow.

(4) Where an applicant does not possess the vision, hearing, or general physical condition necessary, the OCMI, after consultation with the examining physician or physician's assistant, may recommend a waiver to the Commandant if extenuating circumstances warrant special consideration. Applicants may submit to the OCMI, additional correspondence, records and reports in support of this request. In this regard, recommendations from agencies of the Federal Government operating government vessels, as well as owners and operators of private vessels, made in behalf of their employees, will be given full consideration. Waivers are not normally granted to an applicant whose corrected vision in the better eye is not at least 20/40 for deck licenses or 20/50 for engineer licenses.

(e) *Experience or training.* (1) All applicants for original licenses and certificates of registry shall present to the OCMI, letters, discharges, or other documents certifying the amount and character of their experience and the names, tonnage and horsepower of the vessels on which acquired. The OCMI must be satisfied as to the authenticity and acceptability of all evidence of experience or training presented. Certificates of discharge are returned to the applicant. The OCMI shall note on the application that service represented by these documents has been verified. All other documentary evidence of service, or authentic copies thereof, are filed with the application. A license is not considered as satisfactory evidence of any qualifying experience.

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

(3) Experience and service acquired on foreign vessels is creditable for establishing eligibility for an original license, subject to evaluation by the OCMI to determine that it is a fair and reasonable equivalent to service acquired on merchant vessels of the United States, with respect to grade, tonnage, horsepower, waters, and operating conditions. An applicant who has obtained qualifying experience on foreign vessels shall submit satisfactory documentary evidence of such service (including any necessary translation into English) in the forms prescribed by paragraph (e)(1) of this section.

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

(f) *Character check and references.* (1) Each applicant for an original license shall submit written recommendations concerning the applicant's suitability for duty from a master and two other licensed officers of vessels on which the applicant has served. For a license as engineer or as pilot, at least one of the recommendations must be from the chief engineer or licensed pilot, respectively, of a vessel on which the applicant has served. For a license as engineer where service was obtained on vessels not carrying a licensed engineer and for a license as operator of uninspected towing vessels, the recommendations may be by recent marine employers with at least one recommendation from a master, operator, or person in charge of a vessel upon which the applicant has served. For a license as offshore installation manager, barge supervisor, or ballast control operator, at least one recommendation must be from an offshore installation manager of a unit on which the applicant has served. Where an applicant qualifies for a license through an approved training school, one of the character references must be an official of that school. For a license for which no commercial experience may be required, such as: Master or mate 25–200 gross tons, operator of uninspected passenger vessels, radio officer or certificate of registry, the applicant may have the written recommendations of three persons who

have knowledge of the applicant's suitability for duty.

(2) The OCMI may review the criminal record check of each applicant for an original license or certificate of registry according to the procedures set forth in §10.201(h).

(3) A person may apply for an original license, or license of a different type, while on probation as a result of administrative action under part 5 of this chapter. The offense for which the applicant was placed on probation will be considered in determining his or her fitness to hold the license applied for. A license issued to an applicant on probation will be subject to the same probationary conditions as were imposed against the applicant's other license or mariner's document. An applicant may not take an examination for a license during any period when a suspension without probation or a revocation is effective against the applicant's currently held license or mariner's document, or while an appeal from these actions is pending.

(4) In the event a license or certificate of registry has already been issued when information about the applicant's habits of life and character is brought to the attention of the OCMI, if such information warrants the belief that the applicant cannot be entrusted with the duties and responsibilities of the license or certificate of registry issued, or if such information indicates that the application for the license or certificate of registry was false or incomplete, the OCMI may notify the holder in writing that the license or certificate of registry is considered null and void, direct the holder to return it to the OCMI, and advise the holder that, upon return of the license or certificate of registry, the appeal procedures of §10.204 of this part apply.

(g) *Firefighting certificate.* Applicants for the licenses in the following categories must present a certificate of completion from a firefighting course of instruction which has been approved by the Commandant. The course must meet both the basic and advanced sections of the International Maritime Organization's (IMO) Resolution A.437 (XI) *Training of Crews in Firefighting.* The course must have been completed within five years before the date of application for the license requested.

(1) Master's license for service on vessels of 200 gross tons or less in ocean service.

(2) All master or mate's licenses for over 200 gross tons.

(3) All operators of uninspected towing vessels, oceans (domestic trade).

(4) All licenses on mobile offshore drilling units.

(5) All engineer's licenses.

(h) *First aid and cardiopulmonary resuscitation (CPR) course certificates.* All applicants for an original license or certificate of registry, except as provided in §§10.429, 10.456, and 10.466 of this part, must present to the OCMI:

(1) A certificate indicating completion of a first aid course within the past 12 months from:

(i) The American National Red Cross *Standard First Aid and Emergency Care* or *Multi-media Standard First Aid* course;

(ii) A Coast Guard approved first aid training course; or,

(iii) A course the OCMI determines meets or exceeds the standards of the American Red Cross courses; and,

(2) A currently valid certificate of completion of a CPR course from:

(i) The American National Red Cross;

(ii) The American Heart Association;

(iii) A Coast Guard approved CPR training course; or,

(iv) A course the OCMI determines meets or exceeds the standards of the American Red Cross or American Heart Association courses.

(i) *Professional Examination.* (1) When the OCMI finds the applicant's experience and training to be satisfactory and the applicant is eligible in all other respects, the OCMI will authorize the examination in accordance with the following requirements:

(i) Any applicant for a deck or engineer license limited to vessels not exceeding 500 gross tons, or a license limited to uninspected fishing-industry vessels, may request an oral-assisted examination in lieu of any written or other textual examination. If there are textual questions that the applicant has difficulty reading and understanding, the OCMI will offer the oral-assisted examination. Each license based

on an oral-assisted examination is limited to the specific route and type of vessel upon which the applicant obtained the majority of service.

(ii) The general instructions for administration of examinations and the lists of subjects for all licenses appear in Subpart I of this part. The OCMI will place in the applicant's file a record indicating the subjects covered.

(2) When the license application of any person has been approved, the applicant should take the required examination as soon as practicable. If the applicant cannot be examined without delay at the office where the application is made, the applicant may request that the examination be given at another office.

(3) The qualification requirements for *radar observer* are contained in § 10.480.

(4) An examination is not required for a license as radio officer or a certificate of registry.

(j) *Chemical testing for dangerous drugs.* To obtain a license or certificate of registry each applicant shall produce evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in § 16.220 of this subchapter. An applicant who fails a chemical test for dangerous drugs will not be issued a license or certificate of registry.

(k) *National Driver Register.* Each applicant for an original license or certificate of registry shall consent to an NDR check under § 10.201(i).

[CGD 81–059 and CGD 81–059a, 52 FR 38623 and 38666, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 133, Jan. 4, 1989; CGD 81–059a, 55 FR 14799, Apr. 18, 1990; CGD 91–002, 58 FR 15238, Mar. 19, 1993; CGD 91–223, 60 FR 4524, Jan. 23, 1995; CGD 91–212, 60 FR 65486, Dec. 19, 1995; CGD 94–029, 61 FR 47063, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47063, Sept. 6, 1996, § 10.205 was amended by revising (i)(1), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§ 10.205 Requirements for original licenses and certificates of registry.

* * * * *

(i) *Professional Examination.* (1) When an applicant's experience and training are found to be satisfactory and the applicant is eligible in all other respects, the OCMI examines the applicant, in writing except that, if the license is said to be limited is to be limited to uninspected fishing industry vessels, the applicant may request an oral-assisted examination. The alternative of an oral-assisted examination is also available to applicants for deck or engineer licenses limited to 500 gross tons. If there is demonstrated difficulty in reading and understanding the questions, the oral-assisted examination is limited to the specific route and type of vessel upon which the majority of experience was obtained. The instructions for administration of examinations and the lists of subjects for all licenses are contained in subpart I of this part. A record indicating the subjects covered is placed in the applicant's license file.

* * * * *

§ 10.207 Requirements for raise of grade of license.

(a) *General.* Before any person is issued a raise of grade of license, the applicant shall present satisfactory documentary evidence of eligibility. Each applicant shall make written application on a Coast Guard furnished form and, unless exempted under § 10.112, submit the evaluation fee set out in § 10.109.

(b) *Surrendering old license.* Upon the issuance of a new license for raise of grade, the applicant shall surrender the old license to the OCMI. If requested, the old license is returned to the applicant after cancellation.

(c) *Age, experience, and training.* (1) Applicants for raise of grade of licenses shall establish that they possess the age, experience, and training qualifications necessary before they are entitled to a raise of grade of license.

(2) Applicants for raise of grade of license shall present to the OCMI at a Regional Examination Center, letters, discharges, or other official documents certifying to the amount and character of their experience and the names of the vessels on which acquired. Certificates of discharge are returned to the applicant after review by the OCMI. All other documentary evidence of service, or copies thereof, are filed with the application.

(3) Sea service acquired prior to the issuance of the license held is generally not accepted as any part of the service

required for raise of grade of that license. However, service acquired prior to issuance of a license will be accepted for certain crossovers, endorsements or increases in scope of a license, as appropriate. In the limited tonnage categories for deck licenses, total accumulated service is a necessary criterion for most raises in grade; service acquired prior to the issuance of such licenses will, therefore, be accepted.

(4) No raise of grade of license may be issued to any naturalized citizen on less experience in any grade than would have been required of a citizen of the United States by birth.

(5) Experience and service acquired on foreign vessels while holding a valid U. S. license is creditable for establishing eligibility for a raise of grade, subject to evaluation by the OCMI to determine that it is a fair and reasonable equivalent to service acquired on merchant vessels of the United States, with respect to grade, tonnage, horsepower, waters and operating conditions. An applicant who has obtained the qualifying experience on foreign vessels shall submit satisfactory documentary evidence of such service (including any necessary translations into English) in the forms prescribed by paragraph (c)(2) of this section.

(6) An applicant remains eligible for a raise of grade of license while on probation as a result of action under part 5 of this chapter. A raise of grade of license issued to a person on probation will be subject to the same probationary conditions imposed against the applicant's other certificates or licenses. The offense for which he or she was placed on probation will be considered on the merits of the case in determining fitness to hold the license applied for. No applicant will be examined for a raise of grade of license during any period when a suspension without probation or a revocation imposed under part 5 of this chapter is effective against the applicant's license or certificate or while an appeal from these actions is pending.

(d) *Professional Examination.* (1)(i) When the OCMI finds an applicant's experience and training for raise of grade to be satisfactory and the applicant is eligible in all other respects, the OCMI will authorize the examination. Oral-assisted examinations may be administered in accordance with §10.205(i)(1). The OCMI will place in the applicant's file a record indicating the subjects covered.

(ii) The general instructions for administration of examinations and the lists of subjects for all licenses appear in Subpart I of this part.

(2) The qualification requirements for *radar observer* are contained in §10.480.

(e) *Physical requirements.* (1) An applicant for raise of grade of a license who has not had a physical examination for an original license or renewal of license within three years must submit a certification by a licensed physician or physician assistant that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of the license applied for.

(2) If the OCMI has reason to believe that an applicant for raise of grade of license suffers from some physical impairment or medical condition which would render the applicant incompetent to perform the ordinary duties of that license, the applicant may be required to submit the results of an examination by a licensed physician or physician assistant that meets the requirements for an original license.

(3) An applicant who has lost the sight of one eye may obtain a raise of grade of license, provided that the applicant is qualified in all other respects and that the visual acuity in the one remaining eye passes the test required under §10.205(d).

(f) *Firefighting certificate.* Applicants for raise of grade of license who have not previously met the requirements in §10.205(g), must do so.

(g) *Chemical testing for dangerous drugs.* To obtain a raise of grade of a license each applicant shall produce evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in §16.220 of this subchapter.

(h) *Criminal Record Review.* Each applicant for a raise of grade may be required to submit to a criminal record check under §10.201(h).

(i) *National Driver Register.* Each applicant for a raise of grade of a license

shall consent to an NDR check under § 10.201(i) if the license is reissued with a new expiration date.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 134, Jan. 4, 1989; CGD 91–002, 58 FR 15238, Mar. 19, 1993; CGD 91–223, 60 FR 4524, Jan. 23, 1995; CGD 91–212, 60 FR 65486, Dec. 19, 1995; CGD 94–029, 61 FR 47063, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47063, Sept. 6, 1996, § 10.207 was amended by revising (d)(1), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§ 10.207 Requirements for raise of grade of license.

* * * * *

(d) *Professional Examination.* (1) When an applicant's experience and training for raise of grade is found to be satisfactory and he or she is eligible in all other respects, the OCMI examines the applicant in writing, unless an oral-assisted examination is authorized under § 10.205(i)(1). A record indicating the subjects covered is placed in the applicant's license file. The general instructions and list of subjects are contained in subpart I of this part.

* * * * *

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

(a) *General.* Except as provided in paragraph (g) of this section, an applicant for renewal of a license or certificate of registry shall establish possession of all of the necessary qualifications before the license or certificate of registry is issued.

(1) Each application must be on a Coast Guard furnished form and be accompanied by the evaluation fee set out in § 10.109. An approved application is valid for 12 months.

(2) The applicant may apply in person at any Regional Examination Center listed in § 10.105 or may renew the license or certificate of registry by mail under paragraph (e)(3) of this section.

(3) The applicant shall submit the original or a photocopy of the license or certificate of registry to be renewed. A photocopy will include the back and all attachments. If requested, the old license or certificate of registry will be returned to the applicant.

(b) *Fitness.* No license or certificate of registry will be renewed if it has been suspended without probation or revoked as a result of action under part 5 of this chapter, or facts that would render a renewal improper have come to the attention of the Coast Guard.

(c) *Professional requirements.* (1) In order to renew a license as master, mate, engineer, pilot, or operator, the applicant shall:

(i) Present evidence of at least 1 year of sea service during the past 5 years;

(ii) Pass a comprehensive, open-book exercise covering the general subject matter contained in appropriate sections of subpart I of this part;

(iii) Complete an approved refresher training course; or

(iv) Present evidence of employment in a position closely related to the operation, construction or repair of vessels (either deck or engineer as appropriate) for at least 3 years during the past 5 years. An applicant for a deck license with this type of employment must also demonstrate knowledge on an applicable Rules of the Road exercise.

(2) The qualification requirements for renewal of *radar observer* endorsement are in § 10.480.

(3) Additional qualification requirements for renewal of a license as pilot are contained in § 10.713.

(4) An applicant for renewal of a radio officer's license shall, in addition to meeting the requirements of paragraphs (a) and (b) of this section, present a currently valid license as first- or second-class radiotelegraph operator issued by the Federal Communications Commission. This license will be returned to the applicant.

(5) An applicant for renewal of a medical doctor or professional nurse certificate of registry shall, in addition to meeting the requirements of paragraphs (a) and (b) of this section, present evidence that he or she holds a currently valid appropriate license as physician, surgeon, or registered nurse issued under the authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(d) *Physical requirements.* (1) An applicant for renewal of a license shall submit a certification by a licensed physician or physician assistant that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of that license. This certification must address visual acuity and hearing in addition to general physical condition and must have been completed within 12 months of the date of application.

(2) If the OCMI has reason to believe that an applicant for renewal of a license suffers from some physical impairment or medical condition which would render the applicant incompetent to perform the ordinary duties of that license, the applicant may be required to submit the results of an examination by a licensed physician or physician assistant that meets the requirements for original license.

(3) An applicant who has lost the sight of one eye may obtain a renewal of license, provided that the applicant is qualified in all other respects and that the visual acuity in the one remaining eye passes the test required under §10.205(d).

(4) Physical examinations are not required for renewal of certificates of registry.

(e) *Special circumstances*—(1) *Period of grace.* Except as provided herein, a license may not be renewed more than 12 months after it has expired. To obtain a reissuance of the license, an applicant must comply with the requirements of paragraph (f) of this section. When an applicant's license expires during a time of service with the Armed Forces and there is no reasonable opportunity for renewal, including by mail, this period may be extended. The period of military service following the date of license expiration which precluded renewal may be added to the 12 month period of grace. The 12 month period of grace, and any extension, do not affect the expiration date of the license. A license is not valid for use after the expiration date.

(2) *Renewal in advance.* A license or certificate of registry may not be renewed more than 12 months before expiration unless it is being renewed in conjunction with a merchant mariner's document which is either due for renewal or being endorsed, or unless the OCMI is satisfied that special circumstances exist to justify renewal.

(3) *Renewal by mail.* (i) Applications for renewal by mail of licenses or certificates of registry may be sent to the Coast Guard office that issued the license or certificate of registry or holds the applicant's file. The following documents must be submitted:

(A) A properly completed application on a Coast Guard furnished form and the evaluation fee required by §10.109.

(B) The expired license or certificate of registry to be renewed; or, if it has not expired, a photocopy of the license or certificate, including the back and all attachments.

(C) A certification from a licensed physician or physician assistant in accordance with paragraph (d) of this section for the renewal of a license.

(D) If the applicant desires to renew a license with a radar observer endorsement, either the radar observer certificate or a certified copy.

(E) Evidence of, or acceptable substitute for, sea service for the renewal of a license.

(F) For a certificate of registry as a medical doctor or professional nurse, evidence that he or she holds a currently valid, appropriate license as physician, surgeon, or registered nurse, issued under the authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(ii) The open-book exercise, if required, may be administered through the mail.

(iii) Upon receipt of the renewed license or certificate of registry, the applicant shall sign it in order to validate the license or certificate.

(4) *Concurrent renewal of licenses, certificates of registry, and merchant mariner's documents.* An applicant for concurrent renewal of more than one merchant mariner credential shall satisfy the individual renewal requirements and pay the applicable fees required by §§10.109 and 12.02–18 of this chapter for each license, certificate of registry, or merchant mariner's document being renewed.

(f) *Reissuance of expired license or certificate of registry.* (1) Whenever an applicant applies for reissuance of a license more than 12 months after expiration, in lieu of the requirements of paragraph (c) of this section, the applicant shall demonstrate continued professional knowledge by completing a course approved for this purpose, or by passing the complete examination for that license. The examination may be oral-assisted if the expired license was awarded on an oral exam. The fees listed in § 10.109 apply to these examinations. In the case of an expired radio officer's license, the license may be issued upon presentation of a valid first- or second-class radiotelegraph operator license issued by the Federal Communications Commission.

(2) A certificate of registry that has been expired for more than 12 months shall be renewed in the same way as a current certificate of registry. There are no additional requirements for reissuing certificates of registry that have been expired for more than 12 months.

(g) *Inactive license renewal.* (1) Applicants for renewal of licenses who are unwilling or otherwise unable to meet the requirements of paragraphs (c) or (d) of this section may renew their licenses, with the following restrictive endorsement placed on the back of the license: ''License renewed for continuity purposes only; service under the authority of this license is prohibited.'' Holders of licenses with this *continuity endorsement* may have the prohibition rescinded at any time by satisfying the renewal requirements in paragraphs (c), (d), and (h) of this section.

(2) Applications for renewal of a license with the continuity endorsement must include:

(i) The license to be renewed, or, if it is unexpired, a photocopy of the license including the back and all attachments; and,

(ii) A signed statement from the applicant attesting to an awareness of the restriction to be placed on the renewed license, and of the requirements for rescinding the continuity endorsement.

(h) *Chemical testing for dangerous drugs.* Except for applicants requesting an inactive license renewal under paragraph (g) of this section, each applicant for the renewal of a license or of a certificate of registry shall produce evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in § 16.220 of this subchapter. An applicant who fails a chemical test for dangerous drugs will not be issued a license or certificate of registry.

(i) Each applicant for a renewal may be required to consent to a criminal record check under § 10.201(h).

(j) Each applicant for renewal of a license or certificate of registry shall consent to an NDR check under § 10.201(i).

[CGD 91–211, 59 FR 49299, Sept. 27, 1994, as amended by CGD 91–223, 60 FR 4525, Jan. 23, 1995; CGD 91–212, 60 FR 65486, Dec. 19, 1995]

§ 10.211 Creditable service and equivalents for licensing purposes.

(a) Sea service may be documented for licensing purposes in various forms such as certificates of discharge, pilotage service and billing forms, and letters or other official documents from marine companies signed by appropriate officials or licensed masters. For service on vessels of under 200 gross tons, owners of vessels may attest to their own service; however, those who do not own a vessel must obtain letters or other evidence from licensed personnel or the owners of the vessels listed. The documentary evidence produced by the applicant must contain the amount and nature (e.g. chief mate. assistant engineer, etc.) of the applicant's experience, the vessel name, gross tonnage, shaft horsepower and official numbers, the routes upon which the experience was acquired, and approximate dates of service.

(b) Port engineer, shipyard superintendent experience, instructor service, or similar related service may be creditable for a maximum of six months of service for raise of grade of an engineer or deck license, as appropriate, using the following:

(1) Port engineer or shipyard superintendent experience is creditable on a three-for-one basis for a raise of grade. (Twelve months of experience equals four months of creditable service.)

(2) Service as a bona fide instructor at a school of navigation or marine engineering is creditable on a two-for-one basis for a raise of grade. (Twelve months of experience equals six months of creditable service).

(c) Service on mobile offshore drilling units is creditable for raise of grade of license. Evidence of one year's service as mate or equivalent while holding a license as third mate, or as engineering officer of the watch or equivalent while holding a license as third assistant engineer, is acceptable for a raise of grade to second mate or second assistant engineer, respectively; however, any subsequent raises of grade of unlimited, nonrestricted licenses must include a minimum of six months of service on conventional vessels.

(d) Service on a Dual Mode Integrated Tug Barge (ITB) unit is creditable for original or raise of grade of any deck licenses. Service on a Dual Mode ITB with an aggregate tonnage of over 1600 gross tons is creditable on a two-for-one basis (two days experience equals one day of creditable service) for up to 50 percent of the total service on vessels over 1600 gross tons required for an unlimited license. The remaining required service on vessels of over 1600 gross tons must be obtained on conventional vessels or Push Mode ITBs.

(e) Other experience in a marine related area, other than at sea, or sea service performed on unique vessels, will be evaluated by the OCMI and forwarded to the Commandant for a determination of equivalence to traditional service.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 135, Jan. 4, 1989]

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

(a) Sea service as a member of the Armed Forces of the United States will be accepted as qualifying experience for an original, raise of grade, or increase in scope of all licenses. In most cases, military sea service will have been performed upon ocean waters; however, inland service, as may be the case on smaller vessels, will be credited in the same manner as conventional evaluations. The applicant must submit an official transcript of sea service as verification of the service claimed when the application is submitted. The applicant must also provide the Officer in Charge, Marine Inspection other necessary information as to tonnage, routes, horsepower, percentage of time underway, and assigned duties upon the vessels which he or she served. Such service will be evaluated by the OCMI and forwarded to the Commandant for a determination of its equivalence to sea service acquired on merchant vessels and the appropriate grade, class, and limit of license for which the applicant is eligible. Normally, 60 percent of the total time on board is considered equivalent underway service; however, the periods of operation of each vessel may be evaluated separately. In order to be eligible for a master's or chief engineer's unlimited license, the applicant must have acquired military service in the capacity of commanding officer or engineer officer, respectively.

(b) Service in deck ratings on military vessels such as seaman apprentice, seaman, boatswain's mate, quartermaster, or radarman are considered deck service for licensing purposes. Service in other ratings may be considered if the applicant establishes that his or her duties required a watchstanding presence on or about the bridge of a vessel. Service in engineer ratings on military vessels such as fireman apprentice, fireman, engineman, machinists, mate, machinery technician or boiler tender are considered engineer service for licensing purposes. There are also other ratings such as electrician, hull technician, or damage controlman which may be credited when the applicant establishes that his or her duties required watchstanding duties in an operating engine room.

(c) In addition to underway service, members of the Armed Forces may obtain creditable service for periods of assignment to vessels at times other than underway, such as in port, at anchor, or in training. Normally, a 25% factor is applied to these time periods. This experience can be equated with general shipboard familiarity, training,

ship's business, and other related duties.

(d) Sea service obtained on submarines is creditable, as if it were surface vessel service, for deck and engineer licenses under the provision of paragraph (a) of this section. For application to deck licenses, submarine service may be creditable if at least 25 percent of all service submitted for the license was obtained on surface vessels (e.g. If four years' total service were submitted for an original license, at least one year must have been obtained on surface craft in order for the submarine service to be eligible for evaluation).

(e) Service gained in a civilian capacity as commanding officer, master, mate, engineer, or pilot, etc., of any vessel owned and operated by the United States, in any service, in which a license as master, mate, engineer, or pilot was not required at the time of such service, is evaluated by the OCMI and forwarded to the Commandant for a determination of equivalence.

§ 10.215 Modification or removal of limitations.

(a) If an Officer in Charge, Marine Inspection, is satisfied by the documentary evidence submitted that an applicant is entitled by experience, training, and knowledge to an endorsement or increase in the scope of any license held, any limitations which were previously placed upon the license by that OCMI may be changed. Such an increase in scope may include horsepower or tonnage limitations, or geographic route restrictions.

(b) An OCMI may not change a limitation on any license which that office did not place thereon before full information regarding the reason for the limitation is obtained from the OCMI responsible for the limitation.

(c) No limitation on any license may be changed before the applicant has made up any deficiency in the experience prescribed for the license or endorsement desired and passed any necessary examination.

§ 10.217 Examination procedures and denial of licenses.

(a)(1) The examinations for all deck and engineer unlimited licenses are administered at periodic intervals. The examination fee set out in § 10.109 must be paid before the applicant may take the first examination section. If an applicant fails three or more sections of the examination, a complete reexamination must be taken, but may be taken during any of the scheduled exam periods. On the subsequent exam, if the applicant again fails three or more sections, at least 3 months must lapse before another complete examination is attempted, and a new examination fee is required. If an applicant fails one or two sections of an examination, the applicant may be retested twice on these sections during the next 3 months. If the applicant does not successfully complete these sections within the 3 month period, complete reexamination must be taken after a lapse of at least 3 months from the date of the last retest, and a new examination fee is required. The 3 month retest period may be extended by the OCMI if the applicant presents discharges documenting sea time which prevented the taking of a retest during the 3 month period. The retest period may not be extended beyond 7 months from the initial examination.

(2) The scheduling of all other deck and engineer license examinations will be at the discretion of the OCMI. The examination fee set out in § 10.109 must be paid before the applicant may take the first examination section. In the event of a failure, the applicant may be retested twice whenever the examination can be rescheduled with the OCMI. The applicant must be examined in all of the unsatisfactory sections of the preceding examination. If the applicant does not successfully complete all parts of the examination during a 3-month period from the initial test date, a complete reexamination must be taken after a lapse of at least 2 months from the date of the last retest, and a new examination fee is required.

(b) If the OCMI refuses to grant an applicant the license for which applied due to failing to pass a required examination, the applicant is furnished a written statement setting forth the portions of the examination which

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

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 135, Jan. 4, 1989; CGD 91–002, 58 FR 15238, Mar. 19, 1993; CGD 94–029, 61 FR 47064, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47064, Sept. 6, 1996, §10.217 was amended by revising the second sentence of (a)(1) and (2), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§10.217 Requirements for raise of grade of license.

(a) * * *

(1) * * * The examination fee set out in §10.109 must be paid prior to taking the first examination section. * * *

(2) * * * The examination fee set out in §10.109 must be paid prior to taking the first examination section. * * *

* * * * *

§10.219 Issuance of duplicate license or certificate of registry.

(a) Whenever a person to whom a license or certificate of registry has been issued loses the license or certificate, that person shall report the loss to any OCMI. A duplicate license or certificate may be issued by an OCMI listed in the note following §1.05(b) of this part after receiving an application with an affidavit describing the circumstances of the loss from the applicant and verification of the license or certificate record from the Regional Examination Center where it was issued or from the Commandant. The duplicate will be prepared in the same format and wording as the license or certificate being replaced. A duplicate license is issued for the unexpired term of the lost license. Duplicate licenses and certificates of registry bear the following statement: ''This license (or certificate) replaces License (or Certificate) Number ___ issued at ___ on the above date.''

(b) If a person loses a license or certificate of registry by shipwreck or other casualty, a reissue of that license or certificate or registry will be supplied free of charge. Other casualties include any damage to a ship caused by collision, explosion, tornado, wreck, flooding, beaching, grounding, or fire.

(c) If a person loses a license or certificate of registry otherwise than by shipwreck or other casualty and applies for a reissue, the appropriate fee set out in §10.109 is required.

[CGD 81–059, 54 FR 135, Jan. 4, 1989; as amended by CGD 91–002, 58 FR 15238, Mar. 19, 1993]

§10.221 Parting with license.

The holder of a license shall not voluntarily part with it or place it beyond his or her personal control by pledging or depositing it with any other person for any purpose. If the holder violates this section, he or she may be proceeded against in accordance with the provisions of part 5 of this chapter, looking to a suspension or revocation of the license.

§10.223 Suspension and revocation of licenses.

(a) When the license of any individual is revoked, it is no longer valid for any purpose and any license of the same type subsequently requested must be applied for as an original license, except as to number of issue.

(b) No person whose license is suspended without probation or has been revoked may be issued another license without approval of the Commandant.

(c) When a license which is about to expire is suspended, the renewal of such license will be withheld until expiration of the period of suspension.

Subpart C—Training Schools with Approved Courses

§10.301 Applicablilty.

This subpart prescribes the general requirements applicable to all approved courses which may be accepted in lieu of service experience or examination required by the Coast Guard, or which satisfy course completion requirements.

§10.302 Course approval.

(a) The Coast Guard only approves courses satisfying regulatory requirements. The owner or operator of a training school desiring to have a course approved by the Coast Guard shall submit a written request through

the appropriate Officer in Charge, Marine Inspection to the Director, National Maritime Center, NMC–4B, 4200 Wilson Boulevard, Suite 510, Arlington, VA 22203–1804, that contains:

(1) A list of the curriculum including a description of and the number of classroom hours required in each subject;

(2) A description of the facility and equipment;

(3) A list of instructors including the experience, background, and the qualifications of each; and

(4) Specify the Coast Guard training requirements the course is intended to satisfy.

(b) The Coast Guard notifies each applicant in writing whether or not an approval is granted. If a request for approval is denied, the Coast Guard informs the applicant the reasons for the denial and describes what corrections are required for an approval.

(c) Unless sooner surrendered, suspended or revoked, an approval for a course at a training school that meets Coast Guard standards expires 24 months after the month in which it is issued, or on the date of any change in the ownership of the school for which it was issued, whichever occurs first.

(d) If the owner or operator of a training school desires to have a course approval renewed, they shall submit a written request to the address listed in paragraph (a) of this section. For the request to be approved, the Coast Guard must be satisfied that the content and quality of instruction remain satisfactory. Unless sooner surrendered, suspended or revoked, a renewal of the approval expires 60 months after the month it is issued, or on the date of any change in ownership of the school for which it is issued, whichever occurs first.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.303 General standards.

Each school with an approved course must:

(a) Have a well maintained facility that accommodates the students in a safe and comfortable environment conducive to learning.

(b) Have visual aids for realism, including simulators where appropriate, which are modern and well maintained and sufficient for the number of students to be accommodated.

(c) Give appropriate written or practical examinations in the course material to each student of such a degree of difficulty that a student who successfully completes them could reasonably assume that he or she would pass, on the first attempt, an examination prepared by the Coast Guard based upon knowledge requirements of the position or endorsement for which the student is being trained.

(d) Keep for at least one year after the end of each student's enrollment:

(1) Each written examination, or in the case of a practical test, a report of such test; and

(2) A record of each student's classroom attendance.

(e) Not change its approved curriculum unless approved, in writing, after the request for change has been submitted in writing through the appropriate Officer in Charge, Marine Inspection to the Director, National Maritime Center, NMC–4B.

(f) At any time the Officer in Charge, Marine Inspection shall direct, allow the Coast Guard to:

(1) Inspect its facilities, equipment, and records, including scholastic records;

(2) Conduct interviews and surveys of students to aid in course evaluation and improvement;

(3) Assign personnel to observe or participate in the course of instruction; and

(4) Supervise or administer the required examinations or practical demonstrations.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987 and CGD 81–059, 54 FR 132, Jan. 4, 1989, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.304 Substitution of training for required service.

(a) Satisfactory completion of certain training courses approved by the Commandant may be substituted for a portion of the required service for many deck and engineer licenses and for qualified ratings of unlicensed personnel. The list of all currently approved courses of instruction including

the equivalent service and applicable licenses and ratings is maintained by Director, National Maritime Center, NMC–4B. Satisfactory completion of an approved training course may be substituted for not more than two-thirds of the required service on deck or in the engine department for deck or engineer licenses, respectively, and for qualified ratings.

(b) Service time gained at an approved training course does not satisfy recent service requirements nor does training on a simulator; however, any underway service at an approved course may be used for this purpose. An applicant who had met the recent service requirement before entering school will not be penalized by attending the approved training course.

(c) Training obtained prior to receiving a license may not be used for subsequent raises of grade.

(d) Simulator training in combination with a Coast Guard approved training course may be submitted to the Director, National Maritime Center, for evaluation and determination of equivalency to required sea service. Simulator training cannot be substituted for recency requirements, but may substitute for a maximum of 25 percent of the required service for any license transaction.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 135, Jan. 4, 1989; CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§10.305 Radar-observer certificates and qualifying courses.

(a) A student who takes an approved course of training, which includes passing both a radar-theory examination and a practical demonstration on a simulator, and who meets the requirements of this section is entitled to an appropriate radar-observer certificate—

(1) In a form prescribed by the school and acceptable to the Coast Guard; and

(2) Signed by the head of the school.

(b) The following radar-observer certificates are issued under this section:

(1) Radar Observer (Unlimited).

(2) Radar Observer (Inland Waters).

(3) Radar Observer (Rivers).

(4) Radar Observer (Unlimited Renewal).

(5) Radar Observer (Inland Waters Renewal).

(6) Radar Observer (Rivers Renewal).

(c) A school with an approved radar-observer course may issue a certificate listed in paragraph (b) of this section after the student has successfully completed the appropriate curriculum as follows:

(1) Radar Observer (Unlimited). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the following subjects:

(i) Fundamentals of radar:

(A) How radar works.

(B) Factors affecting the performance and accuracy of marine radar.

(C) Purposes and functions of the main components that constitute a typical marine radar system.

(ii) Operation and use of radar:

(A) Purpose and adjustment of controls.

(B) Detection of malfunctions, false and indirect echoes, and other radar phenomena.

(C) Effects of sea return and weather.

(D) Limitations of radar resulting from design factors.

(E) Precautions to observe in performing maintenance of radar equipment.

(F) Measurement of ranges and bearings.

(G) Effect of size, shape, composition, and distance of vessels and terrestrial targets on echo.

(iii) Interpretation and analysis of radar information:

(A) Radar navigation—determining the position and direction of movements of a vessel.

(B) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(C) Determining the course and speed of another vessel.

(D) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.

(E) Detecting changes of course and/or speed of another vessel after its initial course and speed have been established.

(F) Factors to consider when determining changes of course and/or speed

of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(iv) Plotting (by any graphically-correct method):

(A) Principles and methods of plotting relative and true motion.

(B) Practical-plotting problems.

(2) Radar Observer (Inland Waters). Classroom instruction—with emphasis on situations and problems encountered on inland waters, including demonstration and practical exercises using simulators—and examination, in the following subjects:

(i) Fundamentals of radar:

(A) How radar works.

(B) Factors affecting the performance and accuracy of marine radar.

(C) Purpose and functions of the main components that constitute a typical marine radar system.

(ii) Operation and use of radar:

(A) Purpose and adjustment of controls.

(B) Detection of malfunctions, false and indirect echoes, and other radar phenomena.

(C) Effects of sea return and weather.

(D) Limitations of radar resulting from design factors.

(E) Precautions to observe in performing maintenance of radar equipment.

(F) Measurement of ranges and bearings.

(G) Effect of size, shape, composition, and distance of vessels and terrestrial targets on echo.

(iii) Interpretation and analysis of radar information:

(A) Radar navigation—determining the position and direction of movements of a vessel.

(B) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(C) Determining the course and speed of another vessel.

(D) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.

(E) Detecting changes of course and/or speed of another vessel after its initial course and speed have been established.

(F) Factors to consider when determining changes of course and/or speed of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(3) Radar Observer (Rivers). Classroom instruction—with emphasis on situations and problems encountered on rivers including demonstration and practical exercises using simulators—and examination, in the following subjects:

(i) Fundamentals of radar:

(A) How radar works.

(B) Factors affecting the performance and accuracy of marine radar.

(C) Purpose and functions of the main components that constitute a typical marine radar system.

(ii) Operation and use of radar:

(A) Purpose and adjustment of controls.

(B) Detection of malfunctions, false and indirect echoes, and other radar phenomena.

(C) Effects of sea return and weather.

(D) Limitations of radar resulting from design factors.

(E) Precautions to observe in preforming maintenance of radar equipment.

(F) Measurement of ranges and bearings.

(G) Effect of size, shape, composition, and distance of vessels and terrestrial targets on echo.

(iii) Interpretation and analysis of radar information:

(A) Radar navigation—determining the position and direction of movements of a vessel.

(B) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(C) Factors to consider when determining changes of course and/or speed of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(4) Radar Observer (Unlimited Renewal). Classroom Instruction)—including demonstration and practical exercises using simulators—and examination, in the following subjects:

(i) Interpretation and analysis of radar information:

(A) Radar navigation—determining the position and direction of movements of a vessel.

(B) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(C) Determining the course and speed of another vessel.

(D) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking , or overtaken vessel.

(E) Detecting changes of course and/or speed of another vessel after its initial course and speed have been established.

(F) Factors to consider when determining changes of course and/or speed of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(ii) Plotting (by any method that is graphically correct):

(A) The principles and methods of plotting relative and true motion.

(B) Practical-plotting problems.

(5) Radar Observer (Inland Waters Renewal). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the interpretation and analysis of radar information, including:

(i) Radar navigation—determining the position and direction of movements of a vessel.

(ii) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(iii) Determining the course and speed of another vessel.

(iv) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.

(v) Detecting changes of course and/or speed of another vessel after its initial course and speed have been established.

(vi) Factors to consider when determining changes of course and/or speed of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(6) Radar Observer (Rivers Renewal). Classroom instruction—including demonstration and practical exercises using simulators—and examination, in the interpretation and analysis of radar information, including:

(i) Radar navigation—determining the position and direction of movements of a vessel.

(ii) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(iii) Factors to consider when determining changes of course and/or speed of vessel to, on the basis of radar observation, prevent collisons with other vessels.

[CGD 94–041, 59 FR 53757, Oct. 26, 1994]

§10.306 Radar-Operation certificate and course.

(a) A certificate of training from a Radar-Operation course may, as provided by 46 CFR 15.815(c)(2), suffice instead of a radar-observer endorsement. It is valid until the holder's license is renewed or upgraded, or expires, whichever occurs first.

(b) Each Radar-Operation course must contain at least four hours of instruction on the following subjects:

(1) Fundamentals of radar:

(i) How radar works.

(ii) Factors affecting the performance and accuracy of marine radar.

(iii) Purpose and functions of the main components that constitute a typical marine radar system.

(2) Operation and use of radar:

(i) Purpose and adjustment of controls.

(ii) Detection of malfunctions, false and indirect echoes, and other radar phenomena.

(iii) Effects of sea return and weather.

(iv) Limitations of radar resulting from design factors.

(v) Precautions to observe in performing maintenance of radar equipment.

(vi) Measurement of ranges and bearings.

(vii) Effect of size, shape, composition, and distance of vessels and terrestrial targets on echo.

(3) Interpretation and analysis of radar information:

(i) Radar navigation—determining the position and direction of movements of a vessel.

(ii) Collision-avoidance, including visual techniques, appropriate to the circumstances and the equipment in use.

(iii) Factors to consider when determining changes of course and/or speed of a vessel to, on the basis of radar observation, prevent collisions with other vessels.

(c) Each Radar-Operation course must be conducted by an individual who possesses the knowledge and skills taught in the course, with at least one year of experience in their practical application, except that—

(1) A marine instructor or company official may substitute a currently valid certificate from an approved Radar-Observer (Unlimited or Inland Waters) course for the one year of experience; and

(2) An instructor of any approved radar-observer course may teach a Radar-Operation course without further seagoing experience.

(d) A holder of the Radar-Operation certificate seeking a radar-observer endorsement is considered an applicant for an original endorsement rather than an applicant for renewal of the endorsement.

[CGD 94–041, 59 FR 53758, Oct. 26, 1994]

§ 10.307 Training schools with approved radar observer courses.

The Director, National Maritime Center, NMC–4B, 4200 Wilson Boulevard, Suite 510, Arlington, VA 22203–1804 maintains the list of approved schools and specific courses. This information is available upon request by writing the aforementioned address or calling (703) 235–1300.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987 and CGD 81–059, 54 FR 132, Jan. 4, 1989, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

Subpart D—Professional Requirements for Deck Officers Licenses

§ 10.401 Ocean and near coastal licenses.

(a) Any license issued for service as master or mate on ocean waters qualifies the licensee to serve in the same grade on any waters, subject to the limitations of the license, without additional endorsement.

(b) A license issued for service as master or mate on near coastal waters qualifies the licensee to serve in the same grade on near coastal, Great Lakes, and inland waters, subject to the limitations of the license, without additional endorsement.

(c) Near coastal licenses of any gross tons require the same number of years of service as the ocean unlimited licenses. The primary differences in these licenses are the nature of the service and the professional examination as explained in subpart I of this part.

(d) A licensee having a master or mate near coastal license obtained with ocean service may have the license endorsed for ocean service by completing the appropriate examination deficiencies, provided that the additional service requirements of paragraph (e) of this section do not apply.

(e) Master or third mate near coastal unlimited licenses may be obtained by completing the prescribed examination in subpart I of this part and satisfying the requirements of paragraph (g) while holding a license as unlimited master or mate, respectively, upon Great Lakes and inland waters. To have a near coastal unlimited license obtained in this manner endorsed for ocean service, the licensee must obtain 12 months of service as a deck watch officer or higher on ocean waters on vessels of 1600 gross tons or over, in addition to completing the examination topics.

(f) Masters and mates licenses for service on vessels of over 200 gross tons may be endorsed for sail or auxiliary sail as appropriate. The applicant must present the equivalent total qualifying service required for conventional licenses including at least one year of deck experience on that specific type of vessel. For example, for a license as master of vessels of not more than 1600 gross tons endorsed for auxiliary sail, the applicant must meet the total experience requirements for the conventional license, including time as mate, and the proper tonnage experience, including at least one year of deck service on appropriately sized auxiliary sail vessels. For license endorsement

for service on vessels of 200 gross tons or less see individual license requirements.

(g) In order to obtain a master or mate license with a tonnage limit above 200 gross tons, or a license for 200 gross tons or less with an ocean route, whether an original, raise in grade, or increase in the scope of license authority to a higher tonnage category, the applicant must successfully complete the following training and examination requirements:

(1) Approved firefighting course;

(2) Approved radar observer course; and,

(3) Qualification as an able seaman unlimited or able seaman limited (able seaman special or able seaman offshore supply vessels satisfy the able seaman requirement for licenses permitting service on vessels of 1600 gross tons and less).

(h) Each applicant for a deck license which authorizes service on vessels above 1600 gross tons on ocean or near coastal waters, whether original or raise of grade, must pass a practical signaling examination (flashing light). A license applicant who fails in practical signaling, but passes every other part of the examination, may be issued a license with a 1600 gross ton limitation. The tonnage limitation can be removed upon successful completion of the signaling examination.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 135, Jan. 4, 1989]

§10.402 Tonnage requirements for ocean or near coastal licenses for vessels of over 1600 gross tons.

(a) To qualify for an ocean or near coastal license for vessels of any gross tons, all the required experience must be obtained on vessels of over 200 gross tons. At least one-half of the required experience must be obtained on vessels of over 1600 gross tons.

(b) If the applicant for an original or raise of grade of a license as master or mate does not have the service on vessels over 1600 gross tons required by paragraph (a) of this section, or is qualifying for third mate under the provisions of paragraph §10.407(c) of this subpart, a tonnage limitation is placed on the license based on the applicant's qualifying experience. The license is limited to the maximum tonnage on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated. When the calculated limitation equals or exceeds 10,000 gross tons, the applicant is issued an unlimited tonnage license.

(c) Tonnage limitations imposed under paragraph (b) of this section may be raised or removed in the following manner:

(1) When the applicant has six months of service on vessels of over 1600 gross tons in the highest grade licensed, all tonnage limitations are removed.

(2) When the applicant has a total of six months of service on vessels of over 1600 gross tons in any licensed capacity other than the highest grade for which licensed, all tonnage limitations for the grade in which the service is performed are removed and the next higher grade license is raised to the tonnage of the vessel on which the majority of the service was performed. The total cumulative service before and after issuance of the limited license may be considered in removing all tonnage limitations.

(3) When the applicant has 12 months of service as able seaman on vessels over 1600 gross tons while holding a license as third mate, all tonnage limitations on the third mate's license are removed.

(d) Individuals holding licenses as master or mate of vessels of not more than 1600 gross tons, not more than 500 gross tons, or not more than 25–200 gross tons are prohibited from using the provisions of paragraph (c) of this section to increase the tonnages of their licenses.

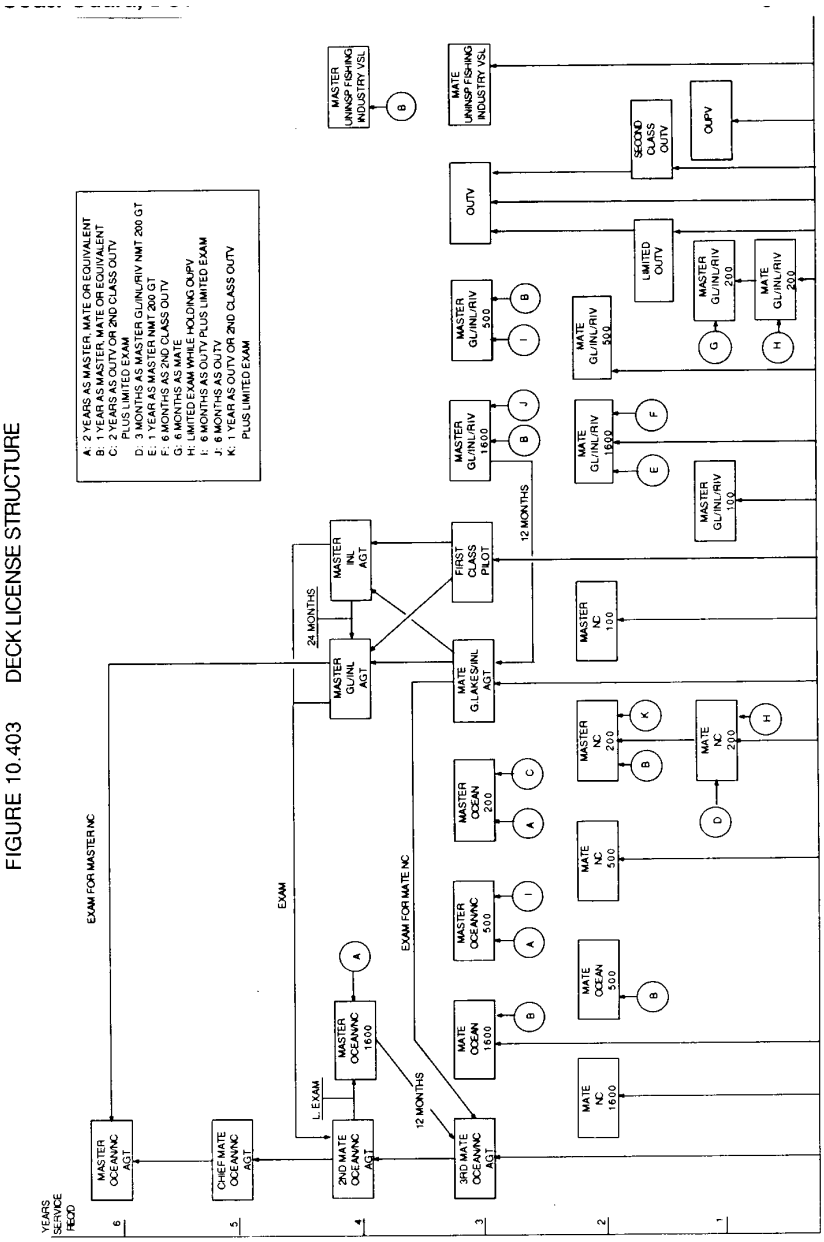
[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 135, Jan. 4, 1989]

§10.403 Deck license structure.

The following diagram illustrates the deck license structure, including cross over points. The section numbers on

the diagram refer to the specific requirements applicable.

FIGURE 10.403 DECK LICENSE STRUCTURE



[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 136, Jan. 4, 1989]

§ 10.404 Service requirements for master of ocean or near coastal steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as master of ocean or near coastal steam or motor vessels of any gross tons is:

(a) One year of service as chief mate on ocean steam or motor vessels; or,

(b) One year of service on ocean steam or motor vessels while holding a license as chief mate of ocean steam or motor vessels as follows:

(1) A minimum of six months of service as chief mate; and,

(2) Service as officer in charge of a navigational watch accepted on a two-for-one basis (12 months as second or third mate equals six months of creditable service).

§ 10.405 Service requirements for chief mate of ocean or near coastal steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as chief mate of ocean or near coastal steam or motor vessels of any gross tons is one year of service as officer in charge of a navigational watch on ocean steam or motor vessels while holding a license as second mate.

§ 10.406 Service requirements for second mate of ocean or near coastal steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as second mate of ocean or near coastal steam or motor vessels of any gross tons is:

(a) One year of service as officer in charge of a navigational watch on ocean steam or motor vessels while holding a license as third mate; or,

(b) While holding a license as third mate of ocean steam or motor vessels of any gross tons, 12 months of service on deck as follows:

(1) A minimum of six months service as officer in charge of a deck watch on ocean steam or motor vessels; in combination with,

(2) Service on ocean steam or motor vessels as boatswain, able seaman, or quartermaster while holding a certificate as able seaman, which may be accepted on a two-for-one basis to a maximum allowable substitution of six months (12 months of experience equals 6 months of creditable service); or,

(c) A licensed master of Great Lakes and inland steam or motor vessels of any gross tons or master of inland steam or motor vessels of any gross tons, may obtain a license as second mate of ocean or near coastal steam or motor vessels of any gross tons by completing the prescribed examination in subpart I of this part.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 138, Jan. 4, 1989]

§ 10.407 Service requirements for third mate of ocean or near coastal steam or motor vessels of any gross tons.

(a) The minimum service or training required to qualify an applicant for license as third mate of ocean or near coastal steam or motor vessels of any gross tons is:

(1) Three years of service in the deck department on ocean steam or motor vessels, six months of which shall have been as able seaman, boatswain, or quartermaster, while holding a certificate as able seaman. Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to three months of the service requirements for this license; or,

(2) Graduation from:

(i) The U.S. Merchant Marine Academy (deck curriculum);

(ii) The U.S. Coast Guard Academy and qualification as an underway officer in charge of a navigational watch;

(iii) The U.S. Naval Academy and qualification as an underway officer in charge of a navigational watch; or,

(iv) The deck class of a maritime academy approved by and conducted under rules prescribed by the Maritime Administrator and listed in part 310 of this title, except the deck class of the Great Lakes Maritime Academy; or,

(3) Satisfactory completion of a three year apprentice mate training program approved by the Commandant.

(b) Graduation from the deck class of the Great Lakes Maritime Academy will qualify the graduate to be examined for a license as third mate near coastal steam or motor vessels of any gross tons.

(c) While holding a license as master of ocean or near coastal steam or

motor vessels of not more than 1,600 gross tons, one year of service as master on vessels of over 200 gross tons operating on ocean or near coastal waters will qualify the applicant for a license as third mate of ocean or near coastal steam or motor vessels of any gross tons.

§10.410 Requirements for deck licenses for vessels of not more than 1600 gross tons.

(a) Licenses as master and mate of vessels of not more than 1600 gross tons are issued in the following tonnage categories:

(1) Not more than 1,600 gross tons;

(2) Not more than 500 gross tons; or,

(3) Between 25–200 gross tons in 50 ton increments and with appropriate mode of propulsion such as steam or motor, sail, or auxiliary sail.

(b) Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to 25 percent of the service requirements for any mate license in this category.

(c) A license in this category obtained with an orally-assisted examination will be limited to 500 gross tons. In order to raise that tonnage limit to 1,600 gross tons, the written examination and service requirements must be satisfied.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 138, Jan. 4, 1989]

§10.412 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 1600 gross tons.

The minimum service required to qualify an applicant for a license as master of ocean or near coastal steam or motor vessels of not more than 1600 gross tons is:

(a) Four years total service on ocean or near coastal waters. Service on Great Lakes and inland waters may substitute for up to two years of the required service. Two years of the required service must have been on vessels of over 100 gross tons. Two years of the required service must have been as a master, mate, or equivalent supervisory position while holding a license as master, mate, operator of uninspected towing vessels, or operator of uninspected passenger vessels. One year of the service as master, mate, or equivalent supervisory position must have been on vessels of over 100 gross tons; or,

(b) An applicant holding a license as chief mate or second mate of ocean or near coastal steam or motor vessels of over 1600 gross tons is eligible for this license upon completion of a limited examination.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§10.414 Service requirements for mate of ocean steam or motor vessels of not more than 1600 gross tons.

The minimum service required to qualify an applicant for a license as mate of ocean steam or motor vessels of not more than 1600 gross tons is:

(a) Three years total service in the deck department of ocean or near coastal steam or motor, sail, or auxiliary sail vessels. Service on Great Lakes and inland waters may substitute for up to 18 months of the required service. One year of the required service must have been on vessels of over 100 gross tons. One year of the required service must have been as a master, mate, or equivalent supervisory position while holding a license as master, mate, operator of uninspected towing vessels, or operator of uninspected passenger vessels. Six months of the required service as master, mate, or equivalent supervisory position must have been on vessels of over 100 gross tons; or,

(b) Three years total service in the deck department on ocean or near coastal steam or motor, sail, or auxiliary sail vessels of over 200 gross tons. Six months of the required service must have been as able seaman.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§10.416 Service requirements for mate of near coastal steam or motor vessels of not more than 1600 gross tons.

The minimum service required to qualify an applicant for a license as mate of near coastal steam or motor vessels of not more than 1600 gross tons is two years total service in the deck department of ocean or near coastal steam or motor, sail, or auxiliary sail

vessels. Service on Great Lakes and inland waters may substitute for up to one year of the required service. One year of the required service must have been on vessels of over 100 gross tons. Six months of the required service must have been as able seaman, boatswain, quartermaster, or equivalent position on vessels of over 100 gross tons while holding a certificate as able seaman.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§ 10.418 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 500 gross tons.

The minimum service required to qualify an applicant for a license as master of ocean or near coastal steam or motor vessels of not more than 500 gross tons is:

(a) Three years total service on ocean or near coastal waters. Service on Great Lakes and inland waters may substitute for up to 18 months of the required service. Two years of the required service must have been as a master, mate, or equivalent supervisory position while holding a license as master, mate, or operator of uninspected passenger vessels. One year of the required service as master, mate, or equivalent supervisory position must have been on vessels of over 50 gross tons.

(b) An applicant holding a license as operator of uninspected towing vessels authorizing service on ocean or near coastal waters is eligible for this license after six months of service as operator of uninspected towing vessels on ocean or near coastal waters and completion of a limited examination. This requires three and one-half years of service. Two years of this service must have been served while holding a license as operator, second-class operator, or mate.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§ 10.420 Service requirements for mate of ocean steam or motor vessels of not more than 500 gross tons.

The minimum service required to qualify an applicant for a license as mate of ocean steam and motor vessels of not more than 500 gross tons is two years total service in the deck department of ocean or near coastal steam or motor, sail, or auxiliary sail vessels. Service on Great Lakes and inland waters may substitute for up to one year of the required service. One year of the required service must have been as a master, mate, or equivalent supervisory position while holding a license as master, mate, operator of uninspected towing vessels, or operator of uninspected passenger vessels. Six months of the required service as master, mate, or equivalent supervisory position must have been on vessels of over 50 gross tons.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§ 10.421 Service requirements for mate of near coastal steam or motor vessels of not more than 500 gross tons.

The minimum service required to qualify an applicant for a license as mate of near coastal steam or motor vessels of not more than 500 gross tons is two years total service in the deck department of ocean or near coastal steam or motor, sail, or auxiliary sail vessels. Service on Great Lakes and inland waters may substitute for up to one year of the required service. One year of the required service must have been on vessels of over 50 gross tons. Three months of the required service must have been as able seaman, boatswain, quartermaster, or equivalent position on vessels of over 50 gross tons while holding a certificate as able seaman.

[CGD 81–059, 54 FR 138, Jan. 4, 1989]

§ 10.422 Tonnage limitations and qualifying requirements for licenses as master or mate of vessels of not more than 200 gross tons.

(a) Except as noted in paragraph (e), all licenses issued for master or mate of vessels of not more than 200 gross tons are issued in 50 gross ton increments based on the applicant's qualifying experience. The license is limited to the maximum tonnage on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 50 gross tons using the next higher figure when an intermediate tonnage is calculated.

(b) The tonnage limitation on these licenses may be raised upon completion of:

(1) At least 45 days of additional service on deck on a vessel of a higher tonnage for a tonnage increase on a mate's license; or,

(2) At least 90 days of additional service on deck on a vessel of a higher tonnage for a tonnage increase on a master's license; or,

(3) Additional service, which, when combined with all previously accumulated service, will qualify the applicant for a higher tonnage license under the basic formula; or,

(4) Six months additional service in the deck department on vessels within the highest tonnage increment on the license. In this case, the tonnage limitation may be raised one increment.

(c) When the service is obtained on vessels upon which licensed personnel are not required, the OCMI must be satisfied that the nature of this qualifying service (i.e., size of vessel, route, equipment, etc.) is a reasonable equivalent to the duties performed on vessels which are required to engage licensed individuals.

(d) Service gained in the engineroom on vessels of not more than 200 gross tons may be creditable for up to 25 percent of the deck service requirements for mate.

(e) When the qualifying service is obtained upon vessels of five gross tons or less, the license will be limited to vessels of not more than 25 gross tons.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 139, Jan. 4, 1989]

§10.424 Service requirements for master of ocean steam or motor vessels of not more than 200 gross tons.

(a) The minimum service required to qualify an applicant for a license as master of ocean steam or motor vessels of not more than 200 gross tons is:

(1) Three years total service on ocean or near coastal waters. Service on Great Lakes and inland waters may substitute for up to 18 months of the required service. Two years of the required service must have been as master, mate, or equivalent supervisory position while holding a license as master, as mate, or as operator of uninspected passenger vessels; or,

(2) Two years total service as a licensed operator or second-class operator of ocean or near coastal uninspected towing vessels. Completion of a limited examination is also required.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12 months of service may have been obtained prior to issuance of the master's license.

(c) In addition to any required examination, the applicant must comply with the requirements listed in §10.401(g) of this subpart.

[CGD 81–059, 54 FR 139, Jan. 4, 1989]

§10.426 Service requirements for master of near coastal steam or motor vessels of not more than 200 gross tons.

(a) The minimum service required to qualify an applicant for a license as master of near coastal steam or motor vessels of not more than 200 gross tons is:

(1) Two years total service on ocean or near coastal waters. Service on Great Lakes and inland waters may substitute for up to one year of the required service. One year of the required service must have been as a master, mate, or equivalent supervisory position while holding a license as master, as mate, or as operator of uninspected passenger vessels; or,

(2) One year of total service as a licensed operator or second-class operator of ocean or near coastal uninspected towing vessels. Completion of a limited examination is also required.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12 months of service may have been obtained prior to issuance of the master's license.

[CGD 81–059, 54 FR 139, Jan. 4, 1989]

§ 10.427 Service requirements for mate of near coastal steam or motor vessels of not more than 200 gross tons.

(a) The minimum service required to qualify an applicant for license as mate of near coastal steam or motor vessels of not more than 200 gross tons is:

(1) Twelve months total service in the deck department of ocean or near coastal steam or motor, sail, or auxiliary sail vessels. Service on Great Lakes and inland waters may substitute for up to six months of the required service; or,

(2) Three months of service in the deck department of steam or motor vessels operating on ocean, near coastal, Great Lakes or inland waters while holding a license as master of inland steam or motor, sail or auxiliary sail vessels of not more than 200 gross tons.

(b) The holder of a license as operator of uninspected passenger vessels with a near coastal route endorsement may obtain this license by successfully completing an examination on rules and regulations for small passenger vessels.

(c) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of six months of deck service on sail or auxiliary sail vessels.

(d) A license as master of near coastal steam or motor vessels may be endorsed as mate of sail or auxiliary sail vessels upon presentation of three months of service on sail or auxiliary sail vessels.

(e) In order to obtain a tonnage endorsement of over 100 gross tons, the applicant must complete the additional examination topics indicated in subpart I of this part.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987. Redesignated and amended by CGD 81–059, 54 FR 139, Jan. 4, 1989]

§ 10.428 Service requirements for master of near coastal steam or motor vessels of not more than 100 gross tons.

(a) The minimum service required to qualify an applicant for a license as master of near coastal steam or motor vessels of not more than 100 gross tons is two years total service in the deck department of steam or motor, sail, or auxiliary sail vessels on ocean or near coastal waters. Service on Great Lakes and inland waters may substitute for up to one year of the required service.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12 months of service may have been obtained prior to issuance of the license.

[CGD 81–059, 54 FR 139, Jan. 4, 1989]

§ 10.429 Service requirements for limited master of near coastal steam or motor vessels of not more than 100 gross tons.

(a) Limited masters' licenses for near coastal vessels of not more than 100 gross tons may be issued to applicants to be employed by organizations such as yacht clubs, marinas, formal camps and educational institutions. A license issued under this section is limited to the specific activity and the locality of the yacht club, marina or camp. In order to obtain this restricted license, an applicant must:

(1) Have four months of service on any waters in the operation of the type of vessel for which the license is requested;

(2) Satisfactorily complete a safe boating course approved by the National Association of State Boating Law Administrators, or a safe boating course conducted by the U.S. Power Squadron or the American Red Cross, or a Coast Guard approved course. This course must have been completed within five years before the date of application; and,

(3) Pass a limited examination appropriate for the activity to be conducted and the route authorized.

(b) The first aid and cardiopulmonary resuscitation (CPR) course certificates required by § 10.201(h) of this part will only be required when, in the opinion of the OCMI, the geographic area over which service is authorized precludes obtaining medical services within a reasonable time.

(c) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of four months of service on sail or auxiliary sail vessels. The required four months of service may have been

obtained prior to issuance of the license.

[CGD 81–059, 54 FR 139, Jan. 4, 1989]

§10.430 Licenses for the Great Lakes and inland waters.

Any license issued for service on the Great Lakes and inland waters is valid on all of the inland waters of the United States as defined in this part. Any license issued for service on inland waters is valid for the inland waters of the United States, excluding the Great Lakes. Licenses with either a Great Lakes and inland or an inland route are valid for service on the sheltered waters of the Inside Passage between Puget Sound and Cape Spencer, Alaska. As these licenses authorize service on waters seaward of the International Regulations for Preventing Collisions at Sea (COLREGS) demarcation line as defined in 33 CFR part 80, the applicant must complete an examination on the COLREGS or the license must be endorsed with an exclusion from such waters.

[CGD 81–059, 54 FR 139, Jan. 4, 1989]

§10.431 Tonnage requirements for Great Lakes and inland licenses for vessels of over 1600 gross tons.

(a) All required experience for Great Lakes and inland unlimited licenses must be obtained on vessels of over 200 gross tons. At least one-half of the required experience must be obtained on vessels of 1600 gross tons or over.

(b) Tonnage limitations may be imposed on these licenses in accordance with §10.402 (b) and (c).

§10.433 Service requirements for master of Great Lakes and inland steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as master of Great Lakes and inland steam or motor vessels of any gross tons is:

(a) One year of service as mate or first class pilot while acting in the capacity of first mate of Great Lakes steam or motor vessels of more than 1600 gross tons; or,

(b) Two years of service as master of inland (excluding the Great Lakes) steam or motor vessels of more than 1600 gross tons; or,

(c) One year of service upon Great Lakes waters while holding a license as mate or first class pilot of Great Lakes and inland steam or motor vessels of more than 1600 gross tons. A minimum of six months of this service must have been in the capacity of first mate. Service as second mate is accepted for the remainder on a two-for-one basis to a maximum of six months (12 months of service equals six months of creditable service).

§10.435 Service requirements for master of inland steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as master of inland (excluding the Great Lakes) steam or motor vessels of any gross tons is:

(a) One year of service as first class pilot (of other than canal and small lakes routes) or mate of Great Lakes or inland steam or motor vessels of more than 1,600 gross tons; or,

(b) Two years of service as wheelsman or quartermaster while holding a mate/first class pilot license.

§10.437 Service requirements for mate of Great Lakes and inland steam or motor vessels of any gross tons.

(a) The minimum service required to qualify an applicant for license as mate of Great Lakes and inland steam or motor vessels of any gross tons is:

(1) Three years of service in the deck department of steam or motor vessels, at least three months of which must have been on vessels on inland waters and at least six months of which must have been as able seaman, inland mate, boatswain, wheelsman, quartermaster, or equivalent position;

(2) Graduation from the deck class of the Great Lakes Maritime Academy; or,

(3) While holding a license as master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons, one year service as master on vessels of over 200 gross tons.

(b) Service gained in the engine department on vessels of appropriate tonnage may be creditable for up to six months of the service requirements under paragraph (a)(1) of this section.

§ 10.442 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.

The minimum service required to qualify an applicant for a license as master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons is:

(a) Three years total service on vessels. Eighteen months of the required service must have been on vessels of over 100 gross tons. One year of the required service must have been as a master, mate, or equivalent supervisory position on vessels of over 100 gross tons while holding a license as master, as mate, or as operator of uninspected towing vessels; or,

(b) Six months of service as operator on vessels of over 100 gross tons while holding a license as operator of uninspected towing vessels.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.444 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.

The minimum service required to qualify an applicant for license as mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons is:

(a) Two years total service in the deck department of steam or motor, sail, or auxiliary sail vessels. One year of the required service must have been on vessels of over 100 gross tons. Six months of the required service must have been as able seaman, boatswain, quartermaster, or equivalent position on vessels of over 100 gross tons while holding a certificate as able seaman; or,

(b) One year total service as master of steam or motor, sail, or auxiliary sail vessels, or operator of uninspected passenger vessels, of over 50 gross tons while holding a license as master steam or motor, sail, or auxiliary sail vessels of not more than 200 gross tons or operator of uninspected passenger vessels; or,

(c) Six months total service as second-class operator of uninspected towing vessels on vessels of over 100 gross tons.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.446 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 500 gross tons.

The minimum service required to qualify an applicant for a license as master of Great Lakes and inland steam or motor vessels of not more than 500 gross tons is:

(a) Three years total service on vessels. One year of the required service must have been as a master, mate, or equivalent supervisory position on vessels of over 50 gross tons while holding a license as master, as mate, or as operator of uninspected passenger vessels.

(b) An applicant holding a license as operator of ocean, near coastal, or Great Lakes and inland uninspected towing vessels is eligible for this license after six months of service as operator of uninspected towing vessels and completion of a limited examination. This requires three and one-half years of service. Two years of this service must have been served while holding a license as operator or second-class operator of uninspected towing vessels, or mate.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.448 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 500 gross tons.

The minimum service required to qualify an applicant for a license as mate of Great Lakes and inland steam or motor vessels of not more than 500 gross tons is two years total service in the deck department of steam or motor, sail, or auxiliary sail vessels. One year of the required service must have been on vessels of over 50 gross tons. Three months of the required service must have been as able seaman, boatswain, quartermaster, or equivalent position on vessels of over 50 gross tons while holding a certificate as able seaman.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§10.450 Tonnage limitations and qualifying requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 200 gross tons.

(a) Except as noted in subparagraph (d), all licenses issued for master or mate of vessels of not more than 200 gross tons are issued in 50 ton increments based on the applicants qualifying experience in accordance with the provisions of §10.422. See the tonnage and qualifying service discussion in §10.422 for further clarification.

(b) Service gained in the engineroom on vessels of not more than 200 gross tons may be creditable for up to 25 percent of the deck service requirements for mate.

(c) When the service is obtained on vessels upon which licensed personnel are not required, the OCMI must be satisfied that the nature of this qualifying service (i.e., size of vessel, route, equipment, etc.) is a reasonable equivalent to the duties performed on vessels which are required to engage licensed individuals.

(d) When the qualifying service is obtained upon vessels of five gross tons or less, the license will be limited to vessels of not more than 25 gross tons.

§10.452 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.

(a) The minimum service required to qualify an applicant for a license as master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons is one year of service on vessels. Six months of the required service must have been as master, mate, or equivalent supervisory position while holding a license as master, mate, operator or second-class operator of uninspected towing vessels, or operator of uninspected passenger vessels. To obtain authority to serve on the Great Lakes, three months of the required service must have been on Great Lakes waters, otherwise the license will be limited to the inland waters of the United States (excluding the Great Lakes).

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must have six months of service on sail or auxiliary sail vessels. The required six months of service may have been obtained prior to issuance of the master's license.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§10.454 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.

(a) The minimum service required to qualify an applicant for a license as mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons is six months of service in the deck department of steam or motor, sail, or auxiliary sail vessels. To obtain authority to serve on the Great Lakes, three months of the required service must have been on Great Lakes waters, otherwise the license will be limited to the inland waters of the United States (excluding the Great Lakes).

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of three months of service on sail or auxiliary sail vessels.

(c) A license as master of steam or motor vessels may be endorsed as mate of sail or auxiliary sail vessels upon presentation of three months service on sail or auxiliary sail vessels.

(d) The holder of a license as operator of inland uninspected passenger vessels may obtain this license by successfully completing an examination on rules and regulations for small passenger vessels. To obtain authority to serve on the Great Lakes, three months of the required service must have been on Great Lakes waters, otherwise the license will be limited to the inland waters of the United States (excluding the Great Lakes).

(e) In order to obtain a tonnage endorsement of over 100 gross tons, the applicant must complete the additional examination topics indicated in subpart I of this part.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.455 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.

(a) The minimum service required to qualify an applicant for a license as master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons is one year of total service in the deck department of steam or motor, sail, or auxiliary sail vessels. To obtain authority to serve on the Great Lakes, three months of the required service must have been on Great Lakes waters, otherwise the license will be limited to the inland waters of the United States (excluding the Great Lakes).

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of six months of service on sail or auxiliary sail vessels. The required six months of service may have been obtained prior to issuance of the license.

[CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.456 Service requirements for limited master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.

Limited masters' licenses for vessels of not more than 100 gross tons upon Great Lakes and inland waters may be issued to applicants to be employed by organizations such as formal camps, educational institutions, yacht clubs, and marinas with reduced service requirements. A license issued under this paragraph is limited to the specific activity and the locality of the camp, yacht club or marina. In order to obtain this restricted license, an applicant must:

(a) Have four months of service in the operation of the type of vessel for which the license is requested; and,

(b) Satisfactorily complete a safe boating course approved by the National Association of State Boating Law Administrators, a public education course conducted by the U.S. Power Squadron or the American Red Cross, or a Coast Guard approved course. This course must have been completed within five years before the date of application; and,

(c) Pass a limited examination appropriate for the activity to be conducted and the route authorized.

(d) The first aid and cardiopulmonary resuscitation (CPR) course certificates required by § 10.201(h) of this part will only be required when, in the opinion of the OCMI, the geographic area over which service is authorized precludes obtaining medical services within a reasonable time.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987. Redesignated and amended by CGD 81–059, 54 FR 140, Jan. 4, 1989]

§ 10.457 Service requirements for master of inland steam or motor vessels of not more than 100 gross tons.

(a) An applicant for a license as master of inland steam or motor vessels of not more than 100 gross tons must present one year of service on any waters. In order to raise the tonnage limitation over 100 gross tons, the examination topics indicated in subpart I of this part must be completed in addition to satisfying the experience requirements of § 10.452(a).

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of six months of service on sail or auxiliary sail vessels. The required six months of service may have been obtained prior to issuance of the license.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987. Redesignated and amended by CGD 81–059, 54 FR 141, Jan. 4, 1989]

§ 10.459 Service requirements for master or mate of rivers.

(a) An applicant for a license as master of river steam or motor vessels of any gross tons must meet the same service requirements as master of inland steam or motor vessels of any gross tons.

(b) An applicant for a license as master or mate of river steam or motor vessels, with a limitation of 25–1600 gross tons, must meet the same service requirements as those required by this subpart for the corresponding tonnage Great Lakes and inland steam or motor license. Service on the Great Lakes is not, however, required.

[CGD 81–059, 54 FR 141, Jan. 4, 1989]

§10.462 Licenses for master or mate of uninspected fishing industry vessels.

(a) This section applies to licenses for masters and mates of all vessels, however propelled, navigating the high seas, which are documented to engage in the fishing industry, with the exception of:

(1) Wooden ships of primitive build;

(2) Unrigged vessels; and,

(3) Vessels of less than 200 gross tons.

(b) Licenses as master or mate of uninspected fishing industry vessels are issued for either ocean or near coastal routes, depending on the examination completed. To qualify for an uninspected fishing industry vessel license, the applicant must satisfy the training and examination requirements of §10.401(g) of this subpart.

(c) An applicant for a license as master of uninspected fishing industry vessels must have four years of total service on ocean or near coastal routes. Service on Great Lakes or inland waters may substitute for up to two years of the required service. One year of the required service must have been as licensed master, as unlicensed master, or as licensed mate or equivalent supervisory position while holding a license as master, mate, operator of uninspected towing vessels, or operator of uninspected passenger vessels.

(1) To qualify for a license of not more than 500 gross tons, at least two years of the required service, including the one year as master, mate or equivalent, must have been on vessels of over 50 gross tons.

(2) To qualify for a license of not more than 1600 gross tons, at least two years of the required service, including the one year as master, mate or equivalent, must have been on vessels of over 100 gross tons.

(3) To qualify for a license of over 1600 gross tons, but not more than 5000 gross tons, the vessel tonnage upon which the four years of required service was obtained will be used to compute the tonnage. The license is limited to the maximum tonnage on which at least 25 percent of the required service was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated. A license as master of uninspected fishing industry vessels authorizing service on vessels over 1600 gross tons also requires one year as master, mate or equivalent on vessels over 100 gross tons.

(4) The tonnage limitation on this license may be raised using one of the following methods, but cannot exceed 5000 gross tons. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated.

(i) Three months service as master on a vessel results in a limitation in that capacity equal to the tonnage of that vessel rounded up to the next multiple of 1000 gross tons;

(ii) Six months service as master on a vessel results in a limitation in that capacity equal to 150% of the tonnage of that vessel;

(iii) Six months service as master on vessels over 1600 gross tons results in raising the limitation to 5000 gross tons;

(iv) Six months service as mate on vessels over 1600 gross tons results in raising the limitation for master to the tonnage on which at least 50 percent of the service was obtained;

(v) Two years service as a deckhand on a vessel while holding a license as master results in a limitation on the master's license equal to 150% of the tonnage of that vessel up to 5000 gross tons; or,

(vi) One year of service as deckhand on a vessel while holding a license as master results in a limitation on the master's license equal to the tonnage of that vessel.

(d) An applicant for a license as mate of uninspected fishing industry vessels must have three years of total service on ocean or near coastal routes. Service on Great Lakes or inland waters may substitute for up to 18 months of the required service.

(1) To qualify for a license of not more than 500 gross tons, at least one year of the required service must have been on vessels of over 50 gross tons.

(2) To qualify for a license of not more than 1600 gross tons, at least one year of the required service must have been on vessels of over 100 gross tons.

(3) To qualify for a license of over 1600 gross tons, but not more than 5000 gross tons, the vessel tonnage upon which the three years of required service was obtained will be used to compute the tonnage. The license is limited to the maximum tonnage on which at least 25 percent of the required service was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated.

(4) The tonnage limitation on this license may be raised using one of the following methods, but cannot exceed 5000 gross tons. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated.

(i) Three months service as mate on a vessel results in a limitation in that capacity equal to the tonnage of that vessel rounded up to the next multiple of 1000 gross tons;

(ii) Six months service as mate on a vessel results in a limitation in that capacity equal to 150% of the tonnage of that vessel;

(iii) Six months service as mate on vessels over 1600 gross tons results in raising the limitation to 5000 gross tons;

(iv) One year of service as deckhand on vessels over 1600 gross tons while holding a license as mate, results in raising the limitation on the mate's license to 5000 gross tons;

(v) Two years service as a deckhand on a vessel while holding a license as mate results in a limitation on the mate's license equal to 150% of the tonnage of that vessel up to 5000 gross tons; or,

(vi) One year of service as deckhand on a vessel while holding a license as mate results in a limitation on the mate's license equal to the tonnage of that vessel.

(e) Applicants may request an oral examination on the subjects listed in subpart I of this part.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 141, Jan. 4, 1989]

§ 10.464 Licenses for operator of uninspected towing vessels.

(a) Licenses are issued as operator or second-class operator of uninspected towing vessels. These licenses do not authorize service aboard uninspected towing vessels on a foreign voyage nor on those of more than 200 gross tons in ocean or near coastal service.

(b) Licenses as operator and second-class operator of uninspected towing vessels are endorsed for operation on one or more of the following geographic areas:

(1) Oceans (domestic trade) waters;

(2) Near coastal waters;

(3) Great Lakes and inland waters;

(4) Western rivers; or,

(5) A limited local area designated by the Officer in Charge, Marine Inspection.

(c) For a license as operator of uninspected towing vessels, an applicant must have one of the following:

(1) Three years of service including the following:

(i) Two years on deck of a vessel of 26 feet or over in length;

(ii) One year on deck on a towing vessel, with at least six months of training or duty in the wheelhouse of the towing vessel; and,

(iii) Three months of service in each particular geographic area for which application is made; or,

(2) Three years of service on towing vessels including the following:

(i) One year on deck, with at least six months of training or duty in the wheelhouse of the towing vessel; and,

(ii) Three months of service in each particular geographic area for which application is made; or,

(3) For a license endorsed for a limited local area, 18 months service on deck on a towings vessel within the local area, including at least three months of training or duty in the Wheelhouse of the towing vessel.

(d) For a license as second-class operator of uninspected towing vessels, an applicant must have:

(1) At least 18 months of service on deck, including 12 months on towing vessels. The service must include at least three months of training or duty in the wheelhouse of towing vessels and

three months of service in each particular geographic area for which endorsement for the license is requested; or,

(2) At least six months of service on towing vessels while holding a merchant mariner's document endorsed as *able seaman unlimited, able seaman limited, or able seaman special.* The service must include three months in each particular geographic area for which an endorsement is requested, and either two months of training or duty in the wheelhouse or one month training or duty in the wheelhouse combined with successful completion of a towboat operator course of training approved by the Director, National Maritime Center under subpart C.

(e) In order to obtain an operator or second-class operator license for ocean (domestic trade) waters, whether an original, raise in grade, or increase in scope, the applicant must complete the following training and examination requirements:

(1) Approved firefighting course;

(2) Approved radar observer course; and,

(3) Qualification as able seaman unlimited, able seaman limited, able seaman special, or able seaman offshore supply vessels.

(f) The examination for a license as operator of uninspected towing vessels endorsed for a local limited area is modified by deleting inappropriate questions.

(g) A person holding a license as second-class operator of uninspected towing vessels who is 21 years old and possesses the service required in paragraph (c) of this section may be issued a license as operator without further examination.

(h) A person holding a license as operator of uninspected towing vessels may have that license endorsed as second-class operator for a geographic area on which he or she has no operating experience, upon passing an examination for that area. Upon completion of three months of experience in that geographic area, the second-class restriction may be removed.

(i) An applicant for a license as operator or second-class operator of uninspected towing vessels who intends to serve only in the vicinity of Puerto Rico, and who speaks Spanish only, may be issued a license restricted to the navigable waters of the United States in the vicinity of Puerto Rico.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 142, Jan. 4, 1989; CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§10.466 Licenses for operators of uninspected passenger vessels.

(a) This section applies to all applicants for the license to operate an uninspected vessel of less than 100 gross tons, equipped with propulsion machinery of any type, carrying six or less passengers.

(b) Operator of uninspected passenger vessels licenses issued for ocean waters will be limited to near coastal waters not more than 100 miles offshore. Licenses issued for inland waters will include all inland waters, except Great Lakes. Licenses may be issued for a particular local area under paragraph (f) of this section.

(c) For a license as operator of an uninspected passenger vessel with a near coastal endorsement, an applicant must have a minimum of 12 months experience in the operation of vessels, including at least three months service on vessels operating on ocean or near coastal waters.

(d) For a license as operator of an uninspected passenger vessel with a Great Lakes and inland waters endorsement, an applicant must have 12 months service on Great Lakes or inland waters, including at least three months service operating vessels on Great Lakes waters.

(e) For a license as operator of an uninspected passenger vessel with an inland endorsement, an applicant must have a minimum of 12 months experience in the operation of vessels.

(f) An operator of uninspected passenger vessels license, limited on its face to undocumented vessels, may be issued to a person who is not a citizen of the United States.

(g) Limited operator of uninspected passenger vessel licenses may be issued to applicants to be employed by organizations such as formal camps, yacht clubs, educational institutions, and marinas. A license issued under this paragraph will be limited to the specific activity and the locality of the

camp, yacht club, or marina. In order to obtain this restricted license, an applicant must:

(1) Have three months service in the operation of the type of vessel for which the license is requested; and,

(2) Satisfactorily complete a safe boating course approved by the National Association of State Boating Law Administrators, or those public education courses conducted by the U.S. Power Squadron or the American National Red Cross or a Coast Guard approved course; and,

(3) Pass a limited examination appropriate for the activity to be conducted and the route authorized.

(4) The first aid and cardiopulmonary resuscitation (CPR) course certificates required by § 10.201(h) of this part will only be required when, in the opinion of the OCMI, the geographic area over which service is authorized precludes obtaining medical services within a reasonable time.

(h) An applicant for a license as operator of uninspected passenger vessels who intends to serve only in the vicinity of Puerto Rico, and who speaks Spanish only, may be issued a license restricted to the navigable waters of the United States in the vicinity of Puerto Rico.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 142, Jan. 4, 1989]

§ 10.468 Licenses for mobile offshore drilling units.

Licenses for service on mobile offshore drilling units (MODUs) authorize service on units of any gross tons upon ocean waters while on location or while underway, as restricted on the license, except when moving independently under their own power.

[CGD 81–059a, 55 FR 14799, Apr. 18, 1990]

§ 10.470 Licenses for offshore installation manager.

(a) Licenses as offshore installation manager (OIM) are endorsed as:

(1) OIM Unrestricted;

(2) OIM Surface Units on Location;

(3) OIM Surface Units Underway;

(4) OIM Bottom Bearing Units on Location; or

(5) OIM Bottom Bearing Units Underway.

(b) To qualify for a license or endorsement as OIM Unrestricted, an applicant must:

(1) Present evidence of the following experience:

(i) Four years of employment assigned to MODUs including at least one year of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator or equivalent supervisory position on MODUs, with a minimum of 14 days of that supervisory service on surface units; or

(ii) A degree from a program in engineering or engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least 168 days of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator, or equivalent supervisory position on MODUs, with a minimum of 14 days of that supervisory service on surface units;

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for an OIM Unrestricted license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July 1, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.'';

(iii) A certificate from a U.S. Minerals Management Service approved blowout prevention and well control training program for the driller, toolpusher, or operator representative position;

(iv) A certificate from a firefighting training course as required by §10.205(g) of this part; and

(3) Provide a recommendation signed by a senior company official which:

(i) Provides a description of the applicant's experience and qualifications;

(ii) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, two rig moves each of surface units and of bottom bearing units; and

(iii) Certifies that one of the rig moves required under paragraph (b)(3)(ii) of this section was completed within one year preceding date of application.

(c) An applicant for an endorsement as OIM Unrestricted who holds an unlimited license as master or chief mate must satisfy the requirements in paragraphs (b)(2) and (b)(3) of this section and have at least 84 days of service on surface units and at least 28 days of service on bottom bearing units.

(d) To qualify for a license or endorsement as OIM Surface Units on Location, and applicant must:

(1) Present evidence of the following experience:

(i) Four years of employment assigned to MODUs including at least one year of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator or equivalent supervisory position on MODUs, with a minimum of 14 days of that supervisory service on surface units; or

(ii) A degree from a program in engineering or engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least 168 days of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator or equivalent supervisory position of MODUs, with a minimum of 14 days of that supervisory service on surface units; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for an OIM Surface Units license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July 1, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.'';

(iii) A certificate from a U.S. Minerals Management Service approved blowout prevention and well control training program for the driller, toolpusher, or operator representative position; and

(iv) A certificate from a firefighting training course as required by §10.205(g) of this part.

(e) An applicant for an endorsement as OIM Surface Units on Location who holds an unlimited license as master or chief mate must satisfy the requirements of paragraph (d)(2) of this section and have at least 84 days of service on surface units.

(f) To qualify for a license as OIM Surface Units Underway, an applicant must:

(1) Provide the following:

(i) Evidence of the experience described in paragraph (d)(1) of this section and a recommendation signed by a senior company official which:

(A) Provides a description of the applicant's experience and qualifications;

(B) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, three rig moves of surface units; and

(C) Certifies that one of the rig moves required under paragraph (f)(1)(i)(B) of this section was completed within one year preceding date of application; or

(ii) A recommendation signed by a senior company official which:

(A) Provides a description of the applicant's experience and company qualifications program completed;

(B) Certifies that the applicant has witnessed ten rig moves either as an observer in training or as a rig mover under supervision;

(C) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, five rig moves of surface units; and

(D) Certifies that one of the rig moves required under paragraph (f)(1)(ii)(C) of this section was completed within one year preceding date of application; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for an OIM Surface Units license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July 1, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.''; and

(iii) A certificate from a firefighting training course as required by § 10.205(g) of this part.

(g) An applicant for endorsement as OIM Surface Units Underway who holds an unlimited license as master or chief mate must satisfy the requirements in paragraph (f)(2) of this section and provide a company recommendation signed by a senior company official which:

(1) Provides a description of the applicant's experience and qualifications;

(2) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, three rig moves on surface units; and

(3) Certifies that one of the rig moves required under paragraph (g)(2) of this section was completed within one year preceding date of application.

(h) To qualify for a license or endorsement as OIM Bottom Bearing Units on Location, an applicant must:

(1) Present evidence of the following experience:

(i) Four years of employment assigned to MODUs including at least one year of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator or equivalent supervisory position on MODUs; or

(ii) A degree from a program in engineering or engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least 168 days of service as driller, assistant driller, toolpusher, assistant toolpusher, barge supervisor, mechanical supervisor, electrician, crane operator, ballast control operator or equivalent supervisory position on MODUs; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July 1, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.'';

(ii) A certificate from a U.S. Minerals Management Service approved blowout prevention and well control training program for the driller, toolpusher, or operator representative position; and

(iii) A certificate from a firefighting training course as required by § 10.205(g) of this part.

(i) An applicant for an endorsement as OIM Bottom Bearing Units on Location who holds an unlimited license as master or chief mate must satisfy paragraph (h)(2) of this section and have at least 28 days of service on bottom bearing units.

(j) To qualify for a license or endorsement as OIM Bottom Bearing Units Underway, an applicant must:

(1) Provide the following:

(i) Evidence of the experience described in paragraph (h)(1) of this section with a recommendation signed by a senior company official which:

(A) Provides a description of the applicant's experience and qualifications;

(B) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, three rig moves of bottom bearing units; and

(C) Certifies that one of the rig moves required under paragraph (j)(1)(i)(B) of this section was completed within one year preceding date of application; or

(ii) A recommendation signed by a senior company official which:

(A) Provides a description of the applicant's experience and company qualifications program completed;

(B) Certifies that the applicant has witnessed ten rig moves either as an observer in training or as a rig mover under supervision;

(C) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, five rig moves of bottom bearing units; and

(D) Certifies that one of the rig moves required under paragraph (j)(1)(ii)(C) of this section was completed within one year preceding date of application; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for OIM Bottom Bearing Units license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July l, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.''; and

(iii) A certificate from a firefighting training course as required by § 10.205(g) of this part;

(k) An applicant for endorsement as OIM Bottom Bearing Units Underway who holds an unlimited license as master or chief mate must satisfy the requirements in paragraph (j)(2) of this section and provide a company recommendation signed by a senior company official which:

(1) Provides a description of the applicant's experience and qualifications;

(2) Certifies that the individual has successfully directed, while under the supervision of an experienced rig mover, three rig moves of bottom bearing units; and

(3) Certifies that one of the rig moves required under paragraph (k)(2) of this section was completed within one year preceding date of application.

[CGD 81–059a, 55 FR 14799, Apr. 18, 1990, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.472 License for barge supervisor.

(a) To qualify for a license or endorsement as barge supervisor (BS), an applicant must:

(1) Present evidence of the following experience:

(i) Three years of employment assigned to MODUs including at least 168 days of service as driller, assistant driller, toolpusher, assistant tool pusher, mechanic, electrician, crane operator, subsea specialist, ballast control operator or equivalent supervisory position on MODUs. At least 84 days of that service shall have been as a ballast control operator or barge supervisor trainee; or

(ii) A degree from a program in engineering or engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least 168 days of service as driller, assistant driller, toolpusher, assistant toolpusher, mechanic, electrician, crane operator, subsea specialist, ballast control operator or equivalent supervisory position on MODUs. At least 84 days of that service shall have been as a ballast control operator or barge supervisor trainee; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for a barge supervisor license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July l, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.''; and

(iii) A certificate from a firefighting training course as required by § 10.205(g) of this part.

(b) An applicant for an endorsement as BS who holds an unlimited license as master or mate must satisfy the requirements in paragraph (a)(2) of this section and have at least 84 days of service as ballast control operator or barge supervisor trainee.

[CGD 81–059a, 55 FR 14801, Apr. 18, 1990, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.474 License for ballast control operator.

(a) To qualify for a license or endorsement as ballast control operator (BCO), an applicant must:

(1) Present evidence of the following experience:

(i) One year of employment assigned to MODUs including at least 28 days of service as a trainee under the supervision of a licensed ballast control operator; or

(ii) A degree from a program in engineering or engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least 28 days of service as a trainee under the supervision of a licensed ballast control operator; and

(2) Present evidence of training course completion as follows:

(i) A certificate from a Coast Guard approved stability course approved for a barge supervisor or ballast control operator license or endorsement;

(ii) A certificate from a Coast Guard approved survival suit and survival craft training course. Prior to July l, 1995, the requirement may be waived at the license applicant's request. However, the license will be issued with an endorsement on the reverse side which states, ''A Coast Guard approved survival suit and survival craft training course must be completed prior to license renewal.''; and

(iii) A certificate from a firefighting training course as required by § 10.205(g) of this part.

(b) An applicant for an endorsement as BCO who holds an unlimited license as master, mate, chief engineer, or assistant engineer must satisfy the requirements in paragraph (a)(2) of this section and have at least 28 days of service as a trainee under the supervision of a licensed ballast control operator.

[CGD 81–059a, 55 FR 14801, Apr. 18, 1990, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.476 Acknowledgments of service and temporary licenses for mobile offshore drilling units.

(a) Prior to January 1, 1991, unlicensed individuals who served in positions on MODUs equivalent to OIM, BS, or BCO may make application for a Coast Guard acknowledgment of service or a temporary license, both of which authorize a continuation of service in that position. To be eligible, these individuals must have served in that position between July 1, 1987 and June 30, 1990, and meet the following requirements:

(1) Coast Guard acknowledgment of service.

(i) To obtain a Coast Guard acknowledgment of service, the applicant must provide a letter from a senior company official of the company worked for. This letter must provide:

(A) Name of vessel(s) served on;

(B) MODU license which the individual's position is equivalent to; and

(C) Period of service.

(ii) The Coast Guard acknowledgment of service is valid for one year and is not renewable.

(2) Temporary license.

(i) To obtain a temporary license, the applicant must:

(A) Provide a letter from a senior company official of the company worked for. This letter must provide:

(*1*) Name of vessel(s) served on;

(*2*) MODU license which the individual's position is equivalent to; and

(*3*) Period of service; and

(B) Provide evidence of 120 days of service in a position equivalent to the license endorsement sought.

(ii) a temporary license is valid for five years and is not renewable.

(b) Acknowledgments or temporary licenses obtained using the provisions of this section will restrict service authority to vessels operated by the company which has certified service.

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990]

§10.480 Radar observer.

(a) This section contains the requirements that an applicant must meet to qualify as a radar observer. (Part 15 of this chapter specifies who must qualify as a radar observer.)

(b) If an applicant meets the requirements of this section, one of the following radar-observer endorsements will be added to his or her deck officer's license:

(1) Radar Observer (Rivers).

(2) Radar Observer (Inland Waters).

(3) Radar Observer (Unlimited).

(c) Endorsement as Radar Observer (Rivers) is valid only on any river, canal, or similar body of water designated by the Officer in Charge, Marine Inspection. Endorsement as Radar Observer (Inland Waters) is valid only for those waters covered by the Inland Navigational Rules other than the Great Lakes. Endorsement as Radar Observer (Unlimited) is valid on all waters.

(d) Except as provided by paragraphs (e) and (f) of this section, each applicant for a radar-observer endorsement or for renewal of an endorsement must complete the appropriate course approved by the Coast Guard, receive the appropriate certificate of training, and present the certificate to the Officer in Charge, Marine Inspection.

(e) An applicant who possesses a radar-observer endorsement, resides in a remote geographic area, and can substantiate to the satisfaction of the Officer in Charge, Marine Inspection, that the applicant's absence would disrupt normal movement of commerce, or that the applicant cannot attend an approved radar-observer renewal course, any have his or her endorsement renewed upon successful completion of an examination administered by the Coast Guard.

(f) An endorsement as radar observer issued under this section is valid for five years after the month of issuance of the certificate of training from a course approved by the Coast Guard. The endorsement is not terminated by the issuance of a new license during these five years.

(g) The month and year of the expiration of the radar-observer endorsement are printed on the license.

(h) A radar-observer endorsement may be renewed at any time.

(i) An applicant for renewal of a license that does not need a radar-observer endorsement may renew the license without meeting the requirements for a radar-observer endorsement.

(j) An applicant seeking to raise the grade of a license or increase its scope, where the increased grade or scope requires a radar-observer certificate, may use an expired radar-observer certificate to fulfill that requirement.

[CGD 94–041, 59 FR 53758, Oct. 26, 1994]

§10.482 Assistance towing.

(a) This section contains the requirements to qualify for an endorsement authorizing an individual to engage in assistance towing. The endorsement is applicable to all licenses except operator of uninspected towing vessels and master or mate licenses authorizing service on inspected vessels over 200 gross tons. Holders of these licenses are authorized to engage in assistance towing without endorsement on any vessel within the scope of the license.

(b) An applicant for an assistance towing endorsement shall pass a written examination demonstrating his or her knowledge of assistance towing safety, equipment, and procedures.

(c) An assistance towing endorsement on a license as master, mate, or operator authorizes the holder to engage in assistance towing on any vessel within the scope of the license.

(d) The period of validity of the endorsement is the same as the license on which it is endorsed, and it may be renewed with the license.

[CGD 87–017, 53 FR 18562, May 24, 1988]

Subpart E—Professional Requirements for Engineer Officers' Licenses

§ 10.501 Grade and type of engineer licenses issued.

(a) Licenses are issued in the grades of:

(1) Chief engineer;

(2) First assistant engineer;

(3) Second assistant engineer;

(4) Third assistant engineer;

(5) Chief engineer (limited);

(6) Assistant engineer (limited);

(7) Designated duty engineer;

(8) Chief engineer uninspected fishing industry vessels; and,

(9) Assistant engineer uninspected fishing industry vessels.

(b) Engineer licenses issued in the grades of chief engineer (limited) and assistant engineer (limited) of steam and/or motor vessels allow the holder to serve within any horsepower limitations on vessels of any gross tons on inland waters and of not more than 1600 gross tons in ocean, near coastal or Great Lakes service in the following manner:

(1) Assistant engineer (limited—oceans) may serve on ocean waters;

(2) Chief engineer (limited—near coastal) may serve on near coastal waters; and,

(3) Chief engineer (limited-oceans) may serve on ocean waters.

(c) Engineer licenses issued in the grades of designated duty engineer of steam and/or motor vessels allow the holder to serve within stated horsepower limitations on vessels of not more than 500 gross tons in the following manner:

(1) Designated duty engineers limited to vessels of not more than 1000 horsepower or 4000 horsepower may serve only on near coastal or inland waters;

(2) Designated duty engineers with no horsepower limitations may serve on any waters.

(d) Engineer licenses are endorsed to authorize service on either steam or motor vessels or may be endorsed for both modes of propulsion.

(e) A person holding an engineer license which is restricted to near coastal waters may serve within the limitations of the license upon near coastal, Great Lakes, and inland waters.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 142, Jan. 4, 1989]

§ 10.502 Additional requirements for engineer licenses.

(a) For all original and raise of grade of engineer licenses, at least one-third of the minimum service requirements must have been obtained on the particular mode of propulsion for which applied.

(b) If a licensed applicant desires to obtain an endorsement on an engineer license in the other propulsion mode (steam or motor), the following alternative methods, while holding a license in that grade, are acceptable:

(1) Four months of service as an observer in the same licensed capacity on vessels of the other propulsion mode;

(2) Four months of service as a licensed officer at a lower license level on vessels of the other propulsion mode;

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

(4) Completion of a Coast Guard approved training course for this endorsement.

(c) Applicants for an original, raise in grade, or increase in the scope, of an engineer license, other than an increase in horsepower limitation, who have not previously done so must meet the requirements of § 10.205(g) of this part.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 142, Jan. 4, 1989]

§ 10.503 Horsepower limitations.

(a) Engineer licenses of all grades and types may be subject to horsepower limitations. Other than as provided in § 10.524 for the designated duty engineer license, the horsepower limitation placed on a license is based on the applicant's qualifying experience considering the total shaft horsepower of

each vessel on which the applicant has served.

(b) When an applicant for an original or raise of grade of an engineer license, other than a designated duty engineer license, has not obtained at least 50 percent of the required qualifying experience on vessels of 4,000 or more horsepower, a horsepower limitation is placed on the license based on the applicant's qualifying experience. The license is limited to the maximum horsepower on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum horsepower on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 horsepower, using the next higher figure when an intermediate horsepower is calculated. When the limitation as calculated equals or exceeds 10,000 horsepower, an unlimited horsepower license is issued.

(c) The following service on vessels of 4,000 horsepower or over will be considered qualifying for the raising or removing of horsepower limitations placed on engineer licenses:

(1) Six months of service in the highest grade licensed: removal of all horsepower limitations.

(2) Six months of service in any licensed capacity other than the highest grade for which licensed: Removal of all horsepower limitations for the grade in which service is performed and raise the next higher grade license to the horsepower of the vessel on which service was performed. The total cumulative service before and after issuance of the limited license may be considered in removing all horsepower limitations.

(3) Twelve months of service as oiler or junior engineer while holding a license as third assistant engineer or assistant engineer (limited-oceans): removal of all horsepower limitations on third assistant engineer or assistant engineer's (limited-oceans) license.

(4) Six months of service as oiler or junior engineer while holding a license as second assistant engineer: removal of all horsepower limitations on third assistant engineer's license.

(d) Raising or removing horsepower limitations based on service required by paragraph (c) of this section may be granted without further written examination providing the Officer in Charge, Marine Inspection who issued the applicant's license, considers further examination unnecessary.

§10.504 Application of deck service for limited engineer licenses.

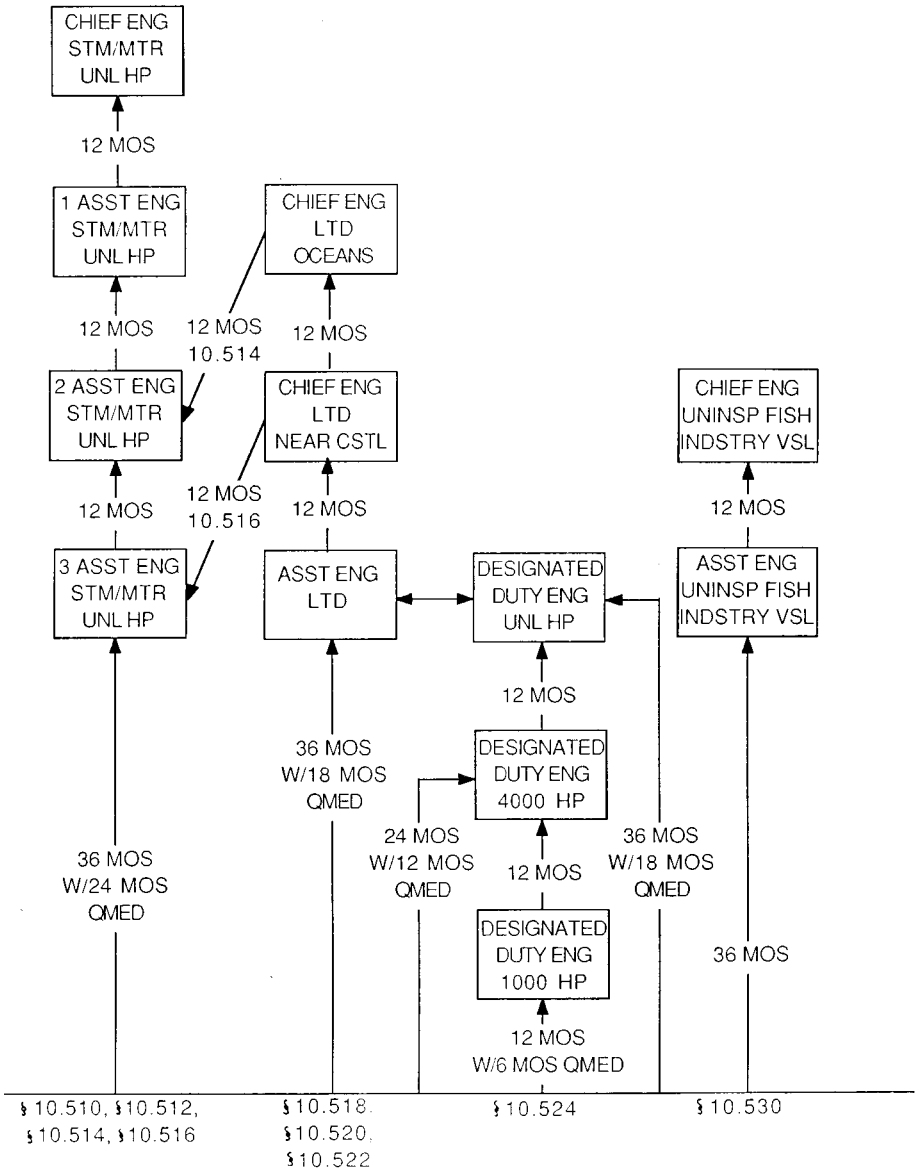
Service gained in the deck department on vessels of appropriate tonnage may substitute for up to 25 percent or 6 months, whichever is less, of the service requirement for a license as chief engineer (limited), assistant engineer (limited), or designated duty engineer.

[CGD 81–059, 54 FR 142, Jan. 4, 1989]

§10.505 Engineer license structure.

The following diagram illustrates the engineering license structure including cross over points. The section numbers on the diagram refer to the specific requirements applicable.

FIGURE 10.505 ENGINEER LICENSE STRUCTURE



[CGD 81–059, 52 FR 38623, Oct. 16, 1987. Redesignated and amended by CGD 81–059, 54 FR 142, Jan. 4, 1989]

§10.510 Service requirements for chief engineer of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as chief engineer of steam and/or motor vessels is:

(a) One year of service as first assistant engineer; or,

(b) One year of service while holding a license as first assistant engineer. A minimum of six months of this service must have been as first assistant engineer. Service as an assistant engineer is accepted on a two-for-one basis to a maximum of six months (12 months of service as a second or third assistant engineer equals six months of creditable service).

§10.512 Service requirements for first assistant engineer of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as first assistant engineer of steam and/or motor vessels is one year of service as an assistant engineer, while holding a license as second assistant engineer.

§10.514 Service requirements for second assistant engineer of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as second assistant engineer of steam and/or motor vessels is:

(a) One year of service as an assistant engineer, while holding a license as third assistant engineer; or,

(b) One year of service while holding a license as third assistant engineer which includes:

(1) A minimum of six months of service as third assistant engineer; and,

(2) Additional service as a qualified member of the engine department, calculated on a two-for-one basis; or,

(c) One year of service as chief engineer (limited-oceans) of steam or motor vessels, and completing the appropriate examination described in subpart I of this part.

§10.516 Service requirements for third assistant engineer of steam and/or motor vessels.

(a) The minimum service required to qualify an applicant for license as third assistant engineer of steam and/or motor vessels is:

(1) Three years of service in the engineroom of vessels, two years of which must have been as a qualified member of the engine department;

(2) Three years of service as an apprentice to the machinist trade engaged in the construction or repair of marine, locomotive, or stationary engines, together with one year service in the engineroom as oiler, watertender, or junior engineer;

(3) Graduation from:

(i) The U.S. Merchant Marine Academy (engineering curriculum);

(ii) The U.S. Coast Guard Academy and completion of an on-board engineer officer qualification program required by the service;

(iii) The U.S. Naval Academy and completion of an on-board engineer officer qualification program required by the service;

(iv) The engineering class of a Maritime Academy approved by and conducted under the rules prescribed by the Maritime Administrator and listed in part 310 of this title;

(4) Graduation from the marine engineering course of a school of technology accredited by the Accreditation Board for Engineering and Technology, together with three months of service in the engine department of steam or motor vessels;

(5) Graduation from the mechanical or electrical engineering course of a school of technology accredited by the Accreditation Board for Engineering and Technology, together with six months of service in the engine department of steam or motor vessels;

(6) Satisfactory completion of a three-year apprentice engineers training program approved by the Director, National Maritime Center; or,

(7) One year of service as chief engineer (limited-near coastal) of steam or motor vessels and completing the appropriate examination described in subpart I of this part.

(b) Experience gained in the deck department on vessels of 100 gross tons or over can be credited for up to three

months of the service requirements under paragraph (a)(1) of this section.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987 and CGD 81–059, 54 FR 132, Jan. 4, 1989, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 10.518 Service requirements for chief engineer (limited-oceans) of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as chief engineer (limited-oceans) of steam and/or motor vessels is five years total service in the engineroom of vessels. Two years of this service must have been as a licensed engineer. Thirty months of the service must have been as a qualified member of the engine department or equivalent supervisory position.

§ 10.520 Service requirements for chief engineer (limited-near coastal) of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as chief engineer (limited-near coastal) of steam and/or motor vessels is four years total service in the engineroom of vessels. One year of this service must have been as a licensed engineer. Two years of the service must have been as a qualified member of the engine department or equivalent supervisory position.

§ 10.522 Service requirements for assistant engineer (limited-oceans) of steam and/or motor vessels.

The minimum service required to qualify an applicant for license as assistant engineer (limited-oceans) of steam and/or motor vessels is three years of service in the engineroom of vessels. Eighteen months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

§ 10.524 Service requirements for designated duty engineer of steam and/or motor vessels.

(a) Designated duty engineer licenses are issued in three levels of horsepower limitations dependent upon the total service of the applicant and completion of appropriate examination. These licenses are limited to vessels of not more than 500 gross tons on certain waters as specified in § 10.501.

(b) The service requirements for licenses as designated duty engineer are:

(1) For designated duty engineer of steam and/or motor vessels of any horsepower, the applicant must have three years of service in the engineroom. Eighteen months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

(2) For designated duty engineer of steam and/or motor vessels of not more than 4,000 horsepower, the applicant must have two years of service in the engineroom. One year of this service must have been as a qualified member of the engine department or equivalent supervisory position.

(3) For designated duty engineer of steam and/or motor vessels of not more than 1,000 horsepower, the applicant must have one year of service in the engineroom. Six months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

§ 10.530 Licenses for engineers of uninspected fishing industry vessels.

(a) This section applies to licenses for chief and assistant engineers of all vessels, however propelled, navigating the high seas, which are documented to engage in the fishing industry, with the exception of:

(1) Wooden ships of primitive build;

(2) Unrigged vessels; and,

(3) Vessels of less than 200 gross tons.

(b) Licenses as chief engineer and assistant engineer of uninspected fishing industry vessels are issued for ocean waters and with horsepower limitations in accordance with the provisions of § 10.503.

(c) For a license as chief engineer, the applicant must have served four years in the engineroom of vessels. One year of this service must have been as a licensed assistant engineer or equivalent supervisory position.

(d) For a license as assistant engineer, an applicant must have served three years in the engineroom of vessels.

(e) Two-thirds of the service required under this section must have been on motor vessels.

(f) Applicants may request an orally assisted examination on the subjects listed in subpart I of this part.

§10.540 Licenses for engineers of mobile offshore drilling units.

Licenses as chief engineer (MODU) or assistant engineer (MODU) authorize service on certain self-propelled or non-self-propelled units of any horsepower where authorized by the vessel's certificate of inspection.

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990]

§10.542 License for chief engineer (MODU).

To qualify for a license as chief engineer (MODU) an applicant must:

(a) Present evidence of the following experience:

(1) Six years of employment assigned to MODUs including three years of employment as mechanic, motorman, subsea engineer, electrician, barge engineer, toolpusher, unit superintendent, crane operator or equivalent. Eighteen months of that employment must have been assigned to self-propelled or propulsion assisted units; or

(2) Two years of employment assigned to MODUs as an assistant engineer (MODU). Twelve months of that employment must have been assigned to self-propelled or propulsion assisted units; and

(b) Present evidence of completion of a firefighting training course as required by §10.205(g) of this part.

(c) If an applicant successfully completes a modified examination and possesses the total required sea service for a license as chief engineer (MODU), but does not possess the required sea service on board self-propelled or propulsion assisted units, the OCMI may issue the applicant a license limited to non-self-propelled units. The OCMI may remove the limitation upon presentation of satisfactory evidence of the required self-propelled sea service and completion of any additional required examination.

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990, as amended by CGD 81–059a, 59 FR 10756, Mar. 8, 1994]

§10.544 License for assistant engineer (MODU).

To qualify for a license as assistant engineer (MODU) an applicant must:

(a) Present evidence of the following experience:

(1) Three years of employment assigned to MODUs including 18 months of employment as mechanic, motorman, subsea engineer, electrician, barge engineer, toolpusher, unit superintendent, crane operator or equivalent. Nine months of that employment must have been assigned to self-propelled or propulsion assisted units;

(2) Three years of employment in the machinist trade engaged in the construction or repair of diesel engines and one year of employment assigned to MODUs in the capacity of mechanic, motorman, oiler, or equivalent. Nine months of that employment must have been assigned to self-propelled or propulsion assisted units; or

(3) A degree from a program in marine, mechanical, or electrical engineering technology which is accredited by the Accreditation Board for Engineering and Technology (ABET). Director, National Maritime Center will give consideration to accepting education credentials from programs having other than ABET accreditation. An applicant qualifying through a degree program must also have at least six months of employment in any of the capacities listed in paragraph (a)(1) of this section aboard self-propelled or propulsion assisted units; and

(b) Present evidence of completion of a firefighting training course as required by §10.205(g) of this part.

(c) If an applicant successfully completes a modified examination and possesses the total required sea service for a license as an assistant engineer (MODU), but does not possess the required sea service on board self-propelled or propulsion assisted units, the OCMI may issue the applicant a license limited to non-self-propelled units. The OCMI may remove the limitation upon presentation of the satisfactory evidence of the required self-propelled sea service and completion of any additional required examination.

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990, as amended by CGD 81–059a, 59 FR 10756, Mar. 8, 1994; CGD 95–072, 60 FR 50460, Sept. 29, 1995]

Subpart F—Licensing of Radio Officers

§ 10.601 Applicability.

This subpart provides for the licensing of radio officers for employment on vessels.

§ 10.603 Requirements for radio officer licenses.

(a) Each applicant for an original license or renewal of license shall present a current first or second class radiotelegraph operator license issued by the Federal Communications Commission. The applicant shall enter on the license application form the number, class, and date of issuance of his or her Federal Communications Commission license.

(b) An applicant for license as radio officer shall apply for a merchant mariner's document under part 12. This document will be endorsed *See License as Radio Officer.*

(c) The application must also include a completed form CG–2765 *Coast Guard Intelligence Agency Check Request.*

Subpart G—Professional Requirements for Pilot Licenses

SOURCE: CGD 81–059b, 52 FR 38659, Oct. 16, 1987 unless otherwise noted.

§ 10.701 Scope of pilot licenses and endorsements.

(a) An applicant for a license as first class pilot need not hold any other license issued under this part. An individual holding a license as master, mate, or operator of uninspected towing vessels may apply for an endorsement as first class pilot for a specific route or routes in lieu of applying for a first class pilot's license.

(b) The issuance of a license or endorsement as first class pilot to an individual qualifies that individual to serve as pilot over the route(s) specified on the license, subject to any limitations imposed under paragraph (c) of this section.

(c) The Officer in Charge, Marine Inspection, issuing a license or endorsement as first class pilot, imposes appropriate limitations commensurate with the experience of the applicant, with respect to class or type of vessel, tonnage, route, and waters.

(d) A license issued for service as a master, mate, or operator of uninspected towing vessels authorizes service as a pilot under the provisions of § 15.812 of this subchapter. Therefore, first class pilot endorsements will not be issued with tonnage limitations of 1600 gross tons or less.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989]

§ 10.703 Service requirements.

(a) The minimum service required to qualify an applicant for a license as first class pilot, or for an endorsement as first class pilot on a license as master, mate, or operator of uninspected towing vessels, is predicated upon the nature of the waters for which pilotage is desired.

(1) *General routes (routes not restricted to rivers, canals and small lakes).* The applicant must have at least 36 months service in the deck department of steam or motor vessels navigating on oceans, coastwise, Great Lakes, or bays, sounds, and lakes other than the Great Lakes, as follows:

(i) 18 months of the 36 months service must be as quartermaster, wheelsman, able seaman, apprentice pilot, or in an equivalent capacity, standing regular watches at the wheel or in the pilothouse as part of routine duties.

(ii) At least 12 months of the 18 months service required in paragraph (a)(1)(i) of this section must be on vessels operating on the class of waters for which pilotage is desired.

(2) *River routes.* The applicant must have at least 36 months service in the deck department of any vessel including at least 12 months service on vessels operating on the waters of rivers while the applicant is serving in the capacity of quartermaster, wheelsman, apprentice pilot, or deckhand who stands watches at the wheel as part of routine duties.

(3) *Canal and small lakes routes.* The applicant must have at least 24 months service in the deck department of any vessel including at least 8 months service on vessels operating on canals or small lakes.

(b) A graduate of the Great Lakes Maritime Academy in the deck class meets the service requirements of this section for a license as first class pilot on the Great Lakes.

(c) Completion of a course of pilot training approved by the Director, National Maritime Center, under subpart C of this part may be substituted for a portion of the service requirements of this section in accordance with §10.304. Additionally, round trips made during this training may apply toward the route familiarization requirements of §10.705. An individual using substituted service must have at least nine months of shipboard service.

(d) An individual holding a license as master or mate of inspected steam or motor vessels of over 1,600 gross tons meets the service requirements of this section for an endorsement as first class pilot.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989; CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§10.705 Route familiarization requirements.

(a) The Officer in Charge, Marine Inspection having jurisdiction determines, within the range limitations specified in this section, the number of round trips required to qualify an applicant for a particular route, considering the following:

(1) The geographic configuration of the waterway;

(2) The type and size of vessels using the waterway;

(3) The abundance or absence of aids to navigation;

(4) The background lighting effects;

(5) The known hazards involved, including waterway obstructions or constrictions such as bridges, narrow channels, or sharp turns; and,

(6) Any other factors unique to the route that the OCMI deems appropriate.

(b) An applicant for an original license as first class pilot shall furnish evidence of having completed a minimum number of round trips, while serving as quartermaster, wheelsman, able seaman, apprentice pilot, or in an equivalent capacity, standing regular watches at the wheel or in the pilot house as part of routine duties, over the route sought. Evidence of having completed a minimum number of round trips while serving as an observer, properly certified by the master and/or pilot of the vessel, is also acceptable. The range of round trips for an initial license is a minimum of 12 round trips and a maximum of 20 round trips. An applicant may have additional routes added to the first class pilot license by meeting the requirements for obtaining an endorsement.

(c) An applicant for an endorsement as first class pilot for a particular route shall furnish evidence of having completed the number of round trips over the route, specified by the Officer In Charge, Marine Inspection, within the range limitations of this paragraph, for the particular grade of existing license held. The range of round trips for an endorsement is a minimum of 8 round trips and a maximum of 15 round trips.

(d) Unless determined impracticable by the OCMI, 25% of the round trips required by the OCMI under this section must be made during the hours of darkness.

(e) One of the round trips required by the OCMI under this section must be made over the route within the six months immediately preceding the date of application.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989]

§10.707 Examination requirements.

(a) An applicant for a license as first class pilot is required to pass the examination described in subpart I of this part.

(b) An applicant for an extension of route, or a licensed master or mate authorized to serve on vessels of over 1,600 gross tons seeking an endorsement as first class pilot, is required to pass those portions of the examination described in subpart I of this part that concern the specific route for which endorsement is sought.

§10.709 Annual physical examination requirements.

(a) This section applies only to an individual who pilots a vessel of 1,600 gross tons and over.

(b) Every person holding a license or endorsement as first class pilot shall have a thorough physical examination each year while holding the license or endorsement.

(c) Each annual physical examination must meet the requirements specified in § 10.205(d) except that the record of examination need not be submitted to the Coast Guard except as provided for in paragraph (e) of this section.

(d) An individual's first class pilot license or endorsement becomes invalid on the first day of the month following the first anniversary of the individual's most recent physical examination satisfactorily completed; the individual may not operate under the authority of that license or endorsement until a physical examination has been satisfactorily completed.

(e) Upon request, a first class pilot shall provide the Coast Guard with a copy of his or her most recent physical examination.

§ 10.711 Tonnage requirements.

(a) In order to obtain a first class pilot license or endorsement authorizing service on vessels of *any gross tons* over a particular route, the applicant must have sufficient experience on vessels of over 1,600 gross tons.

(b) If an applicant does not have sufficient experience on vessels of over 1,600 gross tons, the license or endorsement will be for a limited tonnage until the applicant completes a number of additional round trips, as determined by the OCMI, within the range contained in § 10.705 (b) or (c), as appropriate, on vessels of over 1,600 gross tons.

(c) For purposes of this section, an applicant is considered to have sufficient experience if the applicant has 18 months experience as master, mate, quartermaster, wheelsman, able seaman, apprentice pilot, or in an equivalent capacity, standing regular watches at the wheel or in the pilothouse as part of routine duties, on vessels of 1,600 gross tons or over, and two-thirds of the minimum number of round trips required for the route have been on vessels of 1,600 gross tons or over.

(d) For purposes of this section, for experience with respect to tonnage on towing vessels, the combined gross tonnage of the towing vessel and the vessel(s) towed will be considered. However, the OCMI may require that all or a portion of the required number of round trips be obtained on self-propelled vessels of 1,600 gross tons or over, when the OCMI determines that due to the nature of the waters and the overall experience of the applicant, self-propelled vessel experience is necessary to obtain a first class pilot license or endorsement that is not restricted to tug and barge combinations.

§ 10.713 Requirements for maintaining current knowledge of waters to be navigated.

(a) If a first class pilot has not served over a particular route within the past 60 months, that person's license or endorsement is invalid for that route, and remains invalid until the individual has made one re-familiarization round trip over that route, except as provided in paragraph (b) of this section. Whether this requirement is satisfied or not has no effect on the renewal of a license or endorsement. Round trips made within the 90 day period preceding renewal will be valid for the duration of the renewed license or endorsement.

(b) For certain long or extended routes, the OCMI may, at his discretion, allow the re-familiarization requirement to be satisfied by reviewing appropriate navigation charts, coast pilots tide and current tables, local Notice to Mariners, and any other materials which would provide the pilot with current knowledge of the route. Persons using this method of re-familiarization shall certify, when applying for renewal of their license or endorsement, the material they have reviewed and the dates on which this was accomplished. Review within the 90 day period preceding renewal is valid for the duration of the renewed license or endorsement.

Subpart H—Registration of Staff Officers

§ 10.801 Applicability.

This subpart provides for the registration of staff officers for employment on vessels documented or numbered under the laws of the United

States. Staff officers must be registered if serving on most vessels in ocean service or on the Great Lakes.

§10.803 Grades of certificates issued.

Staff officers are registered in the following grades:

(a) Chief purser.
(b) Purser.
(c) Senior assistant purser.
(d) Junior assistant purser.
(e) Medical doctor.
(f) Professional nurse.

§10.805 General requirements.

(a) The applicant for a certificate of registry as staff officer is not required to take any examination; however, the applicant shall present to the Officer in Charge, Marine Inspection a letter justifying the need for the certificate of registry.

(b) The applicant must hold or apply for a merchant mariner s document.

(c) Endorsements for a higher grade are not made on certificates of registry. An applicant for a higher grade in the staff department shall apply in the same manner as for an original certificate of registry and shall surrender the certificate upon issuance of the new certificate of registry. A person holding a certificate of registry as staff officer may serve in a lower grade of a service for which he or she is registered.

(d) Title 46 U.S.C. 8302 addresses uniforms for staff officers who are members of the Naval Reserve.

(e) A duplicate certificate of registry may be issued by the Officer in Charge, Marine Inspection. (See §10.219.)

(f) A certificate of registry is valid for a term of 5 years from the date of issuance. Procedures for renewing certificates of registry are found in §10.209. The expiration date of a certificate of registry issued without an expiration date shall be determined in accordance with §10.811.

(g) Each applicant for an original certificate of registry or a higher grade of certificate of registry, as described by paragraph (c) of this section, shall produce evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in §16.220 of this subchapter. An applicant who fails a chemical test for dangerous drugs will not be issued a certificate of registry.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989; CGD 91–211, 59 FR 49300, Sept. 27, 1994; CGD 91–223, 60 FR 4525, Jan. 23, 1995]

§10.807 Experience requirements for registry.

(a) The applicant for a certificate of registry as staff officer shall submit evidence of experience as follows:

(1) *Chief purser.* Two years of service aboard vessels performing duties relating to work in the purser's office.

(2) *Purser.* One year of service aboard vessels performing duties relating to work in the purser's office.

(3) *Senior assistant purser.* Six months of service aboard vessels performing duties relating to work in purser's office.

(4) *Junior assistant purser.* Previous experience not required.

(5) *Medical doctor.* A valid license as physician or surgeon issued under the authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(6) *Professional nurse.* A valid license as a registered nurse issued under authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(b) Employment on shore in connection with ship's business may be accepted in lieu of service aboard vessels. Related shore employment is accepted in the ratio of two months of shore service to count as one month of service aboard vessels.

(c) In computing the length of service required of an applicant for a certificate of registry, service of one season on vessels on the Great Lakes is counted as service of one year.

(d) In the event an applicant for a certificate of registry, other than medical doctor or professional nurse, presents evidence of other qualifications which, in the opinion of the Officer in Charge, Marine Inspection, is equivalent to the experience requirements of this section and is consistent with the duties of a staff officer, the Officer in Charge, Marine Inspection may issue the certificate of registry.

§ 10.809 Experience requirements for ratings endorsed on certificate of registry.

An applicant for rating to be endorsed on a certificate of registry shall submit evidence of experience as follows:

(a) *Marine physician assistant.* Successful completion of an accredited course of instruction for a physician's assistant or nurse practitioner program.

(b) *Hospital corpsman.* A rating of at least hospital corpsman or health services technician, first class in the U.S. Navy, U.S. Coast Guard, U.S. Marine Corps, or an equivalent rating in the U.S. Army (not less than staff sergeant, Medical Department, U.S.A.), or in the U.S. Air Force (not less than technical sergeant, Medical Department, U.S.A.F.), and a period of satisfactory service of at least one month in a military hospital or U.S. Public Health Service Hospital.

§ 10.811 Expiration of existing certificates of registry.

The expiration year of a certificate of registry issued without an expiration date is calculated by adding 5-year increments to the issuance date of the certificate of registry, up to first applicable year falling between 1995 and 1999, inclusive. The day and month of expiration are the same as that of issuance. Table 10.811 is provided as an aid for calculating the expiration date of a certificate of registry issued without an expiration date. A certificate of registry is not valid for use after the expiration date calculated under this section, but may be renewed in accordance with the requirements of § 10.209.

TABLE 10.811.—EXPIRATION OF CERTIFICATES OF REGISTRY ISSUED WITH NO EXPIRATION DATE [1]

Expiration year				
1999	1998	1997	1996	1995
Issue Year				
1994	1993	1992	1991	1990
1989	1988	1987	1986	1985
1984	1983	1982	1981	1980
1979	1978	1977	1976	1975
1974	1973	1972	1971	1970
1969	1968	1967	1966	1965
1964	1963	1962	1961	1960
1959	1958	1957	1956	1955

TABLE 10.811.—EXPIRATION OF CERTIFICATES OF REGISTRY ISSUED WITH NO EXPIRATION DATE [1]—Continued

Expiration year				
1999	1998	1997	1996	1995
1954	1953	1952	1951	1950
1949	1948	1947	1946	1945
1944	1943	1942	1941	1940
1939	1938	1937	.....	.....

[1] Find the year in which the certificate of registry was issued (Issue Year), then move up the column to find the Expiration Year. Month and day of expiration correspond to the month and day of issue.

[CGD 91–211, 59 FR 49300, Sept. 27, 1994; CGD 91–211, 59 FR 50964, Oct. 6, 1994]

Subpart I—License Examination Subjects

§ 10.901 General provisions.

(a) Each applicant for any license listed in this part shall pass examinations on the appropriate subjects listed in this subpart, except as noted in § 10.903(b).

(b) If the license is to be limited in a manner which would render any of the subject matter unnecessary or inappropriate, the examination may be amended accordingly by the Officer in Charge, Marine Inspection. Limitations which may affect the examination content are:

(1) Restricted routes for reduced service licenses (master or mate of vessels of not more than 200 gross tons, operator of uninspected passenger vessels or uninspected towing vessels); or,

(2) Engineer licenses with horsepower restrictions.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989; CGD 94–029, 61 FR 47064, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47064, Sept. 6, 1996, § 10.901 was amended by revising (a), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§ 10.901 General provisions.

(a) Applicants for the licenses listed in this subpart must pass an examination on the subjects listed prior to issuance of a license. For all deck and engineering licenses, the examination must be written, except where indicated in § 10.205(i)(1) of this part.

* * * * *

§10.903 Licenses requiring examinations.

(a) The following licenses require examinations for issuance:

(1) Master ocean/near coastal any gross tons;[1]

(2) Chief mate ocean/near coastal any gross tons;[1]

(3) Second mate ocean/near coastal any gross tons;[1]

(4) Third mate ocean/near coastal any gross tons;[1]

(5) Master ocean/near coastal not more than 500 or 1600 gross tons;[1]

(6) Mate ocean/near coastal not more than 500 or 1600 gross tons;[1]

(7) Mate near coastal not more than 200 gross tons;

(8) Master near coastal not more than 100 gross tons;

(9) Master Great Lakes and inland any gross tons;

(10) Mate Great Lakes and inland any gross tons;

(11) Master inland any gross tons;

(12) Master river any gross tons;

(13) Master Great Lakes and inland/river not more than 500 or 1600 gross tons;[1]

(14) Mate Great Lakes and inland/river not more than 500 or 1600 gross tons;[1]

(15) Mate Great Lakes and inland/inland/river not more than 200 gross tons;[1]

(16) Master Great Lakes and inland/inland/river not more than 100 gross tons;[1]

(17) First class pilot;

(18) Operator or second-class operator uninspected towing vessels;

(19) Operator uninspected passenger vessels;

(20) Master uninspected fishing industry vessels;

(21) Mate uninspected fishing industry vessels;

(22) Chief engineer steam/motor vessels;

(23) First assistant engineer steam/motor vessels;

(24) Second assistant engineer steam/motor vessels;

(25) Third assistant engineer steam/motor vessels;

(26) Chief engineer (limited) steam/motor vessels;

(27) Assistant engineer (limited) steam/motor vessels;

(28) Designated duty engineer steam/motor vessels;

(29) Chief engineer uninspected fishing industry vessels;

(30) Assistant engineer uninspected fishing industry vessels.

(b) The following licenses do not require examinations:

(1) Master ocean any gross tons when adding an endorsement as Offshore Installation Manager.

(2) Master ocean or near coastal not more than 200 gross tons, when raising license grade from mate near coastal not more than 200 gross tons. Master ocean not more than 200 gross tons would, however, require an examination in celestial navigation.

(3) Master Great Lakes and inland, inland, and rivers not more than 200 gross tons when raising license grade from mate of the same route not more than 200 gross tons.

(4) Operator of uninspected towing vessels, when raising license grade from second class operator of uninspected towing vessels (endorsed for same route).

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 144, Jan. 4, 1989; CGD 81–059a, 59 FR 10756, Mar. 8, 1994]

§10.910 Subjects for deck licenses.

Table 10.910–1 gives the codes used in table 10.910–2 for all deck licenses. Table 10.910–2 indicates the examination subjects for each license, by code number. Figures in the body of the table, in place of the letter ''x'', refer to notes.

TABLE 10.910–1 CODES FOR DECK LICENSES

Deck Licenses:

1. Master, Oceans/near coastal, any gross tons.
2. Chief mate, oceans/near coastal, any gross tons.
3. Master, oceans/near coastal, 500/1,600 gross tons.
4. Second mate, oceans/near coastal, any gross tons.
5. Third mate, oceans/near coastal, any gross tons.

[1] Examination will vary depending upon route desired.

6. Mate, oceans/near coastal, 500/1,600 gross tons.

7. Master, oceans/near coastal, and mate, near coastal, 200 gross tons (includes master, near coastal, 100 gross tons).

8. Operator, uninspected passenger vessels, near coastal.

9. Operator, uninspected passenger vessels, Great Lakes/inland.

10. Operator, uninspected towing vessels, oceans (domestic trade)/near coastal.

11. Operator, uninspected towing vessels, Great Lakes/inland.

12. Operator, uninspected towing vessels, Western rivers.

13. Master, Great Lakes/inland, or master, inland, any gross tons.

14. Mate, Great Lakes/inland, any gross tons.

15. Master, Great Lakes/inland, 500/1,600 gross tons.

16. Mate, Great Lakes/inland, 500/1,600 gross tons.

17. Master or mate, Great Lakes/inland, 200 gross tons (includes master, Great Lakes/inland, 100 gross tons).

18. Master, rivers, any gross tons.

19. Master, rivers, 500/1,600 gross tons.

20. Mate, rivers, 500/1,600 gross tons.

21. Master or mate, rivers, 200 gross tons (includes master, rivers, 100 gross tons).

22. Master, uninspected fishing industry vessels, oceans/near coastal.

23. Mate, uninspected fishing industry vessels, oceans/near coastal.

24. First class pilot.

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
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 (hi/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	
Star Identification	1	1	1	1																				
Star Selection	1	X	1	X																			1	
Times of Celestial Phenomena:																								
Time of Meridian Transit	1																							
Time of Meridian Transit (Sun Only)	X	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 Publications, and 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 & Nav. Definitions	X	X		X	X																			
Chart Sketch																								4
Seamanship:																								
Marlinspike Seamanship				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			

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
Navigation Safety Regs. (33 CFR 164)	X	X		X	X								X	X				X				6	6	6
Radar Equipment:																								
Radar Observer Certificate	X	X	X	X	X	X	1			1			X	X				X				X	X	X
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
Magnetic Compass Adjustment	X	X											X	X										
Gyro Compass Error/Correction	X	X	X	X	X	X	7				X	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			3									1	1	
Amplitude (Any Body)	X																							
Amplitude (Sun Only)		X	1	X	X	1	1			1			3									1	1	
Deviation Table Construction	X	X	1	X	X								3											
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
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	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
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
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
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, Clearing Fouled Anchors		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	
Maneuvering for Launching of Lifeboats and Liferafts in Heavy Weather		X	X				X			X			X		X							X	X	
Receiving Survivors From Lfbts/Lfrfts		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
Determine Maneuvering Characteristics of Major Vessel Types		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			
Ship Stability, Construction, and Damage Control:																								
Principles of Ship Construction		X	X	X	X		X						X	3	X	3	X	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	
Damage Trim and Stability	X	X	X			X	7																	
Stability, Trim, and Stress Calculation	X	X	X	X			7																	
Vessel Structural Members		X	X	X	X	X	7							X	X	3	7							
IMO Ship Stability Recommendations	X	X																						
Damage Control	X	X	X			X		7								7								
Change in Draft Due to Density	X	X																						
Ship Power Plants:																								
Marine Power Plant Operating 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	7						X	X	X	X	7	X	X	X				
Loading and Discharging Operations		X	X	X	X	X							X	X	X	X		X	X	X				
International Regulations for Cargoes, Especially IMDG	X	X	X																					
Dangerous/Hazardous Cargo Regulations	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
Tank Vessel Safety		X	X	X	X	X							X	X	X	X		X	X	X				
Cargo Piping and Pumping Systems		X	X	X	X	X							X	X	X	X		X	X	X				
Cargo Oil Terms and Definitions		X	X	X	X	X							X	X	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		X	X	X	X	X						X	X	X	X		X	X	X					
Barge Regulations (Operations)										X	X	X												
Fire Prevention and Firefighting Appliances:																								
Organization of Fire Drills		X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Classes and Chemistry of Fire		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Firefighting Systems		X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Firefighting Equip. and Regulations		X	X	X	X	X	7			X	X	X	X	X	X	X	7	X	X	X	7	X	X	
Firefighting Equip. & Regs. for T-Boats							X										X				X			
Basic Firefighting and Prevention		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Emergency Procedures:																								
Ship Beaching Precautions		X	X										X		X									
Actions Prior To/After Grounding		X	X										X		X			X	X					
Refloating a Grounded Ship		X	X										X		X			X	X					
Collision		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			
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 Procedures		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 Procedures		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														
Medical Care:																								
Knowledge and use of:																								
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	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Maritime Law:																								
International Maritime Law:																								
Int'l. Convention on Load Lines	X	X	X																					
SOLAS	X	X	X				7																	
MARPOL 73/78	X	X	X	X	X																			
International Health Regulations	X	X	X																					
Other International Instruments for Ship/Pass./Crew/Cargo Safety	X	X	X																					
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 Inspected T-Boats							X										X				X			
Rules and Regs for Uninsp. Vessels							X	X	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			X	X					
Title 46 U.S. Code	X	X	X										X		X			X	X					
Captain of the Port Regulations, Vessel Traffic Service Procedures 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	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	
Communications:																								
Flashing Light	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
Radiotelephone Communications		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radiotelegraphy Emerg. Dist. Signals		X		X	X																			
Signals: Storm/Wreck/Dist./Special		X	X	X	X	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	X	X	X	X			X												X	X	
Lifesaving Appliance Regulations		X	X	X	X	X	7						X	X	X		7	X	X	X	7			
Lifesaving Appliance Regs. for T-Boats							X										X				X			
Lifesaving Appliance Operation		X	X	X	X	X	7	X	X	X	X		X	X	X	X	7	X	X	X	7	X	X	
Lifesaving Appliance Ops. for T-Boats							X										X				X			
Search and Rescue:																								
Search and Rescue Procedures	X	X	X																					
AMVER	X	X	X																					
SAIL/AUXILIARY SAIL VESSELS ADDENDUM (8):																								
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 route, such as character of the bottom. The OCMI 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—Sail vessel safety precautions, rules of the road, operations, heavy weather procedures, navigation, maneuvering, and sailing terminology. Applicants for sail/auxiliary sail endorsements to master, mate or operator of uninspected passenger vessels licenses are also tested in the subjects contained in this addendum.

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990]

§ 10.920 Subjects for MODU licenses.

Table 10.920–1 gives the codes used in Table 10.920–2 for MODU licenses. Table 10.920–2 indicates the examination subjects for each license by the code number.

Table 10.920–1 Codes for MODU Licenses

1. OIM/Unrestricted
2. OIM/Surface Units Underway
3. OIM/Surface Units on Location
4. OIM/Bottom Bearing Units Underway
5. OIM/Bottom Bearing Units on Location
6. Barge Supervisor
7. Ballast Control Operator

TABLE 10.920–2.—Subjects for MODU Licenses

Examination topics	1	2	3	4	5	6	7
Watchkeeping							
COLREGS	X	X	.....	X	.....	X	.....
''Basic Principles for Navigational Watch''	X	X	X	X	X	X	.....
MODU obstruction lights	X	.....	X	.....	X	X	.....
Meteorology and oceanography:							
Synoptic chart weather forecasting	X	X	X	X	X	X	.....
Characteristics of weather systems	X	X	X	X	X	X	X
Ocean current systems	X	X	X	X	X	X	.....
Tide and tidal current publications	X	X	X	X	X	X	.....
Stability, ballasting, construction and damage control:							
Principles of ship construction, structural members	X	X	X	X	X	X	X
Trim and stability	X	X	X	X	X	X	X
Damaged trim and stability countermeasures	X	X	X	X	.....	X	X
Stability and trim calculations	X	X	X	X	.....	X	X
Load line requirements	X	X	X	X	X	X	X
Operating manual:							
Rig characteristics and limitations	X	X	X	X	X	X	X
Hydrostatics data	X	X	X	X	.....	X	X
Tank tables	X	X	X	X	X	X	X
KG limitations	X	X	X	X	.....	X	X
Severe storm instructions	X	X	X	X	X	X	X
Transit instructions	X	X	.....	X	.....	X	X
On-station instructions	X	.....	X	.....	X	X	X
Unexpected list or trim	X	X	X	X	.....	X	X
Ballasting procedures	X	X	X	.....	.....	X	X
Operation of bilge system	X	X	X	X	.....	X	X
Leg loading calculations	X	.....	.....	X	X	.....	.....

TABLE 10.920–2.—Subjects for MODU Licenses—Continued

Examination topics	1	2	3	4	5	6	7
Completion of variable load form	X	X	X	X	X	X	X
Evaluation of variable load form	X	X	X	X	X	X	X
Emergency procedures	X	X	X	X	X	X	X
Maneuvering and handling:							
Anchoring and anchor handling	X	X	X	.....	.....	X	.....
Heavy weather operations	X	X	X	X	X	X	X
Mooring, positioning	X	X	X	X	.....	X	X
Moving, positioning	X	X	.....	X	.....	X	.....
Fire prevention and firefighting appliances:							
Organization of fire drills	X	X	X	X	X	X	X
Classes and chemistry of fire	X	X	X	X	X	X	X
Firefighting systems	X	X	X	X	X	X	X
Firefighting equipment and regulations	X	X	X	X	X	X	X
Basic firefighting and prevention of fires	X	X	X	X	X	X	X
Emergency procedures and contingency plans:							
Temporary repairs	X	X	X	X	.....	X	.....
Fire or explosion	X	X	X	X	X	X	X
Abandon unit	X	X	X	X	X	X	X
Man overboard	X	X	X	X	X	X	X
Heavy weather	X	X	X	X	X	X	X
Collision	X	X	X	X	X	X	X
Failure of ballast control system	X	X	X	.....	.....	X	X
Mooring emergencies	X	.....	X	.....	.....	X	X
Blowouts	X	.....	X	.....	X	X	X
H_2S safety	X	.....	X	.....	X	X	X
General Engineering—							
Power plants and auxiliary systems:							
Marine engineering terminology	X	X	X	X	X	X	X
Engineering equipment, operations and failures	X	X	X	X	X	X	.....
Offshore drilling operations	.....	.....	.....	.....	.....	.....	X
Deck seamanship—general:							
Transfer of personnel	X	X	X	X	X	X	.....
Support boats/helicopters	X	X	X	X	X	X	.....
Cargo stowage and securing	X	X	X	X	X	X	.....
Hazardous materials/dangerous goods precautions	X	X	X	X	X	X	.....
Mooring equipment	X	X	X	X	X	X	.....
Crane use procedures and inspections	X	X	X	X	X	X	.....

TABLE 10.920–2.—Subjects for MODU Licenses—Continued

Examination topics	1	2	3	4	5	6	7
Medical care:							
Knowledge and use of:							
First aid	X	X	X	X	X	X	X
First response medical action	X	X	X	X	X	X	X
Maritime law and regulation:							
National maritime law:							
Certification and documentation of vessels	X	X	X	X	X	.....	.....
Ship sanitation	X	X	X	X	X	.....	.....
Regulations for vessel inspection	X	X	X	X	X	.....	.....
Pollution prevention regulations	X	X	X	X	X	X	X
Licensing and certification regulations	X	X	X	X	X	.....	.....
Rules and regulations for MODUs	X	X	X	X	X	X	.....
International Maritime law:	.....	.....	.....	.....	.....	.....	.....
International Maritime Organization	X	X	X	X	X	.....	.....
International Convention on Load Lines	X	X	X	X	.....	.....	X
MARPOL 73/78	X	X	X	X	X	.....	.....
Personnel Management and Training:							
Ship's business including:							
Required logs and record keeping	X	X	X	X	X	X	.....
Casualty reports and records	X	X	X	X	X	.....	
Communications:							
Radio communications and FCC permit	X	X	X	X	X	X	
Radiotelephone procedures	X	X	X	X	X	X	.....
Lifesaving/Survival:							
Lifesaving appliance operation (launching, boat handling)	X	X	X	X	X	X	X
Procedures/rules for lifeboats, survival suits, PFDs, liferafts and emergency signals	X	X	X	X	X	X	X
Emergency radio transmissions	X	X	X	X	X	X	X
Survival at sea	X	X	X	X	X	X	X

[CGD 81–059a, 55 FR 14802, Apr. 18, 1990]

§ 10.950 Subjects for engineer licenses.

TABLE 10.950.—SUBJECTS FOR ENGINEER LICENSES

	Unlimited chief engineer		Unlimited 1st asst. engineer		Unlimited 2nd asst. engineer		Unlimited 3rd asst. engineer		Chief engineer limited		A/E Ltd & DDE unlim.		Unin. ind. C/E	Fish. vsl. A/E	DDE Ltd HP		MODU ch. eng.	MODU asst. eng.
	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	MTR	MTR	STM	MTR		
General Subjects:																		
Prints and Tables	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Pipes, Fittings, Valves	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P
Hydraulics	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P–T
Bilge Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P
Sanitary/Sewerage Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Freshwater Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P–T	P	P	P	P–T	P–T
Lubricants	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P
Lubrication Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P
Automation Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P–T	P
Control Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P–T	P–T
Propellers/Shafting Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P		
Machine Shop	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Distilling Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Pumps	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P
Compressors	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P
Administration	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P	P	P	P	P	P–T	P
Governors	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P	P	P	P–T	P–T
Cooling Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Bearings	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Instruments	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Ship Construction and Repair	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P
Theory	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
Steering Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P		
Deck Machinery	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Ventilation Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P	P	P	P	P
Thermodynamics	T	T	T	T	T	T	T	T										
Watch Duties	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P–T
Refrigeration and Air Conditioning:																		
Theory	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
Air Conditioning Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Refrigeration Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Control Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P
Safety	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Casualty Control	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P
Electricity:																		
Theory	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
General Maintenance	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Generators	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Motors	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T

TABLE 10.950.—SUBJECTS FOR ENGINEER LICENSES—Continued

	Unlimited chief engineer		Unlimited 1st asst. engineer		Unlimited 2nd asst. engineer		Unlimited 3rd asst. engineer		Chief engineer limited		A/E Ltd & DDE unlim.		Unin. ind. C/E	Fish. vsl. A/E	DDE Ltd HP		MODU ch. eng.	MODU asst. eng.
	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	MTR	MTR	STM	MTR		
Motor Controllers	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Propulsion Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T	P	P	P	P
Distribution Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P
Electronic Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P	P	P	P–T	P–T
Batteries	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P
Communications	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P	P	P	P
Safety	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Casualty Control	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Steam Generators:																		
Steam	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T		P	P	P		P–T	
Main Boilers	P–T		P–T		P–T		P–T		P–T		P–T				P–T			
Auxiliary Boilers		P–T		P–T		P–T		P–T		P–T		P–T	P	P		P	P–T	P–T
Feedwater Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T		P–T		P	P	P–T		P–T	P
Condensate Systems	P–T	P–T	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T		P–T	P
Recovery Systems	P–T	P–T	P–T	P	P–T	P	P–T	P	P–T		P–T		P	P	P–T		P–T	P
Fuel	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P–T	P–T
Fuel Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P–T	P–T
Boiler Water	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P–T	P	P	P	P–T		P–T	P
Control Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T		P	P	P–T	P–T		
Automation Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T		P	P	P–T		P–T	
Safety	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P	P–T	P
Casualty Control	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P	P–T	P	P–T	P
Steam Engines:																		
Main Turbine	P–T		P–T		P–T		P–T		P–T		P–T				P–T			
Auxiliary Turbine	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Reciprocating Machines	P–T		P–T		P–T		P–T		P–T		P–T				P–T			
Governor Systems	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Control Systems	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Automation Systems	P–T		P–T		P–T		P–T		P–T		P–T				P–T			
Lubrication Systems	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Drive Systems	P–T		P–T		P–T		P–T		P–T		P–T				P–T			
Safety	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Casualty Control	P–T	P	P–T	P	P–T	P	P–T	P	P–T		P–T				P–T			
Motor:																		
Main Engines		P–T		P–T		P–T		P–T		P–T		P–T	P–T	P–T		P–T		
Auxiliary Engines	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P–T	P–T	P
Starting Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P–T	P
Lubrication Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P
Fuel	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P
Fuel Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P
Combustion Systems	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P
Intake Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P
Exhaust Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P

Cooling Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P
Supercharging Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T		
Drive Systems	P	P–T	P	P–T	P	P–T	P	P–T		P–T		P–T	P–T	P–T		P–T	P	P
Control Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P–T
Automation Systems	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P–T	P–T
Governors	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–T	P	P
Turbines	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P	P–T	P–T	P–T		P–	P	P
Safety	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Casualty Control	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Safety:																		
Fire	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Fire Prevention	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Fire Fighting	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T
Flooding	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Dewatering	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Stability and Trim	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Damage Control	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Emergency Equipment and Life-saving Appliances.	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
General Safety	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
First Aid	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Dangerous Materials	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Pollution	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
Inspections and Surveys	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
U.S. Rules and Regulations	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T
International Rules and Regulations.	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P–T	P	P	P–T	P–T

Notes:
P=Practical Knowledge.
T=Theoretical Knowledge.

[CGD 81–059, 52 FR 38623 and 38669, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 147, Jan. 4, 1989; CGD 81–059a, 55 FR 14804, Apr. 18, 1990]

PART 12—CERTIFICATION OF SEAMEN

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

SOURCE: CGFR 65–50, 30 FR 16640, Dec. 30, 1965, unless otherwise noted.

Subpart 12.01—General

§12.01–1 Purpose of regulations.

(a) The purpose of the regulations in this part is to provide a comprehensive and adequate means of determining the identity or the qualifications an applicant must possess in order to be eligible for certification to serve on merchant vessels of the United States.

§12.01–5 Authority for regulations.

(a) *General.* The authority to prescribe regulations generally is set forth in R.S. 4405 and 4462, as amended (46 U.S.C. 375, 416), and sec. 7 of the act of June 25, 1936, as amended (49 Stat. 1936; 46 U.S.C. 689), as well as in other provisions of titles 52 and 53 of the Revised Statutes and acts amendatory thereof or supplemental thereto. Under the provisions of R.S. 4403, as amended (46 U.S.C. 372), the Commandant, United States Coast Guard, superintends the administration of the vessel inspection laws and is required to produce a correct and uniform administration of the inspection laws, rules, and regulations. Under the provisions of section 2 of the act of July 5, 1885 (23 Stat. 118, 46 U.S.C. 2) the Commandant, United States Coast Guard, and the Commissioner of Customs, Bureau of Customs, have general superintendence of the commercial marine and merchant seamen of the United States, so far as vessels and seamen are not, under the existing laws, subject to the supervision of any other officer of the Government.

(b) *Certification of seamen.* The regulations regarding requirements for certification of seamen interpret or apply R.S. 4551, as amended, sec. 13, 38 Stat. 1169, as amended by sec. 1, 49 Stat. 1930, and secs. 1, 2, 50 Stat. 199, and modified by 52 Stat. 753, 55 Stat. 579, and 55 Stat. 732; and sec. 3, 68 Stat. 675; 46 U.S.C. 643, 672, 672b, 672–1, 672–2, 50 U.S.C. 198.

(c) *Lifeboatman.* The regulations regarding lifeboatman interpret or apply R.S. 4417a and 4488, as amended (46 U.S.C. 391a, 481), and sec. 3, 68 Stat. 675 (50 U.S.C. 198).

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 79–116, 60 FR 17142, Apr. 4, 1995]

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

Conviction means the applicant for a merchant mariner's document has been found guilty by judgment or plea by a court of record of the Untied States, the District of Columbia or any State or territory of the United States of a criminal felony or misdemeanor or of an offense described in section 205 of the National Driver Register Act of 1982 (49 U.S.C. 30304). If an applicant pleads guilty or no contest, is granted deferred adjudication, or is required by the court to attend classes, make contributions of time or money, receive treatment, submit to any manner of probation or supervision, or forego appeal of a trial court's conviction, then the applicant will be considered to have received a conviction. A later expungement of the conviction will not negate a conviction unless it is proved to the OCMI that the expungement is based upon a showing that the court's earlier conviction was in error.

Evaluation means processing an application, from the point of receipt to approval or rejection of the application, including review of all documents and records submitted with an application as well as those obtained from public records and databases.

Fails a chemical test for dangerous drugs means that the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''positive'' for the presence of dangerous drugs or drug metabolites in an individual's system by a Medical Review Officer in accordance with that part.

National Driver Register (NDR) means the nationwide repository of information on drivers maintained by the National Highway Traffic Safety Administration as provided under 49 U.S.C. Chapter 303.

NDR listed convictions means a conviction of any of the following motor vehicle-related offenses or comparable offenses:

(a) Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance; or

(b) A traffic violation arising in connection with a fatal traffic accident, reckless driving, or racing on the highways.

Original document means the first merchant mariner's document issued to any person by the Coast Guard.

Passes a chemical test for dangerous drugs means the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''negative'' by a Medical Review Officer in accordance with that part.

Qualified rating means various categories of Able Seaman, Qualified Member of the Engine Department, Lifeboatman, or Tankerman endorsements on merchant mariner's documents.

[CGD 91–002, 58 FR 15238, Mar. 19, 1993, as amended by CGD 91–223, 60 FR 4525, Jan. 23, 1995; CGD 91–212, 60 FR 65487, Dec. 19, 1995]

§ 12.01–7 Regional Examination Centers.

Licensing and Certification functions are performed only by the Officer in Charge, Marine Inspection, at the following locations:

Boston, MA	Toledo, OH
New York, NY	Long Beach, CA
Baltimore, MD	San Francisco, CA
Charleston, SC	Seattle, WA
Miami, FL	Anchorage, AK
New Orleans, LA	Juneau, AK
Houston, TX	Honolulu, HI
Memphis, TN	Portland, OR
St. Louis, MO	

Where the term *Officer in Charge, Marine Inspection,* or *Marine Inspection Office* is used within the context of this part it is to mean that *Officer* or *Office* at one of the above listed locations.

[CGD 82–033, 47 FR 28679, July 1, 1982, as amended by CGD 91–002, 58 FR 15239, Mar. 19, 1993]

Subpart 12.02—General Requirements for Certification

§ 12.02–3 Where documents are issued.

(a) Certificates of identification, certificates of service, certificates of efficiency, and continuous discharge books are issued to applicants qualifying therefor at any Marine Inspection Office of the Coast Guard during usual business hours.

(b)(1) Coast Guard Merchant Marine Details abroad are authorized to conduct examinations for up-grading of seamen, but are not prepared to conduct the physical examination where required. Merchant Marine Details will therefore not issue regular certificates, but temporary permits in lieu thereof. Merchant Marine Details will instruct the recipient of each temporary permit to present it to the Officer in Charge, Marine Inspection, upon arrival in the first port in the United States in which a Marine Inspection Office is located in order to exchange it for a permanent certificate.

(2) The temporary permit shall be accepted in a Marine Inspection Office as proof that the bearer has complied with the rules and regulations governing the issuance of certificates, except as noted in the body of the temporary permit. The requirements noted in the exceptions will be complied with as in the case of other applicants.

(3) The written examinations are forwarded to the Director, National Maritime Center by Merchant Marine Details, and any Marine Inspection Office at which an applicant with a temporary permit appears may request and obtain the examination in the case from the Director, National Maritime Center. Any Marine Inspection Office which doubts the propriety of issuing a permanent certificate in lieu of a temporary permit which has been issued by a foreign Merchant Marine Detail shall inform the Director, National Maritime Center fully as to the circumstances.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.02–4 Basis for denial of documents.

(a) No person who has been convicted by a court of record of a violation of the dangerous drug laws of the United States, the District of Columbia, or any State or territory of the United States is eligible for an original merchant mariner's document, except as provided by the provisions of paragraph (c) of this section. No person who has

ever been the user of, or addicted to the use of, a dangerous drug, or has ever been convicted of an offense described in section 205 of the National Driver Register Act of 1982 (49 U.S.C. 30304) due to the addiction or abuse of alcohol is eligible for a merchant mariner's document unless he or she furnishes satisfactory evidence of suitability for service in the merchant marine as provided in paragraph (e) of this section.

(b) An applicant who fails a chemical test for dangerous drugs required by §12.02–9 will not be issued a merchant mariner's document.

(c) *Criminal Record Review*. The Officer in Charge, Marine Inspection, may require a criminal record check of an applicant for a merchant mariner's document issued as an original or reissued with a new expiration date. An applicant conducting simultaneous merchant mariner's credential transactions shall undergo only one criminal record check. Applicants must provide written disclosure of all prior convictions at the time of application.

(1) If a criminal record check is required by the Officer in Charge, Marine Inspection, applicants shall provide fingerprints at the time of application. The fingerprints will be used to determine whether the applicant has a record of a criminal conviction. An application may be disapproved if the individual's criminal record leads the Officer in Charge, Marine Inspection to determine that the applicant cannot be entrusted with the duties and responsibilities of the merchant mariner's document for which application is made. If an application is disapproved, the Officer in Charge, Marine Inspection will notify the applicant in writing of the reason(s) for disapproval and advise the applicant that the appeal procedures in §1.03 of this chapter apply. No examination will be given pending decision on appeal.

(2) The Officer in Charge, Marine Inspection will use Table 12.02–4(c) to evaluate applicants for merchant mariner's documents who have criminal convictions. The table lists major categories of criminal activity and is not to be construed as an all-inclusive list. If an applicant is convicted of an offense that does not appear on the list, the Officer in Charge, Marine Inspection will establish an appropriate assessment period using the list as a guide. The assessment period commences when an applicant is no longer incarcerated. The applicant must establish proof of the time incarcerated and periods of probation and parole to the satisfaction of the Officer in Charge, Marine Inspection. The assessment period may include supervised or unsupervised probation or parole. A conviction for a drug offense more than 10 years prior to the date of application will not alone be grounds for denial.

(3) When an applicant has convictions for more than one offense, the minimum assessment period will be the longest minimum in Table 12.02–4(c) and Table 12.02–4(d) based upon the applicant's convictions; the maximum assessment period will be the longest shown in Table 12.02–4(c) and Table 12.02–4(d) based upon the applicant's convictions.

(4) If a person with a criminal conviction applies for a merchant mariner's document before the minimum assessment period shown in Table 12.02–4(c), or established by the Officer in Charge, Marine Inspection under paragraph (c)(2) of this section has elapsed, then the applicant must provide, as part of the application package, evidence of suitability for service in the merchant marine. Factors which are evidence of suitability for service in the merchant marine are listed in paragraph (e) of this section. The Officer in Charge, Marine Inspection will consider the applicant's evidence submitted with the application and may issue the merchant mariner's document in less than the listed minimum assessment period if the Officer in Charge, Marine Inspection is satisfied that the applicant is suitable to hold the merchant mariner's document for which he or she has applied. If an application filed before the minimum assessment period has elapsed does not include evidence of suitability for service in the merchant marine, then the application will be considered incomplete and will not be processed by the Officer in Charge, Marine Inspection until the applicant provides the necessary evidence as set forth in paragraph (e) of this section.

(5) If a person with a criminal conviction applies for a merchant mariner's document during the time between the minimum and maximum assessment periods shown in Table 12.02–4(c) or established by the Officer in Charge, Marine Inspection under paragraph (c)(2) of this section, then the Officer in Charge, Marine Inspection shall consider the conviction and, unless there are offsetting factors, shall grant the applicant the merchant mariner's document for which he or she has applied. Offsetting factors include such factors as multiple convictions, failure to comply with court orders (e.g., child support orders), previous failures at rehabilitation or reform, inability to maintain steady employment, or any connection between the crime and the safe operation of a vessel. If the Officer in Charge, Marine Inspection considers the applicant unsuitable for service in the merchant marine at the time of application, the Officer in Charge, Marine Inspection may disapprove the application.

(6) If a person with a criminal conviction applies for a merchant mariner's document after the maximum assessment period shown in Table 12.02–4(c) or established by the Officer in Charge, Marine Inspection under paragraph (c)(2) of this section has elapsed, then the Officer in Charge, Marine Inspection will grant the applicant the merchant mariner's document for which he or she has applied unless the Officer in Charge, Marine Inspection considers the applicant still unsuitable for service in the merchant marine. If the Officer in Charge, Marine Inspection disapproves an applicant with a conviction older than the maximum assessment period listed in Table 12.02–4(c), the Officer in Charge, Marine Inspection will notify the applicant in writing of the reason(s) for the disapproval including the Officer in Charge, Marine Inspection's reason(s) for considering a conviction older than the maximum assessment period listed in Table 12.02–4(c). The Officer in Charge, Marine Inspection will also inform the applicant, in writing, that the reconsideration and appeal procedures contained in § 1.03 of this chapter apply.

TABLE 12.02–4(c)—GUIDELINES FOR EVALUATING APPLICANTS FOR MERCHANT MARINER'S DOCUMENTS WHO HAVE CRIMINAL CONVICTIONS

Crime [1]	Assessment periods	
	Minimum	Maximum
Crimes Against Persons		
Homicide (intentional)	7 years	20 years.
Homicide (unintentional)	5 years	10 years.
Assault (aggravated)	5 years	10 years.
Assault (simple)	1 year	5 years.
Sexual Assault (rape, child molestation)	5 years	10 years.
Other crimes against persons [2].		
Vehicular Crimes		
Conviction involving fatality	1 year	5 years.
Reckless Driving	1 year	2 years.
Racing on the Highway	1 year	2 years.
Other vehicular crimes [2].		
Crimes Against Public Safety		
Destruction of Property	5 years	10 years.
Other crimes against public safety [2].		
Crimes Involving National Security		
Terrorism, Acts of Sabotage, Espionage and related offenses	7 years	20 years.

TABLE 12.02–4(c)—GUIDELINES FOR EVALUATING APPLICANTS FOR MERCHANT MARINER'S DOCUMENTS WHO HAVE CRIMINAL CONVICTIONS—Continued

Crime [1]	Assessment periods	
	Minimum	Maximum
Dangerous Drug Offenses [3,4,5]		
Trafficking (sale, distribution, transfer)	5 years	10 years.
Dangerous drugs (Use or possession)	1 year	10 years.
Other dangerous drug convictions [6].		

[1] Conviction of attempts, solicitations, aiding and abetting, accessory after the fact, and conspiracies to commit the criminal conduct listed in this table carry the same minimum and maximum assessment periods provided in the table.

[2] Other crimes are to be reviewed by the Officer in Charge, Marine Inspection to determine the minimum and maximum assessment periods depending on the nature of the crime.

[3] Applicable to original applications only. Any applicant who has ever been the user of, or addicted to the use of, a dangerous drug shall meet the requirements of paragraph (a) of this section. Note: Applicants for reissue of a merchant mariner's document with a new expiration date including a renewal or additional endorsement(s), who have been convicted of a dangerous drug offense while holding a merchant mariner's document, may have their application withheld until appropriate action has been completed by the Officer in Charge, Marine Inspection under the regulations which appear in 46 CFR part 5 governing the administrative actions against merchant mariner credentials.

[4] The OCMI may consider dangerous drug convictions more than 10 years old only if there has been a dangerous drug conviction within the past 10 years.

[5] Applicants must demonstrate rehabilitation under paragraph (e) of this section, including applicants with dangerous drug use convictions more than ten years old.

[6] Other dangerous drug convictions are to be reviewed by the Officer in Charge, Marine Inspection on a case by case basis to determine the appropriate assessment period depending on the nature of the offense.

(d) *National Driver Register*. A merchant mariner's document will not be issued or reissued with a new expiration date unless the applicant consents to a check of the NDR for offenses described in section 205(a)(3)(A) or (B) of the NDR Act (i.e., operation of a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance; and any traffic violations arising in connection with a fatal traffic accident, reckless driving, or racing on the highways). The Officer in Charge, Marine Inspection will not consider NDR listed civil convictions that are more than 3 years old from the date of request unless that information relates to the current suspension or revocation of the applicant's license to operate a motor vehicle. The Officer in Charge Marine Inspection may determine minimum and maximum assessment periods for NDR listed criminal convictions using Table 12.02–4(c). An applicant conducting simultaneous merchant mariner's credential transactions is subject to only one NDR check.

(1) Any application may be disapproved if information from the NDR check leads the Officer in Charge, Marine Inspection to determine that the applicant cannot be entrusted with the duties and responsibilities of the merchant mariner's document for which the application is made. If an application is disapproved, the Officer in Charge, Marine Inspection will notify the applicant in writing of the reason(s) for disapproval and advise the applicant that the appeal procedures in § 1.03 of this chapter apply. No examination will be given or merchant mariner's document issued pending decision on appeal.

(2) Prior to disapproving an application because of information received from the NDR, the Officer in Charge, Marine Inspection will make the information available to the applicant for review and written comment. The applicant may submit reports from the applicable State concerning driving record and convictions to the Coast Guard Regional Examination Center (REC) processing the application. The REC will hold an application with NDR listed convictions pending the completion of the evaluation and delivery by the individual of the underlying State records.

(3) The guidelines in Table 12.02–4(d) will be used by the Officer in Charge, Marine Inspection when evaluating applicants for merchant mariner's documents who have drug or alcohol related NDR listed convictions. Non-drug or alcohol related NDR listed convictions will be evaluated by the Officer in Charge, Marine Inspection under Table 12.02–4(c) as applicable.

(4) An applicant may request an NDR file check for *personal* use in accordance with the Federal Privacy Act of 1974 (Pub. L. 93–579) by contacting the NDR at the following address: National Driver Register, Nassif Building, 400 7th Street SW., Washington, DC 20590.

(i) Applicants should request Form NDR–PRV or provide the following information on a notarized letter:

(A) Full legal name;

(B) Other names used;

(C) Complete mailing address;

(D) Driver license number;

(E) Eye color;

(F) Social security number;

(G) Height;

(H) Weight; and

(I) Sex.

(ii) The NDR will respond to every valid inquiry including requests which produce no record(s) on the NDR file. Records can be made available, within a reasonable amount of time after the request, for personal inspection and copying during regular working hours at 7:45 a.m. to 4:15 p.m., each day except Federal holidays.

TABLE 12.02–4(d)—GUIDELINES FOR EVALUATING APPLICANTS FOR MERCHANT MARINER'S DOCUMENTS WHO HAVE NDR MOTOR VEHICLE CONVICTIONS INVOLVING DANGEROUS DRUGS OR ALCOHOL [1]

No. of convictions	Date of conviction	Assessment period
1	Less than 1 year	1 year from date of conviction.
1	More than 1, less than 3 years	Application will be processed, unless suspension, or revocation [2] is still in effect. Applicant will be advised that additional conviction(s) may jeopardize merchant mariner credentials.
1	More than 3 years old	Not necessary unless suspension or revocation is still in effect.
2 or more	Any less than 3 years old	1 year since last conviction and at least 3 years from 2nd most recent conviction, unless suspension or revocation is still in effect.
2 or more	All more than 3 years old	Application will be processed unless suspension or revocation is still in effect.

[1] Any applicant who has ever been the user of, or addicted to the use of, a dangerous drug shall meet the requirements of paragraph (a) of this section.

[2] Suspension or revocation, when referred to in Table 12.02–4(d), means a State suspension or revocation of a motor vehicle operator's license.

(e) If an applicant for an original merchant mariner's document has one or more alcohol or dangerous drug related criminal or NDR listed convictions; if the applicant has ever been the user of, or addicted to the use of, a dangerous drug; or if the applicant applies before the minimum assessment period for his or her conviction has elapsed; the Officer in Charge, Marine Inspection may consider the following factors, as applicable, in assessing the applicant's suitability to hold a merchant mariner's document. This list is intended as a guideline. The Officer in Charge, Marine Inspection may consider other factors which he or she judges appropriate, such as:

(1) Proof of completion of an accredited alcohol- or drug-abuse rehabilitation program.

(2) Active membership in a rehabilitation or counseling group, such as Alcoholics or Narcotics Anonymous.

(3) Character references from persons who can attest to the applicant's sobriety, reliability, and suitability for employment in the merchant marine including parole or probation officers.

(4) Steady employment.

(5) Successful completion of all conditions of parole or probation.

[CGFR 69–116, 35 FR 6860, Apr. 30, 1970, as amended by CGD 91–223, Jan. 23, 1995; CGD 95–072, 60 FR 50460, Sept. 29, 1995; CGD 91–212, 60 FR 65487, Dec. 19, 1995]

§ 12.02–5 Form in which documents are issued.

(a) Every certificate of service, certificate of efficiency, or certificate of identification issued or reissued after November 1, 1945, shall be in the form of a merchant mariner's document, Coast Guard Form CG–2838, and wherever such certificates are mentioned in this part they shall be deemed to include merchant mariner's documents representing such certificates.

(b) Continuous discharge books are issued on Coast Guard Form CG–719.

§12.02–7 When documents are required.

(a) Every seaman employed on any merchant vessel of the United States of 100 gross tons or upward, except vessels employed exclusively in trade on the navigable rivers of the United States, shall be issued, at the option of the seaman, a continuous discharge book, a certificate of identification, or merchant mariner's document representing such certificate of identification, which shall be retained by him. This book or certificate of identification or merchant mariner's document will bear a number, and this same number shall be shown on all certificates of service or efficiency issued to the holder of the book or certificate or document. Provisions of this section are not applicable to unrigged vessels except seagoing barges and certain tank barges.

(b) Every seaman, as referred to in paragraph (a) of this section, shall produce a continuous discharge book or certificate of identification or merchant mariner's document representing such a certificate to the United States shipping commissioner before signing Articles of Agreement, and where the seaman is not signed on before a shipping commissioner, one of these documents shall be exhibited to the master of the vessel at the time of his employment. Seamen who do not possess one of these documents may be employed at a foreign port or place.

(c)(1) Every person employed on any merchant vessel of the United States of 100 gross tons and upward, except those navigating rivers exclusively and the smaller inland lakes, below the rank of licensed officer and registered staff officer, shall possess a valid certificate of service, or merchant mariner's document representing such certificate, issued by an Officer in Charge, Marine Inspection.

(2) No certificate of service or efficiency is required of any person below the rank of licensed officer employed on any unrigged vessel except seagoing barges and certain tank barges.

(3) No certificate of service or efficiency is required of any person below the rank of licensed officer employed on any sail vessel of less than 500 net tons while not carrying passengers for hire and while not operating outside the line dividing inland waters from the high seas, as defined in section 2 of the act of February 19, 1895, as amended (33 U.S.C. 151) and in 33 CFR part 82.

§12.02–9 Application for documents.

(a) An applicant for a certificate of service, certificate of efficiency, certificate of identification, continuous discharge book, or merchant mariner's document, shall make written application, in duplicate, on Coast Guard Form CG–719–b and shall appear in person before an Officer in Charge, Marine Inspection, or other person authorized to issue documents. This application may be for the certificates or the rating endorsement for which the seaman believes he is qualified. In the case of a seaman applying for his first certificate, other than certificate of identification, the application shall include a request for either a continuous discharge book or a merchant mariner's document representing a certificate of identification, at the option of the applicant.

(b)(1) When the application is submitted for a certificate of identification, certificate of service, certificate of efficiency, merchant mariner's document, or any combination thereof, or a continuous discharge book, the seaman shall furnish three unmounted dull finish photographs of passport type (2 inches by 1½ inches) taken within one year and showing the full face at least one inch in height with head uncovered.

(2) When the application requests a continuous discharge book in addition to a certificate of service or certificate of efficiency or merchant mariner's document one additional photograph shall be furnished.

(c) An applicant for a document where sea service is required shall produce with his application discharges or other documentary evidence of his service, indicating the name of the vessels and dates on which he has had service, in what capacity and on what waters.

(d) If the applicant possesses a continuous discharge book, certificate of identification, or merchant mariner's document representing such certificate, it shall be exhibited at the time

of making application for any other document.

(e) Approved applications are valid for 12 months.

(f) Except for applicants requesting an inactive merchant mariner's document renewal under § 12.02–27(g) of this part, to obtain an original issuance of a merchant mariner's document, the first endorsement as an able seaman, lifeboatman, qualified member of the engine department, or tankerman, or a reissuance of a merchant mariner's document with a new expiration date, each applicant shall present evidence of having passed a chemical test for dangerous drugs or of qualifying for an exception from testing in § 16.220 of this subchapter.

(g) Each applicant for an original merchant mariner's document may be required to submit to a criminal record check as required by § 12.02–4(c).

(h) Each applicant for an original merchant mariner's document or a merchant mariner's document reissued with a new expiration date shall comply with the NDR requirements in § 12.02–4(d).

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 74–178, 40 FR 57673, Dec. 11, 1975; CGD 91–211, 59 FR 49300, Sept. 27, 1994; CGD 91–223, 60 FR 4525, Jan. 23, 1995; CGD 91–212, 60 FR 65489, Dec. 19, 1995]

§ 12.02–10 Applications for documents from aliens.

(a) No application from an alien for a certificate of service, certificate of efficiency, certificate of identification, continuous discharge book, or merchant mariner's document shall be accepted unless the alien presents acceptable documentary evidence from the United States Immigration and Naturalization Service that he is lawfully admitted to the United States for permanent residence.

(b) This evidence may be in the form of an alien registration receipt card issued by the Immigration and Naturalization Service bearing the certification that the alien was admitted to the United States as an immigrant, or a declaration of intention to become a citizen of the United States issued by a naturalization court.

§ 12.02–11 General provisions respecting merchant mariner's documents.

(a) As provided in § 12.02–5, every certificate of service, certificate of efficiency, or certificate of identification issued or reissued shall be in the form of a merchant mariner's document, Coast Guard Form CG–2838.

(b) Any licensed officer or unlicensed seaman currently holding, in a valid status, any of the documents listed in paragraph (a) of this section may, upon request and without examination, be issued a merchant mariner's document.

(c) A merchant mariner's document shall be a certificate of service authorizing the holder to serve in any rating endorsed thereon, or in any lower rating in the same department, or in any rating covered by a general endorsement thereon.

(d)(1) A merchant mariner's document issued to a licensed deck officer will be endorsed for, *any unlicensed rating in the deck department except able seaman,* and will be a certificate of service authorizing the holder to serve in any unlicensed capacity in the deck department except able seaman without being required to present his license. If a licensed deck officer qualifies as able seaman the merchant mariner's document will be endorsed, *any unlicensed rating in the deck department including able seaman,* and such endorsement will be deemed to include a certificate of efficiency as lifeboatman.

(2) A merchant mariner's document issued to an engineer officer licensed for inspected vessels of over 2,000 horsepower will be endorsed for *any unlicensed rating in the engine department,* and will be a certificate of service authorizing the holder to serve in any unlicensed capacity in the engine department without being required to present his license. If a licensed engineer qualifies as a lifeboatman, the further endorsement, *lifeboatman,* will be placed on the merchant mariner's document.

(3) A merchant mariner's document issued to a licensed radio officer will be endorsed as follows: *See License as Radio Officer.* If a licensed radio officer qualifies as a lifeboatman, the further endorsement, *Lifeboatman,* will be placed on the merchant mariner's document. Qualifications for other ratings

for which a radio officer is eligible may also be endorsed on the document.

(e)(1) A merchant mariner's document issued to a staff officer will be endorsed as follows: *See Certificate of Registry*. The holder of a certificate of registry as chief purser, purser, senior assistant purser, or junior assistant purser may also serve in any capacity in the staff department not requiring a certificate of registry without obtaining an additional endorsement on his merchant mariner's document.

(2) The authorized holder of any valid merchant mariner's document, however endorsed, may serve in any capacity in the staff department of a vessel, except in those capacities requiring registered staff officers: *Provided*, That whenever such service includes the handling of food no person may be so employed unless his document bears the food handler's endorsement ''(F.H.).''

(f) A merchant mariner's document endorsed as able seaman or as lifeboatman shall be a certificate of efficiency as lifeboatman.

(g) Every merchant mariner's document shall be a certificate of identification unless the holder also holds a continuous discharge book. The holder of a certificate of identification in the form issued before November 1, 1945, shall surrender that certificate before he is issued a merchant mariner's document.

§ 12.02–13 Citizenship requirements.

(a) Any person making application for a continuous discharge book or a certificate of identification or a merchant mariner's document representing a certificate of identification and claiming to be a citizen of the United States shall present acceptable evidence of such citizenship at the time of making application. No original document shall be issued to any person claiming to be a citizen of the United States until such citizenship is established by acceptable evidence.

(b) Any person who has been issued a continuous discharge book or certificate of identification or merchant mariner's document showing question marks prior to the effective date of this section may at any time produce additional evidence of citizenship to a shipping commissioner or Officer in Charge, Marine Inspection. If the additional evidence produced satisfies the shipping commissioner or the Officer in Charge, Marine Inspection, to whom it is presented that the same is acceptable evidence of the citizenship of the person, such official may draw lines through the question marks and note the citizenship of the person in the space provided therefor, attesting the change, or reissue the certificate or document. Whenever such changes are made the official making the change shall immediately thereafter notify the Director, National Maritime Center.

(c) Acceptable evidence of citizenship is set forth in § 10.02–5 of this subchapter.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended at 60 FR 50460, Sept. 29, 1995]

§ 12.02–14 Nationality of aliens.

(a) Any alien making application for a continuous discharge book or certificate of identification or merchant mariner's document representing a certificate of identification shall present acceptable evidence of nationality at the time of making application. No original document shall be issued to any alien until nationality is established by acceptable evidence.

(b) Any document of an official character showing the country of which the alien is a citizen or subject may be accepted as acceptable evidence of an alien's nationality. The following are examples of such a document:

(1) Declaration of intention to become a citizen of the United States made by the alien after 1929.

(2) A travel document in the nature of a passport issued by the government of the country of which the alien is a citizen or subject.

(3) A certificate issued by the consular representative of the country of which the alien is a citizen or subject.

(c) Should any doubt arise as to whether or not the document presented may be considered as acceptable evidence of the alien's nationality, the matter shall be referred to the Director, National Maritime Center, for decision.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.02–15 Oath requirement.

Applicants for a merchant mariner's document for any rating shall take an oath before an Officer in Charge, Marine Inspection, or other official authorized to give such oath, or a commissioned officer of the Coast Guard authorized to administer oaths under 10 U.S.C. 936 or 14 U.S.C. 636, that they will faithfully and honestly perform all the duties required of them by law and carry out all lawful orders of superior officers on shipboard. Such an oath remains binding for all subsequent merchant mariner's documents issued to a person until the document is surrendered to the Officer in Charge, Marine Inspection.

[CGD 91–211, 59 FR 49300, Sept. 27, 1994]

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

(a) Upon application of a person for a merchant mariner's document, any required examination will be given as soon as practicable.

(b) Upon determining that the applicant satisfactorily meets all requirements for the document and any endorsements requested, the Officer in Charge, Marine Inspection, shall issue the appropriate document to the applicant. A merchant mariner's document is valid for a term of 5 years from the date of issuance. Any document which is renewed or reissued prior to its expiration date automatically becomes void upon issuance of the replacement document.

(c) When a seaman applies for a merchant mariner's document, he must:

(1) Sign the document; and

(2) Impress his left thumbprint on the document; or

(3) Impress his right thumbprint on the document if his left thumb is missing.

(d) A seaman's social security number is placed on his document and is his official identification number for record purposes.

(e) [Reserved]

(f) An applicant for a certificate of service or efficiency who has been duly examined and refused a certificate by an Officer in Charge, Marine Inspection may come before the same Officer in Charge, Marine Inspection for reexamination at any time after the date of the initial examination. The Officer in Charge, Marine Inspection sets the time of reexamination based on the applicant's performance on the initial examination. However, the maximum waiting period after the initial failure will be 30 days, and the maximum waiting period after a second or subsequent failure will be 90 days.

(g) An applicant who has been examined and refused a certificate by an Officer in Charge, Marine Inspection may not make application for examination to any other Officer in Charge, Marine Inspection until 30 days after the applicant's last failure of an examination or reexamination. However, an applicant may apply for examination by another Officer in Charge, Marine Inspection before the expiration of the 30 day period if sanctioned by the Officer in Charge, Marine Inspection who refused the applicant.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 72–81R, 37 FR 10834, May 31, 1972; 44 FR 21021, Apr. 9, 1979; CGD 91–211, 59 FR 49300, Sept. 27, 1994]

§ 12.02–18 Fees.

(a) The following fees are required for merchant mariner's document activities in this part:

(1) For evaluation for an original document, (does not apply if applicant holds a license or certificate of registry issued under part 10 of this chapter), $17.

(2) For evaluation for a merchant mariner's document endorsed with a qualified rating:

(i) For an original merchant mariner's document, $77.

(ii) For a merchant mariner's document other than original, $60.

(iii) Where further evaluation is not required, such as when a merchant mariner's document is issued incident to a license transaction, no fee.

(3) For administration of examination, $40.

(4) For issuance of a document, $35.

(5) For duplicate of a merchant mariner's document issued in this part where a fee is required in § 12.02–23, $35.

(6) For a duplicate continuous discharge book, record of sea service, or copies of certificates of discharge, $10.

(7) For renewal of a merchant mariner's document:

(i) For evaluation for renewal of a merchant mariner's document endorsed with a qualified rating, $45.

(ii) For evaluation for renewal of a merchant mariner's document when submitted with a license where a renewal evaluation fee already applies, no fee.

(iii) For evaluation for renewal of a merchant mariner's document without qualified rating endorsement, no fee.

(iv) For administration of open-book exercises required by § 12.02–27, $40.

(v) For administration of MMD open-book exercises when required in addition to license open-book exercises for concurrent renewal of these documents, only the license exercise fee in § 10.109(c)(2) will apply.

(vi) For issuance of a renewal of a merchant mariner's document including those issued for continuity purposes only, $35.

(b) Unless otherwise directed, the prescribed fee must be paid as follows:

(1) If an evaluation fee, at the time of application.

(2) If an examination fee, prior to taking the first examination section at a Regional Examination Center. For examinations administered at locations other than a Regional Examination Center, the examination fee must be received by the Regional Examination Center at least one week in advance of the scheduled examination date.

(3) If an issuance fee, prior to receiving the document.

(c) Prescribed fees must be paid by one of the following options:

(1) *Mail-in*. Payment by check or money order only, made payable to one of the following:

(i) U.S. Coast Guard;

(ii) U.S. Government;

(iii) U.S. Treasury;

(iv) U.S. Department of Transportation.

Fee payment must be made by check or money order with the applicant's (payor's) social security number included thereon.

(2) *In-person*. Fee payment will be accepted by cash, check, or money order at Coast Guard units where Regional Examination Centers are located. Where an applicant makes payment by cash, payment must be in the exact amount. A check or money order must be payable as specified in paragraph (c)(1) of this section.

(d) The following applies to anyone failing to pay a fee or charge established under this subpart:

(1) Anyone who fails to pay a fee or charge established under this subpart is liable to the United States Government for a civil penalty of not more than $5,000 for each violation.

(2) The Coast Guard may assess additional charges to anyone to recover collection and enforcement costs associated with delinquent payments of, or failure to pay, a fee. Coast Guard merchant mariner's document services may also be withheld from anyone pending payment of outstanding fees owed to the Coast Guard for services already provided by Regional Examination Centers.

[CGD 91–002, 58 FR 15239, Mar. 19, 1993, as amended by CGD 91–211, 59 FR 49301, Sept. 27, 1994]

§ 12.02–19 Suspension or revocation of documents.

Any certificate of service or of efficiency or merchant mariner's document representing such certificate(s) is subject to suspension or revocation on the same grounds and in the same manner and with like procedure as is provided in the case of suspension or revocation of licenses of officers under the provisions of R.S. 4450, as amended (46 U.S.C. 239).

§ 12.02–21 Issuance of documents after revocation.

(a) An applicant who has had a certificate or other document revoked and who is applying for certification in the same or any other rating shall state in his application the date of revocation and number or type of the document revoked.

(b) No applicant who has had a certificate or other document revoked will be certificated in the same or any other rating except upon approval of the Director, National Maritime Center.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.02–23 Issuance of duplicate documents.

(a) If a seaman loses his continuous discharge book, merchant mariner's document or certificate of discharge by shipwreck or other casualty, he shall be supplied with a reissue of such documents free of charge. The phrase *or other casualty* as used in this section is interpreted to mean any damage to a ship caused by collision, explosion, tornado, wreck or flooding of the ship, such as a tidal wave or a grounding of the ship on a sand bar, or a beaching of the ship on a shore or by fire or other causes in a category with these mentioned.

(b) If a seaman loses a continuous discharge book, merchant mariner's document, or certificate of discharge otherwise than by shipwreck or other casualty and applies for a reissue, the appropriate fee set out in § 12.02–18 is required.

(c) A person entitled to a duplicate merchant mariner's document, duplicate continuous discharge book, copies of certificates of discharge, or record of sea service may obtain the documents by applying at any Regional Examination Center listed in § 12.01–7 by:

(1) Completing the application form provided by the Coast Guard; and

(2) Paying the fee set out in § 12.02–18.

(d) Each person issued a document described in § 12.02–5, shall report to an Officer in Charge, Marine Inspection, its loss.

(e) If a seaman's document or service record is missing, he may obtain a duplicate by following the procedures in paragraph (c) of this section and by:

(1) Signing an affidavit before the Officer in Charge, Marine Inspection, or his designated representative, that explains the loss of his document or service record; and

(2) Submitting at least two photographs for each duplicate document.

(f) No application from an alien for a duplicate merchant mariner's document shall be accepted unless the alien complies with the requirements of § 12.02–10.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGFR 71–168, 36 FR 23297, Dec. 8, 1971; CGD 72–81R, 37 FR 10834, May 31, 1972; CGD 91–002, 58 FR 15239, Mar. 19, 1993]

§ 12.02–24 Reporting loss or recovery of continuous discharge book, merchant mariners document, or certificate of discharge.

Whenever a continuous discharge book, merchant mariners document, or certificate of discharge is reported to an Officer in Charge, Marine Inspection (OCMI), as having been stolen, lost, or destroyed, the OCMI shall immediately report the fact by letter to the Director, National Maritime Center giving all the facts incident to its loss or destruction. By the same procedure the OCMI shall report the recovery of a continuous discharge book, merchant mariners document or certificate of discharge with all the facts incident to its recovery, and shall forward the recovered book, document, or discharge to the Director, National Maritime Center.

[CGD 79–161, 44 FR 70155, Dec. 6, 1979, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.02–25 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50379, Dec. 6, 1989]

§ 12.02–27 Requirements for renewal of a merchant mariner's document.

(a) *General.* Except as provided in paragraph (g) of this section, an applicant for renewal of a merchant mariner's document shall establish possession of all of the necessary qualifications before a merchant mariner's document is issued.

(1) Each application must be on a Coast Guard furnished form and accompanied by the evaluation fee established in § 12.02–18. An approved application is valid for 12 months.

(2) The applicant may apply in person at any Regional Examination Center listed in § 12.01–7 or may renew the merchant mariner's document by mail under paragraph (e)(3) of this section.

(3) The applicant shall submit the original or a photocopy of the merchant mariner's document to be renewed. A photocopy must include the

front and back of the merchant mariner's document. If requested, the old document will be returned to the applicant.

(4) The expiration date of a merchant mariner's document that was issued without an expiration date is determined in accordance with § 12.02–29.

(5) Each applicant shall comply with § 12.02–09(b)(1) of this part.

(b) *Fitness.* No merchant mariner's document will be renewed if it has been suspended without probation or revoked as a result of action under part 5 of this chapter, or facts which would render a renewal improper have come to the attention of the Coast Guard.

(c) *Professional requirements.* (1) In order to renew a merchant mariner's document endorsed with a qualified rating, the applicant shall comply with one of the following:

(i) Present evidence of at least 1 year of sea service during the past 5 years;

(ii) Pass a comprehensive, open-book exercise covering the general subject matter required by this part for the applicable endorsement or pass an open-book license exercise that covers the same subject matter required for the MMD endorsement;

(iii) Complete an approved refresher training course; or,

(iv) Present evidence of employment in a position closely related to the operation, construction, or repair of vessels (either deck or engineer as appropriate for the endorsement) for at least 3 years during the past 5 years.

(2) There are no professional requirements for renewal of a merchant mariner's document that is not endorsed with any qualified ratings.

(d) *Physical requirements.* (1) An applicant for renewal of a merchant mariner's document endorsed with a qualified rating other than lifeboatman, shall submit a certification by a licensed physician or physician assistant that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of that qualified rating(s). This certification must address visual acuity and hearing in addition to general physical condition, and must have been completed within the previous 12 months.

(2) If the Officer in Charge, Marine Inspection has reason to believe that an applicant suffers from some physical impairment or medical condition which would render the applicant incompetent to perform the duties of the qualified rating(s) (other than lifeboatman), the applicant may be required to submit the results of an examination by a licensed physician or physician assistant that meets the requirements for originally obtaining the rating(s).

(3) An applicant who has lost sight in one eye may renew a merchant mariner's document with qualified ratings, provided the applicant is qualified in all other respects and that the visual acuity in the remaining eye passes the test required in § 10.205(d) of this chapter.

(e) *Special circumstances*—(1) *Reissuance after expiration, Period of grace.* Except as provided in this paragraph, a merchant mariner's document may not be renewed more than 12 months after it has expired. To obtain a reissuance of a merchant mariner's document expired more than 12 months, an applicant shall comply with the requirements of paragraph (f) of this section. When an applicant's merchant mariner's document expires during a time of service with the Armed Forces and there is no reasonable opportunity for renewal, including by mail, this 12-month period of grace may be extended. The period of military service following the date of merchant mariner's document expiration which precluded renewal may be added to the 12 month period of grace. The 12 month period of grace, and any extension, do not affect the expiration date of the document. A merchant mariner's document, and any endorsements that it contains, are not valid for use after the expiration date.

(2) *Renewal in advance.* A merchant mariner's document may not be renewed more that 12 months before expiration unless it is being renewed in conjunction with a license or certificate of registry which is either due for renewal or being upgraded, or unless the Officer in Charge, Marine Inspection is satisfied that special circumstances exist to justify renewal.

(3) *Renewal by mail.* (i) Applications for renewal of merchant mariner's documents by mail may be sent to any Coast Guard Regional Examination Center. The following documents must be submitted:

(A) A properly completed application on a Coast Guard furnished form, and the evaluation fee required by § 12.02–18.

(B) The document to be renewed, or, if it has not expired, a photocopy of the document, including the back.

(C) A certification from a licensed physician or physician assistant in accordance with paragraph (d) of this section.

(D) Evidence of, or acceptable substitute for, sea service in accordance with paragraph (c) of this section.

(ii) The open-book exercise, if required, may be administered through the mail.

(4) *Concurrent renewal of merchant mariner's documents, and licenses, or certificates of registry.* An applicant for concurrent renewal of more than one merchant mariner credential shall satisfy the individual renewal requirements and pay the applicable fees required by §§ 12.02–18 and 10.109 of this chapter for each merchant mariner's document, license, or certificate of registry being renewed.

(f) *Reissuance of expired merchant mariner's documents.* (1) Whenever an applicant applies for reissuance of a merchant mariner's document endorsed with qualified rating(s) more than 12 months after expiration, in lieu of the requirements of paragraph (c) of this section the applicant shall demonstrate continued professional knowledge for each qualified rating for which reissuance is sought by completing a course approved for this purpose or, by passing the complete examination for each rating, or by passing the examination for a related license required by § 10.209(f)(1) of this chapter. The fees listed in §§ 12.02–18 and 10.109 apply to these examinations.

(2) A merchant mariner's document without any qualified rating endorsements that has been expired more than 12 months shall be reissued in the same manner as a current merchant mariner's document. There are no additional requirements for reissuing merchant mariner's documents without qualified ratings that have been expired more than 12 months.

(g) *Inactive document renewal.* (1) Applicants for renewal of merchant mariner's documents that are endorsed with qualified ratings, who are unwilling or otherwise unable to meet the requirements of paragraphs (c) or (d) of this section may renew the merchant mariner's document, with the following restrictive endorsement placed on the document: ''Continuity only; service under document prohibited.'' Holders of merchant mariner's documents with this *continuity endorsement* may have the prohibition rescinded at any time by satisfying the renewal requirements in paragraphs (c) and (d) of this section and § 12.02–9(f) of this part.

(2) Applications for renewal of a document with the continuity endorsement must include:

(i) The document to be renewed, or, if it is unexpired, a photocopy of the document including the back and,

(ii) A signed statement from the applicant attesting to an awareness of the restriction to be placed on the renewed document and of the requirements for rescinding the continuity endorsement.

[CGD 91–211, 59 FR 49301, Sept. 27, 1994, as amended by CGD 91–223, 60 FR 4525, Jan. 23, 1995]

§ 12.02–29 Expiration of existing merchant mariner's documents.

The expiration year of a merchant mariner's document issued without an expiration date is calculated by adding 5-year increments to the issuance date of the document, up to the first applicable year falling between 1995 and 1999, inclusive. The day and month of expiration are the same as that of issuance. Table 12.02–29 is provided as an aid for calculating the expiration date of a document issued without an expiration date. A merchant mariner's document is not valid for use after the expiration date calculated under this section, but may be renewed in accordance with the requirements of § 12.02–27.

TABLE 12.02–29.—EXPIRATION OF MERCHANT MARINER'S DOCUMENTS ISSUED WITH NO EXPIRATION DATE [1]

Expiration year				
1999	1998	1997	1996	1995
Issue Year				
1994	1993	1992	1991	1990
1989	1988	1987	1986	1985
1984	1983	1982	1981	1980
1979	1978	1977	1976	1975
1974	1973	1972	1971	1970
1969	1968	1967	1966	1965
1964	1963	1962	1961	1960
1959	1958	1957	1956	1955
1954	1953	1952	1951	1950
1949	1948	1947	1946	1945
1944	1943	1942	1941	1940
1939	1938	1937	.....	.....

[1] Find the year in which the merchant mariner's document was issued (Issue Year), then move up the column to find the Expiration Year. Month and day of expiration correspond to the month and day of issue.

[CGD 91–211, 59 FR 49302, Sept. 27, 1994]

Subpart 12.05—Able Seamen

§12.05–1 Certification required.

(a) Every person employed in a rating as able seaman on any United States vessel requiring certificated able seamen, before signing articles of agreement, shall present to the master, his or her certificate as able seaman (issued in the form of a merchant mariner's document).

(b) No certificate as able seaman is required of any person employed on any tug or towboat on the bays and sounds connected directly with the seas, or on any unrigged vessel except seagoing barges or tank barges.

(c) The following categories of able seaman are established:

(1) Able Seaman—Any Waters, Unlimited.

(2) Able Seaman—Limited.

(3) Able Seaman—Special.

(4) Able Seaman—Special (OSV).

[CGD 80–131, 45 FR 69240, Oct. 20, 1980]

§12.05–3 General requirements.

To qualify for certification as able seaman an applicant must:

(a) Be at least 18 years of age;

(b) Pass the prescribed physical examination;

(c) Meet the sea service or training requirements set forth in this part;

(d) Pass an examination demonstrating ability as an able seaman and lifeboatman; and,

(e) Speak and understand the English language as would be required in performing the general duties of able seaman and during an emergency aboard ship.

[CGD 80–131, 45 FR 69240, Oct. 20, 1980]

§12.05–5 Physical requirements.

(a) All applicants for a certificate of service as able seaman shall be required to pass a physical examination given by a medical officer of the United States Public Health Service and present to the Officer in Charge, Marine Inspection, a certificate executed by the Public Health Service Officer. Such certificate shall attest to the applicant's acuity of vision, color sense, hearing, and general physical condition. In exceptional cases where an applicant would be put to great inconvenience or expense to appear before a medical officer of the United States Public Health Service, the physical examination and certification may be made by any other reputable physician.

(b) The medical examination for an able seaman is the same as for an original license as a deck officer as set forth in §10.02–5 of this subchapter. If the applicant is in possession of an unexpired deck license, the Officer in Charge, Marine Inspection, may waive the requirement for a physical examination.

§12.05–7 Service or training requirements.

(a) The minimum service required to qualify an applicant for the various categories of able seaman is as listed in this paragraph.

(1) Able Seaman—Any Waters, Unlimited. Three years service on deck on vessels operating on the oceans or the Great Lakes.

(2) Able Seaman—Limited. Eighteen months service on deck in vessels of 100 gross tons or over which operate in a service not exclusively confined to the rivers and smaller inland lakes of the United States.

(3) Able Seaman—Special. Twelve months service on deck on vessels operating on the oceans, or the navigable waters of the United States including the Great Lakes.

(4) Able Seaman—Special (OSV). Six months service on deck on vessels operating on the oceans, or the navigable waters of the United States including the Great Lakes.

NOTE: Employment considerations for the various categories of able seaman are contained in § 157.20–15 of this chapter.

(b) Training programs approved by the Director, National Maritime Center, may be substituted for the required periods of service on deck as follows:

(1) A graduate of a school ship may be rated as able seaman upon satisfactory completion of the course of instruction. For this purpose, *school ship* is interpreted to mean an institution which offers a complete course of instruction, including a period of at sea training, in the skills appropriate to the rating of able seaman.

(2) Training programs, other than those classified as a school ship, may be substituted for up to one third of the required service on deck. The service/training ratio for each program is determined by the Director, National Maritime Center, who may allow a maximum of three days on deck service credit for each day of instruction.

(c) A certificate of service as *Able Seaman, Great Lakes—18 months' service*, is considered equivalent to a certificate of service as *Able Seaman—Limited*.

(d) A certificate of service as Able Seaman with the following route, vessel, or time restrictions is considered equivalent to a certificate of service as *Able Seaman—Special*:

(1) *Any waters—12 months.*

(2) *Tugs and towboats—any waters.*

(3) *Bays and sounds—12 months, vessels 500 gross tons or under not carrying passengers.*

(4) *Seagoing barges—12 months.*

(e) An individual holding a certificate of service endorsed as noted in paragraphs (c) or (d) of this section may have his or her merchant mariner's document endorsed with the equivalent category, upon request.

[CGD 80–131, 45 FR 69240, Oct. 20, 1980, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.05–9 Examination and demonstration of ability.

(a) Before an applicant is certified as an able seaman, he or she shall prove to the satisfaction of the Coast Guard by oral or other means of examination, and by actual demonstration, his or her knowledge of seamanship and the ability to carry out effectively all the duties that may be required of an able seaman, including those of a lifeboatman. The applicant shall demonstrate that he or she:

(1) Has been trained in all the operations connected with the launching of lifeboats and liferafts, and in the use of oars;

(2) Is acquainted with the practical handling of boats; and

(3) Is capable of taking command of the boat's crew.

(b) The examination, whether administered orally or by other means, must be conducted only in the English language and must consist of questions regarding:

(1) Lifeboats and liferafts, the names of their essential parts, and a description of the required equipment;

(2) The clearing away, swinging out, and lowering of lifeboats and liferafts, and handling of lifeboats under oars and sails, including questions relative to the proper handling of a boat in a heavy sea;

(3) The operation and functions of commonly used types of davits;

(4) The applicant's knowledge of nautical terms; boxing the compass, either by degrees or points according to his experience; running lights, passing signals, and fog signals for vessels on the high seas, in inland waters, or on the Great Lakes depending upon the waters on which the applicant has had service; and distress signals; and,

(5) The applicant's knowledge of commands in handling the wheel by obeying orders passed to him as *wheelsman*, and knowledge of the use of engineroom telegraph or bell-pull signals.

(c) In the actual demonstration, the applicant shall show his ability by taking command of a boat and directing the operation of clearing away, swinging out, lowering the boat into the water, and acting as coxswain in charge of the boat under oars. He shall

demonstrate his ability to row by actually pulling an oar in the boat. He shall also demonstrate knowledge of the principal knots, bends, splices, and hitches in common use by actually making them.

(c–1) The applicant must demonstrate to the satisfaction of the Officer in Charge, Marine Inspection, his knowledge of pollution laws and regulations, procedures for discharge containment and cleanup, and methods for disposal of sludge and waste material from cargo and fueling operations.

(d) Any person who is in valid possession of a certificate as able seaman endorsed, *any waters—12 months* and who can produce documentary evidence of sufficient service to qualify for a certificate as able seaman endorsed, *any waters—unlimited,* may be issued a new document bearing this endorsement without additional professional examination. The applicant shall surrender for cancellation the document bearing the limited endorsement. No physical examination will be required at the time of this exchange unless it is found that the applicant obviously suffers from some physical or mental infirmity to a degree that in the opinion of the Officer in Charge, Marine Inspection, would render him incompetent to perform the usual duties of an able seaman at sea. If such condition is believed to exist, the applicant shall be required to undergo an examination by a medical officer of the Public Health Service to determine his competency.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 71–161R, 37 FR 28263, Dec. 21, 1972; CGD 94–029, 61 FR 47064, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47064, Sept. 6, 1996, §12.05–9 was amended by revising paragraph (a) and the introductory text of (b), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§12.05–9 Examination and demonstration of ability.

(a) Before an applicant is certified as able seaman, he shall prove to the satisfaction of teh Coast Guard by oral or written examination and by actual demonstration, his knowledge of seamanship and his ability to carry out effectively all the duties that may be required of an able seaman, including those of a lifeboatman. He shall demonstrate that:

(1) He has been trained in all the operations connected with the launching of lifeboats and liferafts and the use of oars and sail;

(2) He is acquainted with the practical handling of the boats themselves; and

(3) He is capable of taking command of a boat's crew.

(b) The oral or written examination shall be conducted only in the English language and shall consist of questions regarding:

* * * * *

§12.05–11 General provisions respecting merchant mariner's documents endorsed 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.

(b) A merchant mariner's document endorsed as able seaman will also be considered a certificate of efficiency as lifeboatman without further endorsement.

(c) This type of document will describe clearly the type of able seaman certificate which it represents, e.g.: able seaman—any waters; able seaman—any waters, 12 months; able seaman—Great Lakes, 18 months; able seaman—on freight vessels, 500 gross tons or less on bays or sounds, and on tugs, towboats, and barges on any waters.

Subpart 12.07—General Requirements for Issuance of Temporary Certificates of Service for Able Seamen on Offshore Supply Vessels

SOURCE: CGD 80–131, 45 FR 69240, Oct. 20, 1980, unless otherwise noted.

§12.07–1 Eligibility.

A person is eligible for a temporary certificate of service as Able Seaman—Special (OSV), for offshore supply vessels if:

(a) Application is made on or before January 6, 1981; and,

(b) The applicant was serving in an equivalent capacity on board an offshore supply vessel as defined by 46 U.S.C. 404–1, on or before January 1, 1979.

§ 12.07–5 Application procedure.

(a) A person may apply for a temporary certificate of service as Able Seaman—Special (OSV), at any Coast Guard Marine Inspection or Marine Safety Office.

(b) Application shall be made upon Coast Guard Form ''Application for Temporary License or Certificate of Service for Crews of Offshore Supply Vessels.''

§ 12.07–7 Service under an acknowledgment of application.

(a) Upon receipt of the completed application, the Officer in Charge, Marine Inspection, issues an *acknowledgment of application* to the applicant. Upon receipt of this acknowledgment, the applicant is deemed to be in compliance with the statutes dealing with certification of merchant marine personnel pending issuance of a temporary certificate or expiration of the acknowledgment of application.

(b) An acknowledgment of application is subject to suspension and revocation on the same grounds and procedures as provided by 46 U.S.C. 239.

(c) An acknowledgment of application shall remain valid until October 7, 1982.

§ 12.07–10 Issuance of temporary certificates of service.

(a) An Officer In Charge, Marine Inspection, may issue temporary certificates of service on or before October 6, 1982 to persons who have applied under § 12.07–5 and meet the requirements of § 12.07–15.

(b) Temporary certificates of service issued under the provisions of this part:

(1) Authorize service only upon offshore supply vessels;

(2) Remain valid for a period of three years from the date of issuance;

(3) May not be raised in grade;

(4) Are not renewable except for replacement occasioned by loss; and,

(5) Are subject to suspension and revocation on the same grounds and procedures as provided by 46 U.S.C. 239.

(c) Authority to issue temporary certificates of service of Able Seaman—Special (OSV), expires on October 7, 1982.

§ 12.07–15 Requirements for temporary certificates of service.

(a) An applicant for a temporary certificate of service as Able Seaman—Special (OSV), must meet the:

(1) Age requirements of § 12.05–3;

(2) Physical requirements of § 12.05–5; and,

(3) The citizenship requirements of § 12.02–13 and § 12.02–14 before such certificate of service shall be issued.

(b) An applicant for a temporary certificate of service shall present to the Officer in Charge, Marine Inspection, letters, discharges, or other official documents certifying the amount and character of sea service, and the names of the vessels on which acquired. The Officer in Charge, Marine Inspection, must be satisfied as to the bona fides of all evidence of sea service or training presented and may reject any evidence not considered to be authentic or which does not sufficiently outline the amount, type and character of service.

(c) The minimum service required to obtain a temporary certificate of service as Able Seaman—Special (OSV) is 95 days service as master, mate or able seaman on board offshore supply vessels.

NOTE: A twelve hour work day is equivalent to one day of the above service requirements. An eight hour work day is equivalent to two thirds of a service day.

(d) Service as master, mate or able seaman on board offshore supply vessels while holding the acknowledgment of application issued in accordance with § 12.07–7 may be utilized to meet the sea service requirements of paragraph (c) of this section.

§ 12.07–20 Possession of temporary certificate of service or acknowledgment of application.

An individual employed in a certificated capacity upon an offshore supply vessel under a valid temporary certificate or acknowledgment of application must have the document in his or her possession and available for examination at all times.

Subpart 12.10—Lifeboatman

§12.10–1 Certification required.

Every person employed in a rating as lifeboatman on any United States vessel requiring certificated lifeboatmen shall produce a certificate as lifeboatman or merchant mariner's document endorsed as lifeboatman or able seaman to the shipping commissioner, United States collector or deputy collector of customs, or master before signing articles of agreement. No certificate of efficiency as lifeboatman is required of any person employed on any unrigged vessel, except on a seagoing barge and on a tank barge navigating waters other than rivers and/or canals.

§12.10–3 Service or training requirements.

(a) An applicant to be eligible for certification as lifeboatman must meet one of the following requirements:

(1) At least 1 year's sea service in the deck department, or at least 2 years' sea service in the other departments of ocean, coastwise, Great Lakes, and other lakes, bays, or sounds vessels.

(2) Graduation from a schoolship approved by and conducted under rules prescribed by the Director, National Maritime Center.

(3) Satisfactory completion of basic training by a Cadet of the United States Merchant Marine Cadet Corps.

(4) Satisfactory completion of 3 years' training at the U.S. Naval Academy or the U.S. Coast Guard Academy including two training cruises.

(5) Satisfactory completion of a course of training approved by the Director, National Maritime Center, and served aboard a training vessel.

(6) Successful completion of a training course approved by the Director, National Maritime Center, such course to include a minimum of 30 hours' actual lifeboat training: *Provided,* That the applicant produces evidence of having served a minimum of 3 months at sea aboard ocean or coastwise vessels.

(b) An applicant, to be eligible for certification as lifeboatman, shall be able to speak and understand the English language as would be required in the rating of lifeboatman and in an emergency aboard ship.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§12.10–5 Examination and demonstration of ability.

(a) Before an applicant is certified as a lifeboatman, he or she shall prove to the satisfaction of the Coast Guard by oral or other means of examination, and by actual demonstration, his or her knowledge of seamanship and the ability to carry out effectively all the duties that may be required of a lifeboatman. The applicant shall demonstrate that he or she:

(1) Has been trained in all the operations connected with the launching of lifeboats and liferafts, and in the use of oars;

(2) Is acquainted with the practical handling of boats; and

(3) Is capable of taking command of the boat's crew.

(b) The examination, whether administered orally or by other means, must be conducted only in the English language and must consist of questions regarding:

(1) Lifeboats and liferafts, the names of their essential parts, and a description of the required equipment;

(2) The clearing away, swinging out, and lowering of lifeboats and liferafts, the handling of lifeboats under oars and sails, including questions relative to the proper handling of a boat in a heavy sea; and,

(3) The operation and functions of commonly used types of davits.

(c) The practical examination shall consist of a demonstration of the applicant's ability to carry out the orders incident to launching lifeboats, and the use of the boat's sail, and to row.

[CGFR 60–50, 30 FR 16640, Dec. 30, 1965, as amended by CGD 71–161R, 37 FR 28263, Dec. 21, 1972; CGD 94–029, 61 FR 47064, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47064, Sept. 6, 1996, §12.10–5 was amended by revising paragraph (a) and the introductory text of (b), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§ 12.05–9 Examination and demonstration of ability.

(a) Before a lifeboatman's certificate may be granted, the applicant must prove to the satisfaction of the Coast Guard by oral or written examination and by actual demonstration that:

(1) He has been trained in all the operations connected with the launching of lifeboats and liferafts and the use of oars and sails;

(2) He is acquainted with the practical handling of boats themselves; and,

(3) He is capable of taking command of a boat's crew.

(b) The oral or written examination shall be conducted only in the English language and shall consist of questions regarding:

* * * * *

§ 12.10–7 General provisions respecting merchant mariner's documents endorsed as lifeboatman.

A merchant mariner's document endorsed as able seaman shall be considered as the equivalent of a certificate as lifeboatman or an endorsement as lifeboatman and it shall be accepted as a certificate as lifeboatman wherever required by law or regulation.

Subpart 12.15—Qualified Member of the Engine Department

§ 12.15–1 Certification required.

(a) Every person employed in a rating as qualified member of the engine department on any United States vessel requiring certificated qualified members of the engine department shall produce a certificate as qualified member of the engine department to the shipping commissioner, United States Collector or Deputy Collector of Customs, or master before signing articles of agreement.

(b) No certificate as qualified member of the engine department is required of any person employed on any unrigged vessel, except seagoing barges.

§ 12.15–3 General requirements.

(a) A qualified member of the engine department is any person below the rating of licensed officer and above the rating of coal passer or wiper, who holds a certificate of service as such qualified member of the engine department issued by the Coast Guard or predecessor authority.

(b) For purposes of administering this part the rating of *assistant electrician* is considered a rating not above that of coal passer or wiper, but equal thereto.

(c) An applicant, to be eligible for certification as qualified member of the engine department, shall be able to speak and understand the English language as would be required in the rating of qualified member of the engine department and in an emergency aboard ship.

§ 12.15–5 Physical requirements.

(a) An applicant for a certificate of service as a qualified member of the engine department shall present a certificate of a medical officer of the United States Public Health Service, or other reputable physician attesting that his eyesight, hearing, and physical condition are such that he can perform the duties required of a qualified member of the engine department.

(b) The medical examination for qualified member of the engine department is the same as for an original license as engineer, as set forth in § 10.02–5 of this subchapter. If the applicant is in possession of an unexpired license, the Officer in Charge, Marine Inspection, may waive the requirement for a physical examination.

(c) An applicant holding a certificate of service for a particular rating as qualified member of the engine department and desiring certification for another rating covered by this same form of certificate may qualify therefor without a physical examination unless the Officer in Charge, Marine Inspection, finds that the applicant obviously suffers from some physical or mental infirmity to a degree that would render him incompetent to perform the ordinary duties of a qualified member of the engine department. In this event the applicant shall be required to undergo an examination to determine his competency.

§ 12.15–7 Service or training requirements.

(a) An applicant for a certificate of service as qualified member of the engine department shall furnish the

Coast Guard proof of qualification based on six months' service in a rating at least equal to that of wiper or coal passer.

(b) Training programs approved by the Director, National Maritime Center, may be substituted for the required service at sea in accordance with the following:

(1) A graduate of a school ship may be rated as qualified member of the engine department upon satisfactory completion of the course of instruction. For this purpose, *school ship* is interpreted to mean an institution which offers a complete course of instruction, including a period of sea training, in the skills appropriate to the rating of qualified member of the engine department.

(2) Training programs other than those classified as a school ship may be substituted for up to one-half of the required service at sea.

[CGD 80–131, 45 FR 69241, Oct. 20, 1980, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.15–9 Examination requirements.

(a) Each applicant for certification as a qualified member of the engine department in the rating of oiler, watertender, fireman, deck engineer, refrigeration engineer, junior engineer, electrician, or machinist shall be examined orally or by other means and only in the English language on the subjects listed in paragraph (b) of this section. The applicant's general knowledge of the subjects must be sufficient to satisfy the examiner that he is qualified to perform the duties of the rating for which he makes application.

(b) List of subjects required:

Subjects	Machinist	Refrigerating engineer	Fireman/Watertender	Oiler	Electrician	Junior engineer	Deck engineer
1. Application, maintenance, and use of hand tools and measuring instruments	X	X	X	X	X	X	X
2. Uses of babbitt, copper, brass, steel, and other metals	X	X	X	X	X	X	X
3. Methods of measuring pipe, pipe fittings, sheet metal, machine bolts and nuts, packing, etc	X	X	X	X	X	X	X
4. Operation and maintenance of mechanical remote control equipment	X	.....	X	X	X	X	X
5. Precautions to be taken for the prevention of fire and the proper use of firefighting equipment	X	X	X	X	X	X	X
6. Principles of mechanical refrigeration; and functions, operation, and maintenance of various machines and parts of the systems	.....	X	.....	X	.....	X	.....
7. Knowledge of piping systems as used in ammonia, freon, and CO_2, including testing for leaks, operation of bypasses, and making up of joints	.....	X	.....	.....	.....	X	.....
8. Safety precautions to be observed in the operation of various refrigerating systems, including storage of refrigerants, and the use of gas masks and firefighting equipment	X	X	X	X	X	X	X
9. Combustion of fuels, proper temperature, pressures, and atomization	.....	.....	X	X	.....	X	.....
10. Operation of the fuel oil system on oil burning boilers, including the transfer and storage of fuel oil	.....	.....	X	X	.....	X	X
11. Hazards involved and the precautions taken against accumulation of oil in furnaces, bilges, floorplates, and tank tops; flarebacks, leaks in fuel oil heaters, clogged strainers and burner tips	X	X	X	X	X	X	.....
12. Precautions necessary when filling empty boilers, starting up the fuel oil burning system, and raising steam from a cold boiler	.....	.....	X	X	.....	X	.....
13. The function, operation, and maintenance of the various engineroom auxiliaries	X	X	X	X	X	X	.....
14. Proper operation of the various types of lubricating systems	X	X	X	X	X	X	X
15. Safety precautions to be observed in connection with the operation of engineroom auxiliaries, electrical machinery, and switchboard equipment	X	X	X	X	X	X	X
16. The function, operation, and maintenance of the bilge, ballast, fire, freshwater, sanitary, and lubricating systems	X	X	X	X	.....	X	X
17. Proper care of spare machine parts and idle equipment	X	X	X	X	X	X	X
18. The procedure in preparing a turbine, reciprocating, or Diesel engine for standby; also the procedure in securing	.....	.....	X	X	.....	X	.....

Subjects	Machinist	Refrigerating engineer	Fireman/Watertender	Oiler	Electrician	Junior engineer	Deck engineer
19. Operation and maintenance of the equipment necessary for the supply of water to boilers, the dangers of high and low water and remedial action	.....	.....	X	X	.....	X	.....
20. Operation, location, and maintenance of the various boiler fittings and accessories	X	.....	X	X	.....	X	.....
21. The practical application and solution of basic electrical calculations (Ohm's law, power formula, etc.)	.....	.....	.....	.....	X	X	X
22. Electrical wiring circuits of the various two-wire and three-wire D.C. systems and the various single-phase and polyphase A.C. systems	.....	.....	.....	.....	X	X	X
23. Application and characteristics of parallel and series circuits	.....	.....	.....	.....	X	X	X
24. Application and maintenance of electrical meters and instruments	.....	.....	.....	.....	X	X	X
25. The maintenance and installation of lighting and power wiring involving testing for, locating and correcting grounds, short circuits and open circuits, and making splices	.....	.....	.....	.....	X	X	X
26. The operation and maintenance of the various types of generators and motors, both A.C. and D.C	.....	.....	.....	.....	X	X	X
27. Operation, installation, and maintenance of the various types of electrical controls and safety devices	.....	.....	.....	.....	X	X	X
28. Testing and maintenance of special electrical equipment, such as telegraphs, telephones, alarm systems, fire-detecting systems, and rudder angle indicators	.....	.....	.....	.....	X	X	.....
29. Rules and Regulations and requirements for installation, repair, and maintenance of electrical wiring and equipment installed aboard ships	.....	.....	.....	.....	X	X	X
29a. Pollution laws and regulations, procedures for discharge containment and cleanup, and methods for disposal of sludge and waste from cargo and fueling operations	X	X	X	X	X	X	.....
30. Such further examination of a nonmathematical character as the Officer in Charge, Marine Inspection, may consider necessary to establish the applicant's proficiency	X	X	X	X	X	X	X

(c) Each applicant for certification as a qualified member of the engine department in the rating of pumpman shall, by oral or other examination, demonstrate sufficient knowledge of the subjects peculiar to that rating to satisfy the Officer in Charge, Marine Inspection, that he or she is qualified to perform the duties of that rating.

(d) Applicants for certification as qualified members of the engine department in the rating of deck engine mechanic or engineman, who have proved eligibility for such endorsement under either § 12.15–13 or § 12.15–15, will not be required to take a written or oral examination for such ratings.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGFR 66–46, 31 FR 13649, Oct. 22, 1966; CGD 71–161R, 37 FR 28263, Dec. 21, 1972; CGD 74–75, 42 FR 24741, May 16, 1977; CGD 94–029, 61 FR 47064, Sept. 6, 1996]

EFFECTIVE DATE NOTE: At 61 FR 47064, Sept. 6, 1996, § 12.15–9 was amended by revising the first sentence of paragraph (a), and paragraph (c), effective October 7, 1996. For the convenience of the reader, the superseded text is set forth as follows:

§ 12.15–9 Examination requirements.

(a) Applicants for certification as qualified members of the engine department in the ratings of oiler, watertender, fireman, deck engineer, refrigerator engineer, junior engineer, electrician, and machinist shall be examined orally or in writing and only in the English language on the subjects listed in paragraph (b) of this section. * * *

* * * * *

(c) Applicants for certification as qualified member of the engine department in the ratings of pumpman shall, by written or oral examination, demonstrate sufficient knowledge of the subjects peculiar to that rating to satisfy the Officer in Charge, Marine Inspection, that they are qualified to perform the duties of the rating.

* * * * *

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

The holder of a merchant mariner's document endorsed with one or more

qualified member of the engine department ratings may serve in any unqualified rating in the engine department without obtaining an additional endorsement. This does not mean that an endorsement of one qualified member of the engine department rating authorizes the holder to serve in all qualified member of the engine department ratings. Each qualified member of the engine department rating for which a holder of a merchant mariner's document is qualified must be endorsed separately. When, however, the applicant qualifies for all ratings covered by a certificate as a qualified member of the engine department, the certification may read *QMED—any rating.* The ratings are as follows:

(a) Refrigerating engineer.
(b) Oiler.
(c) Deck engineer.
(d) Fireman/Watertender.
(e) Junior engineer.
(f) Electrician.
(g) Machinist.
(h) Pumpman.
(i) Deck engine mechanic.
(j) Engineman.

[CGFR 65–50, 30 FR 16640, Dec. 30, 1965, as amended by CGFR 66–46, 31 FR 13649, Oct. 22, 1966; CGD 74–45, 42 FR 24741, May 16, 1977]

§ 12.15–13 Deck engine mechanic.

(a) An applicant for a certificate as *deck engine mechanic* shall be a person holding a merchant mariner's document endorsed as *junior engineer.* The applicant shall be eligible for such certification upon furnishing one of the following:

(1) Presentation of a temporary letter that was issued to the holder to serve as *deck engine mechanic* by an Officer in Charge, Marine Inspection, dated prior to December 1, 1966; or,

(2) Satisfactory documentary evidence of sea service of 6 months in the rating of *junior engineer* on steam vessels of 4,000 horsepower or over; or,

(3) Documentary evidence from an operator of an automated vessel that he has completed satisfactorily at least 4 weeks indoctrination and training in the engine department of an automated steam vessel of 4,000 horsepower or over; or,

(4) Satisfactory completion of a course of training for *deck engine mechanic* acceptable to the Director, National Maritime Center.

(b) The Officer in Charge, Marine Inspection, who is satisfied that an applicant for the rating of *deck engine mechanic* meets the requirements specified in this section, will endorse this rating on the current merchant mariner's document held by the applicant.

(c) Any holder of a merchant mariner's document endorsed for *any unlicensed rating in the engine department* or *QMED—any rating* is qualified as a *deck engine mechanic* and that endorsement will not be entered on his document.

[CGFR 66–46, 31 FR 13649, Oct. 22, 1966, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.15–15 Engineman.

(a) An applicant for a certificate as *engineman* shall be a person holding a merchant mariner's document endorsed as *fireman/watertender* and *oiler,* or *junior engineer.* The applicant shall be eligible for such certification upon furnishing one of the following:

(1) Presentation of a temporary letter that was issued to the holder to serve as *engineman* by an Officer in Charge, Marine Inspection, dated prior to December 1, 1966; or,

(2) Satisfactory documentary evidence of sea service of 6 months in any one or combination of *junior engineer, fireman/watertender* or *oiler* on steam vessels of 4,000 horsepower or over; or,

(3) Documentary evidence from an operator of a *partially automated* steam vessel that he has completed satisfactorily at least 2 weeks indoctrination and training in the engine department of a *partially automated* steam vessel of 4,000 horsepower or over; or

(4) Satisfactory completion of a course of training for *engineman* acceptable to the Director, National Maritime Center.

(b) The Officer in Charge, Marine Inspection, who is satisfied that an applicant for the rating of *engineman* meets the requirements specified in this section, will endorse this rating on the current merchant mariner's document held by the applicant.

(c) Any holder of a merchant mariner's document endorsed for *any unlicensed rating in the engine department,*

QMED—any rating or *deck engine mechanic* is qualified as an *engineman* and that endorsement will not be entered on his document.

[CGFR 66–46, 31 FR 13650, Oct. 22, 1966, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

Subpart 12.17—General Requirements for Issuance of Temporary Certificates of Service for Qualified Members of the Engine Department on Offshore Supply Vessels

SOURCE: CGD 80–131, 45 FR 69241, Oct. 20, 1980, unless otherwise noted.

§ 12.17–1 Eligibility.

A person is eligible for a temporary certificate of service as Qualified Member of the Engine Department for offshore supply vessels if:

(a) Application is made on or before January 6, 1981; and,

(b) The applicant was serving in an equivalent capacity on board an offshore supply vessel as defined by 46 U.S.C. 404–1, on or before January 1, 1979.

§ 12.17–5 Application procedure.

(a) A person may apply for a temporary certificate of service as Qualified Member of the Engine Department at any Coast Guard Marine Inspection or Marine Safety Office.

(b) Application shall be made upon Coast Guard Form ''Application for Temporary License or Certificate of Service for Crews of Offshore Supply Vessels.''

§ 12.17–7 Service under an acknowledgment of application.

(a) Upon receipt of the completed application, the Officer in Charge, Marine Inspection, issues an *acknowledgment of application* to the applicant. Upon receipt of this acknowlegment, the applicant is deemed to be in compliance with the statutes dealing with certification of merchant marine personnel pending issuance of a temporary certificate or expiration of the acknowledgment of application.

(b) An acknowledgment of application is subject to suspension and revocation on the same grounds and procedures as provided by 46 U.S.C. 239.

(c) An acknowledgment of application shall remain valid until October 7, 1982.

§ 12.17–10 Issuance of temporary certificates of service.

(a) An Officer in Charge, Marine Inspection, may issue temporary certificates of service on or before October 6, 1982 to persons who have applied under § 12.17–5 and meet the requirements of § 12.17–15.

(b) Temporary certificates of service issued under the provisions of this part:

(1) Authorize service only upon offshore supply vessels;

(2) Remain valid for a period of three years from the date of issuance;

(3) May not be raised in grade;

(4) Are not renewable except for replacement occasioned by loss; and,

(5) Are subject to suspension and revocation on the same grounds and procedures as provided by 46 U.S.C. 239.

(c) Authority to issue temporary certificates of service of Qualified Member of the Engine Department expires on October 7, 1982.

§ 12.17–15 Requirements for temporary certificates of service.

(a) An applicant for a temporary certificate of service as Qualified Member of the Engine Department must meet the:

(1) Physical requirements of § 12.15–5; and

(2) The citizenship requirements of § 12.02–13 and § 12.02–14 before such certificate of service shall be issued.

(b) An applicant for a temporary certificate of service shall present to the Officer in Charge, Marine Inspection, letters, discharges, or other official documents certifying the amount and character of sea service, and the names of the vessels on which acquired. The Officer in Charge, Marine Inspection, must be satisfied as to the bona fides of all evidence of sea service or training presented and may reject any evidence not considered to be authentic or which does not sufficiently outline the amount, type and character of service.

(c) The minimum service required to obtain a temporary certificate of service as Qualified Member of the Engine Department is 95 days service as chief engineer, assistant engineer or qualified member of the engine department on board offshore supply vessels.

NOTE: A twelve hour work day is equivalent to one day of the above service requirements. An eight hour work day is equivalent to two thirds of a service day.

(d) Service as chief engineer, assistant engineer or qualified member of the engine department on board offshore supply vessels while holding the acknowledgment of application issued in accordance with §12.17–7 may be utilized to meet the sea service requirements of paragraph (c) of this section.

§12.17–20 Possession of temporary certificate of service or acknowledgment of application.

An individual employed in a certificated capacity upon an offshore supply vessel under a valid temporary certificate or acknowledgment of application must have the document in his or her possession and available for examination at all times.

Subpart 12.25—Certificates of Service for Ratings Other Than Able Seaman or Qualified Member of the Engine Department

§12.25–1 Certification required.

(a) Every person employed in a rating other than able seaman or qualified member of the engine department of United States merchant vessels requiring such certificated persons shall produce an appropriate certificate of service or merchant mariner's document to the shipping commissioner, United States Collector or Deputy Collector of Customs, or master, before signing articles of agreement.

(b) No certificate of service shall be required of any person employed on any unrigged vessel, except seagoing barges, or on any sail vessel of less than 500 net tons while not carrying passengers for hire and while not operating outside the line dividing inland waters from the high seas, as defined in section 2 of the act of February 19, 1895, as amended (33 U.S.C. 151) and in 33 CFR part 82.

§12.25–10 General requirements.

(a) Merchant mariner's documents shall be issued without professional examination to applicants for certificates of service as endorsements on merchant mariner's documents in capacities other than able seaman, lifeboatman, tankerman or qualified member of the engine department and shall be endorsed for one or more ratings. For example, *ordinary seaman—wiper—steward's document (F.H.).* Holders of documents endorsed for service as *ordinary seaman* may serve in any unqualified rating in the deck department. Holders of documents endorsed for service as *wiper* may serve in any unqualified rating in the engine department. Documents endorsed for *steward's department (F.H.)* will authorize the holder's service in any capacity in the steward's department. (See §12.02–11(e)(2) for unqualified ratings in the staff department.)

(b) When the holder of a merchant mariner's document has qualified as a food handler, the endorsement of his rating will be followed by the further indorsement *(F.H.).*

§12.25–20 Food handler.

No applicant for a rating authorizing the handling of food will be certificated unless he produces a certificate from a medical officer of the United States Public Health Service, or other reputable physician stating that the applicant is free from communicable disease.

§12.25–25 Members of Merchant Marine Cadet Corps.

No ratings other than cadet (deck) or cadet (engine) as appropriate, and lifeboatman shall be shown on a merchant mariner's document issued to a member of the U.S. Merchant Marine Cadet Corps. The merchant mariner's document shall also be stamped *Valid only while cadet in the U.S. Maritime Administration training program.* The merchant mariner's document thus prepared shall be surrendered upon the holder being certified in any other rating or being issued a license and the rating of cadet (deck) or cadet (engine)

shall be omitted from any new merchant mariner's document issued.

§ 12.25–30 Student observers.

Students in technical schools who are enrolled in courses in marine management and ship operations who present a letter or other documentary evidence that they are so enrolled shall be issued a merchant mariner's document as *student observers—any department* and may be signed on ships as such. Students holding these documents or certificates will not take the place of any of the crew, or fill any of the regular ratings.

§ 12.25–35 Apprentice engineers.

(a) Persons enrolled in an apprentice engineer training program approved by the Director, National Maritime Center, and who present a letter or other documentary evidence that they are so enrolled may be issued a merchant mariner's document as apprentice engineer and may be signed on ships as such. The endorsement apprentice engineer may be in addition to other endorsements. However, this endorsement of apprentice engineer does not authorize the holder to fill any of the regular ratings.

(b) Persons holding merchant mariner's documents with the endorsement apprentice engineer shall be deemed to be seamen under the provisions of title 53 of the Revised Statutes and the regulations in this subchapter.

[CGFR 66–69, 31 FR 15669, Dec. 13, 1966, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 12.25–40 Apprentice mate.

A person enrolled in an apprentice mate training program approved by the Director, National Maritime Center who presents a letter or other documentary evidence that he is so enrolled may be issued a merchant mariner's document as apprentice mate and may be signed on ships as apprentice mate. The endorsement *apprentice mate* may be in addition to other endorsements. However, this endorsement as apprentice mate does not authorize the holder to fill any of the regular ratings.

[CGD 74–226, 40 FR 33976, Aug. 13, 1975, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

PART 13—CERTIFICATION OF TANKERMEN

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AUTHORITY: 46 U.S.C. 3703, 7317, 8105, 8703, 9102; 49 CFR 1.46.

SOURCE: CGD 79–116, 60 FR 17142, Apr. 4, 1995, unless otherwise noted.

Subpart A—General

§13.101 Purpose.

This part describes the various tankerman endorsements issued by the Coast Guard and prescribes the requirements for obtaining an endorsement as a "Tankerman-PIC," "Tankerman-PIC (Barge)," "Tankerman-Assistant," or "Tankerman-Engineer" to a merchant mariner's document.

§13.103 Definitions.

As used in this part:

Cargo engineer means a licensed person on a dangerous-liquid tankship or a liquefied-gas tankship whose primary responsibility is maintaining the cargo system and cargo-handling equipment.

Competent person means a person designated as such in accordance with 29 CFR 1915.7.

Dangerous liquid means a liquid listed in 46 CFR 153.40 that is not a liquefied gas as defined in this part. Liquid cargoes in bulk listed in 46 CFR Part 153, Table 2, are not dangerous-liquid cargoes when carried by non-oceangoing barges.

DL means dangerous liquid.

IMO means the International Maritime Organization.

Liquefied gas means a cargo that has a vapor pressure of 172 kPa (25 psia) or more at 37.8 C (100 F).

LG means liquefied gas.

Liquid cargo in bulk means a liquid or liquefied gas listed in 46 CFR 153.40 and carried as a liquid cargo or liquid-cargo residue in integral, fixed, or portable tanks.

Marine chemist means a person certificated by the National Fire Protection Association.

MMD means a merchant mariner's document issued by the Coast Guard.

Participation, when used with regard to the service on transfers required for tankerman by §13.120, 13.203, or 13.303, means either actual participation in the transfers or close observation of how the transfers are conducted and supervised.

PIC means a person in charge.

Restricted Tankerman endorsement means a valid tankerman endorsement to an MMD restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.

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

Tank barge means a non-self-propelled tank vessel.

Tank vessel means a vessel constructed or adapted to carry, or a vessel that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankerman-Assistant means a person holding a valid "Tankerman-Assistant" endorsement to his or her MMD.

Tankerman-Engineer means a person holding a valid "Tankerman-Engineer" endorsement to his or her MMD.

Tankerman-PIC means a person holding a valid "Tankerman-PIC" endorsement to his or her MMD.

Tankerman-PIC (Barge) means a person holding a valid "Tankerman-PIC (Barge)" endorsement to his or her MMD.

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as

cargo or as cargo residue and propelled by power or sail.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement. Section 13.127 describes what qualifies as participation in a creditable transfer.

§ 13.105 Paperwork approval.

(a) This section lists the control numbers assigned by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980 [Pub. L. 96–511] for the reporting and recordkeeping requirements in this part.

(b) OMB has assigned the following control numbers to the sections indicated:

(1) OMB 2115–0514—46 CFR 13.113, 13.115, 13.117, 13.201, 13.203, 13.205, 13.301, 13.303, 13.305, 13.401, 13.403, 13.405, 13.501, 13.503, 13.505.

(2) OMB 2115–0111—46 CFR 13.121, 13.207, 13.209, 13.307, 13.309, 13.407, 13.409, 13.507, 13.509.

§ 13.107 Tankerman endorsement: General.

(a) If an applicant meets the requirements of subpart B of this part, the Officer in Charge, Marine Inspection (OCMI), at a Regional Examination Center (REC) may endorse his or her MMD as ''Tankerman-PIC'' with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(a) may act as a PIC of transfers of liquid cargo in bulk on either tankships or tank barges.

(b) If an applicant meets the requirements of Subpart C of this part, the OCMI may endorse his or her MMD as ''Tankerman-PIC (Barge)'' with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(b) may act as a PIC of transfers of liquid cargo in bulk only on tank barges.

(c) If an applicant meets the requirements of subpart D of this part, the OCMI may endorse his or her MMD as ''Tankerman-Assistant'' with the appropriate cargo classification or classifications. No person holding this endorsement may act as a PIC of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing service as PIC. He or she may, however, perform duties relative to cargo and cargo-handling equipment assigned by the PIC of transfers of liquid cargo in bulk without being under the direct supervision of the PIC. When performing these duties, he or she shall maintain continuous two-way voice communications with the PIC.

(d) If an applicant meets the requirements of subpart E of this part, the OCMI may endorse his or her MMD as ''Tankerman-Engineer.'' No person holding this endorsement may act as a PIC or ''Tankerman-Assistant'' of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing such service. A person holding this endorsement and acting in this capacity has the primary responsibility on tank vessels carrying dangerous liquids and liquefied gases for maintaining the cargo systems and equipment for transfer of liquids in bulk aboard and for bunkering. No person licensed under part 10 of this chapter may serve as a chief engineer, first assistant engineer, or cargo engineer aboard an inspected tankship when liquid cargo in bulk or cargo residue is carried unless he or she holds this endorsement.

(e) If an applicant meets the requirements of § 13.111 of this part, the OCMI may endorse his or her MMD as a ''Tankerman-PIC'' with a specific restriction or restrictions. A person holding this endorsement may act as Tankerman-PIC or Tankerman-PIC (Barge) for specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.

(f) A tankerman wishing to obtain an endorsement that he or she does not hold shall apply at an REC listed in § 10.105 of this chapter. If he or she meets all requirements for the new endorsement, the REC may issue a new MMD including the endorsement.

§ 13.109 Tankerman endorsement: Authorized cargoes.

(a) Each tankerman endorsement described in § 13.107 will expressly limit

the holder's service under it to transfers involving one or both of the following cargo classifications:

(1) Dangerous liquid (DL).

(2) Liquefied gas (LG).

(b) No tankerman endorsement is necessary to transfer the liquid cargoes in bulk listed in Table 2 of Part 153 of this chapter when those cargoes are carried on barges not certified for ocean service.

(c) A tankerman having qualified in one cargo classification and wishing to qualify in another shall apply at an REC listed in §10.105 of this chapter. If he or she meets all requirements for the other, the REC may issue a new MMD including the endorsement.

§13.111 Restricted endorsement.

(a) An applicant may apply at an REC listed in 46 CFR 10.105 for a tankerman endorsement restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like. The OCMI will evaluate each application and may modify the applicable requirements for the endorsement, making allowance for special circumstances and for whichever restrictions the endorsement will state.

(b) To qualify for a restricted ''Tankerman-PIC'' endorsement, an applicant shall meet §13.201, excluding paragraph (f).

(c) To qualify for a restricted ''Tankerman-PIC (Barge)'' endorsement, an applicant shall meet §13.301, excluding paragraph (f).

(d) To qualify for a restricted ''Tankerman-PIC (Barge)'' endorsement restricted to a tank-cleaning and gas-freeing facility, an applicant shall—

(1) Be at least 18 years old;

(2) Apply on a Coast Guard form;

(3) Present evidence of passing a physical examination in accordance with §13.125;

(4) Present evidence in the form of a letter on company letterhead from the operator of the facility stating that OSHA considers the applicant a ''competent person'' for the facility and that the applicant has the knowledge necessary to supervise tank-cleaning and gas-freeing; and

(5) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

(e) The restricted ''Tankerman-PIC (Barge)'' endorsement restricted to a tank-cleaning and gas-freeing facility is valid only while the applicant is employed by the operator of the facility that provided the letter of service required by paragraph (d)(4) of this section, and this and any other appropriate restrictions will appear in the endorsement.

§13.113 Tankerman certified under prior regulations.

(a) A person who holds a license issued under part 10 of this chapter, and who as a PIC transferred liquid cargoes in bulk before March 31, 1996, may continue to serve as a ''Tankerman-PIC'' under the license until the first renewal of his or her MMD under 12.02–27 of this chapter that occurs after March 31, 1997, as follows:

(1) A person holding a current license issued under part 10 of this chapter may act as a ''Tankerman-PIC'' if he or she can produce a letter on company letterhead from the owner, operator, master, or chief engineer of the vessel that proves his or her qualifying service as required by paragraph (d)(1)(iii) of this section.

(2) A person that cannot produce a letter to prove his or her qualifying service may submit relevant evidence to an REC for evaluation. If the OCMI determines that the person does qualify under paragraph (a) of this section, the OCMI will issue a letter of acknowledgment as a substitute for a letter of service.

(b) A person who holds a current ''Tankerman'' endorsement issued before March 31, 1996, may continue to serve as a Tankerman-PIC (Barge) until the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997. If a person with such an endorsement qualifies for a non-tankerman endorsement that requires a new MMD, he or she may bring the tankerman endorsement forward onto the new MMD.

(c) A person who served as PIC for the transfer of liquid cargoes in bulk listed in subchapter O but who did not require a tankerman endorsement, because they were non-flammable or non-combustible liquids, may act as a ''Tankerman-PIC (Barge)'' for those liquid cargoes until March 31, 2001, if he or she produces a letter—on company letterhead, from the owner or operator of a terminal or of a tank barge or from the owner, operator, or master of a tankship that proves his or her qualifying service as required by paragraph (e)(1)(iii) of this section.

(d) A person that qualifies under paragraph (a) of this section by holding a current license may apply for a ''Tankerman-PIC'' endorsement under this subpart.

(1) To qualify for a ''Tankerman-PIC'' endorsement, a licensed officer shall present—

(i) A certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', or a certificate of completion from a firefighting course before March 31, 1996, that the OCMI finds in substantial compliance with that section;

(ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI finds acceptable under §§ 13.121(e) (1) and (2), appropriate to the endorsement applied for; and

(iii) Evidence of service as follows:

(A) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant—

(*1*) Acted as the PIC of the transfer of DL or LG, appropriate to the endorsement applied for, on tankships before March 31, 1996, and has so acted within five years of the date of application; or

(*2*) Served at least 30 days as a master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so acted within five years of the date of application; or

(B) Certificates of Discharge proving at least 30 days of service as master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

(2) To qualify for a restricted ''Tankerman-PIC'' endorsement, based on his or her cargo-handling experience for the grades handled, an applicant shall meet paragraphs (d)(1) (i) and (iii) of this section.

(e) A person who qualifies under paragraph (b) of this section by holding a current ''Tankerman'' endorsement or under paragraph (c) of this section by having served as PIC for the transfer of liquid cargoes in bulk that are listed in subchapter O but that did not require a tankerman endorsement may apply for a ''Tankerman-PIC (Barge)'' endorsement under this subpart.

(1) To qualify for a ''Tankerman-PIC (Barge)'' endorsement, an applicant shall present—

(i) Evidence of training in firefighting in the form of—

(A) A certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', or a certificate of completion from such a course before March 31, 1996, that the OCMI finds in substantial compliance with that section;

(B) A certificate of completion from a training course meeting § 13.121 in tank-barge firefighting or a certificate of completion from a course in tank-barge firefighting before March 31, 1996, that the OCMI finds in substantial compliance with § 13.121; or

(C) A letter on company letterhead from the owner, operator, master, or chief engineer attesting that before March 31, 1996, the applicant received training in awareness of flammability hazards and in firefighting through a program, lecture, or seminar that included hands-on firefighting that the OCMI finds in substantial compliance with § 13.121;

(ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for,

or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI determines substantially covers the material required by Table 13.121(f); and

(iii) Evidence of service on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant acted as the PIC of the transfer for DL or LG, appropriate to the endorsement applied for on tank vessels, before March 31, 1996, and has so acted within five years of the date of application.

(2) To qualify for a restricted ''Tankerman-PIC (Barge)'' endorsement, based on his or her cargo-handling experience for the grades handled, an applicant shall meet all the requirements of paragraphs (e)(1) (i) and (iii) of this section.

(f) Each person qualifying under this section shall obtain a tankerman endorsement at the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997.

(g) The following table relates the experience and training to the endorsement for tankerman certified under prior regulations. The section numbers on the table refer to the specific requirements applicable.

TABLE 13.113.—TANKERMAN CERTIFIED UNDER PRIOR REGULATIONS

Before effective date served as—	Service after effective date but before permanent endorsement:	Requirements for permanent endorsement to an MMD:	Requirements for RESTRICTED endorsement to an MMD:
Licensed Officer	May serve as: §13.113(a) Tankerman-PIC.	Tankerman-PIC §13.113(d)(1)	Tankerman-PIC §13.113(d)(2).
	Limitations: None ..... Allowed until: First renewal of MMD.	Service: Service letter from company rep as PIC of DL or LG cargo transfer, or 30 days' service as master or mate on tankships carrying DL or LG..	Service: Service letter from company rep as PIC of DL or LG cargo transfer, or 30 days' service as master or mate on tankships carrying DL or LG.
	Service documentation: Service letter from company rep.	Courses: Liquid-cargo course in the appropriate cargo grade, & Firefighting.	Course: Firefighting course.
MMD with a Tankerman's endorsement.	May serve as: §13.113(b) Tankerman-PIC (Barge).	Tankerman-PIC (Barge) §13.113(e)(1).	Tankerman-PIC (Barge) §13.113(e)(2).
	Limitations: Grade of cargo on existing MMD. Until: First renewal of MMD	Service: Service letter from company rep as Service letter PIC of DL or LG cargo transfer.	Service: Service letter from company rep as PIC of DL or LG cargo transfer.
	Documentation: None	Courses: Liquid-cargo course in the appropriate cargo grade, & Tank-barge firefighting.	Course: Tank-barge firefighting.
PIC-Subchapter O Non-flammable and Non-combustible.	May serve as: §13.113(c) Tankerman-PIC (Barge).	Tankerman-PIC (Barge) §13.113(e)(1).	Tankerman-PIC (Barge) §13.113(e)(2).
	Limited to: Subchapter-O products previously transferred. Until: 5 years after effective date.	Service: Service letter from company rep as PIC of DL or LG cargo transfer.	Service: Service letter from company rep as PIC of DL or LG cargo transfer
	Documentation: Service letter from company rep as PIC.	Courses: Liquid-cargo course in the appropriate cargo Tank-barge firefighting.	Course: Tank-barge firefighting.

§13.115 Licensed engineer: Endorsement as Tankerman-Engineer based on service on tankships before March 31, 1996.

A licensed person with service as chief, first assistant, or cargo engineer on at least one tankship before March 31, 1996, may, at any time until the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997, apply for a ''Tankerman-Engineer'' endorsement under this subpart if he or she presents either—

(a) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant served at least 30 days as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31,

1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of service as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§ 13.117 Any person: Endorsement as Tankerman-Assistant based on unlicensed deck service before March 31, 1996.

A person with unlicensed deck service on tankships before March 31, 1996, may, at any time until the first renewal of his or her MMD under § 12.02–27 of this chapter that occurs after March 31, 1997, apply for a ''Tankerman-Assistant'' endorsement under this subpart if the applicant presents either—

(a) A letter on company letterhead from the owner, operator, or master of the vessel attesting that the applicant served at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§ 13.119 Expiration of endorsement.

An endorsement as tankerman is valid for the duration of the MMD.

§ 13.120 Renewal of endorsement.

An applicant wishing to renew a tankerman's endorsement shall meet the requirements of § 12.02–27 of this chapter for renewing an MMD and provide evidence of participation in at least two transfers during the past five years in accordance with § 13.127(b) or of completion of an approved course.

§ 13.121 Courses for training tankerman.

(a) This section prescribes the requirements, beyond those in §§ 10.203 and 10.303 of this chapter, applicable to schools offering courses required for a tankerman endorsement and courses that are a substitute for experience with transfers of liquid cargo in bulk required for the endorsement.

(b) Upon satisfactory completion of an approved course, each student shall receive a certificate, signed by the head of the school offering the course or by a designated representative, indicating the title of the course, the duration, and, if appropriate, credit allowed towards meeting the transfer requirements of this part.

(c) A course that uses simulated transfers to train students in loading and discharging tank vessels may replace a specific number of the transfers required for a ''Tankerman-PIC'' or ''Tankerman-PIC (Barge)'' endorsement. The letter from the Coast Guard approving the course will state the number and kind of transfers the course replaces.

(d) The course in liquid cargo required for an endorsement as—

(1) ''Tankerman-PIC DL'' is Tankship: Dangerous Liquids;

(2) ''Tankerman-PIC (Barge) DL'' is Tank Barge: Dangerous Liquids;

(3) ''Tankerman-PIC LG'' is Tankship: Liquefied Gases; and

(4) ''Tankerman-PIC (Barge) LG'' is Tank Barge: Liquefied Gases.

(e) The course in firefighting required for an endorsement as—

(1) ''Tankerman-PIC (Barge)'' is Tank Barge: Firefighting; and

(2) ''Tankerman-PIC'', ''Tankerman-Assistant'', and ''Tankerman-Engineer'' is a firefighting course that meets the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting''.

(f) No school may issue a certificate unless the student has successfully completed an approved course with the appropriate curriculum outlined in Table 13.121(f).

(g) An organization with a course in DL or LG or a course in tank-barge firefighting taught before March 31, 1996, that substantially covered the material required by Table 13.121(f) for liquid cargoes and by Table 13.121(g) for firefighting may seek approval under § 10.302 of this chapter from the Coast

Guard for any course taught up to ten years before March 31, 1996.

TABLE 13.121(F)

Course topics	1	2	3	4
General characteristics, compatibility, reaction, firefighting procedures, and safety precautions for the cargoes of:				
Bulk liquids defined as Dangerous Liquids in 46 CFR Part 13.	x	x	.....	
Bulk liquefied gases & their vapors defined as Liquefied Gases in 46 CFR Part 13.	.....	.....	x	x
Physical phenomena of liquefied gas, including:				
Basic concept	.....	.....	x	x
Compression & expansion	.....	.....	x	x
Mechanism of heat transfer	.....	.....	x	x
Potential hazards of liquefied gas, including:				
Chemical & physical properties	.....	.....	x	x
Combustion characteristics	.....	.....	x	x
Results of gas release to the atmosphere	.....	.....	x	x
Health hazards (skin contact, inhalation, & ingestion)	.....	.....	x	x
Control of flammability range with inert gas	.....	.....	x	x
Thermal stress in structure & piping of vessel	.....	.....	x	x
Cargo systems, including:				
Principles of containment systems	x	x	x	x
Construction, materials, coatings, & insulation of cargo tanks.	x	x	x	x
General arrangement of cargo tanks	x	x	x	x
Venting & vapor-control systems	x	x	x	x
Cargo-handling systems, including:				
Piping systems, valves, pumps, & expansion systems	x	x	x	x
Operating characteristics	x	x	x	x
Instrumentation systems, including:				
Cargo-level indicators	x	x	x	x
Gas-detecting systems	x	x	x	x
Temperature-monitoring systems, cargo	x	x	x	x
Temperature-monitoring systems, hull	x	x	x	x
Automatic-shutdown systems	x	x	x	x
Auxiliary systems, including:				
Ventilation, inerting	x	x	x	x
Valves, including:				
Quick-closing	x	x	x	x
Remote-control	x	x	x	x
Pneumatic	x	x	x	x
Excess-flow	x	x	x	x
Safety-relief	x	x	x	x
Pressure-vacuum	x	x	x	x
Heating-systems: cofferdams & ballast tanks			x	x
Operations connected with loading & discharging of cargo, including:				
Lining up of cargo system and vapor-control system	x	x	x	x
Pre-transfer inspections	x	x	x	x
Pre-transfer conference and completion of the Declaration of Inspection.	x	x	x	x
Hooking up of cargo hose, loading arms, and grounding-strap.	x	x	x	x
Starting of liquid flow	x	x	x	x
Calculation of loading rates	x	x	x	x
Monitoring of loading rates	x	x	x	x
Discussion of loading	x	x	x	x
Ballasting & deballasting	x	x	x	x
Topping off of cargo tanks	x	x	x	x
Discussion of discharging	x	x	x	x
Stripping of cargo tanks	x	x	x	x
Monitoring of transfers	x	x	x	x
Gauging of cargo tanks	x	x	x	x
Disconnecting of cargo hoses or loading arms	x	x	x	x
Operating procedures & sequence for:				
Inerting of cargo tanks & void spaces	x	x	x	x
Cooldown & warmup of cargo tanks			x	x
Gas-freeing	x	x	x	x
Loaded or ballasted voyages	x	x	x	x
Testing of cargo-tank atmospheres for oxygen & cargo vapor.	x	x	x	x
Load plan, stability, & stress connected with:				
Loading of cargo	x	x	x	x

TABLE 13.121(F)—Continued

Course topics	1	2	3	4
Discharging of cargo	x	x	x	x
Ballasting & deballasting	x		x	
Loadline, draft, & trim	x	x	x	x
Disposal of boil-off, including:				
System design			x	x
Safety features			x	x
Stability-letter requirements	x	x	x	x
Rules (for tank barge & tankship, both international & Federal) pertaining to operational procedures & pollution prevention.	x	x	x	x
Pollution prevention, including:				
Procedures to prevent air & water pollution	x	x	x	x
Measures to take in event of spillage	x	x	x	x
Danger from drift of vapor cloud	x	x	x	x
Emergency procedures for the following, including notice to appropriate authorities:				
Fire	x	x	x	x
Collision	x	x	x	x
Grounding	x	x	x	x
Equipment failure	x	x	x	x
Leaks & spills	x	x	x	x
Structural failure	x	x	x	x
Emergency discharge of cargo	x	x	x	x
Entering of cargo tanks	x	x	x	x
Emergency shutdown of cargo-handling	x	x	x	x
Emergency systems for closing cargo tanks	x	x	x	x
Safety precautions relative to:				
Dangers of skin contact	x	x		
Inhalation of vapors	x	x		
Electricity & static electricity: hazards & precautions	x	x		
Terminology of tankships for oil & chemicals	x			
Terminology of tank barges for oil & chemicals	x	x		
Terminology of tankships for liquefied gases			x	
Terminology of tank barges for liquefied gases			x	
Principles & procedures of Crude-Oil-Washing (COW) systems, including:				
Purpose	x	x		
Equipment & design	x	x		
Operations	x	x		
Safety precautions	x	x		
Maintenance of plant & equipment	x	x		
Principles & procedures of Inert-Gas Systems (IGS), including:				
Purpose	x	x	x	
Equipment & design	x	x	x	
Operations	x	x	x	
Safety precautions	x	x	x	
Maintenance of plant & equipment	x	x	x	
Cargo-tank cleaning: procuredures & precautions.	x	x		
Principles & procedures of vapor-control recovery systems, including:				
Purpose	x	x	x	x
Principles	x	x	x	x
Components	x	x	x	x
Hazards	x	x	x	x
Coast Guard regulations	x	x	x	x
Operating procedures, including:				
Testing & inspection requirements	x	x	x	x
Pre-transfer procedures	x	x	x	x
Connecting sequence	x	x	x	x
Start-up procedures	x	x	x	x
Normal operations	x	x	x	x
Emergency procedures, including notice of release	x	x	x	x
Information systems on hazards of cargo	x	x	x	x
Safe entry into confined spaces, including:				
Definitions & hazards of confined spaces	x	x	x	x
Evaluation & assessment of risks & hazards	x	x	x	x
Safety precautions & procedures	x	x	x	x
Personal protective equipment (PPE)	x	x	x	x
Maintenance of PPE	x	x	x	x
Emergency procedures	x	x	x	x
Federal regulations, national standards, & industry guidelines.	x	x	x	x

TABLE 13.121(F)—Continued

Course topics	1	2	3	4
Inspections by marine chemists & competent persons, including hot-work permits & procedures.	x	x	x	x
Vessel Response Plans:				
Purpose, content, & location of information	x	x	x	x
Procedures for notice & mitigation of spills	x	x	x	x
Geographic-specific appendices	x	x	x	x
Vessel-specific appendices	x	x	x	x
Emergency-action checklist	x	x	x	x

(1) Tankerman-PIC DL.
(2) Tankerman-PIC (Barge) DL.
(3) Tankerman-PIC LG.
(4) Tankerman-PIC (Barge) LG.

TABLE 13.121(g)

Course topics	1	2
Elements of fire (Fire triangle):		
Fuel	X	X
Source of ignition	X	X
Oxygen	X	X
Ignition sources (general):		
Chemical		X
Biological		X
Physical		X
Ignition sources applicable to barges	X	
Definitions of flammability and combustibility:		
Flammability		X
Ignition point	X	X
Burning temperature	X	X
Burning speed		X
Thermal value		X
Lower flammable limit	X	X
Upper flammable limit	X	X
Flammable range	X	X
Inerting	X	X
Static electricity	X	X
Flash point	X	X
Auto-ignition	X	X
Spread of fire:		
By radiation	X	X
By convection	X	X
By conduction	X	X
Reactivity	X	X
Fire classifications and applicable extinguishing agents	X	X
Main causes of fires:		
Oil leakage	X	X
Smoking	X	X
Overheating pumps	X	X
Galley appliances		X
Spontaneous ignition	X	X
Hot work	X	X
Electrical apparatus		X
Reaction, self-heating, and auto-ignition		X
Fire prevention:		
General	X	X
Fire hazards of DL and LG	X	
Fire detection:		
Fire- and smoke-detection systems		X
Automatic fire alarms		X
Firefighting equipment:		
Fire mains, hydrants		X
International shore-connection		X
Smothering-installations, carbon dioxide (CO_2), foam...		X
Halogenated hydrocarbons		X
Pressure-water spray system in special-category spaces		X
Automatic sprinkler system		X
Emergency fire pump, emergency generator		X
Chemical-powder applicants		X
General outline of required and mobile apparatus		X
Fireman's outfit, personal equipment		X
Breathing apparatus		X

TABLE 13.121(g)—Continued

Course topics	1	2
Resuscitation apparatus		X
Smoke helmet or mask		X
Fireproof life-line and harness		X
Fire hose, nozzles, connections, and fire axes		X
Fire blankets		X
Portable fire extinguishers	X	X
Limitations of portable and semiportable extinguishers	X	
Emergency procedures:		
Arrangements:		
Escape routes	X	X
Means of gas-freeing tanks	X	X
Class A, B, and C divisions		X
Inert-gas system		X
Ship firefighting organization:		
General alarms		X
Fire-control plans, muster stations, and duties		X
Communications		X
Periodic shipboard drills		X
Patrol system		X
Basic firefighting techniques:		
Sounding alarm	X	X
Locating and isolating fires	X	X
Stopping leakage of cargo	X	
Jettisoning		X
Inhibiting		X
Cooling		X
Smothering		X
Sizing up situation	X	
Locating information on cargo	X	
Extinguishing		X
Extinguishing with portable units	X	
Setting reflash watch	X	X
Using additional personnel	X	
Firefighting extinguishing-agents:		
Water (solid jet, spray, fog, and flooding)		X
Foam (high, medium and low expansion)		X
Carbon dioxide (CO_2)	X	X
Halon		X
Aqueous-film-forming foam (AFFF)		X
Dry chemicals	X	X
Use of extinguisher on:		
Flammable and combustible liquids	X	
Manifold-flange fire	X	
Drip-pan fire	X	
Pump fire	X	
Drills for typical fires on barges	X	
Field exercises:		
Extinguish small fires using portable extinguishers:		
Electrical	X	X
Manifold-flange	X	X
Drip-pan	X	X
Pump	X	X
Use self-contained breathing apparatus		X
Extinguish extensive fires with water		X
Extinguish fires with foam, or chemical		X
Fight fire in smoke-filled enclosed space wearing SCBA		X
Extinguish fire with water fog in an enclosed space with heavy smoke		X
Extinguish oil fire with fog applicator and spray nozzles, dry-chemical, or foam applicators		X
Effect a rescue in a smoke-filled space while wearing breathing apparatus		X

(1) Course in tank-barge firefighting.
(2) From the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting''.

§ 13.123 Recency of service or experience for original tankerman endorsement.

An applicant for an original tankerman endorsement in subpart B, C, D, or E of this part shall have obtained at least 25% of the qualifying service and, if the endorsement requires transfers, at least two of the qualifying transfers, within five years of the date of application.

§13.125 Physical requirements.

Each applicant for an original tankerman endorsement shall meet the physical requirements of §10.205(d) of this chapter, excluding paragraph (d)(2) of that section.

§13.127 Service requirements: General.

(a) A service letter must specify—

(1) The classification of cargo (DL, LG, or, for a restricted endorsement, a specific product) handled while the applicant accumulated the service;

(2) The dates, the number and kinds of transfers the applicant has participated in, and the number of transfers that involved commencement or completion; and

(3) That the applicant has demonstrated to the satisfaction of the signer that he or she is fully capable of supervising transfers of liquid cargo, including

(i) Pre-transfer inspection;

(ii) Pre-transfer conference and execution of the Declaration of Inspection;

(iii) Connection of cargo hoses or loading-arms;

(iv) Line-up of the cargo system for loading and discharge;

(v) Start of liquid flow during loading;

(vi) Start of cargo pump and increase of pressure to normal discharge pressure;

(vii) Calculation of loading-rates;

(viii) Monitoring;

(ix) Topping-off of cargo tanks during loading;

(x) Stripping of cargo tanks;

(xi) Ballasting and deballasting, if appropriate;

(xii) Disconnection of the cargo hoses or loading-arms; and

(xiii) Securing of cargo systems.

(b) In determining the numbers and kinds of transfers that the applicant has participated in under paragraph (a)(2) of this section, the following rules apply:

(1) A transfer must involve the loading or discharge from at least one of the vessel's cargo tanks to or from a shore facility or another vessel. A shift of cargo from one tank to another tank is not a transfer for this purpose.

(2) Regardless of how long the transfer lasts beyond four hours, it counts as only one transfer.

(3) A transfer must include both a commencement and a completion.

(4) Regardless of how many tanks or products are being loaded or discharged at the same time, a person may receive credit for only one transfer, one loading, and one discharge a watch.

(5) Credit for a transfer during a watch of less than four hours accrues only if the watch includes either the connection and the commencement of transfer or the completion of transfer and the disconnection.

(6) Credit for a commencement of loading accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the cargo system for the loading, the start of liquid flow, and the calculation of loading-rates.

(7) Credit for a commencement of discharge accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the cargo system for the discharge, the start of the cargo pump or pumps and increase of pressure to normal pressure for discharge, and the monitoring of discharge rates.

(8) Credit for a completion of transfer, whether loading or discharge, accrues only if the applicant participates in the topping-off at the loading port, or in the stripping of cargo tanks and the commencement of ballasting, if required by the vessel's transfer procedures, at the discharge port.

§13.129 Quick-reference table for tankerman.

Table 13.129 provides a guide to the requirements for various tankerman endorsements. Provisions in the reference sections are controlling.

TABLE 13.129

Category	Minimum age	Physical required	Service	Recency of service	Proof of service	Firefighting certificate	Course	English language
Tankerman PIC Subpart B.	18: 13.201(a) ..	Yes: 13.125	Yes: 13.203, 30 days licensed or 60 days unlicensed and 10 cargo transfers.	Yes: 13.123, 25% of service, 2 transfers within 5 yrs.	Yes: 13.205, Letter.	Yes: 13.207, Basic F/F*.	Yes: 13.209, DL or LG.	Yes: 13.201(g).
Tankerman PIC (Barge) Subpart C.	18: 13.301(a) ..	Yes: 13.125	Yes: 13.303, 60 days on T/Vs or 6 months on T/Bs and 10 cargo transfers.	Yes: 13.123, 25% of service, 2 transfers within 5 yrs.	Yes: 13.305, Letter.	Yes: 13.307, Basic F/F* or Tank-barge F/F.	Yes: 13.309, DL or LG.	Yes: 13.301(g).
Tankerman Assistant Subpart D.	18: 13.401(a) ..	Yes: 13.125	Yes: 13.403, 90 days on tankships or attend a cargo course.	Yes: 13.123, 25% of service, within 5 yrs.	Yes: 13.405, Letter.	Yes: 13.407, Basic F/F*.	Yes: 13.409, Cargo course or 90 days service.	Yes: 13.401(f).
Tankerman Engineer Subpart E.	18: 13.501(a) ..	Yes: 13.125	Yes: 13.503, 90 days licensed or 30 days licensed and completion of a DL or LG course or 60 days unlicensed and completion of a DL or LG course.	Yes: 13.123, 25% of service, within 5 yrs.	Yes: 13.505, Letter.	Yes: 13.507, Basic F/F*.	Yes: 13.509, Cargo course or service requirements.	Yes: 13.501(g).
Restricted Tankerman PIC.	18: 13.111(b) ..	Yes: 13.111(b) ...	Yes: 13.111(b), 30 days licensed or 60 days unlicensed and 10 cargo transfers.	Yes: 13.111(b), 25% of service, 2 transfers within 5 yrs.	Yes: 3.111(b), Letter.	Yes: 13.111(b), Basic F/F*.	No	Yes: 13.111(b).
Restricted Tankerman PIC (Barge).	18: 13.111(c) ...	Yes: 13.111(c) ...	Yes: 13.111(c), 60 days on T/Vs or 6 months on T/Bs and 10 cargo transfers.	Yes: 13.111(c), 25% of service, 2 transfers within 5 yrs.	Yes: 13.111(c), Letter.	Yes: 13.111(c), Basic F/F* or Tank-barge F/F.	No	Yes: 13.111(c).

Restricted Tankerman PIC (Barge) facility.	18: 13.111(d) ..	Yes: 13.111(d) ...	Yes: 13.111(d)(4), ''Competent Person'' and knowledge of tank-cleaning, gas-freeing.	No	Yes: 13.111(d), Letter.	No	No	Yes: 13.111(d).

*From the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting''.

Subpart B—Requirements for "Tankerman-PIC" Endorsement

§ 13.201 Original application for "Tankerman-PIC" endorsement.

Each applicant for an original ''Tankerman-PIC'' endorsement shall—

(a) Be at least 18 years old;

(b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with § 13.125;

(d) Present evidence of service on tankships in accordance with § 13.203;

(e) Meet the requirement of a course on firefighting in § 13.207;

(f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in § 13.209; and

(g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§ 13.203 Eligibility requirements: Experience.

Each applicant for a ''Tankerman-PIC'' endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

(a) Each applicant shall present evidence of—

(1) At least 30 days of service as a licensed deck officer or a licensed engineering officer on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for;

(2) At least 60 days of unlicensed service on deck or in the engine department on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for; or

(3) A mixture of licensed and unlicensed service on deck or in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for equivalent to 30 days of licensed service, every 2 days of unlicensed service counting as 1 day of licensed service.

(b) Each applicant shall present evidence of participation, under the supervision of a ''Tankerman-PIC,'' in at least ten transfers of liquid cargo in bulk of the classification desired on tankships, including at least—

(1) Five loadings and five discharges;

(2) Two commencements of loading and two completions of loading; and

(3) Two commencements of discharge and two completions of discharge.

(c) Each applicant already holding an MMD endorsed ''Tankerman-PIC'' for DL and seeking an endorsement for LG, or the converse, shall—

(1) Provide evidence of at least half the service required by paragraph (a) of this section; and

(2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§ 13.205 Proof of service for "Tankerman-PIC" endorsement.

Service must be proved by a letter on company letterhead from the owner, operator, or master of the vessel on which the applicant obtained the service. The letter must contain the information described in § 13.127(a).

§ 13.207 Eligibility requirements: Firefighting course.

Each applicant for an original ''Tankerman-PIC'' endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement.

§ 13.209 Eligibility requirements: Cargo course.

Each applicant for an original ''Tankerman-PIC'' endorsement shall present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart C—Requirements for "Tankerman-PIC (Barge)" Endorsement

§13.301 Original application for "Tankerman-PIC (Barge)" endorsement.

Each applicant for a ''Tankerman-PIC (Barge)'' endorsement shall—

(a) Be at least 18 years old;

(b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with §13.125;

(d) Present evidence of service on tank vessels in accordance with §13.303;

(e) Meet the requirement of a firefighting course in §13.307;

(f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.309; and

(g) Be capable of speaking, and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§13.303 Eligibility requirements: Experience.

Each applicant for a ''Tankerman-PIC (Barge)'' endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

(a) Each applicant shall present evidence of—

(1) At least 60 days of service on one or more tank vessels certified to carry DL or LG appropriate to the endorsement applied for; or

(2) At least 6 months of closely related service directly involved with tank barges appropriate to the endorsement applied for; and

(b) Participation, under the supervision of a ''Tankerman-PIC'' or ''Tankerman-PIC (Barge),'' in at least ten transfers of liquid cargo in bulk of the classification desired on tankships or tank barges, including at least—

(1) Five loadings and five discharges;

(2) Two commencements of loading and two completions of loading; and

(3) Two commencements of discharge and two completions of discharge.

(c) Each applicant already holding an MMD endorsed ''Tankerman-PIC (Barge)'' for DL and seeking an endorsement for LG, or the converse, shall—

(1) Provide evidence of at least half the service required by paragraph (a) of this section; and

(2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§13.305 Proof of service for "Tankerman-PIC (Barge)" endorsement.

Service must be proved by a letter on company letterhead from a terminal owner or operator; a tank barge owner or operator; or the owner, operator, or master of a tankship. The letter must contain the information required by §13.127(a), excluding paragraph (a)(3)(vii).

§13.307 Eligibility requirements: Firefighting course.

Each applicant for a ''Tankerman-PIC (Barge)'' endorsement shall present a certificate of successful completion from—

(a) A course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement;

(b) A course in tank-barge firefighting, approved by the Commandant and meeting §13.121, completed within five years of the date of application for the endorsement.

§13.309 Eligibility requirements: Cargo course.

Each applicant for an original ''Tankerman-PIC (Barge)'' endorsement shall present a certificate of completion from a course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart D—Requirements for "Tankerman-Assistant" Endorsement

§ 13.401 Original application for "Tankerman-Assistant" endorsement.

Each applicant for a ''Tankerman-Assistant'' endorsement shall—

(a) Be at least 18 years old;

(b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with § 13.125;

(d) Meet the requirement of a firefighting course in § 13.407;

(e) (1) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in § 13.409; or

(2) Present evidence of service on tankships in accordance with § 13.403; and

(f) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§ 13.403 Eligibility requirements: Experience.

(a) Each applicant for a ''Tankerman-Assistant'' endorsement shall present—

(1) Evidence of at least 90 days of deck service on tankships certified to carry DL or LG appropriate to the endorsement applied for; or

(2) A certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed in § 13.409.

(b) Each applicant already holding an MMD endorsed ''Tankerman-Assistant'' for DL and seeking one for LG, or the converse, shall—

(1) Provide evidence of at least half the service required in paragraph (a)(1) of this section; or

(2) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for as prescribed in § 13.409.

§ 13.405 Proof of service for "Tankerman-Assistant" endorsement.

(a) Service must be proved by a letter on company letterhead from the owner, operator, or master of a tankship. The letter must specify—

(1) The classification of cargo (DL or LG) carried while the applicant accumulated the service;

(2) The number of days of deck service the applicant accumulated on the tankship; and

(3) That the applicant has demonstrated an understanding of cargo transfer and a sense of responsibility that, in the opinion of the signer, will allow the applicant to safely carry out duties respecting cargo transfer and transfer equipment assigned by the PIC of the transfer without direct supervision by the PIC; or

(b) Service must be proved by—

(1) Certificates of Discharge from tankships with the appropriate classification of cargo (DL, LG, or both); and

(2) A letter on company letterhead from the owner, operator, or master of one of the tankships stating that he or she has demonstrated—

(i) An understanding of cargo transfer; and

(ii) A sense of responsibility that, in the opinion of the signer, will allow him or her to safely carry out duties respecting cargo and its equipment assigned by the PIC of the transfer without direct supervision by the PIC.

§ 13.407 Eligibility requirements: Firefighting course.

Each applicant for a ''Tankerman-Assistant'' endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate from one of these courses for a license or endorsement.

§ 13.409 Eligibility requirements: Cargo course.

Each applicant for an original ''Tankerman-Assistant'' endorsement that has not presented the required service on tankships must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for,

within two years of the date of application.

Subpart E—Requirements for "Tankerman-Engineer" Endorsement

§13.501 Original application for "Tankerman-Engineer" endorsement.

Each applicant for a ''Tankerman-Engineer'' endorsement shall—

(a) Be at least 18 years old;

(b) Apply on a Coast Guard form;

(c) Present evidence of passing a physical examination in accordance with §13.125;

(d) Present evidence of service on tankships in accordance with §13.503;

(e) Meet the requirement of a firefighting course in §13.507;

(f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.509; and

(g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§13.503 Eligibility requirements: Experience.

(a) Each applicant for a ''Tankerman-Engineer'' endorsement shall present evidence of at least—

(1) 90 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for;

(2) 30 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a); or

(3) 60 days of unlicensed service in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a).

(b) Each applicant already holding an MMD endorsed ''Tankerman-Engineer'' for DL and seeking one for LG, or the converse, shall provide evidence of at least half the service required by—

(1) Paragraph (a)(1) of this section; or

(2) Paragraph (a)(2) or (3) of this section, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a).

§13.505 Proof of service for "Tankerman-Engineer" endorsement.

(a) Service must be proved by a letter on company letterhead from the owner, operator, or master or chief engineer of a tankship. The letter must specify—

(1) The classification of cargo (DL, LG, or both) carried while the applicant accumulated the service; and

(2) The number of days of licensed and unlicensed service in the engine department on tankships; or

(b) Service must be proved by certificates of discharge from tankships with the appropriate classification of cargo (DL, LG, or both).

§13.507 Eligibility requirements: Firefighting course.

Each applicant for a ''Tankerman-Engineer'' endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), ''Training of Crews in Fire Fighting'', completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or tankerman endorsement.

§13.509 Eligibility requirements: Cargo course.

Each applicant for an original ''Tankerman-Engineer'' endorsement that has not presented service prescribed by §13.503(a)(1) must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

PART 14—SHIPMENT AND DISCHARGE OF SEAMEN

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SOURCE: 44 FR 70155, Dec. 6, 1979, unless otherwise noted.

Subpart 14.01—General

§ 14.01–1 Purpose of part.

This part prescribes rules for the shipment and discharge of seamen on certain United States vessels.

§ 14.01–3 Coast Guard address.

Each form or report required in this part to be submitted to the Commandant shall be forwarded to: Director, National Maritime Center (NMC).

[44 FR 70155, Dec. 6, 1979, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§ 14.01–5 Foreign or intercoastal voyages upon which shipping articles are required.

(a) Prior to proceeding on any foreign or intercoastal voyage listed in this section, or the engagement of replacement or additional seamen for such a voyage, the master shall make an agreement (shipping articles) in writing with each seaman. The articles shall be signed by the master and each seaman so engaged.

(b) Except as provided in § 14.01–7, shipping articles are required for the following voyages and vessels:

(1) A voyage by a United States vessel from a port in the United States to any foreign port other than ports in the following areas:

(i) British North American possessions.

(ii) West India Islands.

(iii) Republic of Mexico.

(2) A voyage by a United States vessel of 75 gross tons or upward between a United States port on the Atlantic and a United States port on the Pacific, or vice versa.

NOTE: The provisions of R.S. 4520 (46 U.S.C. 574), require the master of any United States vessel of 50 gross tons or upward, bound from a port in one state to a port in any other than an adjoining state, to make an agreement (shipping articles) with every seaman engaged.

§ 14.01–7 Voyages upon which shipping articles are not required.

(a) Shipping articles are not required but may be utilized for the following classes of vessels:

(1) Vessels engaged exclusively in fishing or whaling.

(2) Yachts.

(3) Vessels upon which the seamen are by custom or agreement entitled to participate in the profits or results of a cruise or voyage.

Subpart 14.05—Shipping Articles

§ 14.05–1 Form of shipping articles.

(a) The form and content of shipping articles for foreign or intercoastal voyages are generally controlled by R.S. 4511 (46 U.S.C. 564), R.S. 4512 (46 U.S.C. 565), and R.S. 4612 (46 U.S.C. 713, Tables A and B).

(b) The Coast Guard Officer in Charge, Marine Inspection will, as a matter of convenience, supply form CG–705A (shipping articles) upon request. Form CG–705A is considered to comply with the requirements of the statutes noted in paragraph (a) of this section. Any other form of shipping articles complying with the requirements of the statutes noted in paragraph (a) may be utilized.

NOTE: Detailed instructions for the completion of form CG–705A are contained in Navigation and Vessel Inspection Circular #8–79, which may be obtained at any Coast Guard Marine Inspection or Safety Office.

§ 14.05–2 Posting copy of shipping articles.

(a) At the commencement of a foreign or intercoastal voyage the master shall ensure a legible copy of the shipping articles, omitting signatures (Forecastle Card), is posted at a place accessible to the crew. Form CG–704 or equivalent may be utilized for this purpose.

§ 14.05–3 Preparation of shipping articles.

(a) Shipping articles for foreign or intercoastal voyages shall be made out in duplicate. The original shall be retained by the master, who shall enter therein any changes made in the crew during the voyage.

§ 14.05–5 Production of documents by seamen signing shipping articles.

(a) At the time of engagement, each seaman shall present to the master any certificate or license as may be required by law for the service to be performed.

§ 14.05–7 Paying off seamen during foreign or intercoastal voyage.

(a) In case of the paying off of any members of the crew during a foreign or intercoastal voyage, each seaman shall sign the release on the original of the shipping articles. In a foreign port, where a United States consul is available, the release shall be executed by the master and seaman before the consul or his representative. In a foreign port where a United States consul is not available, the release need be executed only by the master and seaman.

§ 14.05–10 Reporting shipment and discharge of seamen.

(a) The master of each merchant vessel of one hundred gross tons or upward, shall report the employment, discharge or termination of the service of every seaman in the manner provided in this section. Reports need not be submitted by masters' of the following vessels:

(1) Vessels employed exclusively in trade on the navigable rivers of the United States.

(2) Fishing and whaling vessels.

(3) Yachts.

(4) Ferries and tugs used in ferry operations if such ferries and tugs are employed exclusively in trade on the Great Lakes, lakes (other than the Great Lakes), bays, sounds, bayous, canals, and harbors, and are not engaged on international voyages.

(5) Unrigged vessels other than seagoing barges.

(b) When a vessel is engaged on a foreign or intercoastal voyage, the master shall submit a Form CG–735–T to the Commandant prior to sailing and upon completion of the voyage. At the option of the master, a copy of the vessel's shipping articles may be submitted to the Commandant in lieu of Form CG–735–T. When utilized, Form CG–735–T shall contain the names, as well as the other information required by the form, of the master and each member of the crew shipped or discharged. During the term of the voyage the master shall submit supplementary reports on Form CG–735–T listing the names, as well as the other information required by the form, of each seaman engaged, discharged, or whose services have been otherwise terminated.

(c) When a vessel is engaged on a coastwise voyage not specifically covered by paragraph (d) or (e) of this section, the master shall, prior to sailing, submit to the Commandant a Form CG–735–T listing the names, as well as other information required by the form, with the exception of the date and place of discharge, of the master and of each member of the crew shipped. Thereafter, at the end of each calendar month, the master shall submit a supplementary report on Form CG–735–T listing the name, as well as the other information required by the form, of each seaman engaged, discharged, or whose services were otherwise terminated since the previous submission of the form. When the voyage is completed the master shall submit a final report to the Commandant on Form CG–735–T.

(d) When a vessel is employed exclusively on bays or sounds, the master shall submit a Form CG–735–T, on the last day of each calendar month, listing the name, as well as the other information required by the form, of each seaman employed, discharged, or whose services were otherwise terminated during the month.

(e) When a vessel is employed exclusively on the Great Lakes, the master shall submit a Form CG–735–T at the commencement of the season, or when the vessel is put into service, lising the names, as well as the other information required by the form, with the exception of date and place of discharge, of each member of the crew. Thereafter, at the end of each calendar month, the master shall submit a supplementary report on Form CG–735–T listing the names, as well as the other information required by the form, of each seaman whose employment was terminated during the month and who was not reengaged on the vessel's next trip, and each seaman engaged during the month who was not also employed on the vessel in the same capacity on her last trip preceding the engagement. At the close of the season, or when the vessel is withdrawn from service, the master shall submit a final report to the Commandant on Form CG–735–T containing the information required by the form, concerning each seaman who has not been previously reported as discharged.

(f) Every discharge entry made on a Form CG–735–T shall agree exactly with the corresponding entry made in a Continuous Discharge Book (Form CG–719), the Record of Entry in Continuous Discharge Book (Form CG–718E), or on the certificate of Discharge to Merchant Seaman (Form CG–718A) issued to a seaman. Each record of entry or copy of the discharge shall be attached to Form CG–735–T on which discharges are reported.

(g) Any master who fails to comply with the requirements of this section is subject to a penalty of $500.

§ 14.05–15 Completing entries in shipping articles at completion of voyage.

(a) At the completion of a foreign or intercoastal voyage, when the crew is paid off, the release on the shipping articles shall be signed by all members of the crew.

(b) All entries made in continuous discharge books during the voyage, and all entries made in certificates of discharge issued during the voyage to seamen holding merchant mariner's documents shall be duplicated on the shipping articles.

Subpart 14.10—Discharging Seamen

§ 14.10–1 Entries in continuous discharge book.

(a) Upon the discharge of any seaman who holds a Continuous Discharge Book (Form CG–719), and the payment of wages, the master shall complete the required entries in the book.

(b) The master making the entries in the Continuous Discharge Book shall also prepare a Record of Entry in Continuous Discharge Book (Form CG–718E).

(c) The completed Form CG–718E shall be signed by the seaman in whose Continuous Discharge Book the original entry was made and by the master.

(d) All entries in a Continuous Discharge Book (Form CG–719) shall be made in black ink. All entries on Form CG–718E shall be made with a typewriter or an indelible pencil.

(e) The original copy of completed Form CG–718E shall be submitted to the Commandant. The duplicate copy of completed Form CG–718E may be retained by the master issuing such record of entry.

§14.10–5 Entries in certificate of discharge to merchant seaman.

(a) Upon the discharge of any seaman who holds a merchant mariner's document issued by the Coast Guard, and payment of wages, the master shall issue to the seaman a Certificate of Discharge to Merchant Seaman (Form CG–718A).

(b) The completed Form CG–718A shall be signed by the seaman to who it is issued and by the master of the vessel. The signatures shall be made with an indelible pencil before the issuance of the original copy to the seaman.

(c) All entries on Certificates of Discharge to Merchant Seaman (Form CG–718A) shall be made with a typewriter or an indelible pencil.

(d) The original completed Form CG–718A shall be issued to the seaman who signs the certificate. The yellow copy of the completed Form CG–718A may be retained by the master issuing such discharge. The white copy of completed Form CG–718A shall be submitted to the Commandant.

§14.10–7 Issuance of certificate of character upon discharge of seaman.

(a) Upon the discharge of each seaman from a vessel engaged on a voyage listed in §14.01–5(b), the master shall make and sign in the official logbook, and on the articles should such an entry be called for, a report of the conduct, character and qualifications of the person discharged; or may state as the report that he declines to give any opinion.

§14.10–10 Discharging a seaman in a foreign port.

(a) Upon the discharge of any seaman in a foreign port the master shall make the required entries on the ship's articles and Form CG–718A or Form CG–718E, as appropriate. All entries shall be attested to by a U.S. Consular Officer in ports where such an officer is available.

§14.10–15 Certificate of discharge issued pending issuance of duplicate continuous discharge book.

(a) When a seaman's continuous discharge book has been lost, pending the issuance of a duplicate, the master shall furnish the seaman with a Certificate of Discharge to Merchant Seaman (Form CG–718A) at the completion of a voyage, and this fact shall be noted on the articles. The white copy of the certificate of discharge shall be forwarded to the Commandant.

§14.10–20 Discharge of seamen in special cases.

(a) Section 16 of the Act of December 21, 1898 (30 Stat. 759), amended in part R.S. 4581 (46 U.S.C. 683), relating to the discharge of seamen by consuls, to read:

> If a seaman is discharged on account of injury or illness, incapacitating him for service, the expenses of his maintenance and return to the United States shall be paid from the fund for the maintenance and transportation of destitute American seamen.

(b) Section 19 of the Seamen's Act of March 4, 1915 (38 Stat. 1185; 46 U.S.C. 683), adds to these words the following:

> *Provided:* That at the discretion of the Commandant of the Coast Guard and under such regulations as he may prescribe, if any seaman incapacitated from service by injury or illness is on board a vessel so situated that a prompt discharge requiring the personal appearance of the master of the vessel before a United States consul or consular agent is impracticable, such seaman may be sent to a consul or consular agent, who shall care for him and defray the cost of his maintenance and transportation, as provided in this paragraph.

(c) The personal appearance of the master of the vessel before a United States consul or consular agent to consent to the discharge of a seaman who has been incapacitated by injury or illness may be waived by the consul under the following conditions:

(1) When the condition of the injured or ill seaman is such that prompt medical attention is necessary and cannot be furnished on shipboard, and

(2) When the master cannot proceed with the seaman to the consul without risk to the crew, the vessel, or the cargo.

(d) When the master cannot appear before the consul in person the master shall address to the consul in writing a full statement of the facts which render necessary the discharge of the seaman, together with a statement of the reasons why the master is unable to appear before the consul. The statement should cover the usual particulars set forth in a discharge and should be accompanied with an account of the wages due with the necessary funds to meet such wages, or (if the cash is not available) with an order to the owner for the amount due.

(e) If the consul shall deem the statement satisfactory, the seaman may be discharged as directed in R.S. 4581, as amended by section 16 of the Act of December 21, 1898, and section 19 of the Act of March 4, 1915, as if the master were present, attaching to the discharge and to the consul's relief account a copy of the statement submitted by the master.

(f) If the consul shall deem the statement unsatisfactory, and the condition of the seaman permits, the consul may decline to grant the discharge and direct that the seaman be returned to the vessel at its expense.

(g) When the condition of the injured or ill seaman is such that the seaman is incapable of completing the release for discharge at the time of removal from the vessel, the master shall complete the master's portion of the Mutual Release (Form CG–713A) and place the form with the seaman.

(1) If the seaman possesses a continuous discharge book, the master shall make the proper entries in the book and on the ship's articles and complete Form CG–718E. Form CG–718E shall be retained by the master until the termination of the voyage, at which time it shall be delivered to the vessel's owner or agent along with the shipping articles. Upon completion and presentation of the Mutual Release (Form CG–713A) to the vessel's owner or agent, the seaman shall receive all wages due. Form CG–718E shall then be signed by the seaman and the original copy forwarded to the Commandant. At this time a notation of the completion of the release should be made on the shipping articles and Form CG–713A attached thereto.

(2) If the seaman possesses a merchant mariner's document, the master shall complete a certificate of discharge on Form CG–718A, and make the proper entries on the ship's articles. Form CG–718A shall be retained by the master until the termination of the voyage, at which time it shall be delivered to the vessel's owner or agent along with the shipping articles. Upon completion and presentation of the Mutual Release (Form CG–713A) to the vessel's owner or agent, the seaman shall receive all wages due. Form CG–718A shall then be signed by the seaman and the original given to him. The white copy of Form CG–718A shall be forwarded to the Commandant. At this time a notation of the completion of the release should be made on the shipping articles and Form CG–713A attached thereto.

Subpart 14.15—Disclosure of Information Regarding Shipments and Discharges of Merchant Mariners

§ 14.15–1 Availability of information to the public.

The Coast Guard makes information available to the public in accordance with 49 CFR part 7.

Subpart 14.20—Special Provisions for Oceanographic Research Vessels

SOURCE: CGD 77–081, 46 FR 56203, Nov. 16, 1981, unless otherwise noted.

§ 14.20–1 General.

Unless otherwise provided in this subpart, the provisions of title 53 of the Revised Statutes governing the employment of merchant seamen, and any acts amending or supplementing it, remain applicable to oceanographic research vessels.

§ 14.20–5 Procedures.

(a) Oceanographic research vessels, designated in accordance with § 3.10–1 of this title may be exempted from certain provisions of title 53 of the Revised Statutes governing the employment of merchant seamen upon written request by the master, owner or agent

of the vessel to the Officer in Charge, Marine Inspection, in whose zone the vessel is located.

(b) The request should contain:

(1) A list of the exemptions set forth in § 14.20–10(b) which the applicant wishes to invoke.

(2) An outline of business practices relating to the shipment, discharge, payment, and outfitting of personnel that would justify the granting of those exemptions.

(c) The Officer in Charge, Marine Inspection, shall forward the exemption request, along with a recommendation, to the Commandant, who will determine whether it shall be granted. Any exemptions granted shall be indicated by letter issued by the Officer in Charge, Marine Inspection. The letter shall be maintained on board the vessel.

(d) In the event of a change in operating conditions, the owner, master, or agent of the vessel shall advise the local Officer in Charge, Marine Inspection. The Officer in Charge, Marine Inspection, shall forward pertinent information concerning the operational changes, along with a recommendation, to the Commandant, who shall determine if the vessel is still eligible to retain its exemptions.

§ 14.20–10 Exemptions.

(a) Certain requirements contained in title 53 of the Revised Statutes are not relevant to the employment of seamen on oceanographic research vessels. These requirements are those concerned with the shipment and discharge of seamen, pay and allotment, and the furnishing of adequate clothing. Section 445 of title 46 U.S.C., provides the authority for exempting oceanographic research vessels from certain provisions of title 53, upon such terms and conditions as may be deemed necessary. The exemptions listed in this subpart are subject to the terms and conditions that are specified below:

(1) The use of any exemption does not in any manner relieve the owner, charterer or master of other statutory responsibilities for the protection of seamen.

(2) The master agrees to receive, consider, and accord appropriate action to the legitimate complaint of any seaman which is presented in a reasonable manner and at a reasonable time.

(3) If an exemption is contingent upon the use of alternate procedures, the crew shall be informed of the alternate procedures.

(4) If an exemption is contingent upon the use of alternate procedures, it may be terminated if the alternate procedures are not followed.

(b) Exemptions from the following provisions of title 53 may be made for oceanographic research vessels that have marine crews employed by a firm, association, corporation, educational or research institution, or governmental body or agency, which operates such vessels as a normal part of its educational or oceanographic activities. Employment on these vessels must be of a permanent nature, rather than for a particular voyage or voyages, and must be subject to the same practices, including method of payment, tenure and employee benefits, as generally applied to other employees of the employer.

(1) 46 U.S.C. 564 Shipping Articles.

(2) 46 U.S.C. 565 Rules for Shipping Articles.

(3) 46 U.S.C. 570 Shipping Seamen in Foreign Ports.

(4) 46 U.S.C. 574 Shipping Articles for Vessels in the Coasting Trade.

(5) 46 U.S.C. 575 Penalty for Shipping without Articles.

(6) 46 U.S.C. 576 Penalty for Omitting to Begin Voyage.

(7) 46 U.S.C. 577 Posting Copies of Agreement.

(8) 46 U.S.C. 596 Time for Payment. (Provided the owner or charterer of the vessel, in the use of a pay system, follows a normal and generally accepted business or governmental practice.)

(9) 46 U.S.C. 597 Payment at Ports.

(10) 46 U.S.C. 599 Advance and allotments.

(11) 46 U.S.C. 641 Mode.

(12) 46 U.S.C. 642 Accounting as to wages.

(13) 46 U.S.C. 643(d) Entry in continuous discharge book and certificate of identification—Entries.

(14) 46 U.S.C. 643(e) Certificate of Discharge; issuance; form and contents. (Provided that upon request, a seaman shall be furnished a certified record of

his or her sea service by the owner, charterer or master of the vessel.)

(15) 46 U.S.C. 643(1) Report by master of employment or discharge of seaman not shipped or discharged before Coast Guard official. (Provided the master submits a report under § 14.20–15.)

(16) 46 U.S.C. 644 Rules for settlement.

(17) 46 U.S.C. 669 Clothing and heat. (May be exempted with respect to clothing. However, the master of the vessel shall ensure that each seaman is adequately outfitted for the voyage, particularly those seamen whose duties require them to be exposed to inclement weather.)

(18) 46 U.S.C. 670 Slop chests. (Provided the master of the vessel determines that each seaman is adequately outfitted and has sufficient personal supplies for the voyage.)

(19) 46 U.S.C. 682 Wages on discharge. (Provided that the owner, charterer or master of the vessel, in the use of a pay system, follows a normal and generally accepted business or governmental practice.)

§ 14.20–15 Reports required.

(a) The master of every oceanographic research vessel of 100 gross tons or more required to execute a shipping agreement shall submit a completed ''Master's Report of Seamen Shipped or Discharged'' (form CG–735T) reporting the employment, discharge, or termination of services of every seaman serving in the crew at least every six months. These reports will provide for orderly central record keeping by the Coast Guard of sea service and other matters for seamen attached to oceanographic research vessels.

(b) At the option of the master, a copy of the vessel's shipping articles, if utilized, may be submitted to the Commandant in lieu of Form CG–735T.

(c) Every discharge entry made on a Form CG–735T or shipping articles must agree exactly with the corresponding entry made in a continuous discharge book or on a certificate of discharge, or other proof of sea service furnished a seaman.

(d) Copies of records or reports that are required to be furnished to the Coast Guard shall be mailed or delivered to the Director, National Maritime Center (NMC).

[44 FR 70155, Dec. 6, 1979, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

PART 15—MANNING REQUIREMENTS

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SOURCE: CGD 81–059, 52 FR 38652, Oct. 16, 1987, unless otherwise noted.

Subpart A—Purpose and Applicability

§15.101 Purpose of regulations.

The purpose of the regulations in this part is to set forth uniform minimum requirements for the manning of vessels. In general, they implement, interpret, or apply the specific statutory manning requirements in title 46, U.S.C., parts E & F, implement various international conventions which affect merchant marine personnel, and provide the means for establishing the complement necessary for safe operation of vessels.

§15.103 General.

(a) The regulations in this part apply to all vessels which are subject to the manning requirements contained in the navigation and shipping laws of the United States, including uninspected vessels (46 U.S.C. 7101–9308).

(b) The navigation and shipping laws state that a vessel may not be operated unless certain manning requirements are met. In addition to establishing a minimum of licensed individuals and members of the crew to be carried on board certain vessels, they establish minimum qualifications concerning licenses, citizenship, and conditions of employment. It is the responsibility of the owner, charterer, managing operator, master, or person in charge or command of the vessel to ensure that appropriate personnel are carried to meet the requirements of the applicable navigation and shipping laws and regulations.

(c) Inspected vessels are issued a certificate of inspection which indicates the minimum complement of licensed individuals and crew (including lifeboatmen) considered necessary for safe operation. The certificate of inspection complements the statutory requirements but does not supersede them.

Subpart B—Definition of Terms

§15.301 Definitions of terms used in this part.

(a) The following terms defined in this subpart apply only to the manning of vessels subject to the manning provisions in the navigation and shipping laws of the United States:

Assistance Towing means towing a disabled vessel for consideration.

Coastwise seagoing vessel means a vessel that is authorized by its Certificate of Inspection to proceed beyond the Boundary Line established in part 7 of this chapter.

Deck crew (excluding licensed individuals) means, as used in 46 U.S.C. 8702, only the following members of the deck department below the grade of licensed individual: Able seamen and ordinary seamen.

Designated areas means those areas within pilotage waters for which first class pilot's licenses or endorsements are issued under part 10, subpart G, of this Chapter, by the Officer in Charge, Marine Inspection (OCMI). The areas for which first class pilot's licenses or endorsements are issued within a particular Marine Inspection Zone and the specific requirements to obtain them may be obtained from the OCMI concerned.

Officer in Charge, Marine Inspection (OCMI) for the purposes of part 15

means any person designated as such by the Commandant and who under the Coast Guard District Commander is in charge of an inspection zone.

Pilotage waters means the navigable waters of the United States, including all inland waters and offshore waters to a distance of three nautical miles from the baseline from which the Territorial Sea is measured.

Staff officer means a person who holds a certificate of registry in the staff department such as a purser, a medical doctor or professional nurse, which is issued by the Coast Guard.

Self-Propelled has the same meaning as the terms propelled by *machinery* and mechanically propelled. This term would also include vessels fitted with both sails and mechanical propulsion.

Tank barge means a non-self-propelled tank vessel.

Tank vessel means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as cargo or cargo residue and propelled by power or sail.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement. Section 13.127 of this chapter describes what qualifies as participation in a creditable transfer.

(b) The following categories of licensed individuals are established in part 10 of this chapter. When used in this part, the following terms mean an individual holding a valid license and/or endorsement to serve in that capacity issued under part 10 of this chapter.

(1) Master;

(2) Mate;

(3) Pilot;

(4) Engineer;

(5) Radio officer;

(6) Operator of uninspected towing vessels;

(7) Operator of uninspected passenger vessels.

(8) Offshore installation manager (OIM);

(9) Barge supervisor (BS);

(10) Ballast control operator (BCO).

(c) The following ratings are established in part 12 of this chapter. When used in this part, terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

(1) Able seaman.

(2) Ordinary seaman.

(3) Qualified member of the engine department.

(4) Lifeboatman.

(5) Wiper.

(6) Steward's department (F.H.).

(d) The following ratings are established in part 13 of this chapter. When used in this part, the terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

(1) Tankerman-PIC.

(2) Tankerman-PIC (Barge).

(3) Restricted Tankerman-PIC.

(4) Restricted Tankerman-PIC (Barge).

(5) Tankerman-Assistant.

(6) Tankerman-Engineer.

[CGD 81–059 and CGD 81–059a, 52 FR 38623 and 38670, Oct. 16, 1987, as amended by CGD 87–017, 53 FR 18562, May 24, 1988; CGD 81–059, 54 FR 149, Jan. 4, 1989; CGD 81–059a, 55 FR 14805, Apr. 18, 1990; CGD 84–060, 59 FR 4841, Feb. 2, 1994; CGD 79–116, 60 FR 17154, Apr. 4, 1995; CGD 84–060, 60 FR 20652, Apr. 27, 1995]

Subpart C—Manning Requirements; All Vessels

§ 15.401 Employment and service within restrictions of license or document.

A person may not employ or engage an individual, and an individual may not serve, in a position in which an individual is required by law or regulation to hold a license, certificate of registry, or merchant mariner's document, unless the individual holds a valid license, certificate of registry, or merchant mariner's document, as appropriate, authorizing service in the capacity in which the individual is engaged or employed and the individual serves within any restrictions placed on the license, certificate of registry, or merchant mariner's document.

[CGD 81–059, 54 FR 149, Jan. 4, 1989]

§15.405 Familiarity with vessel characteristics.

Each licensed, registered, or certificated individual must become familiar with the relevant characteristics of the vessel on which engaged prior to assuming his or her duties. As appropriate, these include but are not limited to: general arrangement of the vessel; maneuvering characteristics; proper operation of the installed navigation equipment; firefighting and lifesaving equipment; stability and loading characteristics; emergency duties; and main propulsion and auxiliary machinery, including steering gear systems and controls.

§15.410 Licensed individuals for assistance towing vessels.

Every assistance towing vessel must be under the direction and control of a licensed individual authorized to engage in assistance towing under the provisions of 46 CFR 10.482.

[CGD 87–017, 53 FR 18562, May 24, 1988]

Subpart D—Manning Requirements; Inspected Vessels

§15.501 Certificate of inspection.

(a) The certificate of inspection (COI) issued by an Officer in Charge, Marine Inspection (OCMI), to a vessel required to be inspected under 46 U.S.C. 3301 specifies the minimum complement of officers and crew necessary for the safe operation of the vessel.

(b) The manning requirements for a particular vessel are determined by the OCMI after consideration of the applicable laws, the regulations in this part, and all other factors involved, such as: Emergency situations, size and type of vessel, installed equipment, proposed routes of operation including frequency of port calls, cargo carried, type of service in which employed, degree of automation, use of labor saving devices, and the organizational structure of the vessel.

[CGD 81–059, 52 FR 38652, Oct. 16, 1987, as amended at CGD 81–059, 54 FR 149, Jan. 4, 1989]

§15.505 Changes in the certificate of inspection.

All requests for changes in manning as indicated on the certificate of inspection must be made to the OCMI who last issued the certificate of inspection, unless the request is made in conjunction with an inspection for certification, in which case the request should be addressed to the OCMI conducting the inspection.

§15.510 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50380, Dec. 6, 1989]

§15.515 Compliance with certificate of inspection.

(a) Except as provided by §15.725, no vessel may be operated unless it has in its service and on board the complement required by the certificate of inspection.

(b) Any vessel subject to inspection under 46 U.S.C. 3301 must, while on a voyage, be under the direction and control of an individual who holds an appropriate license issued by the Coast Guard. For the purposes of this paragraph:

(1) A voyage is the period of time necessary to transit from the port of departure to the final port of arrival.

(2) A port does not include an Outer Continental Shelf (OCS) facility as defined in 33 CFR part 140.

§15.520 Mobile offshore drilling units.

(a) The requirements in this section for mobile offshore drilling units (MODUs) supplement other requirements in this part.

(b) The OCMI determines the minimum number of licensed individuals and crew (including lifeboatmen) required for the safe operation of inspected MODUs. In addition to other factors listed in this part, the specialized nature of the MODU is considered in determining the specific manning levels.

(c) A license as offshore installation manager (OIM), barge supervisor (BS),

or ballast control operator (BCO) authorizes service only on MODUs. A license or endorsement as OIM is restricted to the MODU type and mode of operation specified on the license.

(d) A self-propelled MODU other than a drillship must be under the command of an individual who holds a license as master endorsed as OIM.

(e) A drillship must be under the command of an individual who holds a license as master. When a drillship is on location, the individual in command must hold a license as master endorsed as OIM.

(f) A non-self-propelled MODU must be under the command of an individual who holds a license or endorsement as OIM.

(g) An individual serving as mate on a self-propelled surface unit other than a drillship must hold an appropriate license as mate and an endorsement as BS or BCO. An individual holding a license or endorsement as barge supervisor or ballast control operator may be substituted for a required mate when a self-propelled surface unit other than a drillship is on location or under tow, under certain circumstances as determined by the cognizant OCMI.

(h) An individual holding a license or endorsement as barge supervisor is required on a non-self-propelled surface unit other than a drillship.

(i) An individual holding a license or endorsement as barge supervisor may serve as ballast control operator.

(j) The OCMI issuing the MODU's certificate of inspection may authorize the substitution of chief or assistant engineer (MODU) for chief or assistant engineer, respectively, on self-propelled or propulsion assisted surface units, except drillships. The OCMI may also authorize the substitution of assistant engineer (MODU) for assistant engineer on drillships.

(k) Requirements in this part concerning radar observers do not apply to non-self-propelled MODUs.

(l) A surface mobile offshore drilling unit underway or on location, when afloat and equipped with a ballast control room, must have that ballast control room manned by an individual holding a license or endorsement authorizing service as ballast control operator.

[CGD 81–059a, 55 FR 14805, Apr. 18, 1990]

§ 15.525 Reference to other parts.

Parts 31 and 35 of this chapter contain additional manning requirements applicable to tank vessels.

Subpart E—Manning Requirements; Uninspected Vessels

§ 15.601 General.

The following sections of subparts F, G, and H of this part contain provisions concerning manning of uninspected vessels; §§ 15.701, 15.705, 15.710, 15.720, 15.730, 15.801, 15.805, 15.810, 15.820, 15.825, 15.840, 15.850, 15.855, 15.905, 15.910, and 15.915.

§ 15.605 Licensed operators for uninspected passenger vessels.

Each self-propelled, uninspected vessel carrying not more than six passengers, as defined by 46 U.S.C. 2101(21)(D), must be under the direction and control of an individual licensed by the Coast Guard.

§ 15.610 Licensed operators for uninspected towing vessels.

Every uninspected towing vessel which is at least 26 feet in length measured from end to end over the deck (excluding sheer) must be under the direction and control of an individual licensed by the Coast Guard. This does not apply to a vessel of less than 200 gross tons engaged in the offshore mineral and oil industry if the vessel has offshore mineral and oil industry sites or equipment as its ultimate destination or place of departure.

Subpart F—Limitations and Qualifying Factors

§ 15.701 Officers Competency Certificates Convention, 1936.

(a) This section implements the Officers Competency Certificates Convention, 1936, and applies to each vessel documented under the laws of the United States navigating seaward of the Boundary Lines in part 7 of this chapter, except:

(1) A public vessel;

(2) A wooden vessel of primitive build, such as a dhow or junk;

(3) A barge; and,

(4) A vessel of less than 200 gross tons.

(b) The master, mates and engineers on any vessel to which this section applies must hold a license to serve in that capacity issued by the Coast Guard under part 10 of this chapter.

(c) A vessel to which this section applies, or a foreign flag vessel to which the Convention applies, may be detained by a designated official until that official is satisfied that the vessel is in compliance with the Convention. *Designated official* includes Coast Guard officers, Coast Guard petty officers and officers or employees of the Customs Service.

(d) Whenever a vessel is detained, the owner, charterer, managing operator, agent, master, or individual in charge may appeal the detention within five days under the provisions of §2.01–70 of this chapter.

§15.705 Watches.

(a) Title 46 U.S.C. 8104 is the law applicable to the establishment of watches aboard certain U.S. vessels. The establishment of adequate watches is the responsibility of the vessel's master. The Coast Guard interprets the term *watch* to be the direct performance of vessel operations, whether deck or engine, where such operations would routinely be controlled and performed in a scheduled and fixed rotation. The performance of maintenance or work necessary to the vessel's safe operation on a daily basis does not in itself constitute the establishment of a watch. The minimal safe manning levels specified in a vessel's certificate of inspection takes into consideration routine maintenance requirements and ability of the crew to perform all operational evolutions, including emergencies, as well as those functions which may be assigned to persons in watches.

(b) Subject to exceptions, 46 U.S.C. 8104 requires that when a master of a seagoing vessel of more than 100 gross tons establishes watches for the licensed individuals, sailors, coal passers, firemen, oilers and watertenders, the personnel shall be *divided, when at sea, into at least three watches and shall be kept on duty successively to perform ordinary work incident to the operation and management of the vessel.* The Coast Guard interprets *sailors* to mean those members of the deck department other than licensed officers, whose duties involve the mechanics of conducting the ship on its voyage, such as helmsman (wheelsman), lookout, etc., and which are necessary to the maintenance of a continuous watch. *Sailors* is not interpreted to include able seamen and ordinary seamen not performing these duties.

(c) Subject to exceptions, 46 U.S.C. 8104(g) permits the licensed individuals and crew members (except the coal passers, firemen, oilers, and watertenders) to be divided into two watches when at sea and engaged on a voyage of less than 600 miles on the following categories of vessels:

(1) Towing vessel;

(2) Offshore supply vessel; or,

(3) Barge.

(d) Subject to exceptions, 46 U.S.C. 8104(h) permits a licensed individual operating an uninspected towing vessel that is at least 26 feet in length measured from end to end over the deck (excluding sheer) to work not more than 12 hours in a consecutive 24 hour period except in an emergency. The Coast Guard interprets this, in conjunction with other provisions of the law, to permit licensed individuals serving as operators of uninspected towing vessels that are not subject to the provisions of the Officers' Competency Certificates Convention, 1936, to be divided into two watches regardless of the length of the voyage.

(e) Fish processing vessels are subject to various provisions of 46 U.S.C. 8104 concerning watches.

(1) For fish processing vessels that entered into service before January 1, 1988, the following watch requirements apply to the licensed officers and deck crew:

(i) If over 5000 gross tons—three watches.

(ii) If more than 1600 gross tons and not more than 5000 gross tons—two watches.

(iii) If not more than 1600 gross tons—no watch division specified.

(2) For fish Processing vessels which enter into service after December 31,

1987, the following watch requirements apply to the licensed officers and deck crew:

(i) If over 5000 gross tons—three watches.

(ii) If not more than 5000 gross tons and having more than 16 individuals on board primarily employed in the preparation of fish or fish products—two watches.

(iii) If not more than 5000 gross tons and having not more than 16 individuals on board primarily employed in the preparation of fish or fish products—no watch division specified.

§ 15.710 Working hours.

In addition to prescribing watch requirements, 46 U.S.C. 8104 sets limitations on the working hours of licensed individuals and crew members, prescribes certain rest periods. and prohibits unnecessary work on Sundays and certain holidays when the vessel is in a safe harbor. It is the responsibilty of the master or person in charge to ensure that these limitations are met. However, under 46 U.S.C. 8104(f), the master or other licensed individual can require any part of the crew to work when, in his or her judgment, they are needed for:

(a) Maneuvering, shifting berth, mooring, unmooring;

(b) Performing work necessary for the safety of the vessel, or the vessel's passengers, crew, or cargo;

(c) Saving of life on board another vessel in jeopardy; or,

(d) Performing fire, lifeboat, or other drills in port or at sea.

§ 15.715 Automated vessels.

(a) Coast Guard acceptance of automated systems to replace specific personnel or to reduce overall crew requirements is predicated upon the capabilities of the system, the system's demonstrated and continuing reliability, and a planned maintenance program that ensures continued safe operation of the vessel.

(b) The OCMI considers the capabilities of an automated system in establishing initial manning levels; however, until the system is proven reliable, a manning level adequate to operate in a continuously attended mode will be specified on a vessel's COI. It remains the responsibility of the vessel's master to determine when a continuous watch is necessary.

§ 15.720 Use of non-U.S. licensed and/or documented personnel.

(a) United States vessels which need to replace one or more persons while on a foreign voyage and outside the jurisdiction of the United States, in order to meet manning requirements, may utilize non-U.S. licensed and documented personnel, except for the positions of master and radio officer, until the vessel returns to a port at which in the most expeditious manner replacements who are citizens of the United States can be obtained.

(b) The citizenship requirements of 46 U.S.C. 8103 (a) and (b) are waived, except for the requirement that the master must be a U.S. citizen, with respect to the following vessels:

(1) A U.S.-documented offshore supply vessel (OSV) (as that term is defined in 46 U.S.C. 2101(19)) that is operating from a foreign port; and

(2) A U.S.-documented mobile offshore drilling unit (MODU) (as that term is defined in 46 U.S.C. 2101(15a)) that is operating beyond the water above the U.S. Outer Continental Shelf.

(c) The waiver provided in paragraph (b) of this section does not apply to any vessel operating in water above the U.S. Outer Continental Shelf (as that term is defined in 43 U.S.C. 1331(a)).

(d) The master shall assure that any replacements of crewmembers by non-U.S. citizens made in accordance with this section will be with an individual who holds a license or document which is equivalent in experience, training, and other qualifications to the U.S. license or document required for the position and that the person possesses or will possess the training required to communicate to the extent required by § 15.730.

[CGD 89–061, 55 FR 1212, Jan. 12, 1990]

§ 15.725 Sailing short.

Whenever a vessel is deprived of the service of a member of its complement, and the master or person in charge is unable to find appropriate licensed or documented personnel to man the vessel, the master or person in charge may

proceed on the voyage, having determined the vessel is sufficiently manned for the voyage. A report of sailing short must be filed in writing with the Officer in Charge, Marine Inspection (OCMI) having cognizance for inspection in the area in which the vessel is operating, or the OCMI within whose jurisdiction the voyage is completed. The report must explain the cause of each deficiency and be submitted within twelve hours after arrival at the next port. The actions of the master or person in charge in such instances are subject to review and it must be shown the vacancy was not due to the consent, fault or collusion of the master or other individuals specified in 46 U.S.C. 8101(e). A civil penalty may be assessed against the master or person in charge for failure to submit the report.

§15.730 Language requirements.

(a) The provisions of 46 U.S.C. 8702 relating to language apply generally to vessels of at least 100 gross tons except:

(1) Vessels operating on rivers and lakes (except the Great Lakes);

(2) A manned barge (except a seagoing barge or a barge to which chapter 37 of 46 U.S.C. applies);

(3) A fishing vessel, fish tender vessel, whaling vessel, or yacht;

(4) A sailing school vessel with respect to sailing school instructors and sailing school students;

(5) An oceanographic research vessel with respect to scientific personnel;

(6) A fish processing vessel which entered into service before January 1, 1988, and is not more than 1600 gross tons or which enters into service after December 31, 1987, and has not more than 16 individuals on board primarily employed in the preparation of fish or fish products; and,

(7) All fish processing vessels with respect to those personnel primarily employed in the preparation of fish or fish products or in a support position not related to navigation.

(b) 46 U.S.C. 8702(b) requires that on board vessels departing U.S. ports *75 percent of the crew in each department on board is able to understand any order spoken by the officers.*

(c) The words *able to understand any order spoken by the officers* relates to any order to a member of the crew when directing the performance of that person's duties and orders relating to emergency situations such as used for response to a fire or in using lifesaving equipment. It is not expected that a member of the deck department understand terminology normally used only in the engineroom or vice versa.

(d) Whenever information is presented to the Coast Guard that a vessel fails to comply with the specified language requirements the Coast Guard investigates the allegation to determine its validity. In determining if an allegation is factual, the Coast Guard may require a demonstration by the licensed individuals and crew that appropriate orders are understood. The demonstration will require that orders be spoken to the individual members of the crew by the licensed individuals in the language ordinarily and customarily used by the licensed individuals. The orders must be spoken directly by the licensed individual to the crew member and not through an interpreter. Signs, gestures, or signals may not be used in the test. The Coast Guard representative will specify the orders to be given and will include not only daily routine but orders involving emergencies, either of a departmental or of a general nature. This test will be conducted, if possible, at a time reasonably in advance of the vessel's departure, to avoid delays.

Subpart G—Computations

§15.801 General.

The OCMI will determine the specific manning levels for vessels required to have certificates of inspection by part B of subtitle II of title 46 U.S.C. The masters or individuals in command of all vessels, whether required to be inspected under 46 U.S.C. 3301 or not, are responsible for properly manning vessels in accordance with the applicable laws, regulations, and international conventions.

[CGD 81–059, 54 FR 149, Jan. 4, 1989]

§15.805 Master.

(a) There must be an individual holding an appropriate license as master in command of each of the following vessels:

(1) Every self-propelled, seagoing documented vessel of 200 gross tons and over.

(2) Every self-propelled inspected vessel.

(3) Every inspected passenger vessel.

(4) Every inspected small passenger vessel.

(b) Every vessel documented under the laws of the United States must be under the command of a U.S. citizen.

[CGD 81–059, 52 FR 38623, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 149, Jan. 4, 1989]

§ 15.810 Mates.

(a) The OCMI determines the minimum number of licensed mates required for the safe operation of inspected vessels.

(b) The minimum number of licensed mates required to be carried on every inspected, self-propelled, seagoing and Great Lakes vessel, and every inspected, seagoing, passenger vessel must not be less than the following, except when reductions are authorized under paragraph (e) of this section:

(1) Vessels of 1000 gross tons or more (except MODUs)—three licensed mates (except when on a voyage of less than 400 miles from port of departure to port of final destination—two licensed mates).

(2) MODUs of 1000 gross tons or more:

(i) Three licensed mates when on a voyage of more than 72 hours.

(ii) Two licensed mates when on a voyage of more than 16 but not more than 72 hours.

(iii) One licensed mate when on a voyage of not more than 16 hours.

(3) Vessels of 100 or more gross tons but less than 1000 gross tons—two licensed mates (except vessels of at least 100 but less than 200 gross tons on voyages which do not exceed 24 hours in duration—one licensed mate).

(4) All offshore supply vessels of 100 gross tons or more—two licensed mates (except when on a voyage of less than 600 miles–one licensed mate). A voyage includes the accrued distance from port of departure to port of arrival and does not include stops at offshore points.

(5) All vessels of less than 100 gross tons—one licensed mate (except vessels on voyages not exceeding 12 hours in duration may, if the OCMI determines it to be safe, be operated without licensed mates).

(c) An individual in charge of the navigation or maneuvering of a self-propelled, uninspected, documented, seagoing vessel of 200 gross tons or over must hold an appropriate license authorizing service as mate.

(d) The OCMI may increase the minimum number of mates indicated in paragraph (b) of this section where he or she determines that the vessel's characteristics, route, or other operating conditions create special circumstances warranting an increase.

(e) The Commandant will consider reductions to the number of mates required by this section when special circumstances allowing a vessel to be safely operated can be demonstrated.

[CGD 81–059, 52 FR 38652, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 149, Jan. 4, 1989; CGD 81–059a, 55 FR 14805, Apr. 18, 1990]

§ 15.812 Pilots

(a) Except as specified in paragraph (f) of this section, the following vessels, not sailing on register, when underway on the navigable waters of the United States, must be under the direction and control of an individual qualified to serve as pilot under paragraph (b) or (c) of this section as appropriate:

(1) Coastwise seagoing vessels propelled by machinery and subject to inspection under 46 U.S.C. Chapter 33, and coastwise seagoing tank barges subject to inspection under 46 U.S.C. Chapter 37;

(2) Vessels that are not authorized by their Certificate of Inspection to proceed beyond the Boundary Line established in part 7 of this Chapter which are in excess of 1,600 gross tons, propelled by machinery, and subject to inspection under 46 U.S.C. chapter 33; and

(3) Vessels operating on the Great Lakes that are propelled by machinery and subject to inspection under 46 U.S.C. chapter 33, or are tank barges subject to inspection under 46 U.S.C. chapter 37.

(b) The following individuals may serve as a pilot for a vessel subject to paragraph (a) of this section, when underway on the navigable waters of the United States that are designated areas.

(1) An individual holding a valid first class pilot's license issued by the Coast Guard, operating within the restrictions of his or her license, may serve as pilot on any vessel to which this section applies.

(2) An individual holding a valid license issued by the Coast Guard as master or mate, employed aboard a vessel within the restrictions of his or her license, may serve as pilot on a vessel of not more than 1,600 gross tons propelled by machinery, described in paragraphs (a)(1) and (a)(3) of this section, provided he or she:

(i) Is at least 21 years old;

(ii) Complies with the currency of knowledge provisions of § 10.713 of this chapter; and

(iii) Has completed a minimum of four round trips over the route to be traversed while in the wheelhouse as watchstander or observer. At least one of the round trips must be made during the hours of darkness if the route is to be traversed during darkness.

(3) An individual holding a valid license issued by the Coast Guard as master, mate, or operator employed aboard a vessel within the restrictions of his or her license, may serve as pilot on a tank barge or tank barges totalling not more than 10,000 gross tons, described in paragraphs (a)(1) and (a)(3) of this section, provided he or she:

(i) Is at least 21 years old;

(ii) Complies with the currency of knowledge provisions of § 10.713 of this chapter;

(iii) Has a current physical examination in accordance with the provisions of § 10.709 of this chapter;

(iv) Has at least six months service in the deck department on towing vessels engaged in towing operations; and

(v) Has completed a minimum of twelve round trips over the route to be traversed, as an observer or under instruction in the wheelhouse. At least three of the round trips must be made during the hours of darkness if the route is to be traversed during darkness.

(c) An individual holding a valid license issued by the Coast Guard as master, mate, or operator, employed aboard a vessel within the restrictions of his or her license, may serve as a pilot for a vessel subject to paragraph (a)(1) and (a)(2) of this section, when underway on the navigable waters of the United States that are not designated as first class pilotage areas, provided he or she:

(1) Is at least 21 years old;

(2) Complies with the currency of knowledge provisions of § 10.713 of this chapter; and

(3) Has a current physical examination in accordance with the provisions of § 10.709 of this chapter.

(d) In any instance when the qualifications of a person satisfying the requirements for pilotage through the provisions of this Subpart are questioned by the Coast Guard, the individual shall, within a reasonable time, provide the Coast Guard with documentation proving compliance with the applicable portion(s) of paragraphs (b) and (c) of this section.

(e) Federal pilotage requirements contained in paragraphs (a) through (d) of this section are summarized in two quick reference tables.

(1) Table 15.812(e)(1) provides a guide to the pilotage requirements for inspected, self-propelled vessels.

TABLE 15.812(e)(1).—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED SELF-PROPELLED VESSELS, NOT SAILING ON REGISTER

	Designated areas of pilotage waters (routes for which First Class Pilot's licenses are issued)	Nondesignated areas of pilotage waters (between the three mile line and the start of traditional pilotage routes)
Inspected self-propelled vessels greater than 1,600 GT, authorized by their Certificate of Inspection (COI) to proceed beyond the Boundary Line, or operating on the Great Lakes.	First Class Pilot	Master or Mate may serve as pilot if the individual: 1. Is at least 21 years old. 2. Has an annual physical exam. 3. Maintains current knowledge of the waters to be navigated.[1]

TABLE 15.812(e)(1).—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED SELF-PROPELLED VESSELS, NOT SAILING ON REGISTER—Continued

	Designated areas of pilotage waters (routes for which First Class Pilot's licenses are issued)	Nondesignated areas of pilotage waters (between the three mile line and the start of traditional pilotage routes)
Inspected self-propelled vessels not more than 1,600 GT, authorized by their Certificate of Inspection to proceed beyond the Boundary Line, or operating on the Great Lakes.	First Class Pilot, *or* Master or Mate may serve as pilot if the individual: 1. Is at least 21 years old. 2. Maintains current knowledge of the waters to be navigated.[1] 3. Has 4 round trips over the route.[2]	Master or Mate may serve as pilot if the individual: 1. Is at least 21 years old. 2. Maintains current knowledge of the waters to be navigated.[1]
Inspected self-propelled vessels greater than 1,600 GT, not authorized by their COI to proceed beyond the Boundary Line (Inland route vessels); other than vessels operating on the Great Lakes.	First Class Pilot	Master or Mate may serve as pilot if the individual: 1. Is at least 21 years old. 2. Has an annual physical exam. 3. Maintains current knowledge of the waters to be navigated.[1]
Inspected self-propelled vessels not more than 1,600 GT, not authorized by their COI to proceed beyond the Boundary Line (Inland route vessels); other than vessels operating on the Great Lakes.	No pilotage requirement	No pilotage requirement.

[1] One round trip within the past 60 months.
[2] If the route is to be traversed during darkness, 1 of the 4 round trips must be made during darkness.

(2) Table 15.812(e)(2) provides a guide to the pilotage requirements for tank barges.

TABLE 15.812(e)(2).—QUICK REFERENCE TABLE FOR FEDERAL PILOTAGE REQUIREMENTS FOR U.S. INSPECTED TANK BARGES, NOT SAILING ON REGISTER

	Designated areas of pilotage waters (routes for which First Class Pilot's licenses are issued)	Nondesignated areas of pilotage waters (between the three mile line and the start of traditional pilotage routes)
Tank Barges greater than 10,000 GT, authorized by their Certificate of Inspection to proceed beyond the Boundary Line, or operating on the Great Lakes.	First Class Pilot	Master, Mate, or Operator may serve as pilot if the individual: 1. Is at least 21 years old. 2. Has an annual physical exam.[1] 3. Maintains current knowledge of the waters to be navigated.[2] 4. Has at least 6 months' service in the deck department on towing vessels engaged in towing.
Tank Barges 10,000 GT or less, authorized by their Certificate of Inspection to proceed beyond the Boundary Line, or operating on the Great Lakes.	First Class Pilot, *or* Master, Mate, or Operator may serve as pilot if the individual: 1. Is at least 21 years old 2. Has an annual physical exam.[1] 3. Maintains current knowledge of the waters to be navigated.[2] 4. Has at least 6 months' service in the deck department on towing vessels engaged in towing operations. 5. Has 12 round trips over the route.[3]	Master, Mate, or Operator may serve as pilot if the individual: 1. Is at least 21 years old. 2. Has an annual physical exam.[1] 3. Maintains current knowledge of the waters to be navigated.[2] 4. Has at least 6 months' service in the deck department on towing vessels engaged in towing operations.
Tank Barges authorized by their Certificate of Inspection for Inland routes only (Lakes, Bays, and Sounds/Rivers); other than vessels operating on the Great Lakes.	No pilotage requirement	No pilotage requirement.

[1] Annual physical exam does not apply to an individual who will serve as a pilot of a Tank Barge of less than 1,600 gross tons.
[2] One round trip within the past 60 months.
[3] If the route is to be traversed during darkness, 3 of the 12 round trips must be made during darkness.

(f) In Prince William Sound, Alaska, coastwise seagoing vessels over 1,600 gross tons and propelled by machinery and subject to inspection under 46 U.S.C. Chapter 37 must:

(1) When operating from 60°49′ North latitude to the Port of Valdez be under the direction and control of a federally licensed pilot who:

(i) Is operating under the Federal license;

(ii) Holds a license issued by the State of Alaska; and

(iii) Is not a member of the crew of the vessel.

(2) Navigate with either two licensed deck officers on the bridge or a federally licensed pilot when operating South of 60°49′ North latitude and in the approaches through Hinchinbrook Entrance and in the area bounded:

(i) On the West by a line one mile west of the western boundary of the Traffic Separation Scheme;

(ii) On the East by 146°00′ West longitude;

(iii) On the North by 60°49′ North latitude; and

(iv) On the South by that area of Hinchinbrook Entrance within the territorial sea bounded by 60° 07′ North latitude and 146°31.5′ West longitude.

[CGD 84–060, 59 FR 4842, Feb. 2, 1994, as amended by CGD 84–060, 60 FR 20652, 20653, Apr. 27, 1995]

§15.815 Radar observers.

(a) Each person in the required complement of licensed deck individuals, including the master, on inspected vessels of 300 gross tons or over which are radar equipped, shall hold a valid endorsement as radar observer.

(b) Each person who is employed or serves as pilot in accordance with Federal law on board vessels of 300 gross tons or over which are radar equipped, shall hold a valid endorsement as radar observer.

(c) On or after June 1, 1995, each person having to be licensed under 46 U.S.C. 8904(a) for employment or service as master, mate, or operator on board an uninspected towing vessel of 8 meters (approximately 26 feet) or more in length shall, if the vessel is equipped with radar, hold—

(1) A valid endorsement as radar observer; or,

(2) If the person holds a valid license dated before June 1, 1995, a valid certificate from a Radar-Operation course.

[CGD 81–059, 52 FR 38652, Oct. 16, 1987, as amended by CGD 94–041, 60 FR 8309, Feb. 14, 1995]

§15.820 Chief engineer.

(a) There must be an individual holding an appropriate license as chief engineer or a license authorizing service as chief engineer employed on board the following inspected mechanically propelled vessels:

(1) Seagoing or Great Lakes vessels of 200 gross tons and over.

(2) Offshore supply vessels of more than 200 gross tons.

(3) Inland (other than Great Lakes) vessels of 300 gross tons and over, if the OCMI determines that a licensed individual responsible for the vessel's mechanical propulsion is necessary.

(b) An individual engaged or employed to perform the duties of chief engineer on a mechanically propelled, uninspected, seagoing, documented vessel of 200 gross tons or over must hold an appropriate license authorizing service as a chief engineer.

§15.825 Engineers.

(a) An individual in charge of an engineering watch on a mechanically propelled, seagoing, documented vessel of 200 gross tons or over, other than an individual described in §15.820, must hold an appropriate license authorizing service as an assistant engineer.

(b) The Officer in Charge, Marine Inspection determines the minimum number of licensed engineers required for the safe operation of inspected vessels.

§15.830 Radio officers.

Radio officers are required on certain merchant vessels of the United States. The determination of when a radio officer is required is based on the Federal Communications Commission requirements.

§15.835 Staff officers.

Staff officers, when carried, must be registered as specified in part 10 of this chapter.

§ 15.840 Able seamen.

(a) With certain exceptions, 46 U.S.C. 8702 applies to all vessels of at least 100 gross tons. At 1east 65 percent of the deck crew of these vessels, excluding licensed individuals, must be able seamen. For vessels permitted to maintain a two watch system, the percentage of able seamen may be reduced to 50 percent.

(b) Able seamen are rated as: unlimited, limited, special, offshore supply vessel, sail, and fishing industry, under the provisions of part 12 of this chapter. 46 U.S.C. 7312 specifies the categories of able seamen (i.e., unlimited, limited, etc.) necessary to meet the requirements of 46 U.S.C. 8702.

(c) It is the responsibility of the master or person in charge to ensure that the able seamen in the service of the vessel meet the requirements of 46 U.S.C. 7312 and 8702.

§ 15.845 Lifeboatmen.

The number of lifeboatmen required for a vessel are specified in the parts of the regulations dealing with the inspection of that specific type of vessel.

§ 15.850 Lookouts.

The requirements for the maintenance of a proper lookout are specified in Rule 5 of the International Regulations for Preventing Collisions at Sea, 1972, and Rule 5 of the Inland Navigational Rules Act of 1980 (33 U.S.C. 2005). Lookout is a function to be performed by a member of a navigational watch.

§ 15.855 Cabin watchmen and fire patrolmen.

(a) On vessels carrying passengers at night, the master or person in charge shall ensure that a suitable number of watchmen are in the vicinity of the cabins or staterooms and on each deck, to guard against and give alarm in case of fire or other danger.

(b) On a fish processing vessel of more than 100 gross tons, there must be a suitable number of watchmen trained in firefighting on board when hot work is being done, to guard against and give alarm in case of a fire.

§ 15.860 Tankerman.

(a) The Officer in Charge, Marine Inspection, enters on the Certificate of Inspection issued to each manned tank vessel subject to the regulations in this chapter the number of crewmembers required to hold valid merchant mariners' documents with the proper tankerman endorsement. Table 15.860(a)(1) provides the minimal requirements for tankermen aboard manned tank vessels; Table 15.860(a)(2) provides the tankerman endorsements required for personnel aboard tankships.

(b) For each tankship of more than 5,000 gross tons certified for voyages beyond the Boundary Line:

(1) The number of ''Tankerman-PICs'' or restricted ''Tankerman-PICs'' carried must be not fewer than two.

(2) The number of ''Tankerman-Assistants'' carried must be not fewer than three.

(3) The number of ''Tankerman-Engineers'' carried must be not fewer than two.

(c) For each tankship of 5,000 gross tons or less certified for voyages beyond the Boundary Line:

(1) The number of ''Tankerman-PICs'' or restricted ''Tankerman-PICs'' carried must be not fewer than two.

(2) The number of ''Tankerman-Engineers'' carried must be not fewer than two, unless only one engineer is required, in which case the number of ''Tankerman-Engineers'' carried may be just one.

(d) For each tankship not certified for voyages beyond the Boundary Line, if the total crew complement is:

(1) One or two, the number of ''Tankerman-PICs'' or restricted ''Tankerman-PICs'' carried may be just one.

(2) More than two, the number of ''Tankerman-PICs'' or restricted ''Tankerman-PICs'' carried must be not fewer than two.

(e) For each tank barge manned under § 31.15–5 of this chapter, if the total crew complement is:

(1) One or two, the number of ''Tankerman-PICs'', restricted ''Tankerman-PICs'', ''Tankerman-PICs (Barge)'', or restricted ''Tankerman-PICs (Barge)'' carried may be just one.

(2) More than two, the number of ''Tankerman-PICs'', restricted ''Tankerman-PICs'', ''Tankerman-PICs (Barge)'', or restricted ''Tankerman-PICs (Barge)'' carried must be not fewer than two.

(f) The following personnel aboard each tankship certified for voyages beyond the Boundary Line shall hold valid merchant mariners' documents, endorsed as follows:

(1) The master and chief mate shall each hold a ''Tankerman-PIC'' or restricted ''Tankerman-PIC'' endorsement.

(2) The chief, first assistant, and cargo engineers shall each hold a ''Tankerman-Engineer'' or ''Tankerman (PIC)'' endorsement.

(3) Each licensed person acting as the PIC of a transfer of liquid cargo in bulk shall hold a ''Tankerman-PIC'' or restricted ''Tankerman-PIC'' endorsement.

(4) Each licensed or unlicensed person, who is assigned by the PIC duties and responsibilities related to the cargo or cargo-handling equipment during a transfer of liquid cargo in bulk but is not directly supervised by the PIC, shall hold a ''Tankerman-Assistant'' endorsement.

(g) The endorsements required by this section must be for the classification of the liquid cargo in bulk or of the cargo residue being carried.

TABLE 15.860(a)(1).—MINIMAL REQUIREMENTS FOR TANKERMEN ABOARD MANNED TANK VESSELS

Tank vessels	Tankerman PIC	Tankerman assistant	Tankerman engineer	Tankerman PIC or tankerman PIC (barge)
Tankship Certified for Voyages Beyond Boundary Line:				
Over 5000 GT	2	3	2	.....
5000 GT or less	2	.....	*2	.....
Tankship Not Certified for Voyages Beyond Boundary Line	**2	.....	.....	.....
Tank Barge Certified for Voyages Beyond Boundary Line	.....	.....	.....	***2

*If only one engineer is required, then only one Tankerman Engineer is required.
**If the total crew complement is one or two persons, then only one Tankerman PIC is required.
***If the total crew complement is one or two persons, then only one Tankerman PIC or Tankerman PIC (Barge) is required.

TABLE 15.860(a)(2).—TANKERMEN ENDORSEMENTS REQUIRED FOR PERSONNEL ABOARD TANKSHIPS

[Endorsement for the Classification of the Bulk Liquid Cargo or Residues Carried]

Tankship certified for voyages beyond boundary line	Tankerman PIC		Tankerman engineer	Tankerman assistant
Master	✔			
Chief Mate	✔			
Chief Engineer	✔	or	✔	
First Assistant Engineer	✔	or	✔	
Cargo Engineer	✔	or	✔	
Licensed Person Acting as PIC of Transfer of Liquid Cargo in Bulk	✔			
Licensed or Unlicensed Person Not Directly Supervised by PIC	.....	.....	.....	✔

[CGD 79–116, 60 FR 17154, Apr. 4, 1995]

Subpart H—Equivalents

§15.901 Inspected vessels of less than 100 gross tons.

(a) An individual holding a license as mate or pilot of inspected, self-propelled vessels of over 200 gross tons is authorized to serve as master on inspected vessels of less than 100 gross tons within any restrictions on the individual's license.

(b) An individual holding a license authorizing service as master or mate of inspected, self-propelled vessels is authorized to serve as master or mate, respectively, of non-self-propelled vessels other than sail vessels, within any restrictions on the individual's license.

(c) An individual holding a license authorizing service as master or mate of inspected, sail vessels is authorized to serve as master or mate, respectively, of other non-self-propelled vessels, within any restrictions on the individual's license.

(d) An individual holding a license authorizing service as master or mate of inspected, auxiliary sail vessels, is authorized to serve as master or mate, respectively, of self-propelled and non-self-propelled vessels, within any restrictions on the individual's license.

[CGD 81–059, 54 FR 150, Jan. 4, 1989]

§ 15.905 Uninspected passenger vessels.

(a) An individual holding a license as master or pilot of inspected, self-propelled vessels is authorized to serve as operator of uninspected passenger vessels within any restrictions, other than gross tonnage limitations, on the individual's license.

(b) An individual holding a license as mate of inspected, self-propelled vessels, other than Great Lakes, inland, or river vessels of not more than 200 gross tons, is authorized to serve as operator of uninspected passenger vessels, within any restrictions, other than gross tonnage limitations, on the individual's license.

[CGD 81–059, 54 FR 150, Jan. 4, 1989]

§ 15.910 Uninspected towing vessels.

(a) An individual of 21 years or more of age holding a license as master of inspected, self-propelled vessels, or a license as mate or pilot of inspected, self-propelled vessels of more than 200 gross tons, is authorized to serve as operator of uninspected towing vessels within any restrictions on the indivdual's license. A licensed mate or pilot authorized by this section to serve as operator of uninspected towing vessels may only be in command of the vessel on domestic routes.

(b) Whenever an uninspected towing vessel is under the direction and control of a person holding a license for service only as second-class operator of uninspected towing vessels, a person holding a license authorizing service as operator of uninspected towing vessels must be on board as a member of the crew.

(c) An individual of 19 years or more of age holding a license which authorizes service as mate of vessels of not more than 200 gross tons authorizes the holder to serve as second-class operator of uninspected towing vessels within any restrictions on the individual's license.

[CGD 81–059, 52 FR 38652, Oct. 16, 1987, as amended by CGD 81–059, 54 FR 150, Jan. 4, 1989]

§ 15.915 Engineer licenses.

The following licenses authorize the holder to serve as noted, within any restrictions on the license:

(a) A designated duty engineer license authorizes service as chief or assistant engineer on vessels of not more than 500 gross tons in the following manner:

(1) A designated duty engineer limited to vessels of not more than 1000 horsepower or 4000 horsepower may serve only on near coastal, Great Lakes, or inland waters;

(2) A designated duty engineer with no horsepower limitations may serve on any waters.

(b) A chief engineer (limited-oceans) license authorizes service as chief or assistant engineer on vessels of any gross tons on inland waters and of not more than 1600 gross tons on ocean, near coastal, or Great Lakes waters.

(c) A chief engineer (limited-near coastal) license authorizes service as chief or assistant engineer on vessels of any gross tons on inland waters and of not more than 1600 gross tons on near coastal or Great Lakes waters.

(d) An assistant engineer (limited-oceans) license authorizes service on vessels of any gross tons on inland waters and of not more than 1600 gross tons on ocean, near coastal, or Great Lakes waters.

[CGD 81–059, 54 FR 150, Jan. 4, 1989]

Subpart I—Vessels in Foreign Trade

SOURCE: CGD 92–061, 60 FR 24796, May 10, 1995, unless otherwise noted.

§ 15.1001 General.

Self-propelled vessels engaged in foreign commerce are required to use a pilot holding an appropriately endorsed Federal first class pilot's license issued by the Coast Guard when operating in the navigable waters of the United States specified in this subpart.

§ 15.1010 California.

The following offshore marine oil terminals located within U.S. navigable waters of the State of California:

(a) *Carlsbad, CA.* The waters including the San Diego Gas and Electric, Encina Power Plant, lying within an area bounded by a line beginning at latitude 33°10′06″N, longitude 117°21′42″W, thence southwesterly to latitude 33°08′54″N, longitude 117°24′36″W, thence southwesterly to latitude 33°04′30″N, longitude 117°21′42″W, thence northeasterly to latitude 33°05′36″N, longitude 117°18′54″W, thence northwesterly along the shoreline to latitude 33°10′06″N, longitude 117°21′42″W.

(b) *Huntington Beach, CA.* The waters including the Golden West Refining Company, Huntington Beach Marine Terminal, lying within an area bounded by a line beginning at latitude 33°39′06″N, longitude 118°00′0″W, thence westerly to latitude 33°39′18″N, longitude 118°05′12″W, thence southeasterly along a line drawn three nautical miles from the baseline to latitude 33°35′30″N, longitude 118°00′00″W, thence easterly to latitude 33°35′30″N, longitude 117°52′30″W, thence northwesterly along the shoreline to latitude 33°39′06″N, longitude 118°00′00″W.

(c) *El Segundo, CA.* The waters including the Chevron USA, El Segundo Marine Terminal, lying within an area bounded by a line beginning at latitude 33°56′18″N, longitude 118°26′18″W, thence westerly to latitude 33°56′18″N, longitude 118°30′48##W, thence southeasterly along a line drawn three nautical miles from the baseline to latitude 33°51′48″N, longitude 118°27′54″W, thence easterly to latitude 33°51′48″N, longitude 118°24′00″W, thence northwesterly along the shoreline to latitude 33°56′18″N, longitude 118°26′18″W.

(d) *Oxnard, CA.* The waters including the Southern California Edison Company, Mandalay Generating Station, lying within an area bounded by a line beginning at latitude 34°14′12″N, longitude 119°16′00″W, thence westerly to latitude 34°14′12″N, longitude 119°19′36″W, thence southeasterly along a line drawn three nautical miles from the baseline to latitude 34°09′24″N, longitude 119°17′20″W, thence easterly to latitude 34°09′24″N, longitude 119°13′24″W, thence northwesterly along the shoreline to latitude 34°14′24″N, longitude 119°16′00″W.

(e) *Goleta, CA.* The waters including the ARCO, Ellwood Marine Terminal, lying within an area bounded by a line beginning at latitude 34°26′12″N, longitude 119°57′00″W, thence southerly to latitude 34°22′48″N, longitude 119°57′00″W, thence southeasterly along a line drawn three nautical miles from the baseline to latitude 34°21′06″N, longitude 119°50′30.5″W, thence northerly to latitude 34°24′18″N, longitude 119°50′30″W, thence northwesterly along the shoreline to latitude 34°26′12″N, longitude 119°57′00″W.

(f) *Gaviota, CA.* The waters including the Texaco Trading and Transportation, Gaviota Marine Terminal, lying within an area bounded by a line beginning at latitude 34°28′06″N, longitude 120°16′00″W, thence southerly to latitude 34°25′06″N, longitude 120°16′00″W, thence easterly along a line drawn three nautical miles from the baseline to latitude 34°25′24″N, longitude 120°08′30″W, thence northerly to latitude 34°28′24″N, longitude 120°08′30″W, thence westerly along the shoreline to latitude 34°28′06″N, longitude 120°16′00″W.

(g) *Moss Landing, CA.* The waters including the Pacific Gas and Electric Company Power Plant, lying within an area bounded by a line beginning at latitude 36°49′00″N, longitude 121°47′42″W, thence westerly to latitude 36°49′00″N, longitude 121°51′00″W, thence southerly to latitude 36°47′00″N, longitude 121°51′00″W thence easterly to latitude 36°47′00″N, longitude 121°47′54″W, thence northerly along the shoreline to latitude 36°49′00″N, longitude 121°47′42″W.

(h) *Estero Bay, CA.* The waters including various moorings, including the Pacific Gas and Electric Company mooring and the two Chevron Oil Company Terminals lying within an area bounded by a line beginning at latitude 36°25′00″N, longitude 120°52′30″W, thence westerly to latitude 36°25′00″N, longitude 120°56′00″W, thence southerly to latitude 36°22′00″N, longitude 120°56′00″W, thence easterly to latitude 36°22′00″N, longitude 120°52′12″W, thence northerly along the shoreline to latitude 36°25′00″N, longitude 120°52′30″W.

(i) *San Luis Obispo Bay, CA.* The waters including the Unocal Corporation Avila Terminal and the approaches thereto, lying in an area bounded by a line beginning at latitude 35°09′42″N, longitude 120°46′00″W, thence southerly to latitude 35°07′00″N, longitude 120°46′00″W, thence easterly to latitude 35°07′00″N, longitude 120°43′00″W, thence northerly to latitude 35°10′24″N, longitude 120°43′00″W, thence westerly along the shoreline to latitude 35°09′42″N, longitude 120°46′00″W.

§ 15.1020 Hawaii.

The following offshore marine oil terminals located within U.S. navigable waters of the State of Hawaii: *Barbers Point, Island of Oahu.* The waters including the Hawaiian Independent Refinery, Inc. and the Chevron moorings lying within an area bounded by a line bearing 180 degrees true from Barbers Point Light to latitude 21°14.8′N, longitude 158°06.4′W, thence easterly to latitude 21°14.8′N, longitude 158°03.3′W, thence northeasterly to latitude 21°15.6′N, longitude 158°01.1′W, thence northwesterly to latitude 21°18.5′N, longitude 158°02.0′W, thence westerly along the shoreline to latitude 21°17.8′N, longitude 158°06.4′W.

§ 15.1030 New York and New Jersey.

The following U.S. navigable waters located within the States of New York and New Jersey when the vessel is making an intra-port transit, to include, but not limited to, a movement from a dock to a dock, from a dock to an anchorage, from an anchorage to a dock, or from an anchorage to an anchorage, within the following listed operating areas:

(a) East River from Execution Rocks to New York Harbor, Upper Bay;

(b) Hudson River from Yonkers, New York to New York Harbor, Upper Bay;

(c) Raritan River from Grossman Dock/Arsenal to New York Harbor, Lower Bay;

(d) Arthur Kill Channel;

(e) Kill Van Kull Channel;

(f) Newark Bay;

(g) Passaic River from Point No Point to Newark Bay;

(h) Hackensack River from the turning basin to Newark Bay; and

(i) New York Harbor, Upper and Lower Bay.

§ 15.1040 Massachusetts.

The following U.S. navigable waters located within the State of Massachusetts when the vessel is in transit, but not bound to or departing from a port within the following listed operating areas:

(a) Cape Cod Bay south of latitude 41°48′54″N;

(b) The Cape Cod Canal; and

(c) Buzzards Bay east of a line extending from the southernmost point of Wilbur Point (latitude 41°34′55″N longitude 70°51′15##W) to the easternmost point of Pasque Island (latitude 41°26′55″N longitude 70°50′30″W).

PART 16—CHEMICAL TESTING

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APPENDIX A [RESERVED]

APPENDIX B DRUG AND ALCOHOL TESTING MANAGEMENT INFORMATION SYSTEM (MIS) DATA COLLECTION FORM

AUTHORITY: 46 U.S.C. 2103, 3306, 7101, 7301, and 7701; 49 CFR 1.46.

SOURCE: CGD 86–067, 53 FR 47079, Nov. 21, 1988, unless otherwise noted.

Subpart A—General

§16.101 Purpose of regulations.

(a) The regulations in this part provide a means to minimize the use of intoxicants by merchant marine personnel and to promote a drug free and safe work environment.

(b) These regulations prescribe the minimum standards, procedures, and means to be used to test for the use of dangerous drugs.

(c) As part of a reasonable cause drug testing program established pursuant to this part, employers may test for drugs in addition to those specified in this part only with approval granted by the Coast Guard under 49 CFR part 40 and for substances for which the Department of Health and Human Services has established an approved testing protocol and positive threshold.

§16.105 Definitions of terms used in this part.

Chemical test means a scientifically recognized test which analyzes an individual's breath, blood, urine, saliva, bodily fluids, or tissues for evidence of dangerous drug or alcohol use.

Crewmember means an individual who is:

(a) On board a vessel acting under the authority of a license, certificate of registry, or merchant mariner's document issued under this subchapter, whether or not the individual is a member of the vessel's crew; or

(b) Engaged or employed on board a vessel owned in the United States that is required by law or regulation to engage, employ, or be operated by an individual holding a license, certificate of registry, or merchant mariner's document issued under this subchapter, except the following:

(1) Individuals on fish processing vessels who are primarily employed in the preparation of fish or fish products, or in a support position, and who have no duties that directly affect the safe operation of the vessel;

(2) Scientific personnel on an oceanographic research vessel;

(3) Individuals on industrial vessels who are industrial personnel, as defined in this chapter; and

(4) Individuals not required under part 15 of this subchapter who have no duties that directly affect the safe operation of the vessel.

Dangerous drug means a narcotic drug, a controlled substance, or a controlled-substance analog (as defined in section 102 of the Comprehensive Drug Abuse and Control Act of 1970 (21 U.S.C. 802)).

Dangerous drug level means the amount of traces of dangerous drugs or drug metabolites in an individual's breath, blood, urine, saliva, or body fluids or tissues.

Drug test means a chemical test of an individual's urine for evidence of dangerous drug use.

Employer means a marine employer or sponsoring organization.

Fails a chemical test for dangerous drugs means that the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''positive'' for the presence of dangerous drugs or drug metabolites in an individual's system by a Medical Review Officer in accordance with that part.

Intoxicant means any form of alcohol, dangerous drug, or combination thereof.

Marine employer means the owner, managing operator, charterer, agent, master, or person in charge of a vessel, other than a recreational vessel.

Medical Review Officer means an individual designated by the employer to carry out the duties specified in §16.370 of this part.

Operation means to navigate, steer, direct, manage, or sail a vessel, or to control, monitor, or maintain the vessel's main or auxiliary equipment or systems. Operation includes:

(a) Determining the vessel's position, piloting, directing the vessel along a

desired trackline, keeping account of the vessel's progress through the water, ordering or executing changes in course, rudder position, or speed, and maintaining a lookout;

(b) Controlling, operating, monitoring, maintaining, or testing: the vessel's propulsion and steering systems; electric power generators; bilge, ballast, fire, and cargo pumps; deck machinery including winches, windlasses, and lifting equipment; lifesaving equipment and appliances; firefighting systems and equipment; and navigation and communication equipment; and

(c) Mooring, anchoring, and line handling; loading or discharging of cargo or fuel; assembling or disassembling of tows; and maintaining the vessel's stability and watertight integrity.

Passes a chemical test for dangerous drugs means the result of a chemical test conducted in accordance with 49 CFR part 40 is reported as ''negative'' by a Medical Review Officer in accordance with that part.

Positive rate means the number of positive results for random drug tests conducted under this part plus the number of refusals to take random tests required by this part, divided by the total number of random drug tests conducted under this part plus the number of refusals to take random tests required by this part.

Refuse to submit means that a crewmember fails to provide a urine sample as required by 49 CFR part 40, without a genuine inability to provide a specimen (as determined by a medical evaluation), after he or she has received notice of the requirement to be tested in accordance with the provisions of this part, or engages in conduct that clearly obstructs the testing process.

Serious marine incident means an event defined in 46 CFR 4.03–2.

Sponsoring organization is any company, consortium, corporation, association, union, or other organization with which individuals serving in the marine industry, or their employers, are associated.

Vessel owned in the United States means any vessel documented or numbered under the laws of the United States; and any vessel owned by a citizen of the United States that is not documented or numbered by any nation.

[CGD 86–067, 53 FR 47079, Nov. 21, 1988; 53 FR 48367, Nov. 30, 1988, as amended by CGD 90–014, 56 FR 31033, July 8, 1991; CGD 90–053, 58 FR 31107, May 28, 1993; CGD 93–051, 59 FR 28792, June 3, 1994; 59 FR 62226, Dec. 2, 1994; CGD 91–223, 60 FR 4525, Jan. 23, 1995]

Subpart B—Required Chemical Testing

§ 16.201 Application.

(a) Chemical testing of personnel must be conducted as required by this subpart.

(b) If an individual fails a chemical test for dangerous drugs under this part, the individual will be presumed to be a user of dangerous drugs.

(c) If an individual holding a license, certificate of registry, or merchant mariner's document fails a chemical test for dangerous drugs, the individual's employer or prospective employer shall report the test results in writing to the nearest Coast Guard Officer in Charge, Marine Inspection (OCMI). The individual shall be denied employment as a crewmember or removed from duties which directly affect the safe operation of the vessel as soon as practicable and shall be subject to suspension and revocation proceedings against his or her license, certificate of registry, or merchant mariner's document under 46 CFR part 5.

(d) If an individual who does not hold a license, certificate of registry, or merchant mariner's document fails a chemical test for dangerous drugs, the individual shall be denied employment as a crewmember or removed from duties which directly affect the safe operation of the vessel as soon as possible.

(e) An individual who has failed a required chemical test for dangerous drugs may not be reemployed aboard a vessel until the requirements of § 16.370(d) of this part and 46 CFR part 5, if applicable, have been satisfied.

[CGD 86–607, 53 FR 47049, November 11, 1988, as amended by CGD 90–014, 56 FR 31034, July 8, 1991]

§ 16.205 Implementation of chemical testing programs.

(a) Each employer who employs more than 50 employees required to be tested

under this part was required to implement the pre-employment testing program required by this part not later than July 21, 1989, and the serious marine incident and reasonable cause testing programs required by this part not later than December 21, 1989. The random testing program required by this part shall be implemented not later than October 1, 1991.

(b) Each employer who employs from 11 to 50 employees required to be tested under this part was required to implement the pre-employment, serious marine incident and reasonable cause testing programs required by this part not later than December 21, 1989. The random testing program required by this part shall be implemented not later than October 1, 1991.

(c) Each employer who employs 10 or fewer employees required to be tested under this part was required to implement the pre-employment, serious marine incident and reasonable cause testing programs required by this part not later than December 21, 1990. The random testing program required by this part shall be implemented not later than October 1, 1991.

(d) [Reserved]

(e) The periodic testing requirements of §16.220 apply to physical examinations performed after December 21, 1990.

(f) When a vessel owned in the United States is operating in waters that are not subject to the jurisdiction of the United States, the testing requirements of §§16.210 and 16.230 do not apply to a citizen of a foreign country engaged or employed as pilot in accordance with the laws or customs of that foreign country.

(g) Upon written request of an employer, Commandant (G–MOA) will review the employer's chemical testing program to determine compliance with the provisions of this part.

[CGD 90–014, 56 FR 60930, Nov. 30, 1991, as amended by 59 FR 62226, Dec. 2, 1994; CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§16.207 Conflict with foreign laws.

(a) This part shall not apply to any person for whom compliance with this part would violate the domestic laws or policies of another country.

(b) This part is not effective until January 2, 1997, with respect to any person onboard U.S. vessels in waters that are subject to the jurisdiction of a foreign government. On or before December 1, 1996, the Commandant shall issue any necessary amendment resolving the applicability of this part to such person on and after January 2, 1997.

[CGD 86–067, 53 FR 47079, Nov. 21, 1988, as amended by CGD 86–067e, 56 FR 18983, Apr. 24, 1991; CGD 86–067f, 57 FR 31275, July 14, 1992; CGD 94–106, 59 FR 65501, Dec. 20, 1994; CGD 95–090, 60 FR 67063, Dec. 28, 1995]

§16.210 Pre-employment testing requirements.

(a) No marine employer shall engage or employ any individual to serve as a crewmember unless the individual passes a chemical test for dangerous drugs for that employer.

(b) An employer may waive a pre-employment test required for a job applicant by paragraph (a) of this section if the individual provides satisfactory evidence that he or she has:

(1) Passed a chemical test for dangerous drugs, required by this part, within the previous six months with no subsequent positive drug tests during the remainder of the six-month period; or

(2) During the previous 185 days been subject to a random testing program required by §16.230 for at least 60 days and did not fail or refuse to participate in a chemical test for dangerous drugs required by this part.

[CGD 90–053, 58 FR 31107, May 28, 1993, as amended by CGD 93–051, 59 FR 28792, June 3, 1994]

§16.220 Periodic testing requirements.

(a) Except as provided by paragraph (c) of this section, and §§10.209(h) and 12.02–9(f) of this subchapter, an applicant for an original issuance or a renewal of a license or a certificate of registry (COR), a raise in grade of a license, a higher grade of COR, an original issuance of a merchant mariner's document (MMD), the first endorsement as an able seaman, lifeboatman, qualified member of the engine department, or tankerman, or a reissuance of an MMD with a new expiration date shall be required to pass a chemical

test for dangerous drugs. The applicant shall provide the results of the test to the Coast Guard Regional Examination Center (REC) at the time of submitting an application. The test results must be completed and dated not more than 185 days prior to submission of the application.

(b) Unless excepted under paragraph (c) of this section, each pilot required by this subchapter to receive an annual physical examination must pass a chemical test for dangerous drugs as a part of that examination. The individual shall provide the results of each test required by this section to the REC when the pilot applies for a license renewal or when requested by the Coast Guard.

(c) An applicant need not submit evidence of passing a chemical test for dangerous drugs required by paragraph (a) or (b) of this section if he or she provides satisfactory evidence that he or she has—

(1) Passed a chemical test for dangerous drugs required by this part within the previous six months with no subsequent positive chemical tests during the remainder of the 6-month period; or

(2) During the previous 185 days been subject to a random testing program required by § 16.230 for at least 60 days and did not fail or refuse to participate in a chemical test for dangerous drugs required by this part.

(d) Except as provided by paragraph (b) of this section, an applicant is required to provide the results of only one chemical test for dangerous drugs when multiple transactions are covered by or requested in a single application.

[CGD 91–223, 60 FR 4525, Jan. 23, 1995]

§ 16.230 Random testing requirements.

(a) Marine employers shall establish programs for the chemical testing for dangerous drugs on a random basis of crewmembers on inspected vessels who:

(1) Occupy a position, or perform the duties and functions of a position, required by the vessel's Certificate of Inspection;

(2) Perform the duties and functions of patrolmen or watchmen required by this chapter; or,

(3) Are specifically assigned the duties of warning, mustering, assembling, assisting, or controlling the movement of passengers during emergencies.

(b) Marine employers shall establish programs for the chemical testing for dangerous drugs on a random basis of crewmembers on uninspected vessels who:

(1) Are required by law or regulation to hold a license issued by the Coast Guard in order to perform their duties on the vessel;

(2) Perform duties and functions directly related to the safe operation of the vessel;

(3) Perform the duties and functions of patrolmen or watchmen required by this chapter; or,

(4) Are specifically assigned the duties of warning, mustering, assembling, assisting, or controlling the movement of passengers during emergencies.

(c) The selection of crewmembers for random drug testing shall be made by a scientifically valid method, such as a random number table or a computer-based random number generator that is matched with crewmembers' Social Security numbers, payroll identification numbers, or other comparable identifying numbers. Under the testing frequency and selection process used, each covered crewmember shall have an equal chance of being tested each time selections are made and an employee's chance of selection shall continue to exist throughout his or her employment. As an alternative, random selection may be accomplished by periodically selecting one or more vessels and testing all crewmembers covered by this section, provided that each vessel subject to the marine employer's test program remains equally subject to selection.

(d) Marine employers may form or otherwise use sponsoring organizations, or may use contractors, to conduct the random chemical testing programs required by this part.

(e) Except as provided in paragraph (f) of this section, the minimum annual percentage rate for random drug testing shall be 50 percent of covered crewmembers.

(f) The annual rate for random drug testing may be adjusted in accordance with this paragraph.

(1) The Commandant's decision to increase or decrease the minimum annual percentage rate for random drug testing is based on the reported random positive rate for the entire industry. All information used for this determination is drawn from the drug MIS reports required by this part. In order to ensure reliability of the data, the Commandant considers the quality and completeness of the reported data, may obtain additional information or reports from marine employers, and may make appropriate modifications in calculating the industry random positive rate. Each year, the Commandant will publish in the FEDERAL REGISTER the minimum annual percentage rate for random drug testing of covered crewmembers. The new minimum annual percentage rate for random drug testing will be applicable starting January 1 of the calendar year following publication.

(2) When the minimum annual percentage rate for random drug testing is 50 percent, the Commandant may lower this rate to 25 percent of all covered crewmembers if the Commandant determines that the data received under the reporting requirements of 46 CFR 16.500 for two consecutive calendar years indicate that the positive rate is less than 1.0 percent.

(3) When the minimum annual percentage rate for random drug testing is 25 percent, and the data received under the reporting requirements of 46 CFR 16.500 for any calendar year indicate that the positive rate is equal to or greater than 1.0 percent, the Commandant will increase the minimum annual percentage rate for random drug testing to 50 percent of all covered crewmembers.

(g) Marine employers shall randomly select a sufficient number of covered crewmembers for testing during each calendar year to equal an annual rate not less than the minimum annual percentage rate for random drug testing determined by the Commandant. If the marine employer conducts random drug testing through a consortium, the number of crewmembers to be tested may be calculated for each individual marine employer or may be based on the total number of covered crewmembers covered by the consortium who are subject to random drug testing at the same minimum annual percentage rate under this part or any DOT drug testing rule.

(h) Each marine employer shall ensure that random drug tests conducted under this part are unannounced and that the dates for administering random tests are spread reasonably throughout the calendar year.

(i) If a given covered crewmember is subject to random drug testing under the drug testing rules of more than one DOT agency for the same marine employer, the crewmember shall be subject to random drug testing at the percentage rate established for the calendar year by the DOT agency regulating more than 50 percent of the crewmember's function.

(j) If a marine employer is required to conduct random drug testing under the drug testing rules of more than one DOT agency, the marine employer may—

(1) Establish separate pools for random selection, with each pool containing the covered crewmembers who are subject to testing at the same required rate; or

(2) Randomly select such crewmembers for testing at the highest percentage rate established for the calendar year by any DOT agency to which the marine employer is subject.

(k) An individual may not be engaged or employed, including self-employment, on a vessel in a position as master, operator, or person in charge for which a license or merchant mariner's document is required by law or regulation unless all crewmembers covered by this section are subject to the random testing requirements of this section.

[CGD 90–014, 56 FR 31034, July 8, 1991, as amended by 59 FR 62227, Dec. 2, 1994]

§16.240 Serious marine incident testing requirements.

The marine employer shall ensure that all persons directly involved in a serious marine incident are chemically tested for evidence of dangerous drugs and alcohol in accordance with the requirements of 46 CFR 4.06.

§ 16.250 Reasonable cause testing requirements.

(a) The marine employer shall require any crewmember engaged or employed on board a vessel owned in the United States that is required by law or regulation to engage, employ or be operated by an individual holding a license, certificate of registry, or merchant mariner's document issued under this subchapter, who is reasonably suspected of using a dangerous drug to be chemically tested for dangerous drugs.

(b) The marine employer's decision to test must be based on a reasonable and articulable belief that the individual has used a dangerous drug based on direct observation of specific, contemporaneous physical, behavioral, or performance indicators of probable use. Where practicable, this belief should be based on the observation of the individual by two persons in supervisory positions.

(c) When the marine employer requires testing of an individual under the provisions of this section, the individual must be informed of that fact and directed to provide a urine specimen as soon as practicable. This fact shall be entered in the vessel's official log book, if one is required.

(d) If an individual refuses to provide a urine specimen when directed to do so by the employer under the provisions of this section, this fact shall be entered in the vessel's official log book, if one is required.

§ 16.260 Records.

(a) Employers shall maintain records of chemical tests which the Medical Review Officer reports as *positive* for a period of at least 5 years and shall make these records available to Coast Guard officials upon request. Records of tests reported as *negative* shall be retained for one year.

(b) The records shall be sufficient to:

(1) Satisfy the requirements of §§ 16.210(b) and 16.220(c) of this part.

(2) Identify the total number of individuals chemically tested annually for dangerous drugs in each of the categories of testing required by this part including the annual number of individuals failing chemical tests and the number and types of drugs for which individuals tested positive.

[CGD 86–067, 53 FR 47079, Nov. 21, 1988, as amended by CGD 91–223, 60 FR 4526, Jan. 23, 1995]

Subpart C—Standards for Chemical Testing for Dangerous Drugs

§ 16.301 Procedures for Transportation Workplace Drug Testing Programs.

Drug testing programs subject to this part shall be conducted in accordance with 49 CFR part 40, Procedures for Transportation Workplace Drug Testing Programs. This subpart summarizes requirements for drug testing programs contained in those regulations. Those regulations should be consulted to determine the specific procedures which must be established and utilized. Drug testing programs required by this part shall use only drug testing laboratories certified by the Department of Health and Human Services (DHHS).

§ 16.310 General.

(a) *Collection site.* The employer shall ensure that the collection site is adequate to provide for the collection, security, temporary storage, and shipping of specimens to a certified drug testing laboratory.

(b) *Security.* Procedures shall provide for the collection site to be secure. Collection sites dedicated solely for specimen collection must be secure at all times. Collection sites which are not dedicated solely for specimen collection must be secured during specimen collection.

(c) *Access to authorized personnel only.* No unauthorized personnel shall be permitted in any part of a collection site when specimens are collected nor shall unauthorized personnel be allowed access to stored specimens.

(d) *Privacy.* Procedures for collecting urine specimens shall allow for individual privacy unless there is reason to believe that a particular individual may alter or substitute the specimen to be provided.

(e) *Integrity of specimens.* Collection site personnel shall take precautions to

ensure that each specimen is not adulterated or diluted during the collection process.

§16.320 Chain of custody.

(a) A chain of custody for each specimen to be chemically tested shall be established and maintained from the time of specimen collection through the testing of the specimen.

(b) If a specimen is not immediately prepared for shipment, it shall be safeguarded during temporary storage.

(c) Every effort shall be made to minimize the number of persons handling specimens.

§16.330 Specimen handling and shipping.

(a) The employer shall obtain a specimen collection and shipping kit to be used to collect specimens and ship them to the certified drug testing laboratory.

(b) The specimen collection and shipping kit, as required by 49 CFR part 40, shall contain:

(1) Plastic urine specimen bottles in a sufficient quantity to accommodate the people to be tested;

(2) Means for sealing and identifying specimen bottles;

(3) Chain of custody forms;

(4) A set of step-by-step instructions which describe the proper procedures to be followed during specimen collection, handling, and shipping; and

(5) Shipping materials.

(c) The marine employer shall ensure that specimens are promptly shipped to a certified testing laboratory meeting the requirements of §16.340. Chain of custody documents must accompany each specimen from the time of specimen collection through shipment to and testing by the laboratory.

(d) Specimens shall be shipped by an expeditious means.

§16.340 Test laboratory requirements.

(a) The employer shall ensure that all chemical testing for dangerous drugs required by this part is conducted by a DHHS certified laboratory.

(b) The laboratory shall meet the requirements of 49 CFR part 40.

§16.350 Specimen analysis.

(a) Each specimen shall be analyzed in accordance with 49 CFR 40.29, which requires testing for—

(1) Marijuana;

(2) Cocaine;

(3) Opiates;

(4) Phencyclidine (PCP); and

(5) Amphetamines.

(b) A specimen which indicates the presence of a dangerous drug at a level equal to or exceeding the levels established in 49 CFR 40.29 is reported to the Medical Review Officer as positive.

[CGD 90–053, 58 FR 31107, May 28, 1993]

§16.360 Specimen analysis reports.

(a) The laboratory shall report all test results as required by 49 CFR 40.29(g). Reports are made within an average of five days after receipt of a specimen by the laboratory.

(b) The laboratory reports as negative all specimens which are negative on the initial test or negative on the confirmatory test. Only specimens confirmed positive are reported positive to the Medical Review Officer for a specific drug or drug metabolite.

[CGD 86–067, 53 FR 47079, Nov. 21, 1988, as amended by CGD 90–053, 58 FR 31107, May 28, 1993]

§16.370 Medical Review Officer.

(a) The employer shall designate or appoint a Medical Review Officer (MRO) meeting the qualifications of 49 CFR 40.33. If the employer does not have a qualified individual on staff to serve as MRO, the employer may contract for the provision of MRO services as part of its drug testing program.

(b) The MRO shall review and interpret each confirmed positive test result in accordance with 49 CFR 40.33.

(c) If the MRO verifies a laboratory confirmed positive report, the MRO shall report the positive test result to the employer or the employer's designated agent.

(d) Before an individual who has failed a required chemical test for dangerous drugs may return to work aboard a vessel, the MRO shall determine that the individual is drug-free and the risk of subsequent use of dangerous drugs by that person is sufficiently low to justify his or her return

to work. In addition, the individual shall agree to be subject to increased, unannounced testing for a period as determined by the MRO of up to 60 months.

[CGD 86–067, 53 FR 47079, Nov. 21, 1988; 53 FR 48367, Nov. 30, 1988, as amended by CGD 90–053, 58 FR 31107, May 28, 1993]

§ 16.380 Release of information.

(a) Except as provided for in this part and in § 4.06–60 of this chapter, an employer shall not release individual test results or other personal information for anti-drug program records.

(b) Individual results from drug tests required by this part may be released if the individual tested signs a specific authorization for the release of the results to an identified person.

(c) Nothing in this section shall prevent an individual tested under this part from obtaining the results of that test.

Subpart D—Employee Assistance Programs

§ 16.401 Employee Assistance Program (EAP).

The employer shall provide an Employee Assistance Program (EAP) for all crewmembers. The employer may establish the EAP as a part of its internal personnel services or the employer may contract with an entity that will provide EAP services to a crewmember. Each EAP must include education and training on drug use for crewmembers and the employer's supervisory personnel as provided below:

(a) *EAP education program:* Each EAP education program must include at least the following elements: display and distribution of informational material; display and distribution of a community service hot-line telephone number for crewmember assistance, and display and distribution of the employer's policy regarding drug and alcohol use in the workplace.

(b) *EAP training program:* An EAP training program must be conducted for the employer's crewmembers and supervisory personnel. The training program must include at least the following elements: the effects and consequences of drug and alcohol use on personal health, safety, and work environment; the manifestations and behavioral cues that may indicate drug and alcohol use and abuse; and documentation of training given to crewmembers and the employer's supervisory personnel. Supervisory personnel must receive at least 60 minutes of training.

Subpart E—Management Information System

§ 16.500 Management Information System requirements.

(a) All marine employers shall collect the drug and alcohol testing program data identified in this section for each calendar year, January 1 to December 31. Marine employers shall submit this data to the Coast Guard by March 15 of the following year. The data shall be submitted to Commandant (G–MOA), 2100 Second Street, SW, Washington, DC, 20593–0001.

(b) All marine employers shall collect the following drug and alcohol testing program data:

(1) Number of covered employees.

(2) Number of covered employees subject to testing under the anti-drug rules of more than one DOT agency because of the nature of their assigned duties, identified by each agency.

(3) Number of drug and alcohol tests by test type. The drug test types are pre-employment, random, post-accident and reasonable cause. The alcohol test types are post-accident and reasonable cause.

(4) Number of positive drug test results verified by a Medical Review Officer (MRO) by test type and type of drug(s). Number of alcohol tests resulting in a blood alcohol concentration of .04 percent by weight or more by test type.

(5) Number of negatives reported by a MRO by type of test.

(6) Number of applicants denied employment based on a positive drug test result verified by an MRO.

(7) Number of marine employees with a positive drug test result verified by an MRO, who were returned to duty in a covered position, having met the requirements of § 16.370(d) and part 5 of this chapter.

(8) Number of marine employee drug test results that MROs verify positive

for more than one drug or combination of drugs.

(9) Number of covered employees who refused to submit to a drug test required under this part.

(10) Marine employee training and education information.

(c) The data listed in paragraph (b) of this section must be submitted on Form CG–5573, which is reproduced in appendix B to this part and may be obtained at any Officer in Charge, Marine Inspection. All items on the form must be completed. Data may be submitted by consortia or other employer representatives on behalf of a marine employer. Reports submitted in this manner may be on one form, but must also be accompanied by a list of marine employers for whom the report is submitted. Unless submitting the report on their own behalf, each marine employer must notify the Coast Guard (Commandant (G-MOA)) in writing of the consortium or representative that will submit the employer's data, and remains responsible for ensuring that the data is submitted and is accurate.

(d) Marine employers that conduct operations regulated by another Department of Transportation Operating Administration must submit appropriate data to that Operating Administration for those employees covered by that Operating Administration's regulations.

[CGD 91–019, 58 FR 68277, Dec. 23, 1993, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

Appendix A—[Reserved]

APPENDIX B - DRUG AND ALCOHOL TESTING MANAGEMENT INFORMATION SYSTEM (MIS) DATA COLLECTION FORM

INSTRUCTIONS

This reporting form includes four parts. Collectively, these parts address the data elements required in the United States Coast Guard (USCG) and the U.S. Department of Transportation (DOT) drug and alcohol testing regulations. The form is preceded by instructions which outline and explain the information requested and indicate the probable sources for this information. The four sections, the page number for the instructions, and the page location on the reporting form are:

Section	Instructions Page	Reporting Form Page
A. MARINE EMPLOYER INFORMATION	i	1
B. COVERED EMPLOYEES	i	1
C. MARINE EMPLOYEE DRUG TESTING INFORMATION	ii-iv	2
D. MARINE EMPLOYEE ALCOHOL TESTING INFORMATION	iv-v	2

Page 1 **MARINE EMPLOYER INFORMATION** (Section A) requires the company name for which the report is done and a current address. Below this, a signature, typed or printed name, title, date, and current telephone number (including the area code) are required from the person certifying the correctness and completeness of the form.

Page 1 **COVERED EMPLOYEES** (Section B) requires a count of employees (including prospective employees who were pre-employment tested) who were subject to testing under the USCG/DOT drug testing regulations. The most likely source for this information is the employer's personnel department. The count should include all covered employees working for the company during the reported year.

Additional information must be completed if your company employs personnel who perform duties covered by the drug and alcohol rules of more than one DOT operating administration. **NUMBER OF EMPLOYEES COVERED BY MORE THAN ONE DOT OPERATING ADMINISTRATION**, requires that you identify the number of employees under the appropriate additional operating administration(s).

The following instructions are to be used as a guide for completing the drug testing information in the USCG/DOT **Drug and Alcohol Testing MIS Data Collection Form**. A sample testing results table with a narrative explanation is provided on pages ii-iii as an example to facilitate the process of completing the form correctly.

Section C is used to summarize the drug testing results for applicants and covered employees. There are four categories of testing to be completed. Items necessary to complete this table include:

1) the number of specimens collected in each testing category;
2) the number of specimens tested which were reported negative and verified positive for any drug(s); and
3) individual counts of those specimens which were verified positive for each of the five drugs.

Do not include results of quality control samples submitted to the testing laboratory in the table.

A sample table with detailed instructions is provided.

Page 2 **MARINE EMPLOYEE DRUG TESTING INFORMATION** (Section C) requires information for drug testing by category of testing. Each part of this table must be completed for each category of testing. These numbers **do not** include refusals for testing. A sample of the table with example numbers is presented on page iii.

Three types of information are necessary to complete the left side of this table. The first blank column with the heading "**NUMBER OF SPECIMENS COLLECTED,**" requires a count for all collected specimens by testing category. It should not include refusals to test. The second blank column with the heading "**NUMBER OF SPECIMENS REPORTED NEGATIVE,**" requires a count for all completed tests by testing category that were reported negative by your Medical Review Officer (MRO).

The third blank column with the heading "**NUMBER OF SPECIMENS VERIFIED POSITIVE FOR ONE OR MORE OF THE FIVE DRUGS,**" refers to the number of specimens provided by job applicants or employees that were verified positive. "Verified positive" means the results were verified by your MRO.

The right hand portion of this table, with the heading "**NUMBER OF SPECIMENS VERIFIED POSITIVE FOR EACH TYPE OF DRUG,**" requires counts of positive tests **for each** of the five drugs for which tests were done, i.e., marijuana (THC), cocaine, phencyclidine (PCP), opiates, and amphetamines. The number of specimens verified positive for each drug should be entered in the appropriate column for that drug type. Again, "verified positive" refers to test results verified by your MRO.

If an applicant or employee tested positive for more than one drug; for example, both marijuana and cocaine, that person's positive results would be included once in each of the appropriate columns (marijuana and cocaine).

SAMPLE MARINE EMPLOYEE TEST RESULTS TABLE

The following example is for Section C, **MARINE EMPLOYEE DRUG TESTING INFORMATION**, and summarizes pre-employment testing results. The procedures detailed here also apply to the

other categories of testing in Section C which require you to summarize testing results for employees.

A — Urine specimens were collected for 157 job applicants for covered positions during the reporting year. This information is entered in the first blank column of the table in the row marked "PRE-EMPLOYMENT".

B — The MRO for your company reported that 153 of those 157 specimens from applicants were negative (i.e., no drugs were detected). Enter this information in the second blank column of the table in the row marked "PRE-EMPLOYMENT".

C — The MRO for your company reported that 4 of those 157 specimens from applicants were positive (i.e., a drug or drugs were detected). Enter this information in the third blank column of the table in the row marked "PRE-EMPLOYMENT".

D — With the 4 specimens that tested positive, the following drugs were detected:

Specimen	Drugs
#1	Marijuana
#2	Amphetamines
#3	Marijuana and Cocaine (Multi-drug specimen)
#4	Marijuana

Marijuana was detected in three (3) specimens, cocaine in one (1), and amphetamines in one (1). This information is entered in the columns on the right hand side of the table under each of these drugs. Two different drugs were detected in specimen #3 (multi-drug) so an entry is made in both the marijuana and the cocaine column for this specimen.

TYPE OF TEST	NUMBER OF SPECIMENS COLLECTED	NUMBER OF SPECIMENS REPORTED NEGATIVE	NUMBER OF SPECIMENS VERIFIED POSITIVE FOR ONE OR MORE OF THE FIVE DRUGS	NUMBER OF SPECIMENS VERIFIED POSITIVE FOR EACH TYPE OF DRUG				
				Marijuana (THC)	Cocaine	Phencyclidine (PCP)	Opiates	Amphetamines
PRE-EMPLOYMENT	157	153	4	3	1	0	0	1

A B C D

Note that adding up the numbers for each type of drug in a row ("NUMBER OF SPECIMENS VERIFIED POSITIVE FOR EACH TYPE OF DRUG") will not always match the number entered in the third column, "NUMBER OF SPECIMENS VERIFIED POSITIVE FOR ONE OR MORE OF THE FIVE DRUGS". The total for the numbers on the right hand side of the table may differ from the number of specimens testing positive since some specimens may contain more than one drug.

Page 2 Below the table for **MARINE EMPLOYEE DRUG TESTING INFORMATION** is a box with the heading **"Number of persons denied a position as a covered employee following a verified positive drug test"**. This is simply a count of those persons who were not placed in a covered position because they tested positive for one or more drugs.

Page 2 Also following the table for **MARINE EMPLOYEE DRUG TESTING INFORMATION**, you must provide counts for employees who have tested positive and have returned to work in a covered position during the reported period. This information should be available from the personnel office and/or drug program manager.

Page 2 **SPECIMENS VERIFIED POSITIVE FOR MORE THAN ONE DRUG** requires information on specimens that contained more than one drug. First, indicate the **NUMBER OF VERIFIED POSITIVES**. Then specify the combination of drugs reported as positive by placing the same number in the appropriate columns. For example, if marijuana and cocaine were detected in 3 specimens, then you would write "3" as the number of verified positives and "3" in the columns for "Marijuana" and "Cocaine". If marijuana and opiates were detected in 2 specimens, then you would write "2" as the number of verified positives and "2" in the columns for "Marijuana" and "Opiates".

Page 2 **EMPLOYEES WHO REFUSED TO SUBMIT TO A DRUG TEST** requires a count of the **NUMBER OF COVERED EMPLOYEES** who refused to submit to a **random** or **non-random** (pre-employment, post-accident, or reasonable cause) drug test required under the USCG regulation.

Page 2 **DRUG AND ALCOHOL TRAINING** requires information on the number of covered employees and supervisory personnel who have received the required drug and alcohol training during the current reporting period.

The following instructions are to be used as a guide for completing the alcohol testing information for the USCG/DOT **Drug and Alcohol Testing MIS Data Collection Form**. A sample testing results table with a narrative explanation is provided on page v as an example to facilitate the process of completing the form correctly.

Section D is used to summarize the alcohol testing results for covered employees. There are two categories of testing to be completed in this table. Items necessary to complete this table includes:

1) the number of alcohol tests performed for each testing category; and
2) the number of test results which were equal to or greater than 0.04.

A sample table with detailed instructions is provided.

Page 2 **MARINE EMPLOYEE ALCOHOL TESTING INFORMATION** (Section D) requires information for post-accident and reasonable cause alcohol testing. These numbers **do not** include refusals for testing. A sample table with example numbers is presented on page v.

Two types of information are necessary to complete this table. The first blank column with the heading "**NUMBER OF TESTS**" requires a count of all alcohol tests performed for each testing category.

The second blank column with the heading "**NUMBER OF TEST RESULTS EQUAL TO OR GREATER THAN 0.04**" requires a count of positive tests.

SAMPLE MARINE EMPLOYEE TEST RESULTS TABLE

The following example is for Section D, **MARINE EMPLOYEE ALCOHOL TESTING INFORMATION**, which summarizes post-accident and reasonable cause testing results.

A — Tests were conducted on 6 employees in covered positions during the reporting year. This information is entered in the first blank column of the table in the row marked "POST-ACCIDENT". The test results for these 6 employees were the following:

Employee	Results
#1	0.06
#2	0.00
#3	0.00
#4	0.04
#5	0.00
#6	0.02

B — The test results for 2 of the employees in covered positions were equal to or greater than 0.04. Enter this information in the second blank column of the table in the row marked "POST-ACCIDENT".

TYPE OF TEST	NUMBER OF TESTS	NUMBER OF TEST RESULTS EQUAL TO OR GREATER THAN 0.04
POST-ACCIDENT	6	2
REASONABLE CAUSE	10	1

A B

Please note that the sample data collection form also has information for REASONABLE CAUSE testing on line two. For REASONABLE CAUSE testing, 10 tests were conducted and 1 was equal to or greater than 0.04.

USCG DRUG AND ALCOHOL TESTING MIS DATA COLLECTION FORM OMB No. 2115-0003

YEAR COVERED BY THIS REPORT: 19__

A. MARINE EMPLOYER INFORMATION

Company _____

Address _____

_____

_____

I, the undersigned, certify that the information provided on this United States Coast Guard Drug and Alcohol Testing Management Information System Data Collection Form is, to the best of my knowledge and belief, true, correct, and complete for the period stated.

Signature	Printed Name	Date
Title	Phone Number	

Title 18, U.S.C. Section 1001, makes it a criminal offense subject to a maximum fine of $10,000, or imprisonment for not more than 5 years, or both, to knowingly and willfully make or cause to be made any false or fraudulent statements or representations in any matter within the jurisdiction of any agency of the United States.

B. COVERED EMPLOYEES

COVERED EMPLOYEES						
EMPLOYEE CATEGORY	NUMBER OF USCG COVERED EMPLOYEES	NUMBER OF EMPLOYEES COVERED BY MORE THAN ONE DOT OPERATING ADMINISTRATION				
		FAA	FHWA	FRA	FTA	RSPA
Crewmembers						

READ BEFORE COMPLETING THE REMAINDER OF THIS FORM:

1. All items refer to the **current** reporting period **only** (for example, January 1, 1994 - December 31, 1994).
2. This report is only for testing **REQUIRED BY THE UNITED STATES COAST GUARD (USCG)**:
   - Results should be reported only for employees in **COVERED POSITIONS** as defined by the USCG drug and alcohol testing regulations.
   - The information requested should only include testing for: marijuana (THC), cocaine, phencyclidine (PCP), opiates, and amphetamines using the standard procedures required by DOT regulation 49 CFR Part 40; and alcohol using the standard procedures required by USCG regulations 33 CFR Part 95 and 46 CFR Parts 4 and 16.
3. Information on refusals for testing should only be reported in the table entitled "EMPLOYEES WHO REFUSED TO SUBMIT TO A DRUG TEST". Do not include refusals for testing in other sections of this report.
4. Do not include the results of any quality control samples submitted to the testing laboratory in any of the tables.
5. Complete all items; DO NOT LEAVE ANY ITEM BLANK. If the value for an item is zero (0), place a zero (0) on the form.

The United States Coast Guard estimates that the average burden for this report form is 31 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant, U.S. Coast Guard Headquarters (G-MMI); 2100 2nd St., S.W.; Washington, D.C. 20593-0001; OR Office of Management and Budget, Paperwork Reduction Project (2115-0003); Washington, D.C. 20503.

DEPT. OF TRANSP., USCG, CG-5573 (11-93) 1

REVERSE OF CG-5573 (11-93)

This part of the form requires information on VERIFIED POSITIVE and REPORTED NEGATIVE drug tests. These are the results that are reported to you by your Medical Review Officer (MRO).

C. MARINE EMPLOYEE DRUG TESTING INFORMATION

TYPE OF TEST	NUMBER OF SPECIMENS COLLECTED	NUMBER OF SPECIMENS REPORTED NEGATIVE	NUMBER OF SPECIMENS VERIFIED POSITIVE FOR ONE OR MORE OF THE FIVE DRUGS	NUMBER OF SPECIMENS VERIFIED POSITIVE FOR EACH TYPE OF DRUG				
				Mari-juana (THC)	Cocaine	Phency-clidine (PCP)	Opiates	Amphet-amines
PRE-EMPLOYMENT								
RANDOM								
POST-ACCIDENT								
REASONABLE CAUSE								

Number of persons denied a position as a covered employee following a verified positive drug test:	
Number of marine employees with a positive drug test result verified by an MRO, who were returned to duty in a covered position, having met the requirements of 46 CFR 16.370 (d) and 46 CFR Part 5:	

SPECIMENS VERIFIED POSITIVE FOR MORE THAN ONE DRUG					
NUMBER OF VERIFIED POSITIVES	Marijuana (THC)	Cocaine	Phencyclidine (PCP)	Opiates	Amphetamines

EMPLOYEES WHO REFUSED TO SUBMIT TO A DRUG TEST	Number
Covered employees who refused to submit to a **random** drug test required under USCG regulations:	
Covered employees who refused to submit to a **non-random** drug test required under USCG regulations:	

DRUG AND ALCOHOL TRAINING	Number
Covered employees who have received initial training on the consequences, manifestations, and behavioral cues of drug and alcohol use as required by USCG drug and alcohol testing regulations:	
Supervisory personnel who have received initial training on the specific contemporaneous physical, behavioral, and performance indicators of probable drug and alcohol use as required by USCG drug and alcohol testing regulations:	

D. MARINE EMPLOYEE ALCOHOL TESTING INFORMATION

TYPE OF TEST	NUMBER OF TESTS	NUMBER OF TEST RESULTS EQUAL TO OR GREATER THAN 0.04
POST-ACCIDENT		
REASONABLE CAUSE		

2

[CGD 91–019, 58 FR 68279, Dec. 23, 1993]

[CGD 91–019, 58 FR 68279, Dec. 23, 1993]

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EDITORIAL NOTE: This listing is provided for informational purposes only. It is compiled and kept current by the Coast Guard, Department of Transportation.

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SUBCHAPTER C—UNINSPECTED VESSELS

PART 24—GENERAL PROVISIONS

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AUTHORITY: 46 U.S.C. 2113, 3306, 4104, 4302; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16650, Dec. 30, 1965, unless otherwise noted.

Subpart 24.01—Authority and Purpose

§ 24.01–1 Purpose of regulations.

The purpose of the regulations in this subchapter is to set forth uniform minimum requirements for uninspected commercial vessels, certain motor vessels, vessels propelled by said carrying passenger for hire, and barges carrying passengers for hire in accordance with the intent of the Motorboat Act of 1940, as amended (54 Stat. 163; 46 U.S.C. 526–526t) and the Federal Boat Safety Act of 1971 (85 Stat. 213; 46 U.S.C. 1451–1489). The regulations are necessary to carry out the provisions of the Motorboat Act of 1940, and the Federal Boat Safety Act of 1971 and such regulations have the force of law.

[CGD 72–172R, 38 FR 8116, Mar. 28, 1973]

§ 24.01–5 Assignment of functions.

(a) The Department of Transportation Act (Pub. L. 89–670, 80 Stat. 931–950, 49 U.S.C. 1651–1659), transferred to and vested in the Secretary of Transportation ‘‘* * * all functions, powers, and duties, relating to the Coast Guard, of the Secretary of the Treasury and of other officers and offices of the Department of the Treasury’’ (subsection 6(b) (1), 49 U.S.C. 1655(b)). This transfer is subject to certain conditions, modifications, and exceptions as set forth in such act. By rule in 49 CFR 1.4(a), the Secretary of Transportation delegated to the Commandant, U.S. Coast Guard, authority to exercise certain functions, powers, and duties as set forth in subsections 6(a) (4), 6(b) (1), and 6(g) of such act (49 U.S.C. 1655), subject to conditions, exceptions and modifications as described in 49 CFR part 1. By a rule in 49 CFR 1.9 the Secretary of Transportation continued in effect actions taken prior to April 1, 1967.

(b) The Commandant, U.S. Coast Guard, in a notice dated March 31, 1967, and effective April 1, 1967 (32 FR 5611), approved the continuation of orders, rules, regulations, policies, procedures, privileges, waivers, and other actions, which had been made, allowed, granted, or issued prior to April 1, 1967, and provided that they shall continue in effect according to their terms until modified, terminated, repealed, superseded, or set aside by appropriate authority.

[CGFR 68–32, 33 FR 5711, Apr. 12, 1968]

§ 24.01–7 Right of appeal.

Any person directly affected by a decision or action taken under this subchapter, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50380, Dec. 6, 1989]

Subpart 24.05—Application

§ 24.05–1 Vessels subject to the requirements of this subchapter.

(a) This subchapter shall be applicable to all vessels indicated in Column 6 of Table 24.05–1 (a), and shall apply to all such United States flag vessels, and to all such foreign vessels, except as follows:

(1) Any vessel operating exclusively on inland waters which are not navigable waters of the United States.

(2) Any vessel while laid up and dismantled and out of commission.

(3) With the exception of vessels of the U.S. Maritime Administration, any vessel with title vested in the United States and which is used for public purposes.

TABLE 24.05–1(a)

Method of propulsion	Size or other limitations[1]	Classes of vessels (including motorboats) examined or inspected under various Coast Guard regulations[1]					
		Vessels inspected and certificated under subchapter D—Tank Vessels[2]	Vessels inspected and certificated under either subchapter H—Passenger Vessels[2 3 4 5] or subchapter T—Small Passenger Vessels[2 3 4]	Vessels inspected and certificated under subchapter I—Cargo and Miscellaneous Vessels[2 3]	Vessels subject to provisions of subchapter C—Uninspected Vessels[2 3 5 6 7 8]	Vessels subject to provisions of subchapter U—Oceanographic Vessels[3 5 6 7 9]	Vessels subject to the provisions of subchapter O—Certain Bulk Dangerous Cargoes[10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Steam	Vessels not over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	All tugboats and towboats.	All vessels except those covered by columns 3, 4, 5, and 7.	None	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.[12]
	Vessels over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels of not over 15 gross tons which carry more than 6 passengers.[7] 3. All other vessels carrying passengers,[7] except:. a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4.	None	All vessels engaged in oceanographic research.	Do.

TABLE 24.05–1(a)—Continued

Method of propulsion	Size or other limitations[1]	Classes of vessels (including motorboats) examined or inspected under various Coast Guard regulations[1]					
		Vessels inspected and certificated under subchapter D—Tank Vessels[2]	Vessels inspected and certificated under either subchapter H—Passenger Vessels[2345] or subchapter T—Small Passenger Vessels[234]	Vessels inspected and certificated under subchapter I—Cargo and Miscellaneous Vessels[23]	Vessels subject to provisions of subchapter C—Uninspected Vessels[235678]	Vessels subject to provisions of subchapter U—Oceanographic Vessels[35679]	Vessels subject to the provisions of subchapter O—Certain Bulk Dangerous Cargoes[10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
			c. Towing and fishing vessels, in other than ocean and coastwise service, may carry persons on the legitimate business of the vessel, in addition to crew, but not to exceed one for each net ton of the vessel.				
Motor	Vessels not over 15 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All vessels except those covered by columns 3, 4, 5, and 7.	None	Do.
	Vessels over 15 gross tons except seagoing motor vessels of 300 gross tons and over.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels not over 65 feet in length which carry more than 6 passengers.[7]	All vessels carrying freight for hire except those covered by columns 3 and 4.	All vessels except those covered by columns 3, 4, 5, and 7.	None	Do.

			3. All other vessels of over 65 feet in length carrying passengers for hire except documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.				
	Seagoing motor vessels of 300 gross tons and over	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts 2. All other vessels carrying passengers,[7] except:. a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4, and those engaged in the fishing, oystering, clamming, crabbing, or any other branch of the fishery, kelp, or sponge industry.	All vessels except those covered by columns 3, 4, 5, and 7.	All vessels engaged in oceanographic research.	None.
Sail	Vessels not over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All vessels carrying 6 or less passengers for hire.[12]	None	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.[12]

TABLE 24.05–1(a)—Continued

Method of propulsion	Size or other limitations[1]	Classes of vessels (including motorboats) examined or inspected under various Coast Guard regulations[1]					
		Vessels inspected and certificated under subchapter D—Tank Vessels[2]	Vessels inspected and certificated under either subchapter H—Passenger Vessels[2 3 4 5] or subchapter T—Small Passenger Vessels[2 3 4]	Vessels inspected and certificated under subchapter I—Cargo and Miscellaneous Vessels[2 3]	Vessels subject to provisions of subchapter C—Uninspected Vessels[2 3 5 6 7 8]	Vessels subject to provisions of subchapter U—Oceanographic Vessels[3 5 6 7 9]	Vessels subject to the provisions of subchapter O—Certain Bulk Dangerous Cargoes[10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Vessels over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying passengers for hire.	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	None	None	Do.
Non-self-propelled	Vessels less than 100 gross tons.	All vessels carrying combustible or liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 49 CFR parts 171–179.	All barges carrying passengers except those covered by column 4.	None	All tank barges carrying in bulk the cargoes listed in Table 151.05 of this chapter.[11 12]
	Vessels 100 gross tons or over.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying passengers for hire.	All seagoing barges except those covered by columns 3 and 4; and those inland barges carrying dangerous cargoes when required by 49 CFR parts 171–179.	All barges carrying passengers except those covered by columns 4 and 7.	All seagoing barges engaged in oceanographic research.	

[1] Where length is used in this table it means the length measured from end to end over the deck, excluding sheer. This expression means a straight line measurement of the overall length from the foremost part of the vessel to the aftermost part of the vessel, measured parallel to the centerline.

[2] Subchapters E (Load Lines), F (Marine Engineering), J (Electrical Engineering), and N (Dangerous Cargoes) of this chapter may also be applicable under certain conditions. The provisions of 49 CFR parts 171–179 apply whenever hazardous materials are on board vessels (including motorboats), except when specifically exempted by law.

[3] Public nautical schoolships, other than vessels of the Navy and Coast Guard, shall meet the requirements of part 167 of subchapter R (Nautical Schools) of this chapter. Civilian nautical schoolships, as defined by 46 U.S.C. 1331, shall meet the requirements of subchapter H (Passenger Vessels) and part 168 of subchapter R (Nautical Schools) of this chapter.

[4] Subchapter H (Passenger Vessels) of this chapter covers only those vessels of 100 gross tons or more. Subchapter T (Small Passenger Vessels) of this chapter covers only those vessels of less than 100 gross tons.

[5] Vessels covered by subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter, where the principal purpose or use of the vessel is not for the carriage of liquid cargo, may be granted a permit to carry a limited amount of flammable or combustible liquid cargo in bulk. The portion of the vessel used for the carriage of the flammable or combustible liquid cargo shall meet the requirements of subchapter D (Tank Vessels) in addition to the requirements of subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter.

[6] Any vessel on an international voyage is subject to the requirements of the International Convention for Safety of Life at Sea, 1974.

[7] The meaning of the term *passenger* is as defined in the Act of May 10, 1956 (Sec. 1, 70, Stat. 151; 46 U.S.C. 300). On oceanographic vessels scientific personnel on board shall not be deemed to be passengers nor seamen, but for calculations of lifesaving equipment, etc., shall be counted as persons.

[8] Boilers and machinery are subject to examination on vessels over 40 feet in length.

[9] Under 46 U.S.C. 441 an *oceanographic research vessel* is a vessel "* * * being employed exclusively in instruction in oceanography or limnology, or both, or exclusively in oceanographic research, * * *." Under 46 U.S.C. 443, "an oceanographic research vessel shall not be deemed to be engaged in trade or commerce." If or when an oceanographic vessel engages in trade or commerce, such vessel cannot operate under its certificate of inspection as an oceanographic vessel, but shall be inspected and certificated for the service in which engaged, and the scientific personnel aboard then become persons employed in the business of the vessel.

[10] Bulk dangerous cargoes are cargoes specified in table 151.01–10(b), in table I of part 153, and in table 4 of part 154 of this chapter.

[11] For manned tank barges see § 151.01–10(e) of this chapter.

[12] Lifesaving device requirements of subpart 25.25 only.

[CGFR 65–50, 30 FR 16650, Dec. 30, 1965, as amended by CGFR 67–33, 33 FR 1104, Jan. 27, 1968; CGFR 70–10, 35 FR 3707, Feb. 25, 1970; CGD 72–172R, 38 FR 3116, Mar. 28, 1973; CGD 73–96, 42 FR 49023, Sept. 26, 1977; CGD 86–033, 53 FR 36023, Sept. 16, 1988; 53 FR 46871, Nov. 21, 1988; CGD 90–008, 55 FR 30659, July 26, 1990]

§ 24.05–5 Specific application noted in text.

(a) At the beginning of the various parts, subparts, and sections, a more specific application is generally given for the particular portion of the text involved. This application sets forth the types, sizes, or services of vessels to which the text pertains, and in many cases limits the application of the text to vessels contracted for before or after a specific date. As used in this subchapter, the term *vessels contracted for* includes not only the contracting for the construction of a vessel, but also the contracting for a material alteration to a vessel, the contracting for the conversion of a vessel to a passenger vessel, and the changing of service or route of a vessel if such change increases or modifies the general requirements for the vessel or increases the hazards to which it might be subjected.

Subpart 24.10—Definition of Terms Used in This subchapter

§ 24.10–1 Approved.

This term means approved by the Commandant unless otherwise stated.

§ 24.10–2 Barge.

This term means any vessel not equipped with means of self-propulsion.

[CGFR 68–32, 33 FR 5711, Apr. 12, 1968]

§ 24.10–3 Carrying passengers for hire.

The carriage of any person or persons by a vessel for a valuable consideration, whether directly or indirectly flowing to the owner, charterer, operator, agent or any other person interested in the vessel.

§ 24.10–5 Carrying freight for hire.

The carriage of any goods, wares, or merchandise or any other freight for a valuable consideration, whether directly or indirectly flowing to the owner, charterer, operator, agent, or any other person interested in the vessel.

§ 24.10–7 Commandant.

This term means the Commandant of the Coast Guard.

§ 24.10–9 Coast Guard District Commander.

This term means an officer of the Coast Guard designated as such by the Commandant to command all Coast Guard activities within his district, which include the inspection, enforcement, and administration of title 52, Revised Statutes, and acts amendatory thereof or supplemental thereto, and rules and regulations thereunder.

§ 24.10–11 Headquarters.

This term means the Office of the Commandant, Washington, DC.

§ 24.10–13 International voyage.

(a) This section describes those voyages which are considered to be ''international voyages'' for the purposes of this subchapter.

(b) Except as provided in paragraph (c) of this section, the term *international voyage* as used in this subchapter shall have the same meaning as that contained in Regulation 2(d), chapter I of the International Convention for Safety of Life at Sea, 1974, i.e., ''*International voyage* means a voyage from a country to which the present convention applies to a port outside such country, or conversely.''

(c) The International Convention for Safety of Life at Sea, 1974, does not apply to vessels ''solely navigating the Great Lakes of North America and the River St. Lawrence as far east as a straight line drawn from Cap de Rosiers to West Point, Anticosti Island and, on the north side of Anticosti Island, the 63d Meridian.'' Accordingly, such vessels shall not be considered as being on an *international voyage* for the purpose of this subchapter.

(d) In addition, although voyages between the continental United States and Hawaii or Alaska, and voyages between Hawaii and Alaska are not *international voyages* under the provisions of the International Convention for Safety of Life at Sea, 1974, such voyages are similar in nature and shall be considered as *international voyages* for the purposes of this subchapter.

[CGD 90–008, 55 FR 30659, July 26, 1990]

§24.10–15 Marine inspector or inspector.

These terms mean any person from the civilian or military branch of the Coast Guard assigned under the superintendence and direction of an Officer in Charge, Marine Inspection, or any other person as may be designated for the performance of duties with respect to the inspection, enforcement, and administration of title 52, Revised Statutes, and acts amendatory thereof or supplemental thereto, and rules and regulations thereunder.

§24.10–17 Motorboat.

(a) This term means any vessel indicated in column 6 of Table 24.05–1(a), 65 feet in length or less which is equipped with propulsion machinery (including steam). The length shall be measured from end to end over the deck excluding sheer. This term includes a boat temporarily or permanently equipped with a detachable motor, since such a boat is also subject to the Act of April 25, 1940, as amended (46 U.S.C. 526–526u), and the regulations promulgated thereunder. For the purpose of this subchapter, motorboats are included under the term *vessel* unless specifically noted otherwise. The various classes of motorboats are as follows:

Class A—Any motorboat less than 16 feet in length.

Class 1—Any motorboat 16 feet or over and less than 26 feet in length.

Class 2—Any motorboat 26 feet or over and less than 40 feet in length.

Class 3—Any motorboat 40 feet or over and not more than 65 feet in length.

(b) The expression ''length shall be measured from end to end over the deck excluding sheer'' means a straight line measurement of the overall length from the foremost part of the vessel to the aftermost part of the vessel, measured parallel to the centerline. Bow sprits, bumpkins, rudders, outboard motor brackets, and similar fittings or attachments, are not to be included in the measurement. Length shall be stated in feet and inches.

[CGFR 65–50, 30 FR 16650, Dec. 30, 1965, as amended by CGFR 69–18, 34 FR 5723, Mar. 27, 1969]

§24.10–19 Motor vessel.

This term means any vessel more than 65 feet in length, which is propelled by machinery other than steam.

§24.10–20 Oceanographic research vessel.

An *oceanographic research vessel* is a vessel which the U.S. Coast Guard finds is employed exclusively in one or more of the following:

(a) Oceanographic instruction;
(b) Limnologic instruction;
(c) Oceanographic research; or
(d) Limnologic research.

[CGD 77–0811, 46 FR 56204, Nov. 16, 1981]

§24.10–21 Officer in Charge, Marine Inspection.

This term means any person from the civilian or military branch of the Coast Guard designated as such by the Commandant and who, under the superintendence and direction of the Coast Guard District Commander, is in charge of an inspection zone for the performance of duties with respect to the inspections, enforcement, and administration of title 52, Revised Statutes, and acts amendatory thereof or supplemental thereto, and rules and regulations thereunder.

§24.10–23 Passenger.

A passenger is every person, other than the master and the members of the crew or other persons employed or engaged in any capacity on board a vessel in the business of that vessel. In the case of a vessel on an international voyage a child under one year of age is not counted as a passenger.

§24.10–27 Vessel.

Where the word *vessel* is used in this subchapter, it shall be considered to include all vessels indicated in Column 6 of Table 24.05–1(a), except as otherwise noted in this subpart.

Subpart 24.15—Equivalents

§24.15–1 Conditions under which equivalents may be used.

(a) Where in this subchapter it is provided that a particular fitting, material, appliance, apparatus, or equipment, or type thereof, shall be fitted or

carried in a vessel, or that any particular provision shall be made or arrangement shall be adopted, the Commandant may accept in substitution therefor any other fitting, material, apparatus, or equipment, or type thereof, or any other arrangement: *Provided*, That he shall have been satisfied by suitable trials that the fitting, material, appliance, apparatus, or equipment, or type thereof, or the provision or arrangement is at least as effective as that specified in this subchapter.

(b) In any case where it is shown to the satisfaction of the Commandant that the use of any particular equipment, apparatus, or arrangement not specifically required by law is unreasonable or impracticable, the Commandant may permit the use of alternate equipment, apparatus, or arrangement to such an extent and upon such conditions as will insure to his satisfaction, a degree of safety consistent with the minimum standards set forth in this subchapter.

§ 24.15–5 Canadian pleasure craft temporarily using navigable waters of the United States.

(a) Uninspected Canadian pleasure craft (uninspected vessels) temporarily using navigable waters of the United States may carry in lieu of the equipment required by the Motorboat Act of 1940 (46 U.S.C. 526–526u) and the regulations in this subchapter, the equipment as required by the laws of the Dominion of Canada and the regulations of the Department of Transport, Ottawa, Canada.

Subpart 24.20—General Marine Engineering Requirements

§ 24.20–1 Marine engineering details.

(a) All marine engineering details relative to the design, construction, and testing of boilers and machinery on steam-propelled motorboats of over 40 feet in length will be found in subchapter F (Marine Engineering) of this chapter.

PART 25—REQUIREMENTS

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25.45–1 Heating and lighting systems on vessels carrying passengers for hire.
25.45–2 Cooking systems on vessels carrying passengers for hire.

Subpart 25.50—Garbage Retention

25.50–1 Criteria.

AUTHORITY: 33 U.S.C. 1903(b); 46 U.S.C. 3306, 4302; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16653, Dec. 30, 1965, unless otherwise noted.

Subpart 25.01—Application

§25.01–1 Applicable to all vessels.

(a) The provisions of this part shall apply to all vessels except as specifically noted.

§25.01–3 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). 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 make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Compliance (G–MOC), 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:

American Boat and Yacht Council (ABYC)

3069 Solomons Island Road, Edgewater, MD 21037

Standard A–1–78, Marine LPG-Liquefied Petroleum Gas Systems, December 15, 1978 .....25.45–2

Standard A–22–78, Marine CNG-Compressed Natural Gas Systems, December 15, 1978 .....25.45–2

National Fire Protection Association (NFPA)

1 Batterymarch Park, Quincy, MA 02269

NFPA 302, Fire Protection Standard for Pleasure and Commercial Motor Craft, 1989.....25.45–2

Society of Automotive Engineers (SAE)

400 Commonwealth Drive, Warrendale, PA 15096

SAE J–1928, Devices Providing Backfire Flame Control for Gasoline Engines in Marine Applications, June 1989.....25.35–1

Underwriter's Laboratories (UL)

12 Laboratory Drive, Research Triangle Park, NC 27709

UL 1111, Marine Carburetor Flame Arrestors, June 1988.....25.35–1

[CGD 88–032, 56 FR 35820, July 29, 1991, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 95–072, 60 FR 54106, Oct. 19, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§25.01–5 OMB control numbers assigned pursuant to the Paperwork Reduction Act.

(a) *Purpose.* This section collects and displays the control numbers assigned to information collection and recordkeeping requirements in this subchapter by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). The Coast Guard intends that this section comply with the requirements of 44 U.S.C. 3507(f), which requires that agencies display a current control number assigned by the Director of the OMB for each approved agency information collection requirement.

(b) *Display.*

46 CFR part or section where identified or described	Current OMB control No.
§25.45–2	2115.0549

[CGD 83–013, 54 FR 6401, Feb. 10, 1989 and CGD 83–013, 55 FR 3959, Feb. 6, 1990]

Subpart 25.25—Life Preservers and Other Lifesaving Equipment

SOURCE: CGD 72–172R, 38 FR 8117, Mar. 28, 1973, unless otherwise noted.

§25.25–1 Application.

This subpart applies to each vessel to which this part applies, except:

(a) Vessels used for noncommercial use;

(b) Vessels leased, rented, or chartered to another for the latter's noncommercial use;

(c) Commercial vessels propelled by sail not carrying passengers for hire; or

(d) Commercial barges not carrying passengers for hire.

§25.25–3 Definitions.

As used in this subpart:

(a) *Approved* means approved under subchapter Q of this chapter.

(b) *Use* means operate, navigate, or employ.

§ 25.25–5 Life preservers and other lifesaving equipment required.

(a) No person may operate a vessel to which this subpart applies unless it meets the requirements of this subpart.

(b) Each vessel not carrying passengers for hire, less than 40 feet in length must have at least one life preserver (Type I PFD), buoyant vest (Type II PFD), or marine buoyant device intended to be worn (Type III PFD), approved under subchapter Q of a suitable size for each person on board. Kapok and fibrous glass life preservers that do not have plastic-covered pad inserts as required by subparts 160.062 and 160.005 of this chapter are not acceptable as equipment required by this paragraph.

(c) Each vessel carrying passengers for hire and each vessel 40 feet in length or longer not carrying passengers for hire must have at least one life preserver approved under subchapter Q of a suitable size for each person on board. Kapok and fibrous glass life preservers which do not have plastic-covered pad inserts as required by subparts 160.002 and 160.005 of this chapter are not acceptable as equipment required by this paragraph.

(d) In addition to the equipment required by paragraph (b) or (c) of this section, each vessel 26 feet in length or longer must have at least one approved ring life buoy, constructed in accordance with subpart 160.050 of this chapter; except a ring life buoy that was approved under former subpart 160.009 of this chapter may be used as long as it is in good and serviceable condition.

(e) Each vessel not carrying passengers for hire may substitute an exposure suit for a life preserver, buoyant vest, or marine buoyant device required under paragraphs (b) or (c) of this section. Each exposure suit carried in accordance with this paragraph must be of a type approved under subpart 160.071 of this chapter.

(f) On each vessel, regardless of length and regardless of whether carrying passengers for hire, an approved commercial hybrid PFD may be substituted for a life preserver, buoyant vest, or marine buoyant device required under paragraphs (b) or (c) of this section if it is—

(1) Used in accordance with the conditions marked on the PFD and in the owner's manual;

(2) Labeled for use on commercial vessels; and

(3) In the case of a Type V commercial hybrid PFD, worn when the vessel is underway and the intended wearer is not within an enclosed space.

[CGD 72–172R, 38 FR 8117, Mar. 28, 1973, as amended by CGD 77–081, 47 FR 10558, Mar. 11, 1982; CGD 82–075a, 49 FR 4483, Feb. 7, 1984; CGD 78–174A, 51 FR 4350, Feb. 4, 1986; CGD 78–174, 60 FR 2485, Jan. 9, 1995]

§ 25.25–7 Marking.

The lifesaving equipment required by this subpart must be legibly marked as specified in subchapter Q of this chapter.

§ 25.25–9 Storage.

(a) The lifesaving equipment designed to be worn required in § 25.25–5 (b), (c) and (e) must be readily accessible.

(b) Lifesaving equipment designed to be thrown required in § 25.25–5(d) must be immediately available.

[CGD 72–172R, 38 FR 8117, Mar. 28, 1973, as amended by CGD 82–075a, 49 FR 4483, Feb. 7, 1984]

§ 25.25–11 Condition.

The lifesaving equipment required by this subpart must be in serviceable condition.

§ 25.25–13 Personal flotation device lights.

(a) This section applies to vessels described in § 25.25–1 that engage in ocean, coastwise, or Great Lakes voyages.

(b) Each exposure suit carried in accordance with § 25.25–5(e), each life preserver, each marine buoyant device intended to be worn, and each buoyant vest must have a personal flotation device light that is approved under subpart 161.012 of this chapter.

(c) Each personal flotation device light required by this section must be securely attached to the front shoulder area of the exposure suit, life preserver, or other personal flotation device.

(d) If a personal flotation device light has a non-replaceable power source, the

light must be replaced on or before the expiration date of the power source. If the light has a replaceable power source, the power source must be replaced on or before its expiration date and the light must be replaced when it is no longer serviceable.

[44 FR 38783, July 2, 1979, as amended by CGD 82–075a, 49 FR 4483, Feb. 7, 1984]

§ 25.25–15 Retroreflective material for personal flotation devices.

(a) Each life preserver, each marine buoyant device intended to be worn, and each buoyant vest carried on a vessel must have Type I retroreflective material that is approved under subpart 164.018 of this chapter.

(b) Each item required to have retroreflective material must have at least 200 sq. cm (31 sq. in.) of material attached to its front side, at least 200 sq. cm of material on its back side, and, if the item is reversible, at least 200 sq. cm of material on each of its reversible sides. The material attached on each side of the item must be divided equally between the upper quadrants of the side, and the material in each quadrant must be attached as closely as possible to the shoulder area of the item.

[CGD 76–028, 44 FR 38783, July 2, 1979, as amended by CGD 82–075a, 49 FR 4483, Feb. 7, 1984]

Subpart 25.26—Emergency Position Indicating Radio Beacons (EPIRB)

SOURCE: CGD 87–016a, 58 FR 13367, Mar. 10, 1993 unless otherwise noted.

§ 25.26–1 Definitions.

As used in this subpart:

Berthing space means a space that is intended to be used for sleeping and is provided with installed bunks and mattresses.

EPIRB means an Emergency Position Indicating Radiobeacon which is Type Accepted by the Federal Communications Commission under requirements in 47 CFR parts 2 and 80.

Galley means a space that provides for the preparation and extended storage of food. This does not include small alcohol or propane stoves with limited cooking capability, or ice chests or similar devices that are intended for keeping small quantities of food for short durations.

High seas means the waters beyond a line three nautical miles seaward of the Territorial Sea Baseline as defined in 33 CFR 2.05–10.

Length means the length listed on a vessel's Certificate of Documentation or Certificate of Number.

Uninspected passenger vessel means a vessel which, when used for commercial service, is used solely to carry passengers for hire or to provide non-emergency assistance to boaters (assistance towing), and which is not inspected by the Coast Guard under any other 46 CFR subchapter.

NOTE: As an example, a vessel on a voyage involving catching fish which are to be sold, is a commercial fishing industry vessel for the purposes of the EPIRB regulations in this section, even if there are passengers on board during the voyage.

§ 25.26–5 Commercial fishing industry vessels.

(a) The owner of a fishing vessel, a fish processing vessel, or a fish tender vessel, 11 meters (36 feet) or more in length, except for vessels described in paragraph (b) or (c) of this section, shall ensure that the vessel does not operate on the high seas or beyond three miles from the coastline of the Great Lakes unless it has on board a float-free, automatically activated Category 1 406 MHz EPIRB stowed in a manner so that it will float-free if the vessel sinks.

(b) After March 10, 1994, the owner of a fishing vessel, fish processing vessel, or a fish tender vessel less than 11 meters (36 feet) in length, or 11 meters or more in length which has a builder's certification that the vessel is constructed with sufficient inherently buoyant material to keep the flooded vessel afloat, shall ensure that the vessel does not operate on the high seas or beyond three miles from the coastline of the Great Lakes, unless it has installed in a readily accessible location at or near the principal steering station—

(1) A manually activated Category 2 406 MHz EPIRB; or

(2) A float-free, automatically activated Category 1 406 MHz EPIRB; or

(3) Until February 1, 1998, a 121.5/243.0 MHz EPIRB meeting § 25.26–30.

(c) After March 10, 1994, the owner of a fishing vessel, fish processing vessel, or a fish tender vessel 11 meters (36 feet) or more in length that does not have installed galley or berthing facilities, shall ensure that the vessel does not operate on the high seas or beyond three miles from the coastline of the Great Lakes unless it has on board—

(1) A float-free, automatically activated Category 1 406 MHz EPIRB stowed in a manner so that it will float free if the vessel sinks; or

(2) Until February 1, 1998, a 121.5/243.0 MHz EPIRB meeting § 25.26–30(a).

[CGD 87–016a, 58 FR 13367, Mar. 10, 1993; 58 FR 27658, May 11, 1993]

§ 25.26–10 Uninspected passenger vessels.

An uninspected passenger vessel is not required to carry an EPIRB.

§ 25.26–20 Other manned uninspected commercial vessels.

(a) After March 10, 1994, the owner of a manned uninspected commercial vessel 11 meters (36 feet) or more in length, other than a vessel under § 25.26–5 or § 25.26–10 or under paragraph (b) of this section, shall ensure that the vessel does not operate on the high seas or beyond three miles from the coastline of the Great Lakes, unless it has on board—

(1) A float-free, automatically activated Category 1 406 MHz EPIRB stowed in a manner so that it will float free if the vessel sinks; or

(2) Until February 1, 1998, a 121.5/243.0 MHz EPIRB meeting § 25.26–30.

(b) After March 10, 1994, the owner of a manned uninspected commercial vessel less than 11 meters (36 feet) in length, or 11 meters or more in length which has a builder's certification that the vessel is constructed with sufficient inherently buoyant material to keep the flooded vessel afloat, shall ensure that the vessel does not operate on the high seas or beyond three miles from the coastline of the Great Lakes, unless it has installed in a readily accessible location at or near the principal steering station—

(1) A manually activated Category 2 406 MHz EPIRB; or

(2) A float-free, automatically activated Category 1 406 MHz EPIRB; or

(3) Until February 1, 1998, a 121.5/243.0 MHz EPIRB meeting § 25.26–30.

[CGD 87–016a, 58 FR 13367, Mar. 10, 1993; 58 FR 27658, May 11, 1993]

§ 25.26–30 121.5/243.0 MHz EPIRBs.

A 121.5/243.0 MHz EPIRB manufactured after October 1, 1988, may be used to meet certain requirements of § 25.26–5 and § 25.26–20, if the EPIRB is operable and was installed on the vessel on or before April 26, 1993. The EPIRB must be a Class A EPIRB, or a Class B EPIRB which is watertight, self-buoyant, and stable in a floating position to properly transmit a distress signal.

§ 25.26–50 Servicing of EPIRBs.

(a) The master of each vessel required to have an EPIRB under this subpart shall ensure that each EPIRB on board is tested and serviced as required by this section.

(b) The EPIRB must be tested immediately after installation and at least once each month thereafter, unless it is an EPIRB installed in a Coast Guard approved inflatable liferaft that is tested annually during the servicing of the liferaft by an approved servicing facility. The test shall be conducted in accordance with the manufacturer's instructions, using the visual or audio indicator on the EPIRB. If the EPIRB is not operating, it must be repaired or replaced with an operating EPIRB.

(c) The battery of the EPIRB must be replaced—

(1) Immediately after the EPIRB is used for any purpose other than being tested; and

(2) Before the expiration date that is marked on the battery.

[CGD 87–016a, 58 FR 13367, Mar. 10, 1993; 58 FR 27658, May 11, 1993]

§ 25.26–60 Exemptions.

(a) A skiff or work boat is not required to carry an EPIRB if—

(1) Its ''mother ship'' is required to carry an EPIRB under this subpart; and

(2) When not in use, the skiff or work boat is carried on board the mother ship.

(b) Each Coast Guard District Commander may, on a case-by-case basis, grant exemptions from the carriage requirements of EPIRBs in this subpart for certain geographic areas within the boundaries of his or her own district if the District Commander determines that an EPIRB will not significantly enhance the overall safety of the vessel and crew. Exemptions may be limited to specific time periods. Exemptions granted under this paragraph must be:

(1) Issued in writing by the cognizant Coast Guard District Commander for each individual application; and

(2) For geographic locations and may be limited to specific time periods.

Subpart 25.30—Fire Extinguishing Equipment

§ 25.30–1 Application.

(a) The provisions of this subpart, with the exception of § 25.30–90, shall apply to all vessels contracted for on or after November 19, 1952. Vessels contracted for prior to that date shall meet the requirements of § 25.30–90.

§ 25.30–5 General provisions.

(a) Where equipment in this subpart is required to be of an approved type, such equipment requires the specific approval of the Commandant. Such approvals are published in the FEDERAL REGISTER, and in addition, are contained in Coast Guard publication COMDTINST M16714.3 (Series), Equipment Lists.

(b) All hand portable fire extinguishers, semiportable fire extinguishing systems, and fixed fire extinguishing systems shall be of an approved type.

[CGFR 65–50, 30 FR 16653, Dec. 30, 1965, as amended by CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§ 25.30–10 Hand portable fire extinguishers and semiportable fire extinguishing systems.

(a) Hand portable fire extinguishers and semiportable fire extinguishing systems are classified by a combination letter and number symbol. The letter indicating the type of fire which the unit could be expected to extinguish, and the number indicating the relative size of the unit.

(b) For the purpose of this subchapter, all required hand portable fire extinguishers and semiportable fire extinguishing systems are of the ''B'' type; i.e., suitable for extinguishing fires involving flammable liquids, greases, etc.

(c) The number designations for size will start with ''I'' for the smallest to ''V'' for the largest. For the purpose of this subchapter, only sizes I through III will be considered. Sizes I and II are considered hand portable fire extinguishers and sizes III, IV, and V are considered semiportable fire extinguishing systems which shall be fitted with suitable hose and nozzle or other practicable means so that all portions of the space concerned may be covered. Examples of size graduations for some of the typical hand portable fire extinguishers and semiportable fire extinguishing systems are set forth in Table 25.30–10(c).

TABLE 25.30–10(c)

Classification		Foam, gallons	Carbon Dioxide, pounds	Dry chemical, pounds
Type	Size			
B	I	1¾	4	2
B	II	2½	15	10
B	III	12	35	20

(d) All hand portable fire extinguishers and semiportable fire extinguishing systems shall have permanently attached thereto a metallic name plate giving the name of the item, the rated capacity in gallons, quarts, or pounds, the name and address of the person or firm for whom approved, and the identifying mark of the actual manufacturer.

(e) Vaporizing-liquid type fire extinguishers containing carbon tetrachloride or chlorobromomethane or other toxic vaporizing liquids are not acceptable as equipment required by this subchapter.

(f) Hand portable or semiportable extinguishers which are required on their name plates to be protected from freezing shall not be located where freezing temperatures may be expected.

(g) The use of dry chemical, stored pressure, fire extinguishers not fitted with pressure gauges or indicating devices, manufactured prior to January 1,

1965, may be permitted on motorboats and other vessels so long as such extinguishers are maintained in good and serviceable condition. The following maintenance and inspections are required for such extinguishers:

(1) When the date on the inspection record tag on the extinguishers shows that 6 months have elapsed since last weight check ashore, then such extinguisher is no longer accepted as meeting required maintenance conditions until reweighed ashore and found to be in a serviceable condition and within required weight conditions.

(2) If the weight of the container is ¼ ounce less than that stamped on container, it shall be serviced.

(3) If the outer seal or seals (which indicate tampering or use when broken) are not intact, the boarding officer or marine inspector will inspect such extinguisher to see that the frangible disc in neck of the container is intact; and if such disc is not intact, the container shall be serviced.

(4) If there is evidence of damage, use, or leakage, such as dry chemical powder observed in the nozzle or elsewhere on the extinguisher, the container shall be replaced with a new one and the extinguisher properly serviced or the extinguisher replaced with another approved extinguisher.

(h) The dry chemical, stored pressure, fire extinguishers without pressure gauges or indicating devices manufactured after January 1, 1965, shall not be labeled with the marine type label bed in § 162.028–4 of this title nor shall such extinguishers manufactured after January 1, 1965, be carried on board motorboats or other vessels as required equipment.

[CGFR 65–50, 30 FR 16653, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5711, Apr. 12, 1968; CGFR 69–18, 34 FR 5723, Mar. 27, 1969]

§ 25.30–15 Fixed fire extinguishing systems.

(a) When a fixed fire extinguishing system is installed, it shall be of an approved carbon dioxide type, designed and installed in agreement with the applicable provisions of subpart 76.15 of subchapter H (Passenger Vessels) of this chapter.

§ 25.30–20 Fire extinguishing equipment required.

(a) *Motorboats.* (1) All motorboats shall carry at least the minimum number of hand portable fire extinguishers set forth in Table 25.30–20(a)(1), except that motorboats less than 26 feet in length, propelled by outboard motors and not carrying passengers for hire, need not carry such portable fire extinguishers if the construction of such motorboats will not permit the entrapment of explosive or flammable gases or vapors.

TABLE 25.30–20(a)(1)

Class of motor boat	Length, feet	Minimum number of B–I hand portable fire extinguishers required[1]	
		No fixed fire extinguishing system in machinery space	Fixed fire extinguishing system in machinery space
A	Under 16	1	0
1	16 and over, but under 26	1	0
2	26 and over, but under 40	2	1
3	40 and over, but not over 65	3	2

[1] One B–II hand portable fire extinguisher may be substituted for two B–I hand portable fire extinguishers.

(2) The intent of this regulation is illustrated in Figure 25.30–20(a1) where fire extinguishers are required if any one or more of the specified conditions exist, and in Figure 25.30–20(a2) where specified conditions do not, in themselves, require that fire extinguishers be carried.

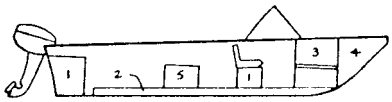

FIGURE 25.30–20(a1)

Fire extinguishers are required if any one or more of the following conditions exist (numbers identifying conditions are the same as those placed in Figure 25.30–20 (a1)):

1. Closed compartment under thwarts and seats wherein portable fuel tanks may be stored.

2. Double bottoms not sealed to the hull or which are not completely filled with flotation material.

3. Close living spaces.

4. Closed stowage compartments in which combustible or flammable materials are stowed.
5. Permanently installed fuel tanks.

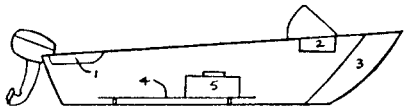

FIGURE 25.30–20(a2).

The following conditions do not, in themselves, require that fire extinguishers be carried (numbers identifying conditions are the same as those placed in Figure 25.30–20(a2)):
1. Bait wells.
2. Glove compartments.
3. Buoyant flotation material.
4. Open slatted flooring.
5. Ice chests.

(b) *Motor vessels.* (1) All motor vessels shall carry at least the minimum number of hand portable fire extinguishers set forth in Table 25.30–20(b) (1).

TABLE 25.30–20(b)(1)

Gross tonnage—		Minimum number of B–II hand portable fire extinguishers
Over	Not over	
.....	50	1
50	100	2
100	500	3
500	1,000	6
1,000	.....	8

(2) In addition to the hand portable fire extinguishers required by paragraph (b)(1) of this section, the following fire-extinguishing equipment shall be fitted in the machinery space:

(i) One Type B–II hand portable fire extinguisher shall be carried for each 1,000 B. H. P. of the main engines or fraction thereof. However, not more than 6 such extinguishers need be carried.

(ii) On motor vessels of over 300 gross tons, either one Type B–III semiportable fire-extinguishing system shall be fitted, or alternatively, a fixed fire-extinguishing system shall be fitted in the machinery space.

(3) The frame or support of each Type B–III fire extinguisher required by paragraph (b)(2)(ii) of this section must be welded or otherwise permanently attached to a bulkhead or deck.

(4) If an approved semiportable fire extinguisher has wheels and is not required by this section, it must be securely stowed when not in use to prevent it from rolling out of control under heavy sea conditions.

(c) *Barges carrying passengers.* (1) Every barge of 65 feet in length or less while carrying passengers when towed or pushed by a motorboat, motor vessel, or steam vessel shall be fitted with hand portable fire extinguishers as required by Table 25.30–20(a)(1), depending upon the length of the barge.

(2) Every barge of over 65 feet in length while carrying passengers when towed or pushed by a motorboat, motor vessel, or steam vessel shall be fitted with hand portable fire extinguishers as required by Table 25.30–20(b)(1), depending upon the gross tonnage of the barge.

[CGFR 65–50, 30 FR 16653, Dec. 30, 1965, as amended by CGD 77–039, 44 FR 34132, June 14, 1979]

§ 25.30–90 Vessels contracted for prior to November 19, 1952.

(a) Vessels contracted for prior to November 19, 1952, shall meet the applicable provisions of §§ 25.30–5 through 25.30–20 insofar as the number and general type of equipment is concerned. Existing items of equipment and installations previously approved but not meeting the applicable requirements for type approval may be continued in service so long as they are in good condition. All new installations and replacements shall meet the requirements of §§ 25.30–5 through 25.30–20.

Subpart 25.35—Backfire Flame Control

§ 25.35–1 Requirements.

(a) Every gasoline engine installed in a motorboat or motor vessel after April 25, 1940, except outboard motors, shall be equipped with an acceptable means of backfire flame control.

(b) Installations made before November 19, 1952, need not meet the detailed requirements of this subpart and may be continued in use as long as they are serviceable and in good condition. Replacements shall meet the applicable conditions in this section.

(c) Installations consisting of backfire flame arresters bearing basic Approval Nos. 162.015 or 162.041 or engine

air and fuel induction systems bearing basic Approval Nos. 162.015 or 162.042 may be continued in use as long as they are serviceable and in good condition. New installations or replacements must meet applicable requirements of subpart 58.10 of this chapter.

[CGFR 65–50, 30 FR 16653, Dec. 30, 1965, as amended by CGD 88–032, 56 FR 35820, July 29, 1991]

Subpart 25.40—Ventilation

§ 25.40–1 Tanks and engine spaces.

(a) All motorboats or motor vessels, except open boats and as provided in paragraphs (d) and (e) of this section, the construction or decking over of which is commenced after April 25, 1940, and which use fuel having a flashpoint of 110° F., or less, shall have at least two ventilator ducts, fitted with cowls or their equivalent, for the efficient removal of explosive or flammable gases from the bilges of every engine and fuel tank compartment. There shall be at least one exhaust duct installed so as to extend from the open atmosphere to the lower portion of the bilge and at least one intake duct installed so as to extend to a point at least midway to the bilge or at least below the level of the carburetor air intake. The cowls shall be located and trimmed for maximum effectiveness and in such a manner so as to prevent displaced fumes from being recirculated.

(b) As used in this section, the term *open boats* means those motorboats or motor vessels with all engine and fuel tank compartments, and other spaces to which explosive or flammable gases and vapors from these compartments may flow, open to the atmosphere and so arranged as to prevent the entrapment of such gases and vapors within the vessel.

(c) Boats as defined in the Federal Boat Safety Act of 1971 built after July 31, 1980 or which are in compliance with 33 CFR part 183 are excepted from these requirements.

(d) Boats, as defined in the Federal Boat Safety Act of 1971, built after July 31, 1978 are excepted from the requirements of paragraph (a) for fuel tank compartments that:

(1) Contain a permanently installed fuel tank if each electrical component is ignition protected in accordance with 33 CFR 183.410(a); and

(2) Contain fuel tanks that vent to the outside of the boat.

[CGFR 65–50, 30 FR 16653, Dec. 30, 1965, as amended by CGD 76–082A, 44 FR 73047, Dec. 17, 1979; CGD 76–082A, 45 FR 7551, Feb. 4, 1980; CGD 95–012, 60 FR 48048, Sept. 18, 1995]

Subpart 25.45—Cooking, Heating, and Lighting Systems

§ 25.45–1 Heating and lighting systems on vessels carrying passengers for hire.

(a) No fuel may be used in any heating or lighting system on any vessel carrying passengers for hire without the approval of Commandant (G–MSE), except—

(1) Alcohol, solid,

(2) Alcohol, liquid, combustible,

(3) Fuel oil, No. 1, No. 2, or No. 3,

(4) Kerosene,

(5) Wood or,

(6) Coal.

(b) Heating and lighting systems using alcohol must meet the following requirements:

(1) Containers of solidified alcohol must be properly secured to a fixed base.

(2) Fluid alcohol burners, where wet priming is used, must have—

(i) A catch pan of not less than ¾'' depth secured inside the frame of the stove; or

(ii) The metal protection under the stove flanged up at least ¾'' to form a pan.

(c) Heating and lighting systems using kerosene or fuel oil must meet the following requirements:

(1) Where wet priming is used, each system must have—

(i) A catch pan of not less than ¾'' depth secured inside the frame of the stove; or

(ii) The metal protection under the stove flanged up at least ¾'' to form a pan.

(2) Fuel tanks must be—

(i) Separated from the stove that they serve;

(ii) Mounted in a location open to the atmosphere or mounted inside a compartment that is vented to the atmosphere; and

(iii) Fitted with an outside fill and vent.

(d) Heating systems using wood or coal installed after August 9, 1989, shall be installed in accordance with the guidelines in chapter 6 of NFPA 302.

[CGD 83–013, 54 FR 6402, Feb. 10, 1989 and CGD 83–013, 55 FR 3959, Feb. 6, 1990; CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§25.45–2 Cooking systems on vessels carrying passengers for hire.

(a) No fuel may be used in any cooking system on any vessel carrying passengers for hire without the approval of Commandant (G–MSE) except those listed in §25.45–1, subject to the requirements stated therein, and liquefied petroleum gas (LPG), or compressed natural gas (CNG).

(b) Cooking systems using LPG or CNG must meet the following requirements:

(1) The design, installation, and testing of each LPG system must meet ABYC A–1–78 or chapter 6 of NFPA 302.

(2) The design, installation, and testing of each CNG system must meet ABYC A–22–78 or chapter 6 of NFPA 302.

(3) Cooking systems using chapter 6 of NFPA 302 as the standard must meet the following additional requirements:

(i) The storage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited.

(ii) LPG or CNG must be odorized in accordance with ABYC A–1.5.d or A–22.5.b, respectively.

(iii) The marking and mounting of LPG cylinders must be in accordance with ABYC A–1.6.b.

(iv) LPG cylinders must be of the vapor withdrawal type as specified in ABYC A–1.5.b.

(4) Continuous pilot lights or automatic glow plugs are prohibited for an LPG or CNG installation using ABYC A–1 or A–22 as the standard.

(5) CNG installations using ABYC A–22 as the standard must meet the following additional requirements:

(i) The stowage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited.

(ii) The CNG cylinders, regulating equipment, and safety equipment must meet the installation, stowage, and testing requirements specified in paragraph 6–5.12 of NFPA 302.

(iii) The use of stowage of stoves with attached CNG cylinders is prohibited as specified in paragraph 6–5.1 of NFPA 302.

(6) If the fuel supply line of an LPG or CNG system enters an enclosed space on the vessel, a remote shut-off valve must be installed that can be operated from a position adjacent to the appliance. The valve must be located between the fuel tank and the point where the fuel supply line enters the enclosed portion of the vessel. A power operated valve installed to meet this requirement must be of a type that will fail closed.

(7) The following variances from ABYC A–1.11.b(1) are allowed for CNG:

(i) The storage locker or housing access opening need not be in the top.

(ii) The locker or housing need not be above the waterline.

(8) The following variances from NFPA 302 are allowed:

(i) The storage locker or housing for CNG tank installations need not be above the waterline as required by paragraph 6–5.12.1.1(a).

(ii) Ignition protection need not be provided as required by paragraph 6–5.4.

[CGD 83–013, 54 FR 6402, Feb. 10, 1989, as amended by CGD 83–013, 55 FR 3960, Feb. 6, 1990; CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

Subpart 25.50—Garbage Retention

§25.50–1 Criteria.

Each uninspected vessel must meet the garbage discharge, waste management plan, and placard requirements of 33 CFR part 151 applicable to the vessel.

NOTE: 33 CFR 151.67 prohibits the discharge of plastic or garbage mixed with plastic into the sea or the navigable waters of the United

States. ''Plastic'' and ''garbage'' are defined in 33 CFR 151.05.

[CGD 88–002A, 56 FR 8880, Mar. 1, 1991]

PART 26—OPERATIONS

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AUTHORITY: 46 U.S.C. 3306, 4104, 6101, 8105; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277.; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16656, Dec. 30, 1965, unless otherwise noted.

Subpart 26.01—Application

§ 26.01–1 Applicable to all vessels.

(a) The provisions of this part shall apply to all vessels except as specifically noted.

Subpart 26.03—Special Operating Requirements

§ 26.03–1 Safety orientation.

(a) Before getting underway in any vessel carrying 6 or fewer passengers for hire, the operator in charge shall ensure that suitable public announcements, instructive placards or both are provided in a manner which affords all passengers the opportunity to become acquainted with:

(1) Stowage locations of life preservers;

(2) Proper method of donning and adjusting life preservers of the type(s) carried on the vessel;

(3) The type and location of all life-saving devices carried on the vessel; and

(4) The location and contents of the *Emergency Checkoff List* required by § 26.03–2.

(b) Vessels subject to this subpart engaged in tender service at yacht clubs and marinas, and vessels being demonstrated for a potential purchaser by a yacht broker, are excluded from the requirements of § 26.03–1 and § 26.03–2.

[CGD 78–009, 45 FR 11109, Feb. 19, 1980]

§ 26.03–2 Emergency instructions.

(a) The operator in charge of each vessel carrying 6 or fewer passengers for hire shall ensure than an emergency checkoff list is posted in a conspicuous, continuously accessible place to serve as a notice to the passengers and a reminder to the crew of precautionary measures which may be necessary in the event of an emergency situation.

(b) Except where any part of the emergency instructions are deemed unnecessary by the Officer in Charge, Marine Inspection, the emergency checkoff list must contain not less than the applicable portions of the sample emergency checkoff list which follows:

SAMPLE EMERGENCY CHECKOFF LIST

Measures to be considered in the event of:

(a) *Rough weather at sea or crossing hazardous bars.*

☐ All weathertight and watertight doors, hatches and airports closed to prevent taking water aboard.

☐ Bilges kept dry to prevent loss of stability.

☐ Passengers seated and evenly distributed.
☐ All passengers wearing life preservers in conditions of very rough seas or if about to cross a bar under hazardous conditions.
☐ An international distress call and a call to the Coast Guard over radiotelephone made if assistance is needed (if radiotelephone equipped).

(b) *Man overboard.*

☐ Ring buoy thrown overboard as close to the victim as possible.
☐ Lookout posted to keep the victim in sight.
☐ Crewmember, wearing a life preserver and lifeline, standing by ready to jump into the water to assist the victim back aboard.
☐ Coast Guard and all vessels in the vicinity notified by radiotelephone (if radiotelephone equipped).
☐ Search continued until after radiotelephone consultation with the Coast Guard, if at all possible.

(c) *Fire at Sea.*

☐ Air supply to the fire cut off by closing hatches, ports, doors, and ventilators, etc.
☐ Portable extinguishers discharged at the base of the flames of flammable liquid or grease fires or water applied to fires in combustible solids.
☐ If fire is in machinery spaces, fuel supply and ventilation shut off and any installed fixed firefighting system discharged.
☐ Vessel maneuvered to minimize the effect of wind on the fire.
☐ Coast Guard and all vessels in the vicinity notified by radiotelephone of the fire and vessel location (if radiotelephone equipped).
☐ Passengers moved away from fire and wearing life preservers.

(c) When in the judgment of the cognizant Officer in Charge, Marine Inspection, the operation of any vessel subject to this section does not present the hazards listed on the emergency checkoff list or when any vessel has no suitable mounting surface, an exclusion from the requirements of §26.03–2(a) and (b) is granted by letter.

[CGD 78–009, 45 FR 11109, Feb. 19, 1980]

§26.03–5 Action required after accident.

(a) Whenever an undocumented vessel is involved in a collision, accident, or other casualty, the operator shall:

(1) Comply with requirements in subsection 13(b) of the Act of April 25, 1940, as amended (46 U.S.C. 526l), which reads as follows:

In the case of collision, accident, or other casualty involving a motorboat or other vessel subject to this Act, it shall be the duty of the operator, if and so far as he can do so without serious danger to his own vessel, or persons aboard, to render such assistance as may be practicable and necessary to other persons affected by the collision, accident, or other casualty in order to save them from danger caused by the collision, accident, or casualty. He shall also give his name, address, and identification of his vessel to any person injured and to the owner of any property damaged. The duties imposed by this subsection shall be in addition to any duties otherwise provided by law.

(b) See subpart 173.01 of part 173 of subchapter S (Numbering of Undocumented Vessels, Statistics on Numbering, and *Boating Accident Reports* and Accident Statistics) of this chapter for requirements governing *boating accident reports.*

§26.03–10 Signaling light.

(a) All vessels of over 150 gross tons, when engaged on an international voyage, shall be equipped with an efficient daylight signaling lamp in accordance with the requirements of subchapter J (Electrical Engineering) of this chapter.

[CGFR 68–32, 33 FR 5711, Apr. 12, 1968]

Subpart 26.08—Notice and Reporting of Casualty and Voyage Records

AUTHORITY: 46 U.S.C. 6101; 46 CFR 1.46.

§26.08–1 Notice and reporting of casualty and voyage records.

The requirements for providing notice and reporting of marine casualties and for retaining voyage records are contained in part 4 of this chapter.

[CGD 84–099, 52 FR 47535, Dec. 14, 1987; 53 FR 13117, Apr. 21, 1988]

Subpart 26.10—Assessment, Collection, Mitigation, Remission of Fines or Penalties

§ 26.10–1 General.

(a) The assessment, collection, mitigation, and remission of any fine, penalty, or forfeiture incurred under the Act of April 25, 1940, as amended, are authorized by section 17 (46 U.S.C. 526p), which reads in part as follows:

> * * * The Commandant of the Coast Guard or any officer of the Coast Guard authorized by the Commandant may, upon application therefor, remit or mitigate any fine, penalty or forfeiture incurred under this Act or any regulations thereunder relating to motorboats or vessels, except the penalties provided in section 14 hereunder. * * *

(b) The assessment, collection, mitigation, and remission of penalties incurred under the Federal Boating Act of 1958 are authorized by subsection 8(b) (46 U.S.C. 527e), which reads as follows:

> The Secretary may assess and collect any penalty incurred under this Act or any regulations prescribed pursuant to section 7 of this Act. The Secretary may, in his discretion, remit or mitigate any penalty imposed under this section, or discontinue prosecution therefor on such terms as he may deem proper.

§ 26.10–5 Procedures.

(a) Violations of maritime safety, navigation and vessel inspection laws, as well as rules and regulations prescribed thereunder, administered and enforced by the Coast Guard are reported by Coast Guard personnel detecting such violations to the Commander of the Coast Guard district in which the alleged violations occurred. The alleged offender will be informed of the nature of the violation.

(b) The procedures for the assessment, collection, remission, or mitigation are set forth in 33 CFR part 1.

[CGFR 65–50, 30 FR 16656, Dec. 30, 1965, as amended by CGD 74–68, 39 FR 19481, June 3, 1974]

Subpart 26.15—Boarding

§ 26.15–1 May board at any time.

(a) To facilitate the boarding of vessels by the commissioned, warrant, and petty officers of the U.S. Coast Guard in the exercise of their authority, every uninspected vessel, as defined in 46 U.S.C. 2101(43), if underway and upon being hailed by a Coast Guard vessel, must stop immediately and lay to, or must maneuver in such a way to permit the Coast Guard boarding officer to come aboard. Failure to permit a Coast Guard boarding officer to board a vessel or refusal to comply will subject the operator or owner of the vessel to the penalties provided in law.

(b) Coast Guard boarding vessels will be identified by the display of the Coast Guard ensign as a symbol of authority and the Coast Guard personnel will be dressed in Coast Guard uniform. The Coast Guard boarding officer upon boarding a vessel will identify himself to the master, owner, or operator and explain his mission.

[CGFR 65–50, 30 FR 16656, Dec. 30, 1965, as amended by CGD 72–132R, 38 FR 5750, Mar. 2, 1973; CGD 95–027, 61 FR 25997, May 23, 1996]

Subpart 26.20—Exhibition of Motorboat Operator's License

§ 26.20–1 Must be available.

(a) Any person to whom a license as a motorboat operator has been issued shall have such license in his possession and available for immediate production to any Coast Guard boarding officer at all times during which any vessel which he is operating is carrying passengers for hire.

Subpart 26.25—[Reserved]

Subpart 26.30—Work Vest

Source: CGFR 68–65, 33 FR 19982, Dec. 28, 1968, unless otherwise noted.

§ 26.30–1 Approved unicellular plastic foam work vests.

(a) Buoyant work vests carried under the permissive authority of this subpart shall be of an approved type, and shall be constructed, listed, and labeled in accordance with subpart 160.053 of subchapter Q (Specifications) of this chapter.

§ 26.30–5 Use.

(a) Approved buoyant work vests are considered to be items of safety apparel and may be carried aboard vessels to be worn by crew members when working near or over the water under favorable working conditions.

(b) When carried, approved buoyant work vests shall not be accepted in lieu of any portion of the required number of approved lifesaving appliances required by § 25.25–10 of this subchapter.

§ 26.30–10 Stowage.

(a) The approved buoyant work vests shall be stowed separately from the regular stowage of required lifesaving equipment.

PART 28—REQUIREMENTS FOR COMMERCIAL FISHING INDUSTRY VESSELS

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28.890 Examination and certification of compliance.
28.895 Loadlines.
28.900 Post accident inspection.
28.905 Repairs and alterations.

AUTHORITY: 46 U.S.C. 3316, 4502, 4506, 6104, 10603; 49 U.S.C. 5103, 5106; 49 CFR 1.46.

SOURCE: CGD 88–079, 56 FR 40393, Aug. 14, 1991, unless otherwise noted.

Subpart A—General Provisions

§ 28.10 Authority.

The regulations in this part are prescribed by the Commandant of the Coast Guard, pursuant to a delegation of authority by the Secretary of Transportation set forth in 49 CFR 1.46(b), to carry out the intent and purpose of 46 U.S.C. 3316 which authorizes the Secretary to rely on reports, documents, and certificates issued by the American Bureau of Shipping (ABS) or a similar United States classification society, or an agent of the ABS or similar society; sections 4502 and 4506 which require safety equipment and operational stability for certain vessels in the commercial fishing industry; section 6104 which requires the Secretary of Transportation to compile statistics concerning marine casualties compiled from vessel insurers and to delegate that authority to compile statistics from insurers to a qualified person; and section 10603 which requires seamen on commercial fishing industry vessels to give notice of illness, injury, or disability to their employer.

§ 28.20 OMB control numbers.

(a) This section collects and displays the control numbers assigned to information collection and recordkeeping requirements in this part by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). This section complies with the requirements of 44 U.S.C. 3507(f) which requires that agencies display a current control number assigned by the Director of the OMB for each approved agency information collection requirement.

(b) Display.

46 CFR part or section where identified or described	Current OMB control No.
§ 28.80	2115–0582
§ 28.90	2115–0582
§ 28.135	2115–0582
§ 28.165	2115–0582

46 CFR part or section where identified or described	Current OMB control No.
§28.530	2115–0582
§28.710	2115–0582
§28.720	2115–0582

§28.30 Applicability.

(a) Except as provided in paragraph (b) of this section, this part is applicable to all United States flag vessels not inspected under this chapter that are commercial fishing, fish processing, or fish tender vessels. This includes vessels documented under the provisions of subchapter G of this chapter and vessels numbered by a State or the Coast Guard under the provisions of 33 CFR subchapter S of this chapter. Certain regulations in this part apply only to limited categories of vessels. Specific applicability statements are provided at the beginning of those regulations.

(b) This part does not apply to a small boat or auxiliary craft that is deployed from a fishing industry vessel for the purpose of handling fishing gear.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

§28.40 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). 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 make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Design and Engineering Standards (G–MSE), 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:

American Boat and Yacht Council (ABYC),	
3069 Solomons Island Road, Edgewater, MD 21037	
E–1–1972—Bonding of Direct Current Systems	28.345
E–8–1985—Alternating Current (AC) Electrical Systems on Boats.	28.345
E–9–1981—Recommended Practices and Standards Covering Direct Current (DC) Electrical Systems on Boats.	28.345
H–2–1989—Ventilation of Boats Using Gasoline	28.340
H–25–1986—Portable Fuel Systems for Flammable Liquids	28.335
H–33–1989—Diesel Fuel Systems	28.335
P–1–1986—Installation of Exhaust Systems for Propulsion and Auxiliary Engines.	28.380
International Maritime Organization (IMO),	
Publications Section, 4 Albert Embankment, London SE1 7SR, England:	
Resolution A.658(16) ''Use and Fitting of Retro-Reflective Materials on Life-Saving Appliances'', dated November 1989.	28.135
National Fire Protection Association (NFPA),	
1 Batterymarch Park, Quincy, MA 02269:	
70–1990—National Electrical Code (also known as ANSI/NFPA 70–1990).	28.350; 28.370; 28.865
302–1989—Pleasure and Commercial Motor Craft	28.335; 28.340; 28.345
17–1985—Dry Chemical Extinguishing Systems	28.330
17A–1986—Wet Chemical Extinguishing Systems	28.330
Society of Automotive Engineers (SAE),	
400 Commonwealth Drive, Warrendale, PA 15096;	
SAE J 1475–1984—Hydraulic Hose Fitting for Marine Applications.	28.880
SAE J 1942–1989—Hose and Hose Assemblies for Marine Applications.	28.405
Underwriters Laboratories, Inc. (UL),	
333 Pfingsten Rd., Northbrook, IL 60062:	
UL 217–1985—Single and Multiple Station Smoke Detectors	28.325; 28.830

UL 710–1990—Exhaust Hoods for Commercial Cooking Equipment. 28.330

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 94–025, 60 FR 54444, Oct. 24, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§ 28.50 Definition of terms used in this part.

Accepted organization means an organization which has been designated by the Commandant for the purpose of examining commercial fishing industry vessels under the provisions of § 28.073.

Accommodations include:

(1) A messroom.
(2) A lounge.
(3) A sitting area.
(4) A recreation room.
(5) Quarters.
(6) A toilet space.
(7) A shower room.
(8) A galley.
(9) Berthing facilities.
(10) A clothing changing room.

Aleutian trade means the transportation of cargo, including fishery related products, for hire on board a fish tender vessel to or from a place in Alaska west of 153 degrees West longitude and east of 172 degrees East longitude if that place receives weekly common carrier service by water, to or from a place in the United States, except a place in Alaska.

Approved means approved by the Commandant unless otherwise stated.

Boundary lines means the lines set forth in 46 CFR part 7. In general, they follow the trend of the seaward high water shorelines and cross entrances to small bays, inlets and rivers. In some areas, they are along the 12 mile line which marks the seaward limits of the contiguous zone and in other areas they come ashore.

Coast Guard Representative means a person employed at the cognizant U.S. Coast Guard Marine Safety Office or Marine Inspection Office, or an accepted organization, or a similarly qualified organization approved in examining commercial fishing industry vessels. Contact Chief, Vessel and Facility Operating Standards Division, Commandant (G–MSO–2), U.S. Coast Guard, 2100 Second Street S.W., Washington, DC 20593–0001 for a current list of accepted organizations or similarly qualified organizations.

Coastal waters means coastal waters as defined in 33 CFR 175.105.

Cold water means water where the monthly mean low water temperature is normally 59 °F (15 °C) or less.

Commandant means the Commandant of the Coast Guard or an authorized representative of the Commandant of the Coast Guard.

Commercial fishing industry vessel means a fishing vessel, fish tender vessel, or a fish processing vessel.

Currently corrected means corrected with changes contained in all Notice to Mariners published by the Defense Mapping Agency Hydrographic/Topographic Center.

Custom engineered means, when referring to a fixed gas fire extinguishing system, a system that is designed for a specific space requiring individual calculations for the extinguishing agent volume, flow rate, and piping, among other factors, for the space.

Documented vessel means a vessel for which a Certificate of Documentation has been issued under the provisions of 46 CFR part 67.

Fish means finfish, mollusks, crustaceans, and all other forms of marine animal and plant life, except marine mammals and birds.

Fish processing vessel means a vessel that commercially prepares fish or fish products other than by gutting, decapitating, gilling, skinning, shucking, icing, freezing, or brine chilling.

Fish tender vessel means a vessel that commercially supplies, stores, refrigerates, or transports fish, fish products, or materials directly related to fishing or the preparation of fish to or from a fishing, fish processing or fish tender vessel or a fish processing facility.

Fishing vessel means a vessel that commercially engages in the catching, taking, or harvesting of fish or an activity that can reasonably be expected to result in the catching, taking, or harvesting of fish.

Gasoline as used in this part includes gasoline-alcohol blends and any other

fuel having a flash point of 110 °F (43.3 °C) or lower.

Length means the length listed on the vessel's Certificate of Documentation or Certificate of Number.

Major conversion means a conversion of a vessel that—

(1) Substantially changes the dimensions or carrying capacity of the vessel;

(2) Changes the type of the vessel;

(3) Substantially prolongs the life of the vessel; or

(4) Otherwise so changes the vessel that it is essentially a new vessel, as determined by the Commandant.

Mile means a nautical mile.

North Pacific Area means all waters of the North Pacific Ocean and Bering Sea north of 48°30′ north latitude including waters in contiguous bays, inlets, rivers, and sounds.

Officer in Charge, Marine Inspection (OCMI) means an officer of the Coast Guard who commands a Marine Inspection Zone described in 33 CFR part 3 or an authorized representative of that officer.

Open to the atmosphere means a space that has at least 15 square inches (9680 square millimeters) of open area directly exposed to the atmosphere for each cubic foot (0.0283 cubic meters) of net volume of the space.

Operating station means the principal steering station on the vessel from which the vessel is normally navigated.

Pre-engineered means, when referring to a fixed gas fire extinguishing system, a system that is designed and tested to be suitable for installation as a complete unit in a space of a set volume, without modification, regardless of the vessel on which installed.

Similarly qualified organization means an organization which has been designated by the Commandant for the purpose of classing or examining commercial fishing industry vessels under the provisions of §28.76.

Switchboard means an electrical panel which receives power from a generator, battery, or other electrical power source and distributes power directly or indirectly to all equipment supplied by the power source.

Warm water means water where the monthly mean low water temperature is normally more than 59° F. (15° C.).

Watertight means designed and constructed to withstand a static head of water without any leakage, except that ''watertight'' for the purposes of electrical equipment means enclosed so that equipment does not leak when a stream of water from a hose with a nozzle one inch (25.4 millimeters) in diameter that delivers at least 65 gallons (246 liters) per minute is played on the enclosure from any direction from a distance of 10 feet (3 meters) for five minutes.

Weather deck means the uppermost deck exposed to the weather to which a weathertight sideshell extends.

Weathertight means that water will not penetrate into the unit in any sea condition.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 94–025, 60 FR 54444, Oct. 24, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§28.70 Approved equipment and material.

(a) Equipment and material that is required by this subchapter to be approved or of an approved type, must have been manufactured and approved in accordance with the design and testing requirements in Subchapter Q of this chapter or as otherwise specified by the Commandant.

(b) Notice regarding equipment approvals is published in the FEDERAL REGISTER. Coast Guard publication COMDTINST M16714.3, ''Equipment Lists, Items Approved, Certificated or Accepted under Marine Inspection and Navigation Laws,'' lists approved equipment by type and manufacturer. COMDTINST M16714.3 may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Each OCMI may be contacted for information concerning approved equipment.

§28.73 Accepted organizations.

An organization desiring to be designated by the Commandant as an accepted organization must request such designation in writing. As a minimum the organization must verify that it is an organization—

(a) With a Code of Ethics;

(b) Whose surveyors are familiar with the requirements of this chapter related to commercial fishing industry vessels;

(c) Whose surveyors are familiar with the operations and equipment on board commercial fishing industry vessels;

(d) Whose only interest in the fishing industry is in ensuring the safety of commercial fishing industry vessels and surveying commercial fishing industry vessels;

(e) That has grievance procedures;

(f) That has procedures for accepting and terminating membership of an individual, including minimum professional qualifications for surveyors;

(g) That maintains a roster of present and past accepted members and surveyors; and

(h) That has an Apprentice/Associate program for surveyors.

§ 28.76 Similarly qualified organizations.

An organization desiring to be designated by the Commandant as a similarly qualified organization must request such designation in writing. As a minimum the organization must verify that it—

(a) Publishes standards for vessel design and construction which are as widely available as and which are of similar content to the standards published by the ABS;

(b) Performs periodic surveys in a wide range of localities during and after construction to ensure compliance with published standards, including drydock examinations, in a manner similar to the ABS;

(c) Issues certificates testifying to compliance with the published standards;

(d) Has as its primary concern the survey and classification of vessels;

(e) Has no interest in owning or operating fishing, fish processing, or fish tender vessels; and

(f) Maintains records of surveys and makes such records available to the Coast Guard upon request in a manner similar to the ABS.

§ 28.80 Report of casualty.

(a) Except for a casualty which is required to be reported to the Coast Guard on Form CG 2692 in accordance with part 4 of this chapter, the owner, agent, operator, master, or individual in charge of a vessel involved in a casualty must submit a report in accordance with paragraph (c) of this section, as soon as possible after the casualty, to the underwriter of primary insurance for the vessel or to an organization listed in paragraph (d) of this section whenever the casualty involves any of the following.

(1) Loss of life.

(2) An injury to an individual that causes that individual to remain incapacitated for a period in excess of 72 hours.

(3) Loss of a vessel.

(4) Damage to or by a vessel, its cargo, apparel or gear, except for fishing gear while not on board a vessel, or that impairs the seaworthiness of the vessel, or that is initially estimated at $2,500.00 or more.

(b) Each underwriter of primary insurance for a commercial fishing industry vessel must submit a report of each casualty involving that vessel to an organization listed in paragraph (d) of this section within 90 days of receiving notice of the casualty and whenever it pays a claim resulting from the casualty. Initial reports must be in accordance with paragraph (c) of this section. Subsequent reports must contain sufficient information to identify the casualty and any new or corrected casualty data.

(c) Each report of casualty must include the following information:

(1) The name and address of the vessel owner and vessel operator, if different than the vessel owner;

(2) The name and address of the underwriter of primary insurance for the vessel;

(3) The name, registry number, call sign, gross tonnage, year of build, length, and hull material of the vessel;

(4) The date, location, primary cause, and nature of the casualty;

(5) The specific fishery, intended catch, and length of fishery opening when applicable;

(6) The date that the casualty was reported to the underwriter of primary insurance for the vessel, or to an organization acceptable to the Commandant;

(7) The activity of the vessel at the time of the casualty;

(8) The weather conditions at the time of the casualty, if the weather caused or contributed to the cause of the casualty;

(9) The damages to or by the vessel, its apparel, gear, or cargo;

(10) The monetary amounts paid for damages;

(11) The name, birth date, social security number, address, job title, length of disability, activity at the time of injury, type of injury, and medical treatment required for each individual incapacitated for more than 72 hours, or deceased as a result of the casualty;

(12) The name, registry number, and call sign of every other vessel involved in the casualty; and

(13) The monetary amount paid for an injury or a death.

(d) A casualty to a commercial fishing industry vessel must be reported to an organization that has knowledge and experience in the collection and processing of statistical insurance data and that has been accepted by the Commandant to receive and process casualty data under this part. The Commandant has accepted for this purpose:

(1) Marine Index Bureau, Inc., P.O. Box 1964, New York, NY 10156–0612.

(2) [Reserved]

NOTE: The Coast Guard intends to treat information collected under this section from underwriters of primary insurance as exempt from disclosure under the Freedom of Information Act because it is commercial and financial information which, if disclosed, would be likely to cause substantial harm to the competitive position of the underwriter.

§28.90 Report of injury.

Each individual employed on a commercial fishing industry vessel must notify the master, individual in charge of the vessel, or other agent of the employer of each illness, disability, or injury suffered while in service to the vessel not later than seven days after the date on which the illness, disability, or injury arose.

§28.95 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with part 1, subpart 1.03 of this chapter.

Subpart B—Requirements For All Vessels

§28.100 Applicability.

Each commercial fishing industry vessel must meet the requirements of this subpart, in addition to the requirements of parts 24, 25, and 26 of this chapter.

§28.105 Lifesaving equipment—general requirements.

(a) In addition to the requirements of this subpart, each commercial fishing industry vessel must comply with the requirements of part 25, subpart 25.25 of this chapter.

(b) Except as provided in §28.120(d), each item of lifesaving equipment carried on board a vessel to meet the requirements of this part must be approved by the Commandant. Equipment for personal use which is not required by this part need not be approved by the Commandant.

§28.110 Life preservers or other personal flotation devices.

(a) Except as provided by §28.305 of this chapter, each vessel must be equipped with at least one immersion suit, exposure suit, or wearable personal flotation device of the proper size for each individual on board as specified in table 28.110 and part 25, subpart 25.25 of this chapter. Notwithstanding the provisions of paragraphs (c) and (d) of §25.25–1 of this chapter, each commercial fishing industry vessel propelled by sail or a manned barge employed in commercial fishing activities must meet the requirements of this paragraph.

(b) Each wearable personal flotation device must be stowed so that it is readily accessible to the individual for whom it is intended, from both the individual's normal work station and berthing area. If there is no location accessible to both the work station and the berthing area, an appropriate device must be stowed in both locations.

TABLE 28.110.—PERSONAL FLOTATION DEVICES AND IMMERSION SUITS

Applicable waters	Vessel type	Devices required	Other regulations
Seaward of the Boundary Line and North of 32°N or South of 32°S; and Lake Superior.	Documented Vessel	Immersion suit or exposure suit.[1]	28.135; 25.25–9(a); 25.25–13; 25.25–15.
Coastal Waters on the West Coast of the United States north of Point Reyes, CA; Beyond Coastal Waters, cold water; and Lake Superior.	All vessels	.....do[1]	Do.
All other waters (Includes all Great Lakes except Lake Superior).	40 feet (12.2 meters) or more in length.	Type I, Type V commercial hybrid, immersion suit, or exposure suit.[2]	28.135; 25.25–5(e); 25.25–5(f); 25.25–9(a); 25.25–13; 25.25–15.
	Less than 40 feet (12.2 meters) in length.	Type I, Type II, Type III, Type V commercial hybrid, immersion suit, or exposure suit.[2]	Do.

[1] Until September 1, 1995, individuals weighing less than 44 pounds (196 Newtons) may substitute an approved personal flotation device of the appropriate size for a required immersion suit or exposure suit.

[2] Certain Type V personal flotation devices are approved for substitution for Type I, II, or III personal flotation devices when used in accordance with the conditions stated in the Coast Guard approval table.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 88–079b, 57 FR 34189, Aug. 3, 1992; CGD 95–012, 60 FR 48048, Sept. 18, 1995]

§ 28.115 Ring life buoys.

(a) Except as provided in paragraph (b) of this section and § 28.305, each vessel must be equipped with a throwable flotation device or a ring life buoy as specified in table 28.115. If the vessel is equipped with a ring life buoy, at least one ring life buoy must be equipped with a line which is at least:

(1) 60 feet (18.3 meters) in length for a vessel less than 65 feet (19.8 meters) in length; or

(2) 90 feet (27.4 meters) in length for a vessel 65 feet (19.8 meters) or more in length.

(b) For each vessel less than 65 feet (19.8 meters) in length, an approved 20 inch (0.51 meters) or larger ring life buoy which is in serviceable condition and which was installed on board before September 15, 1991, may be used to meet the requirements of paragraph (a) of this section.

TABLE 28.115.—THROWABLE FLOTATION DEVICES

Vessel length	Devices required
Less than 16 feet (4.9 meters).	None.
16 feet (4.9 meters) or more, but less than 26 feet (7.9 meters).	1 buoyant cushion, or ring life buoy (Type IV PFD).
26 feet (7.9 meters) or more, but less than 65 feet (19.8 meters).	1 ring life buoy approval number starting with 160.009 or 160.050; orange; at least 24 inch (0.61 meters) size.

TABLE 28.115.—THROWABLE FLOTATION DEVICES—Continued

Vessel length	Devices required
65 feet (19.8 meters) or more.	3 ring life buoys, approval number 160.050; orange; at least 24 inch (0.61 meters) size.

NOTE: Certain Type V PFDs are approved for use in substitution for Type IV PFDs, when used in accordance with the conditions stated in the Coast Guard approval label.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991; 56 FR 49822, Oct. 1, 1991; CGD 95–012, 60 FR 48048, Sept. 18, 1995]

§ 28.120 Survival craft.

(a) Except as provided in paragraphs (b) and (d) through (h) of this section, each vessel must carry the survival craft specified in table 28.120(a), table 28.120(b), or table 28.120(c), as appropriate for the vessel, in an aggregate capacity to accommodate the total number of individuals on board.

(b) The requirements of this section do not apply to a vessel with less than 4 individuals on board which operates within 12 miles of the coastline.

(c) Except as provided by § 28.305, compliance dates for the requirements for the number and type of survival craft in tables 28.120(a), 28.120(b), and 28.120(c) are:

(1) For a documented vessel that operates in the North Pacific Area, September 1, 1992;

(2) For a documented vessel that operates in the Great Lakes or in the Atlantic Ocean north and east of a line drawn at a bearing 150° true from

Watch Hill Light, Rhode Island, September 1, 1993;

(3) For each other documented vessel, September 1, 1994; and

(4) For each other vessel, September 1, 1995.

(d) Each survival craft installed on board a vessel before September 15, 1991, may continue to be used to meet the requirements of this section provided the survival craft is:

(1) Of the same type as required in tables 28.120(a), 28.120(b), or 28.120(c), as appropriate for the vessel type; and

(2) Maintained in good and serviceable condition.

(e) Each inflatable liferaft installed on board a vessel before September 15, 1991, may continue to be used to meet the requirements for an approved inflatable liferaft, provided the existing liferaft is maintained in good and serviceable condition as required by table 28.140, and it is equipped with the equipment pack required by tables 28.120(a), 28.120(b), or 28.120(c), as appropriate for the vessel type. Where no equipment pack is specified in tables 28.120(a), 28.120(b), or 28.120(c), a coastal service pack is required.

(f) An approved lifeboat may be substituted for any survival craft required by this section, provided it is arranged and equipped in accordance with part 94 of this chapter.

(g) The capacity of an auxiliary craft carried on board a vessel which is integral to and necessary for normal fishing operations will satisfy the requirements of this section for survival craft, except for an inflatable liferaft, provided the craft is readily accessible during an emergency and is capable of safely holding all individuals on board the vessel. If the auxiliary craft is equipped with a Coast Guard required capacity plate, the boat must not be loaded so as to exceed the rated capacity.

(h) A vessel less than 36 feet in length which meets the positive flotation provisions of 33 CFR part 183 is exempt from the requirement for survival craft in paragraph (a) of this section for operation on the following waters:

(1) Within 12 miles of the coastline, any waters; and

(2) Rivers.

TABLE 28.120 (a).—SURVIVAL CRAFT FOR DOCUMENTED VESSELS

Area	Vessel type	Survival craft required
Beyond 50 miles of coastline	All	Inflatable liferaft with SOLAS A pack.
Between 20–50 miles of coastline, cold waters	All	Inflatable liferaft with SOLAS B pack.
Between 20–50 miles of coastline, warm waters	All	Inflatable liferaft.
Beyond Boundary Line, within 20 miles of coastline, cold waters.	All	Inflatable liferaft.
Beyond Boundary Line, within 20 miles of coastline, warm waters.	All	Life float.
Inside Boundary Line, cold waters; or Lakes, bays, sounds, cold waters; or Rivers, cold waters.	36 feet (11 meters) or more in length.	Inflatable buoyant apparatus.
Do	Less than 36 feet (11 meters) in length.	None.
Inside Boundary Line, warm waters; or Lakes, bays, sounds, warm waters; or Rivers, warm waters.	All	None.
Great Lakes, cold waters	36 feet (11 meters) or more in length.	Inflatable buoyant apparatus.
Do	Less than 36 feet (11 meters) in length.	Buoyant apparatus.
Great Lakes, beyond 3 miles of coastline, warm waters	All	Buoyant apparatus.
Great Lakes, within 3 miles of coastline, warm waters	All	None.

NOTE: The hierarchy of survival craft in descending order is lifeboat, inflatable liferaft with SOLAS A pack, inflatable liferaft with SOLAS B pack, inflatable liferaft with coastal service pack, inflatable buoyant apparatus, life float, buoyant apparatus. A survival craft higher in the hierarchy may be substituted for any survival craft required in this table.

TABLE 28.120(b).—SURVIVAL CRAFT FOR UNDOCUMENTED VESSELS WITH NOT MORE THAN 16 INDIVIDUALS ON BOARD

Area	Vessel type	Survival craft required
Beyond 20 miles of coastline	All	Inflatable buoyant apparatus.
Beyond Boundary Line, within 20 miles of coastline, cold waters.	All	Inflatable buoyant apparatus.
Beyond Boundary Line, within 20 miles of coastline, warm waters.	All	Life float.
Inside Boundary Line, cold waters; or Lakes, bays, sounds, cold waters; or Rivers, cold waters.	36 feet (11 meters) or more in length.	Buoyant apparatus.
Do	Less than 36 feet (11 meters) in length.	None.
Inside Boundary Line, warm waters; or Lakes, bays, sounds, warm waters; or Rivers, warm waters.	All	None.
Great Lakes, cold waters	All	Buoyant apparatus.
Great Lakes, beyond 3 miles of coastline, warm waters	All	Buoyant apparatus.
Great Lakes, within 3 miles of coastline, warm waters	All	None.

NOTE: The hierarchy of survival craft in descending order is lifeboat, inflatable liferaft with SOLAS A pack, inflatable liferaft with SOLAS B pack, inflatable liferaft with coastal service pack, inflatable buoyant apparatus, life float, buoyant apparatus. A survival craft higher in the hierarchy may be substituted for any survival craft required in this table.

TABLE 28.120(c).—SURVIVAL CRAFT FOR UNDOCUMENTED VESSELS WITH MORE THAN 16 INDIVIDUALS ON BOARD

Area	Vessel type	Survival craft required
Beyond 50 miles of coastline	All	Inflatable liferaft with SOLAS A pack.
Between 20-50 miles of coastline, cold waters	All	Inflatable liferaft with SOLAS B pack.
Between 20-50 miles of coastline, warm waters	All	Inflatable liferaft.
Beyond Boundary Line, within 20 miles of coastline, cold water.	All	Inflatable liferaft.
Beyond Boundary Line within 20 miles of coastline, warm waters.	All	Life float.
Inside Boundary Line, cold waters; or Lakes, bays, sounds, cold waters; or Rivers, cold waters.	36 feet (11 meters) or more in length.	Inflatable buoyant apparatus.
Do	Less than 36 feet (11 meters) in length.	None.
Inside Boundary Line, warm waters; or Lakes, bays, sounds, warm waters; or Rivers, warm waters.	All	None.
Great Lakes, cold waters	36 feet (11 meters) or more in length.	Inflatable buoyant apparatus.
Do	Less than 36 feet (11 meters) in length.	Buoyant apparatus.
Great Lakes, beyond 3 miles of coastline, warm waters	All	Buoyant apparatus.
Great Lakes, within 3 miles of coastline, warm waters	All	None.

NOTE: The hierarchy of survival craft in descending order is lifeboat, inflatable liferaft with SOLAS A pack, inflatable liferaft with SOLAS B pack, inflatable liferaft with coastal service pack, inflatable buoyant apparatus, life float, buoyant apparatus. A survival craft higher in the hierarchy may be substituted for any survival craft required in this table.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991; 56 FR 49822, Oct 1, 1991]

§ 28.125 Stowage of survival craft.

(a) Each inflatable liferaft required to be equipped with a SOLAS A or a SOLAS B equipment pack must be stowed so as to float free and automatically inflate in the event the vessel sinks.

(b) Each inflatable liferaft, inflatable buoyant apparatus, and any auxiliary craft used in their place, must be kept readily accessible for launching or be stowed so as to float free in the event the vessel sinks.

(c) Each hydrostatic release unit used in a float-free arrangement must be approved under part 160, subpart 160.062 of this chapter.

(d) Each float-free link used with a buoyant apparatus or with a life float must be certified to meet part 160, subpart 160.073 of this chapter.

§28.130 Survival craft equipment.

(a) *General.* Each item of survival craft equipment must be of good quality, effective for the purpose it is intended to serve, and secured to the craft.

(b) *Inflatable liferafts.* Each inflatable liferaft must have one of the following equipment packs as shown by the markings on its container:

(1) Coastal Service;

(2) SOLAS B Pack (formerly ''Limited Service''); or

(3) SOLAS A Pack (formerly ''Ocean Service'').

(c) Each life float and buoyant apparatus must be fitted with a lifeline, pendants, a painter, and a floating electric water light approved under part 161 subpart 161.010 of this chapter.

(d) *Other survival craft.* A vessel must not carry survival craft other than inflatable liferafts, life floats, inflatable buoyant apparatus, or buoyant apparatus, such as lifeboats or rigid liferafts, unless the survival craft and launching equipment comply with the requirements for installation, arrangement, equipment, and maintenance contained in 46 CFR part 94.

§28.135 Lifesaving equipment markings.

(a) Except as provided in paragraph (d) of this section, lifesaving equipment carried aboard a vessel pursuant to the requirements of this subpart or part 25, subpart 25.25 of this chapter must be marked as specified in table 28.135.

(b) Lettering used in lifesaving equipment markings must be in block capital letters.

(c) Retroreflective markings required by this section must be with material approved under part 164, subpart 164.018 of this chapter. The arrangement of the retroreflective material must meet IMO Resolution A.658(16).

(d) A wearable personal flotation device must be marked with the name of either the vessel, the owner of the device, or the individual to whom it is assigned.

TABLE 28.135.—LIFESAVING EQUIPMENT MARKINGS

Item	Markings Required	
	Name of vessel	Retroflective material
Wearable personal flotation device (Type I, II, III, or wearable Type V); Immersion suit or exposure suit.	See §28.135(d)	Type I or Type II.
Ring life buoy	X	Type II.
Inflatable liferaft	See note	See note.
Inflatable buoyant apparatus	See note	See note.
Life float	X	Type II.
Buoyant apparatus	X	Type II.
Auxiliary craft	X	Type II.
EPIRB	X	Type II.

NOTE: No marking other than that provided by the manufacturer and the servicing facility is required.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991, as amended by CGD 95–012, 60 FR 48048, Sept. 18, 1995]

§28.140 Operational readiness, maintenance, and inspection of lifesaving equipment.

(a) The master or individual in charge of a vessel must ensure that each item of lifesaving equipment must be in good working order, ready for immediate use, and readily accessible before the vessel leaves port and at all times when the vessel is operated.

(b) Except for an inflatable liferaft or an inflatable buoyant apparatus less than two years of age, each item of lifesaving equipment, including unapproved equipment, must be maintained and inspected in accordance with:

(1) Table 28.140;

(2) The servicing procedure under the subpart of this chapter applicable to the item's approval; and

(3) The manufacturer's guidelines.

(c) An inflatable liferaft or inflatable buoyant apparatus must be serviced at a facility specifically approved by the Commandant.

(d) An escape route from a space where an individual may be employed or an accommodation space must not be obstructed.

TABLE 28.140.—SCHEDULED MAINTENANCE AND INSPECTION OF LIFESAVING EQUIPMENT

Item	Interval		Regulation
	Monthly	Annually	
Inflatable wearable personal flotation device (Type V commercial hybrid).	.....	Servicing	28.140
Personal flotation devices, exposure suits and immersion suits.	.....	Inspect, clean and repair as necessary.	28.140
Buoyant apparatus and life floats	.....	Inspect, clean and repair as necessary.	28.140
Inflatable liferaft	.....	Servicing	28.140
Inflatable buoyant apparatus	.....	Servicing	28.140
Hydrostatic release	.....	Servicing	28.140
Disposable hydrostatic release	.....	Replace on or before expiration date.	28.140
Undated batteries	.....	Replace	28.140
Dated batteries [1] and other items	.....	Replace on or before expiration date.	25.26–5, 28.140
EPIRB	Test	.....	25.26–5

[1] Water activated batteries must be replaced whenever they are used.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

§ 28.145 Distress signals.

Except as provided by 28.305, each vessel must be equipped with the distress signals specified in table 28.145.

TABLE 28.145.—DISTRESS SIGNALS

Area	Devices required
Ocean, more than 50 miles from coastline.	3 parachute flares, approval series 46 CFR 160.136; plus 6 hand flares, approval series 46 CFR 160.121; plus 3 smoke signals, approval series 46 CFR 160.122.
Ocean, 3–50 miles from the coastline; or more than 3 miles from the coastline on the Great Lakes.	3 parachute flares, approval series 46 CFR 160.136, or 160.036; plus 6 hand flares, approval series 46 CFR 160.121 or 160.021; plus 3 smoke signals, approval series 46 CFR 160.122, 160.022, or 160.037.
Coastal waters, excluding the Great Lakes; or within 3 miles of the coastline on the Great Lakes.	Night visual distress signals consisting of one electric distress light, approval series 46 CFR 161.013 or 3 approved flares; plus Day visual distress signals consisting of one distress flag, approval series 46 CFR 160.072, or 3 approved flares, or 3 approved smoke signals.[1]

[1] If flares are carried, the same 3 flares may be counted toward meeting both the day and night requirement.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended at 60 FR 48048, Sept. 18, 1995]

§ 28.150 Emergency Position Indicating Radio Beacons (EPIRBs).

Each vessel must be equipped with an emergency position indicating radio beacon (EPIRB) as required by 46 CFR part 25, subpart 25.26.

NOTE: Each vessel which uses radio communication equipment must have a Ship Radio Station License issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

§ 28.155 Excess fire detection and protection equipment.

Installation of fire detection and protection equipment in excess of that required by the regulations in this subchapter is permitted provided that the excess equipment does not endanger the vessel or individuals on board in any way. The excess equipment must, at a minimum, be listed and labeled by an independent, nationally recognized testing laboratory and be in accordance with an appropriate industry standard for design, installation, testing, and maintenance.

§28.160 Portable fire extinguishers.

(a) Each vessel must meet the requirements of part 25, subpart 25.30 of this chapter.

(b) Each vessel 65 feet (19.8 meters) or more in length must be equipped with the minimum number, location, and type of portable fire extinguishers specified in table 28.160.

TABLE 28.160.—PORTABLE FIRE EXTINGUISHERS FOR VESSELS 65 FEET (19.8 METERS) OR MORE IN LENGTH

Space	Classification	Quantity and location
Safety areas, communicating corridors	A–II	1 in each main corridor not more than 150 feet (49.2 meters) apart. (May be located in stairways.)
Pilothouse	C–I	2 in vicinity of exit.
Service spaces, galleys	B–II or C–II	1 for each 2,500 square feet (269.1 sq. meters) or fraction thereof suitable for hazards involved.
Paint lockers	B–II	1 outside space in vicinity of exit.
Accessible baggage and storerooms	A–II	1 for each 2,500 square feet (269.1 sq. meters) or fraction thereof located in the vicinity of exits, either inside or outside the spaces.
Work shops and similar spaces	A–II	1 outside the space in vicinity of exit.
Machinery spaces; Internal combustion propelling machinery.	B–II	1 for each 1,000 brake horsepower or fraction thereof but not less than 2 nor more than 6.
Electric propulsion motors or generator unit of open type.	C–II	1 for each propulsion motor generator unit.
Auxiliary spaces	B–II	1 outside the space in the vicinity of exit.
Internal combustion machinery	B–II	1 outside the space in the vicinity of exit.
Electric emergency motors or generators	C–II	1 outside the space in the vicinity of exit.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991]

§28.165 Injury placard.

Each vessel must have posted in a highly visible location accessible to the crew a placard measuring at least 5 inches by 7 inches (127 millimeters by 178 millimeters) which reads:

Notice

Report All Injuries

United States law, 46 United States Code 10603, requires each seaman on a fishing vessel, fish processing vessel, or fish tender vessel to notify the master or individual in charge of the vessel or other agent of the employer regarding any illness, disability, or injury suffered by the seaman when in service to the vessel not later than seven days after the date on which the illness, disability, or injury arose.

Subpart C—Requirements for Documented Vessels That Operate Beyond the Boundary Lines or With More Than 16 Individuals On Board, or for Fish Tender Vessels Engaged in the Aleutian Trade

§28.200 Applicability.

Each documented commercial fishing industry vessel must meet the requirements of this subpart in addition to the requirements of subparts A and B of this part if it:

(a) Operates beyond the Boundary Lines;

(b) Operates with more than 16 individuals on board; or

(c) Is a fish tender vessel engaged in the Aleutian trade.

[CGD 94–025, 60 FR 54444, Oct. 24, 1995]

§28.205 Fireman's outfits and self-contained breathing apparatus.

(a) Each vessel that operates with more than 49 individuals on board must be equipped with at least two fireman's outfits stowed in widely separated locations.

(b) Each vessel that uses ammonia as a refrigerant must be equipped with at least two self-contained breathing apparatuses.

(c) A fireman's outfit must consist of one self-contained breathing apparatus with lifeline attached, one flashlight, a rigid helmet, boots, gloves, protective clothing, and one fire axe.

(d) At least one spare air bottle must be provided for each self-contained breathing apparatus.

(e) Each self-contained breathing apparatus must be approved by the Mine Safety and Health Administration (MSHA) and by the National Institute for Occupational Safety and Health (NIOSH), have as a minimum a 30 minute air supply, and a full facepiece.

§ 28.210 First aid equipment and training.

(a) Each vessel must have on board a complete first aid manual and medicine chest of a size suitable for the number of individuals on board in a readily accessible location.

(b) *First aid and cardiopulmonary resuscitation (CPR) course certification*. Certification in first aid and CPR must be as described in this paragraph.

(1) First aid—a certificate indicating completion of a first aid course from:

(i) The American National Red Cross ''Standard First Aid and Emergency Care'' or ''Multi-media Standard First Aid'' course; or

(ii) A course approved by the Coast Guard under § 10.205(h)(l)(ii) of this chapter.

(2) CPR—A certificate indicating completion of course from:

(i) The American National Red Cross;

(ii) The American Heart Association; or

(iii) A course approved by the Coast guard under § 10.205(h)(2)(iii) of this chapter.

(c) Each vessel that operates with more than 2 individuals on board must have at least 1 individual certified in first aid and at least 1 individual certified in CPR. An individual certified in both first aid and CPR will satisfy both of these requirements.

(d) Each vessel that operates with more than 16 individuals on board must have at least 2 individuals certified in first aid and at least 2 individuals certified in CPR. An individual certified in both first aid and CPR may be counted for both requirements.

(e) Each vessel that operates with more than 49 individuals on board must have at least 4 individuals certified in first aid and at least 4 individuals certified in CPR. An individual certified in both first aid and CPR may be counted for both requirements.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 95–012, 60 FR 48048, Sept. 18, 1995]

§ 28.215 Guards for exposed hazards.

(a) Each space on board a vessel must meet the requirements of this section.

(b) Suitable hand covers, guards, or railing must be installed in way of machinery which can cause injury to personnel, such as gearing, chain or belt drives, and rotating shafting. This is not meant to restrict necessary access to fishing equipment such as winches, drums, or gurdies.

(c) Each exhaust pipe from an internal combustion engine which is within reach of personnel must be insulated or otherwise guarded to prevent burns.

§ 28.225 Navigational information.

(a) Each vessel must have at least the following navigational information on board:

(1) Marine charts of the area to be transited, published by the National Ocean Service, Defense Mapping Agency Hydrographic/Topographic Center, U.S. Army Corps of Engineers, or a river authority that—

(i) Are of a large enough scale and have enough detail to make safe navigation of the area possible; and

(ii) Are currently corrected.

(2) For the area to be transited, a currently corrected copy of, or applicable currently corrected extract from, each of the following publications:

(i) U.S. Coast Pilot; and

(ii) Coast Guard Light List.

(3) For the area to be transited, the current edition of, or applicable current extract from, each of the following publications:

(i) Tide tables published by the National Ocean Service; and

(ii) Tidal current tables published by the National Ocean Service, or river current publication issued by the U.S.

Army Corps of Engineers or a river authority.

(b) Each vessel of 39.4 feet (12 meters) or more in length that operates shoreward of the COLREG Demarcation Lines, as set forth in 33 CFR part 80, must carry on board and maintain for ready reference a copy of the Inland Navigation Rules, as set forth in 33 CFR chapter I, subchapter E.

§28.230 Compasses.

Each vessel must be equipped with an operable magnetic steering compass with a compass deviation table at the operating station.

§28.235 Anchors and radar reflectors.

(a) Each vessel must be fitted with an anchor(s) and chain(s), cable, or rope appropriate for the vessel and the waters of the intended voyage.

(b) Except for a vessel rigged with gear that provides a radar signature from a distance of 6 miles, each nonmetallic hull vessel must have a radar reflector.

§28.240 General alarm system.

(a) Except as provided in paragraph (f) of this section, each vessel with an accommodation space or a work space which is not adjacent to the operating station, must have an audible general alarm system with a contact-maker at the operating station suitable for notifying individuals on board in the event of an emergency.

(b) The general alarm system must be capable of notifying an individual in any accommodation space or work space where they may normally be employed.

(c) In a work space where background noise makes a general alarm system difficult to hear, a flashing red light must also be installed.

(d) Each general alarm bell and flashing red light must be identified with red lettering at least ½ inch (13 millimeters) high as follows:

Attention

General Alarm—When Alarm Sounds Go to Your Station.

(e) A general alarm system must be tested prior to operation of the vessel and at least once each week thereafter.

(f) A public address system or other means of alerting all individuals on board may be used in lieu of a general alarm system provided it complies with paragraphs (b), (c), and (e) of this section and can be activated from the operating station.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 95–012, 60 FR 48048, Sept. 18, 1995]

§28.245 Communication equipment.

(a) Except as provided in paragraphs (b) through (e) of this section, each vessel must be equipped as follows.

(1) Each vessel must be equipped with a VHF radiotelephone capable of transmitting and receiving on the frequency or frequencies within the 156–162 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.

(2) Each vessel that operates more than 20 miles from the coastline, in addition to the VHF radiotelephone required by paragraph (a)(1) of this section, must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in the 2–4 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.

(3) Each vessel that operates more than 100 miles from the coastline, in addition to the communication equipment required by paragraph (a)(1) of this section must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in the 2–27.5 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.

(4) Each vessel that operates in waters contiguous to Alaska where no public coast station or U.S. Coast Guard station is within communications range of a VHF radio transceiver operating on the 156–162 MHz band or the 2–4 MHz band, in addition to the VHF radio communication equipment required by paragraph (a)(1) of this section, must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in

the 2–27.5 MHz band necessary to communicate with a public coast station or a U.S. Coast Guard station serving the area in which the vessel is operating.

(b) A single radio transceiver capable of meeting the requirements of paragraphs (a) (2) and (3), or paragraphs (a) (2), (3), and (4) of this section, is acceptable.

(c) Satellite communication capability with the system servicing the area in which the vessel is operating is acceptable as an alternative to the requirements of paragraphs (a)(2), (a)(3), or (a)(4) of this section.

(d) A cellular telephone capable of communicating with a public coast station or a U.S. Coast Guard station serving the area in which the vessel is operating is acceptable as an alternative to the requirements of paragraphs (a)(2), (a)(3), or (a)(4) of this section.

(e) A radiotelephone transceiver installed on board a vessel before September 15, 1991, capable of transmitting and receiving on frequencies on the 4–20 MHz band may continue to be used to satisfy the requirements of paragraphs (a)(3) and (a)(4) of this section.

(f) The principle operating position of the communication equipment must be at the operating station.

(g) Communication equipment must be installed to ensure safe operation of the equipment and to facilitate repair. It must be protected against vibration, moisture, temperature, and excessive currents and voltages. It must be located so as to minimize the possibility of water intrusion from windows broken by heavy seas.

(h) Communication equipment must comply with the technical standards and operating requirements issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

NOTE: Each vessel which uses radio equipment to meet the communication requirements of this section must have a Ship Radio Station License issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

(i) All communication equipment must be provided with an emergency source of power that complies with § 28.375.

§ 28.250 High water alarms.

On a vessel 36 feet (11.8 meters) or more in length, a visual and audible alarm must be provided at the operating station to indicate high water level in each of the following normally unmanned spaces:

(a) A space with a through-hull fitting below the deepest load waterline, such as the lazarette;

(b) A machinery space bilge, bilge well, shaft alley bilge, or other space subject to flooding from sea water piping within the space; and

(c) A space with a non-watertight closure, such as a space with a non-watertight hatch on the main deck.

§ 28.255 Bilge pumps, bilge piping, and dewatering systems.

(a) Each vessel must be equipped with a bilge pump and bilge piping capable of draining any watertight compartment, other than tanks and small buoyancy compartments, under all service conditions. Large spaces, such as enginerooms must be fitted with more than one suction line.

(b) In addition to the requirements of paragraph (a) of this section, a space used in the sorting or processing of fish in which water is used must be fitted with dewatering system capable of dewatering the space under normal conditions of list and trim at the same rate as water is introduced. Pumps used as part of the processing of fish do not count for meeting this requirement. The dewatering system must be interlocked with the pump(s) supplying water to the space, so that in the event of failure of the dewatering system, the water supply is inactivated.

(c) Except as provided by paragraph (f) of this section, each vessel 79 feet (24 meters) or more in length must be equipped with a fixed, self-priming, powered, bilge pump connected to a bilge manifold.

(d) If a bilge pump required by paragraph (a) of this section is portable, it must be provided with a suitable suction hose of adequate length to reach the bilges of each watertight compartment it must serve and with a discharge hose of adequate length to ensure overboard discharge. A portable pump must be capable of dewatering each space it serves at a rate of at least

2 inches (51 millimeters) of water depth per minute.

(e) Except for a fire pump required by §28.315, a bilge pump may be used for other purposes.

(f) Except where an individual pump is provided for a separate space or for a portable pump, each individual bilge suction line must be led to a manifold. Each bilge suction line must be provided with a stop valve at the manifold and a check valve at some accessible point in the bilge line to prevent unintended flooding of a space.

(g) Each bilge suction line and dewatering system suction must be fitted with a suitable strainer to prevent clogging of the suction line. Strainers must have an open area of not less than three times the open area of the suction line.

(h) Each vessel must comply with the oil pollution prevention requirements of 33 CFR parts 151 and 155.

§28.260 Electronic position fixing devices.

Each vessel 79 feet (24 meters) or more in length must be equipped with an electronic position fixing device capable of providing accurate fixes for the area in which the vessel operates.

§28.265 Emergency instruction.

(a) Except as provided in paragraphs (b) and (c) of this section, each vessel must have emergency instructions posted in conspicuous locations accessible to the crew.

(b) The instructions identified in paragraphs (d)(6), (d)(7), (d)(8), and (d)(9) of this section, may be kept readily available as an alternative to posting.

(c) On a vessel which operates with less than 4 individuals on board, the emergency instructions may be kept readily available as an alternative to posting.

(d) The emergency instructions required by this section must identify at least the following information, as appropriate for the vessel:

(1) The survival craft embarkation stations aboard the vessel and the survival craft to which each individual is assigned;

(2) The fire and emergency signal and the abandon ship signal;

(3) If immersion suits are provided, the location of the suits and illustrated instructions on the method for donning the suits;

(4) Procedures for making a distress call, such as:

(i) Make sure your communication equipment is on.

(ii) Select 156.8 MHz (VHF channel 16), 2182 kHz, or other distress frequency used in your area of operation. Note: VHF channel 16 and 2182 kHz on SSB are for emergency and calling purposes only.

(iii) Press microphone button and speaking slowly—clearly—calmly say:

''Mayday—Mayday—Mayday''

(iv) Say: ''This is the M/V (Insert name of your vessel), (Insert name of your vessel), (Insert name of your vessel), Over.''

(v) Release the microphone button briefly and listen for acknowledgment. If no one answers, repeat steps in paragraphs (d)(4) (iii) and (iv) of this section.

(vi) If there is still no answer, or if the Coast Guard or another vessel responds, say: ''Mayday—This is the M/V (Insert Name of Your Vessel).''

(vii) Describe your position using latitude and longitude coordinates, LORAN coordinate, or range and bearing from a known point.

(viii) State the nature of the distress.

(ix) Give number of individuals aboard and the nature of any injuries.

(x) Estimate the present seaworthiness of your vessel.

(xi) Describe your vessel: (Insert length, color, hull type, trim, masts, power, and any additional distinguishing features).

(xii) Say: ''I will be listening on Channel 16/2182 (or other channel monitored).''

(xiii) End message by saying: ''This is (insert vessel's name and call sign).''

(xiv) If your situation permits, stand by the radio to await further communication with the Coast Guard or another vessel. If no answer, repeat, then try another channel.

(5) Essential action that must be taken in an emergency by each individual, such as:

(i) Making a distress call.

(ii) Closing of hatches, airports, watertight doors, vents, scuppers, and

valves for intake and discharge lines which penetrate the hull, stopping of fans and ventilation systems, and operation of all safety equipment.

(iii) Preparing and launching of survival craft and rescue boats.

(iv) Fighting a fire.

(v) Mustering of personnel including—

(A) Seeing that they are properly dressed and have put on their lifejackets or immersion suits; and

(B) Assembling personnel and directing them to their appointed stations.

(vi) Manning of fire parties assigned to deal with fires.

(vii) Special duties required for the operation of fire fighting equipment.

(6) The procedures for rough weather at sea, crossing hazardous bars, flooding, and anchoring of the vessel, such as:

(i) Close all watertight and weathertight doors, hatches and airports to prevent taking water aboard or further flooding in the vessel.

(ii) Keep bilges dry to prevent loss of stability due to water in bilges. Use power driven bilge pump, hand pump, and buckets to dewater.

(iii) Align fire pumps to use as bilge pumps, if possible.

(iv) Check all intake and discharge lines which penetrate the hull for leakage.

(v) Personnel should remain stationary and evenly distributed.

(vi) Personnel should don lifejackets and immersion suits if the going becomes very rough, the vessel is about to cross a hazardous bar, or when otherwise instructed by the master or individual in charge of the vessel.

(7) The procedures for anchoring the vessel.

(8) The procedures to be used in the event an individual falls overboard, such as:

(i) Throw a ring life buoy as close to the individual as possible;

(ii) Post a lookout to keep the individual in the water in sight;

(iii) Launch the rescue boat and maneuver it to pick up the individual in the water;

(iv) Have a crewmember put on a lifejacket or immersion suit, attach a safety line to the crewmember, and have the crewmember standby to jump into the water to assist in recovering the individual in the water if necessary;

(v) If the individual overboard is not immediately located, notify the Coast Guard and other vessels in the vicinity; and

(vi) Continue searching until released by the Coast Guard.

(9) Procedures for fighting a fire, such as:

(i) Shut off air supply to the fire—close hatches, ports, doors, ventilators, and similar openings.

(ii) Deenergize the electrical systems supplying the affected space, if possible.

(iii) Immediately use a portable fire extinguisher or use water for fires in ordinary combustible materials. Do not use water on electrical fires.

(iv) If the fire is in a machinery space, shut off the fuel supply and ventilation system and activate the fixed extinguishing system, if installed.

(v) Maneuver the vessel to minimize the effect of wind on the fire.

(vi) If unable to control the fire, immediately notify the Coast Guard and other vessels in the vicinity.

(vii) Move personnel away from the fire, have them put on lifejackets, and if necessary, prepare to abandon the vessel.

§ 28.270 Instruction, drills, and safety orientation.

(a) *Drills and instruction*. The master or individual in charge of each vessel must ensure that drills are conducted and instruction is given to each individual on board at least once each month. Instruction may be provided in conjunction with drills or at other times and places provided it ensures that each individual is familiar with their duties and their responses to at least the following contingencies:

(1) Abandoning the vessel;

(2) Fighting a fire in different locations on board the vessel;

(3) Recovering an individual from the water;

(4) Minimizing the affects of unintentional flooding;

(5) Launching survival craft and recovering lifeboats and rescue boats;

(6) Donning immersion suits and other wearable personal flotation devices;

(7) Donning a fireman's outfit and a self-contained breathing apparatus, if the vessel is so equipped;

(8) Making a voice radio distress call and using visual distress signals;

(9) Activating the general alarm; and

(10) Reporting inoperative alarm systems and fire detection systems.

(b) *Participation in drills.* Drills must be conducted on board the vessel as if there were an actual emergency and must include participation by all individuals on board, breaking out and using emergency equipment, testing of all alarm and detection systems, donning protective clothing, and donning immersion suits, if the vessel is so equipped.

(c) *Training.* No individual may conduct the drills or provide the instructions required by this section unless that individual has been trained in the proper procedures for conducting the activity. An individual licensed for operation of inspected vessels of 100 gross tons or more need not have additional training to comply with this requirement.

(d) The viewing of videotapes concerning at least the contingencies listed in paragraph (a) of this section, whether on board the vessel or not, followed by a discussion led by an individual familiar with these contingencies will satisfy the requirement for instruction but not the requirement for drills in paragraph (b) of this section or for the safety orientation in paragraph (e) of this section.

(e) *Safety orientation.* The master or individual in charge of a vessel must ensure that a safety orientation is given to each individual on board that has not received the instruction and has not participated in the drills required by paragraph (a) of this section before the vessel may be operated.

(f) The safety orientation must explain the emergency instructions required by §28.265 and cover the specific evolutions listed in paragraph (a) of this section.

NOTE: The individual conducting the drills and instruction need not be the master, individual in charge of the vessel, or a member of the crew.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 95–012, 60 FR 48048, Sept. 18, 1995]

Subpart D—Requirements for Vessels Which Have Their Keel Laid or Are at a Similar Stage of Construction on or After or Which Undergo a Major Conversion Completed on or After September 15, 1991, and That Operate With More Than 16 Individuals on Board

§28.300 Applicability and general requirements.

Each commercial fishing industry vessel which has its keel laid or is at a similar stage of construction on or after or which undergoes a major conversion completed on or after September 15, 1991, and that operates with more than 16 individuals on board must comply with the requirements of this subpart in addition to the requirements of subparts A, B, and C of this part.

§28.305 Lifesaving and signaling equipment.

Each vessel to which this subpart applies must meet the requirements for life preservers, immersion suits, ring life buoys, distress signals, and survival craft in §§28.110, 28.115, 28.145 and table 28.120 (a), (b), or (c), as appropriate for the vessel type, on the date that its construction or major conversion is completed.

§28.310 Launching of survival craft.

A gate or other opening must be provided in the deck rails, lifelines, or bulwarks adjacent to the stowage location of each survival craft which weighs more than 110 pounds (489 Newtons), to allow the survival craft to be manually launched.

§28.315 Fire pumps, fire mains, fire hydrants, and fire hoses.

(a) Each vessel 36 feet (11.8 meters) or more in length must be equipped with a self-priming, power driven fire pump connected to a fixed piping system.

(1) A fire pump on a vessel 79 feet (24 meters) or more in length must be capable of delivering water simultaneously from the two highest hydrants, or from both branches of the fitting if the highest hydrant has a siamese fitting, at a pitot tube pressure of at least 50 psi (0.345 Newtons per square millimeter) and a flow rate of at least 80 gpm (303 liters per minute).

(2) Each vessel with a power driven fire pump must be equipped to permit energizing the fire main from the operating station and from the pump.

(b) *Fire main, hydrants, hoses and nozzles.*

(1) A vessel required to have a fixed fire main system must have a sufficient number of fire hydrants to reach any part of the vessel using a single length of fire hose.

(2) A fire hose must be connected to each fire hydrant at all times the vessel is operating.

(3) A fire hose on a vessel less than 79 feet (24 meters) in length must be at least ⅝ inch (16 millimeters) nominal diameter, be of good commercial grade and be fitted with a nozzle of corrosion resistant material capable of providing a solid stream and a spray pattern.

(4) A fire hose on a vessel 79 feet (24 meters) or more in length must be lined commercial fire hose and be fitted with a nozzle made of corrosion resistant material capable of providing a solid stream and a spray pattern.

§ 28.320 Fixed gas fire extinguishing systems.

(a) *Requirements for vessels 79 feet (24 meters) or more in length.* A vessel 79 feet (24 meters) or more in length must be fitted with a fixed gas fire extinguishing system in the following enclosed spaces:

(1) A space containing an internal combustion engine of more than 50 horsepower;

(2) A space containing an oil fired boiler;

(3) An incinerator and;

(4) A space containing a gasoline storage tank.

(b) *System types and alternatives.*

(1) A pre-engineered fixed gas fire extinguishing system may only be installed in a normally unoccupied machinery space, a paint locker, or a space containing flammable liquid stores, which has a gross volume of not more than 1200 cubic feet (42.4 cubic meters).

(2) A fixed gas fire extinguishing system, which is capable of automatic discharge upon heat detection, may only be installed in a normally unoccupied space with a gross volume of not more than 6000 cubic feet (21.2 cubic meters).

(3) A space with a gross volume exceeding 6000 cubic feet (21.2 cubic meters) must be fitted with a manually actuated and alarmed, fixed gas fire extinguishing system.

(c) *General requirements.*

(1) A fixed gas fire extinguishing system aboard a vessel must be approved by the Commandant and be custom engineered, unless the system meets the requirements for a pre-engineered fixed gas fire extinguishing system in paragraph (d) of this section.

(2) System components must be listed and labeled by an independent, nationally recognized testing laboratory for the system being installed.

(3) System design and installation must be in accordance with the Manufacturer's Marine Design, Installation, Operation, and Maintenance Manual approved for the system by the Commandant.

(4) A fixed gas fire extinguishing system may protect more than one space. The quantity of extinguishing agent must be at least sufficient for the largest space protected by the system.

(d) *Pre-engineered fixed gas fire extinguishing systems.*

(1) A pre-engineered fixed gas fire extinguishing system must:

(i) Be approved by the Commandant;

(ii) Be capable of manual actuation from outside the space in addition to any automatic actuation devices; and

(iii) Automatically shut down all power ventilation systems serving the protected space and all engines that draw intake air from within the protected space.

(2) A vessel on which a pre-engineered fixed gas fire extinguishing system is installed must have the following equipment at the operating station:

(i) A visual alarm to indicate the discharge of the extinguishing agent;

(ii) An audible alarm to sound upon discharge of the extinguishing agent; and

(iii) A means to reset devices used to automatically shut down ventilation systems and engines as required by paragraph (d)(1)(iii) of this section.

§28.325 Fire detection systems.

(a) Each accommodation space must be equipped with an independent modular smoke detector or a smoke actuated fire detecting unit installed in accordance with 46 CFR part 76, subpart 76.33.

(b) An independent modular smoke detector must meet UL 217 and be listed as a ''Single Station Smoke Detector—Also suitable for use in Recreational Vehicles.''

§28.330 Galley hood and other fire protection equipment.

(a) Each vessel must be fitted with a grease extraction hood complying with UL 710 above each grill, broiler, and deep fat fryer.

(b) Each grease extraction hood must be equipped with a pre-engineered dry or wet chemical fire extinguishing system meeting the applicable sections of NFPA 17 or 17A and must be listed by an independent laboratory.

(c) A vessel 79 feet (24 meters) or more in length must have at least one fire axe located in or adjacent to the operating station.

§28.335 Fuel systems.

(a) *Applicability*. Except for the components of an outboard engine or portable bilge pump, each vessel must meet the requirements of this section.

(b) *Portable fuel systems.* Portable fuel systems including portable tanks and related fuel lines and accessories are prohibited except where used for outboard engines or portable bilge pumps. The design, construction, and stowage of portable tanks and related fuel lines and accessories must meet the requirements of ABYC H–25.

(c) *Fuel restrictions.* Except for outboard engines, the use of fuel other than bunker C or diesel is prohibited. An installation using bunker C must comply with the requirements of subchapter F of this chapter.

(d) *Vent pipes for integral fuel tanks.* Each integral fuel tank must meet the requirements of this paragraph.

(1) Each fuel tank must be fitted with a vent pipe connected to the highest point of the tank terminating in a 180 degree (3.14 radians) bend on a weather deck and fitted with a flame screen.

(2) Except where provision is made to fill a tank under pressure, the net cross-sectional area of the vent pipe for a fuel tank must not be less than 0.484 square inches (312.3 square millimeters).

(3) Where provision is made to fill a tank under pressure, the net cross-sectional area of the vent pipe must not be less than that of the fill pipe.

(e) *Fuel piping.* Except as permitted in paragraph (e)(1) and (e)(2) of this section, each fuel line must be seamless and must be of steel, annealed copper, nickel-copper, or copper-nickel. Each fuel line must have a wall thickness of not less than that of 0.035 inch (0.9 millimeters) except that:

(1) Aluminum piping is acceptable on an aluminum hull vessel provided it is installed outside the machinery space and is at least Schedule 80 in thickness; and

(2) Nonmetallic flexible hose is acceptable but must—

(i) Not be used in lengths of more than 30 inches (0.82 meters);

(ii) Be visible, easily accessible, and must not penetrate a watertight bulkhead;

(iii) Be fabricated with an inner tube and a cover of synthetic rubber or other suitable material reinforced with wire braid.

(iv) Be fitted with suitable, corrosion resistant, compression fittings; and

(v) Be installed with two clamps at each end of the hose, if designed for use with clamps. Clamps must not rely on spring tension and must be installed beyond the bead or flare or over the serrations of the mating spud, pipe, or hose fitting.

(f) A fuel line subject to internal head pressure from fuel in the tank must be fitted with a positive shutoff valve located at the tank which is operable from a safe location outside the space in which the valve is located.

(g) A vessel less than 79 feet (24 meters) in length may comply with one of

the following standards in lieu of the requirements of paragraphs (e) and (f) of this section.

(1) ABYC H–33.

(2) Chapter 5 of NFPA 302.

(3) 33 CFR Chapter I, subchapter S (Boating Safety).

§ 28.340 Ventilation of enclosed engine and fuel tank spaces.

(a) *Applicability*. Each vessel with a gasoline outboard engine or gasoline storage tank must comply with the requirements of this section.

(b) *Ventilation of spaces containing gasoline.* Each space that contains a gasoline engine, a gasoline storage tank, or gasoline piping connected to an integral gasoline tank must be open to the atmosphere and so arranged as to prevent the entrapment of vapors or be ventilated by a mechanical exhaust system with a nonsparking fan. The fan motor must comply with 46 CFR 111.105–23.

(c) *Alternative standards.* A vessel less than 65 feet in length with ventilation installations in accordance with NFPA 302, chapter 2, section 2–2, or ABYC H–2 and 33 CFR part 183, subpart K, will be considered as meeting the requirements of this section.

§ 28.345 Electrical standards for vessels less than 79 feet (24 meters) in length.

(a) A vessel less than 79 feet (24 meters) in length with an alternating current electrical distribution system may comply with the requirements of ABYC E–8 and either paragraph (c) or (d) of this section, as applicable, in lieu of meeting the requirements of §§ 28.350 through 28.370.

(b) A vessel less than 79 feet (24 meters) in length with a direct current system may comply with the requirements of ABYC E–1, ABYC E–9, and either paragraph (c) or (d) of this section, as applicable, in lieu of meeting the requirements of §§ 28.350 through 28.370.

(c) In addition to paragraph (a) or (b) of this section, the vessel may comply with the requirements of NFPA 302, chapters 7 and 8.

(d) In addition to paragraph (a) or (b) of this section, the vessel may comply with the requirements of 33 CFR part 183, subpart I and § 28.370.

§ 28.350 General requirements for electrical systems.

(a) Electrical equipment exposed to the weather or in a location exposed to seas must be waterproof, watertight, or enclosed in a watertight housing.

(b) Aluminum must not be used for current carrying parts of electrical equipment or wiring.

(c) As far as practicable, electrical equipment must not be installed in lockers used to store paint, oil, turpentine, or other flammable or combustible liquid. If electrical equipment, such as lighting, is necessary in these spaces, it must be explosion-proof or intrinsically safe.

(d) Explosion-proof and intrinsically safe equipment must meet the requirements of 46 CFR part 111, subpart 111.105.

(e) Metallic enclosures and frames of electrical equipment must be grounded.

(f) Each vessel with a nonmetallic hull must have a continuous, non-current carrying grounding conductor which connects together the enclosures and frames of electrical equipment and which connects metallic items such as engines, fuel tanks, and equipment enclosures to a common ground point.

(g) The equipment grounding conductor must be sized in accordance with section 250–95 of NFPA Standard 70.

§ 28.355 Main source of electrical power.

(a) *Applicability*. Each vessel that relies on electricity to power any of the following essential loads must have at least two electrical generators to supply these loads:

(1) The propulsion system and its necessary auxiliaries and controls;

(2) Interior lighting;

(3) Steering systems;

(4) Communication systems;

(5) Navigation equipment and navigation lights;

(6) Fire protection or detection equipment;

(7) Bilge pumps; or

(8) General alarm system.

(b) Each generator must be attached to an independent prime mover.

§28.360 Electrical distribution systems.

(a) Each electrical distribution system which has a neutral bus or conductor must have the neutral bus or conductor grounded.

(b) A grounded electrical distribution system must have only one connection to ground. This ground connection must be at the switchboard or, on a nonmetallic vessel, at the common ground point.

§28.365 Overcurrent protection and switched circuits.

(a) Each power source must be protected against overcurrent. Overcurrent devices for generators must be set at a value not exceeding 115 percent of the generator full load rating.

(b) Except for a steering circuit, each circuit must be protected against both overload and short circuit. Each overcurrent device in a steering system power and control circuit must provide short circuit protection only.

(c) Each ungrounded current carrying conductor must be protected in accordance with its current carrying capacity by a circuit breaker or fuse at the connection to the switchboard or distribution panel bus.

(d) Each circuit breaker and each switch must simultaneously open all ungrounded conductors.

(e) The grounded conductor of a circuit must not be disconnected by a switch or an overcurrent device unless all ungrounded conductors of the circuit are simultaneously disconnected.

(f) Navigation light circuits must be separate, switched circuits having fused disconnect switches or circuit breakers so that only the appropriate navigation lights can be switched on.

(g) A separate circuit with overcurrent protection at the main distribution panel or switchboard must be provided for each radio installation.

§28.370 Wiring methods and materials.

(a) All cable and wire must have insulated, stranded copper conductors of the appropriate size and voltage rating for the circuit.

(b) Each conductor must be No. 22 AWG or larger. Conductors in power and lighting circuits must be No. 14 AWG or larger. Conductors must be sized so that the voltage drop at the load terminals is not more than 10 percent.

(c) Cable and wiring not serving equipment in a high risk fire area such as a galley, laundry, or machinery space must be routed as far as practicable from these spaces. As far as practicable, cables serving duplicated essential equipment must be separated so that a casualty that affects one cable does not affect the other.

(d) Cable and wire for power and lighting circuits must:

(1) For circuits of less than 50 volts, meet 33 CFR 183.425 and 183.430; and

(2) For circuits of 50 volts or greater:

(i) Meet sections 310–13 and 310–15 of NFPA 70, except that asbestos insulated cable and dry location cable must not be used;

(ii) Be listed by Underwriters Laboratories Inc. as UL Boat or UL Marine Shipboard cable; or

(iii) Meet 46 CFR part 111, subpart 111.60.

(e) All metallic cable armor must be electrically continuous and grounded to the metal hull or the common ground point at each end of the cable run, except that final sub-circuits (those supplying loads) may be grounded at the supply end only.

(f) A wiring termination and connection must be made in a fire retardant enclosure such as a junction box, fixture enclosure, or panel enclosure. A fire retardant plastic enclosure is acceptable.

§28.375 Emergency source of electrical power.

(a) Each vessel must have an emergency source of electrical power which is independent of the main sources of electrical power and which is located outside the main machinery space.

(b) The emergency source of electrical power must be capable of supplying all connected loads continuously for at least 3 hours.

(c) Except as provided in paragraphs (d) and (e) of this section, the following electrical loads must be connected to the emergency source of power:

(1) Navigation lights;

(2) Steering systems;

(3) Bilge pumps;

(4) Fire protection and detection systems, including fire pumps;

(5) Communication equipment;

(6) General alarm system and;

(7) Emergency lighting.

(d) A vessel less than 36 feet (11.0 meters) in length need only supply communication equipment by an emergency source of electrical power if flashlights are provided.

(e) A vessel less than 79 feet (24 meters) in length which is not dependent upon electrical power for propulsion, including propulsion control systems or steering, need only supply emergency lighting, navigation equipment, general alarm system, and communication systems by the emergency source of power.

(f) Where the emergency source of power is a generator, the generator prime mover must have a fuel supply which is independent of other prime movers.

[CGD 88–079; 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

§ 28.380 General structural fire protection.

(a) *Fire hazards to be minimized.* Each vessel must be constructed so as to minimize fire hazards insofar as is reasonable and practicable.

(b) *Combustibles insulated from heated surfaces.* An internal combustion engine exhaust, galley uptake, or similar source of ignition must be kept clear of and suitably insulated from combustible material. A dry exhaust system for an internal combustion engine on a wooden or fiber reinforced plastic vessel must be installed in accordance with ABYC P–1.

(c) *Separation of machinery and fuel tank spaces from accommodation spaces.*

(1) Each accommodation space must be separated from machinery and fuel tank spaces by a fire resistant boundary which will prevent the passage of vapors.

(2) Each pipe and cable penetration between an accommodation space and a machinery or a fuel tank storage space must be sealed.

(d) *Paint and flammable liquid lockers.* Each vessel carrying paint and flammable liquids must be equipped with a steel or a steel lined storage locker.

(e) *Insulation.* Except as provided in paragraphs (e)(1) and (e)(2) of this section, insulation must be noncombustible.

(1) In machinery spaces, combustible insulation may be used for pipe and machinery lagging.

(2) In cargo spaces and refrigerated compartments of service spaces, combustible insulation may be used.

(f) *Vapor barrier.* Where insulation of any type is used in spaces where flammable and combustible liquids or vapors are present, e.g., machinery spaces and paint lockers, a vapor barrier which covers the insulation must be provided.

(g) *Paint.* Nitrocellulose or other highly flammable or noxious fume producing paints or lacquers must not be used on the vessel.

(h) *Mattresses.* Polyurethane foam mattresses are prohibited.

NOTE: The U.S. Department of Commerce Standard for Mattress Flammability (FF4–72.16) in 16 CFR part 1632, subpart A, applies to each mattress.

(i) *Fiber reinforced plastic.* When the hull, a deck, deckhouse, or superstructure of a vessel is partially or completely constructed of fiber reinforced plastic, the resin used must be fire retardant.

(j) *Cooking areas.* Vertical or horizontal surfaces within 3 feet (0.91 meters) of cooking appliances must be composed of noncombustible material or covered by noncombustible material. Curtains, draperies, or free hanging fabrics are not permitted within 3 feet (1 meter) of cooking appliances.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

§ 28.385 Structural fire protection for vessels that operate with more than 49 individuals on board.

(a) *Applicability.* Each vessel that operates with more than 49 individuals on board must comply with the requirements of this section in addition to the requirements of § 28.380.

(b) *Construction.* The hull, structural bulkheads, columns and stanchions must be composed of steel. Superstructures and deckhouses must be constructed of noncombustible material.

(c) *Protection of accommodation spaces.* A bulkhead or deck separating an accommodation space from a control station, machinery space, cargo space, or service space must be constructed of noncombustible material.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

§ 28.390 Means of escape.

(a) Each space which is used by an individual on a regular basis or which is generally accessible to an individual must have at least two widely separated means of escape. At least one of the means of escape must be independent of watertight doors. Subject to the restrictions of this section, means of escape include normal exits and emergency exits, passageways, stairways, ladders, deck scuttles, and windows.

(b) At least one of the means of escape from each space must provide a satisfactory route to weather.

(c) Each door, hatch or scuttle used as a means of escape must be capable of being opened by one individual, from either side, in both light dark conditions, must open towards the expected direction of escape from the space served, and if a watertight door be of the quick acting type.

(d) Each deck scuttle which serves as a means of escape, must be fitted with a quick-acting release and a device to hold the scuttle in an open position.

(e) Each foothold, handhold, ladder, or similar structure, provided to aid escape, must be suitable for use in emergency conditions and must be of rigid construction.

(f) A window or windshield of sufficient size and proper accessibility may be used as one of the required means of escape from an enclosed space.

§ 28.395 Embarkation stations.

Each vessel must have at least one designated survival craft embarkation station and any additional embarkation stations necessary so that an embarkation station is readily accessible from each accommodation space and work space. Each embarkation station must be arranged to allow the safe boarding of survival craft.

§ 28.400 Radar and depth sounding devices.

(a) Each vessel must be fitted with a general marine radar system for surface navigation with a radar screen mounted at the operating station.

(b) Each vessel must be fitted with a suitable echo depth sounding device.

§28.405 Hydraulic equipment.

(a) Each hydraulic system must be so designed and installed that proper operation of the system is not affected by back pressure in the system.

(b) Piping and piping components must be designed with a burst pressure of not less than four times the system maximum operating pressure.

(c) Each hydraulic system must be equipped with at least one pressure relieving device set to relieve at the system's maximum operating pressure.

(d) All material in a hydraulic system must be suitable for use with the hydraulic fluid used and must be of such chemical and physical properties as to remain ductile at the lowest operating temperature likely to be encountered by the vessel.

(e) Except for hydraulic steering equipment, controls for hydraulic equipment must be located where the operator has an unobstructed view of the hydraulic equipment and the adjacent working area.

(f) Controls for hydraulic equipment must be so arranged that the operator is able to quickly disengage the equipment in an emergency.

(g) Hydraulically operated machinery must be equipped with a holding device to prevent uncontrolled movement due to loss of hydraulic system pressure.

(h) A nonmetallic flexible hose must only be used between two points of relative motion, including a pump and piping system, and must meet SAE J 1942.

(i) Each nonmetallic flexible hose and hose assembly must be installed in accordance with the manufacturer's rating and guidelines and must be limited to a length of not more that 30 inches (0.76 meters) in an application not subject to torsional loading.

§ 28.410 Deck rails, lifelines, storm rails, and hand grabs.

(a) Except as otherwise provided in paragraph (d) of this section, deck rails, lifelines, grab rails, or equivalent protection must be installed near the periphery of all weather decks accessible to individuals. Where space limitations make deck rails impractical, hand grabs may be substituted.

(b) The height of deck rail, lifelines, or bulwarks must be at least 39½ inches (1 meter) from the deck, except, where this height would interfere with the normal operation of the vessel, a lesser height may be substituted.

(c) All deck rails or lifelines must be permanently supported by stanchions at intervals of not more than 7 feet (2.3 meters). Stanchions must be through bolted or welded to the deck.

(d) Portable stanchions and lifelines may be installed in locations where permanently installed deck rails would impede normal fishing operations or emergency recovery operations.

(e) Deck rails or lifelines must consist of evenly spaced courses. The spacing between courses must not be greater than 15 inches (0.38 meters). The opening below the lowest course must not be more than 9 inches (0.23 meters). Lower courses are not required where all or part of the space below the upper rail is fitted with a bulwark, chain link fencing, wire mesh, or an equivalent.

(f) A suitable storm rail or hand grab must be installed where necessary in a passageway, at a deckhouse side, at a ladder, and a hatch where an individual might have normal access.

(g) A stern trawler must have doors, gates, or other protective arrangements at the top of the stern ramp at least as high as adjacent bulwarks or 39½ inches (1 meter), whichever is less.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 49822, Oct. 1, 1991]

Subpart E—Stability

§ 28.500 Applicability.

This subpart applies to each commercial fishing industry vessel which is 79 feet (24 meters) or more in length that is not required to be issued a load line under subchapter E of this chapter and that—

(a) Has its keel laid or is at a similar stage of construction or undergoes a major conversion started on or after September 15, 1991;

(b) Undergoes alterations to the fishing or processing equipment for the purpose of catching, landing, or processing fish in a manner different than has previously been accomplished on the vessel—these vessels need only comply with § 28.501 of this subpart; or

(c) Has been substantially altered on or after September 15, 1991.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991, as amended by CGD 88–079, 57 FR 364, Jan. 6, 1992]

§ 28.501 Substantial alterations.

(a) Except as provided in paragraph (b) of this section, a vessel that is substantially altered, including the cumulative effects of all alterations, need not comply with the remainder of this subpart, provided that it has stability instructions developed by a qualified individual which comply with § 28.530 (c) through (e).

(b) A vessel that is substantially altered in a manner which adversely affects its stability, including the cumulative effects of all alterations, need not comply with the remainder of this subpart, provided the stability instructions required by paragraph (a) of this section are based on loading conditions or operating restrictions, or both, which compensate for the adverse affects of the alterations.

(c) The following changes to a vessel's lightweight characteristics are considered to adversely affect vessel stability:

(1) An increase in the vertical center of gravity at lightweight by more than 2 inches (51 millimeters) compared to the original lightweight value.

(2) An increase or decrease of lightweight displacement by more than 3 percent of the original lightweight displacement.

(3) A shift of the longitudinal center of gravity of more than 1 percent of the vessel's length.

(d) In determining whether or not a vessel's stability has been adversely affected, a qualified individual must, at a minimum, consider the net effects on stability of any:

(1) Reduction of the downflooding angle;

(2) Increase in the maximum heeling moment caused by fishing gear or weight lifted over the side due to changes in lifting arrangement or capacity;

(3) Reduction in freeing port area;

(4) Increase in free surface effects, including increased free surface effects due to water on deck associated with any increase in length or height of bulwarks;

(5) Increase in projected wind area;

(6) Decrease in the angle of maximum righting arm;

(7) Decrease in the area under the righting arm curve; and

(8) Increase in the surface area on which ice can reasonably be expected to accumulate.

§28.505 Vessel owner's responsibility.

(a) Where a test or calculations are necessary to evaluate stability, it is the owner's responsibility to select a qualified individual to perform the test or calculations.

(b) Test results and calculations developed in evaluating stability must be maintained by the owner.

§28.510 Definition of stability terms.

Downflooding means the entry of seawater through any opening into the hull or superstructure of an undamaged vessel due to heel, trim, or submergence of the vessel.

Downflooding angle means the static angle from the intersection of the vessel's centerline and the waterline in calm water to the first opening that cannot be closed weathertight and through which downflooding can occur.

Flush deck means a continuous weather deck located at the uppermost sheer line of the hull.

Forward perpendicular means a vertical line corresponding to the intersection of the forward side of the vessel's stem and the vessel's waterline at the vessel's deepest operating draft.

Open boat means a vessel not protected from entry of water by means of a complete deck, or by a combination of partial weather deck and superstructure which is seaworthy for the waters upon which the vessel operates.

Protected waters means sheltered waters presenting no special hazards such as most rivers, harbors, lakes, and similar waters as determined by the OCMI.

Qualified individual means an individual or an organization with formal training in and experience in matters dealing with naval architecture calculations.

Substantially altered means the vessel is physically altered in a manner that affects the vessel's stability and includes:

(1) Alterations that result in a change of the vessel's lightweight vertical center of gravity of more than 2 inches (51 millimeters), a change in the vessel's lightweight displacement of more than 3 percent, or an increase of more than 5 percent in the vessel's projected lateral area, as determined by tests or calculations;

(2) Alterations which change the vessel's underwater shape;

(3) Alterations which change a vessel's angle of downflooding; and

(4) Alterations which change a vessel's buoyant volume.

Well deck means a weather deck fitted with solid bulwarks that impede the drainage of water over the sides or an exposed recess in the weather deck extending one-half or more of the length of the vessel.

§28.515 Submergence test as an alternative to stability calculations.

(a) A vessel may comply with this section in lieu of the remainder of the requirements in this subpart. A certification plate installed under 33 CFR part 183, subpart B, is acceptable evidence of compliance with this section.

(b) A vessel which is fitted with inboard engines and loaded as described in paragraph (e) of this section must float in calm water, after being submerged for 18 hours, so that—

(1) For a open vessel, any portion of the vessel's gunwale is above the water's surface; or

(2) For a decked vessel, any portion of the main deck is above the water's surface.

(c) A vessel which is fitted with an outboard engine must be loaded as described in paragraph (e) of this section

and must float in calm water after being submerged for 18 hours so that—

(1) The vessel has an equilibrium heel angle of less than 10°;

(2) Any portion of the vessel's hull is above the water's surface; and

(3) Any portion of the lowest 3 feet (0.91 meters) of the vessel's hull is not more than 6 inches (152 millimeters) below the water's surface as measured at the lowest point on the following—

(i) The gunwale, for an open boat; or

(ii) The main deck, for a decked vessel.

(d) A vessel which is fitted with an outboard engine must be loaded as described in paragraph (f) of this section and must survive the submergence described in paragraph (c) of this section, except that the equilibrium heel angle must not exceed 30° and the vessel must float with the lower end of the vessel not more than 12 inches (0.31 meters) below the water's surface in calm water.

(e) For the tests described in paragraph (b) and (c) of this section, a vessel must be complete in all respects, except that machinery which would be damaged by water may be replaced with equivalent fixed weight in the same location as the machinery it replaces. The vessel must be loaded with weight to represent the most adverse loading condition. The most adverse loading condition normally includes the maximum weight of fish in its highest possible location. Weights must be substituted for operating personnel at 165 pounds (734 Newtons) per individual and may be substituted for fishing gear. The substitute weights may be located transversely so that the vessel floats level prior to being submerged. The two largest air chambers, or compartments of a decked vessel not used as fuel tanks, that contribute buoyancy to the vessel must be flooded.

(f) For the test described in paragraph (d) of this section, a vessel must be complete and loaded as described in paragraph (e) of this section, except that the center of gravity of the equivalent maximum fish load must be located to one side of the vessel's centerline by a distance equal to one-fifth of the maximum transverse dimension of the fish storage space.

§ 28.520 [Reserved]

§ 28.525 [Reserved]

§ 28.530 Stability instructions.

(a) *Intent.* The intent of this section is to ensure that vessel masters and individuals in charge of vessels are provided with enough stability information to allow them to maintain their vessel in a satisfactory stability condition. The rules provide maximum flexibility for owners and qualified individuals to determine how this information is conveyed, taking into consideration decisions by operating personnel must be made quickly and that few operating personnel in the commercial fishing industry have had specialized training in stability. Therefore, stability instructions should take into account the conditions a vessel may reasonably be expected to encounter and provide simple guidance for the operating personnel to deal with these situations.

(b) Each vessel must be provided with stability instructions which provide the master or individual in charge of the vessel with loading constraints and operating restrictions which maintain the vessel in a condition which meets the applicable stability requirements of this subpart.

(c) Stability instructions must be developed by a qualified individual.

(d) Stability instructions must be in a format easily understood by the master or individual in charge of the vessel. Units of measure, language, and rigor of calculations in the stability instructions must be consistent with the ability of the master or the individual in charge of the vessel. The format of the stability instructions may include, at the owner's discretion, any of the following:

(1) Simple loading instructions;

(2) A simple loading diagram with instructions;

(3) A stability booklet with sample calculations; or

(4) Any other appropriate format for providing stability instructions.

(e) Stability instructions must be developed based on the vessel's individual characteristics and may include the following, as appropriate for the format chosen for presentation:

(1) A general description of the vessel, including lightweight data;

(2) Instructions on the use of the information;

(3) General arrangement plans showing watertight compartments, closures, vents, downflooding angles, and allowable weights;

(4) Loading restrictions, such as diagrams, tables, descriptions or maximum KG curves;

(5) Sample loading conditions;

(6) General precautions for preventing unintentional flooding;

(7) Capacity plan or tank sounding tables showing tank and hold capacities, centers of gravity, and free surface effects;

(8) A rapid and simple means for evaluating any specific loading condition;

(9) The amount and location of fixed ballast;

(10) Any other necessary guidance for maintaining adequate stability under normal and emergency conditions;

(11) A general description of the stability criteria that are used in developing the instructions;

(12) Guidance on the use of roll limitation devices such as stabilizers; and

(13) Any other information the owner feels is important to the stability and operation of the vessel.

§ 28.535 Inclining test.

(a) Except as provided in paragraphs (b) and (c) of this section, each vessel for which the lightweight displacement and centers of gravity must be determined in order to do the calculations required in this subpart must have an inclining test performed.

(b) A deadweight survey may be substituted for the inclining test, if there is a record of an inclining test of a sister vessel. A vessel qualifies as a sister vessel if it is built to the same basic drawings and the undocumented weight difference between the two vessels is less than 3 percent of the lightweight displacement of the vessel which was inclined and the location of the longitudinal center of gravity differs less than 1 percent of the vessel's length.

(c) A deadweight survey may be substituted for the inclining test, or the inclining test may be dispensed with, if an accurate estimate of the vessel's lightweight characteristics can be made and the precise location of the position of the vessel's vertical center of gravity is not necessary to ensure that the vessel has adequate stability in all probable loading conditions.

(d) ASTM Standard F 1321–90, with the exception of Annexes A and B, may be used as guidance for any inclining test or deadweight survey conducted under this section.

§ 28.540 Free surface.

(a) When doing the stability calculations required by this subpart, the virtual rise in the vessel's vertical center of gravity due to liquids in tanks must be considered by calculating the following—

(1) For each type of consumable liquid, the maximum free surface effect of a tank, or a transverse pair of tanks, having the greatest free surface effect, in addition to a correction for service tanks; and

(2) The free surface effect of each partially filled tank and hold containing a liquid that is not a consumable or containing fish or a fish product that can shift as the vessel heels. This should include correction for any loose water within the vessel's hull associated with the processing of fish.

(b) The free surface effect of tanks fitted with cross connection piping must be calculated assuming the tanks are one common tank, unless valves that will be kept closed to prevent the transfer of liquids as the vessel heels are installed in the piping.

(c) The moment of transference method may be used in lieu of the inertia method when calculating free surface effects.

§ 28.545 Intact stability when using lifting gear.

(a) Each vessel which lifts a weight over the side, or that uses fishing gear that can impose an overturning moment on the vessel, such as trawls and seines, must meet the requirements of this section if that maximum heeling moment exceeds 0.67(W)(GM)(F/B), in foot-long tons (meter-metric tons), where:

W=displacement of the vessel with the lifted weight or the force on the fishing gear included, in long tons (metric tons);

GM=metacentric height with the lifted weight or force on the fishing gear included, in feet (meters);

F=freeboard to the lowest weather deck, measured at amidships in feet (meters); and

B=maximum beam, in feet (meters).

(b) Except as provided in paragraph (f) of this section, each vessel must meet the requirements of § 28.570 or have at least 15 foot-degrees (0.080 meter-radians) of area under the righting arm curve, after correcting the righting arms for the heeling arm caused by lifting or fishing gear, from the angle of equilibrium to the least of the following:

(1) The angle corresponding to the maximum righting arm;

(2) The angle of downflooding; or

(3) 40° (0.7 radians).

(c) The angle of intersection of the heeling arm curve resulting from the lifting moment or the moment of fishing gear and the righting arm curve must not be at an angle of more than 10° (0.17 radians).

(d) The heeling arm curve resulting from lifting must be calculated as the resultant of the upright heeling moment divided by the vessel's displacement multiplied by the cosine of the angle of heel.

(e) For the purposes of this section, the weight of suspended loads must be assumed to act at the tip of the boom unless the suspended load's transverse movement is restricted, such as by the use of sideboards.

(f) A vessel that operates on protected waters, as defined in § 170.050 of this chapter, must comply with the requirements of this section, except that the area described in paragraph (b) of this section must be at least 10 foot-degrees (0.053 meter-radians).

§ 28.550 Icing.

(a) *Applicability*. Each vessel that operates north of 42° North latitude between November 15 and April 15 or south of 42° South latitude between April 15 and November 15 must meet the requirements of this section.

(b) Except as provided in paragraph (d) of this section, the weight of assumed ice on each surface above the waterline of a vessel which operates north of 66°30′ North latitude or south of 66° South latitude must be assumed to be at least:

(1) 6.14 pounds per square foot (30 Kilograms per square meter) of horizontal projected area which corresponds to a thickness of 1.3 inches (33 millimeters); and

(2) 3.07 pounds per square foot (15 Kilograms per square meter) of vertical projected area which corresponds to a thickness of 0.65 inches (16.5 millimeters).

(c) Except as provided in paragraph (d) of this section, the weight of assumed ice on a vessel that operates north of 42° North but south of 66°30′ North latitude or south of 42° South but north of 66° South latitude must be assumed to be at least one-half of the values required by paragraphs (b)(1) and (b)(2) of this section.

(d) The height of the center of gravity of the accumulated ice should be calculated according to the position of each corresponding horizontal surface (deck and gangway) and each other continuous surface on which ice can reasonably be expected to accumulate. The projected horizontal and vertical area of each small discontinuous surface such as a rail, a spar, and rigging with no sail can be accounted for by increasing the calculated area by 15 percent.

(e) The weight and location of ice must be included in the vessel's weight and centers of gravity in each condition of loading when performing the stability calculations required by this subpart.

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991]

§ 28.555 Freeing ports.

(a) Except as provided in paragraph (i) of this section, each decked vessel fitted with bulwarks must be fitted with freeing ports.

(b) Freeing ports must be located to allow the rapid clearing of water in all probable conditions of list and trim.

(c) Except as provided by paragraphs (d) through (h) of this section, the aggregate clear area of freeing ports on each side of the vessel must not be less than 7.6 plus 0.115 times the length of bulwark, in feet, for area in square feet (0.7 plus 0.035 times the length of the

bulwark, in meters, for area in square meters).

(d) Except as provided in paragraphs (e) through (h) of this section, for bulwarks which exceed 66 feet (20 meters) in length, the aggregate clear area of freeing ports on each side of the vessel must not be less than 0.23 times the length of the bulwark in feet (0.07 times the length of the bulwark in meters, for area in square meters).

(e) For a bulwark more than 4 feet (1.22 meters) in height, the freeing port area required by paragraphs (c) or (d) of this section must be increased in accordance with the following formula:

$i=[h-4]0.04q$, ($i=[h-1.722].04q$, for metric units), where:

i=increase in freeing port area, in square feet (square meters);

h=bulwark height, in feet (meters); and

q=length of bulwark exceeding 4 feet (1.22 meters) in height, in feet (meters).

(f) For a bulwark less than 3 feet (0.91 meters) in height, the required freeing port area, required by paragraph (c) or (d) of this section, may be decreased in accordance with the following formula:

$r=[3-h]0.04q$, ($r=[h-0.91-h]0.04q$), where:

r=permitted reduction in freeing port area, in square feet (square meters).

h=bulwark height, in feet (meters).

q=length of bulwark which is less than 3 feet (0.914 meters) in height, in feet (meters).

(g) For a vessel without sheer, the freeing port area must be increased by 50 percent.

(h) The area of the freeing ports on a vessel that operates on protected waters need only be 50 percent of the area required by paragraphs (c) or (d) of this section.

(i) Freeing port covers are permitted provided that the freeing port area required by this section is not diminished and the covers are constructed and fitted so that water will readily flow outboard but not inboard.

§28.560 Watertight and weathertight integrity.

(a) Each opening in a deck or a bulkhead that is exposed to weather must be fitted with a weathertight or a watertight closure device.

(b) Except as provided in paragraphs (c) through (f) of this section, each opening in a deck or a bulkhead that is exposed to weather must be fitted with a watertight coaming as follows:

(1) For a vessel 79 feet (24 meters) or more in length, the coaming must be at least 24 inches (0.61 meters) in height; or

(2) For a vessel less than 79 feet (24 meters) in length, the coaming must be at least 12 inches (0.30 meters) in height.

(c) A coaming to a fish hold that is under constant attention when the closure is not in place need only be 6 inches (0.15 meters) in height.

(d) The coaming of an opening fitted with a quick-acting watertight closure device need only be of sufficient height to accommodate the device.

(e) Except on an exposed forecastle deck, a coaming is not required on a deck above the lowest weather deck.

(f) Each window and portlight located below the first deck above the lowest weather deck must be provided with an inside deadlight. Each deadlight must be efficient, hinged, and arranged so that it can be effectively closed watertight.

(g) An opening in a vessel below the weather deck which is used for discharging water or debris resulting from processing or sorting operations must be fitted with a means to ensure the opening can be closed weathertight. This means of closing must be operable from a location which is outside the space containing the opening.

§28.565 Water on deck.

(a) Each vessel with bulwarks must comply with the requirements of this section.

(b) Except for a vessel that operates on protected waters, the residual righting energy, ''b'' in Figure 28.565, must not be less than the water on deck heeling energy, ''a'' in Figure 28.565.

(c) The water on deck heeling energy must be determined assuming the following:

(1) The deck well is filled to the top of the bulwark at its lowest point and the vessel heeled to the angle at which this point is immersed;

(2) Water does not run off through the freeing ports;

(3) Vessel trim and displacement are constant and equal to the values of the vessel without the water on deck; and

(4) Water in the well is free to run-off over the top of the bulwark.

(d) The residual righting energy is the righting energy from the value where the righting arm equals the water on deck heeling arm up to the lesser of the values of 40° (0.70 radians) of heel or the downflooding angle.

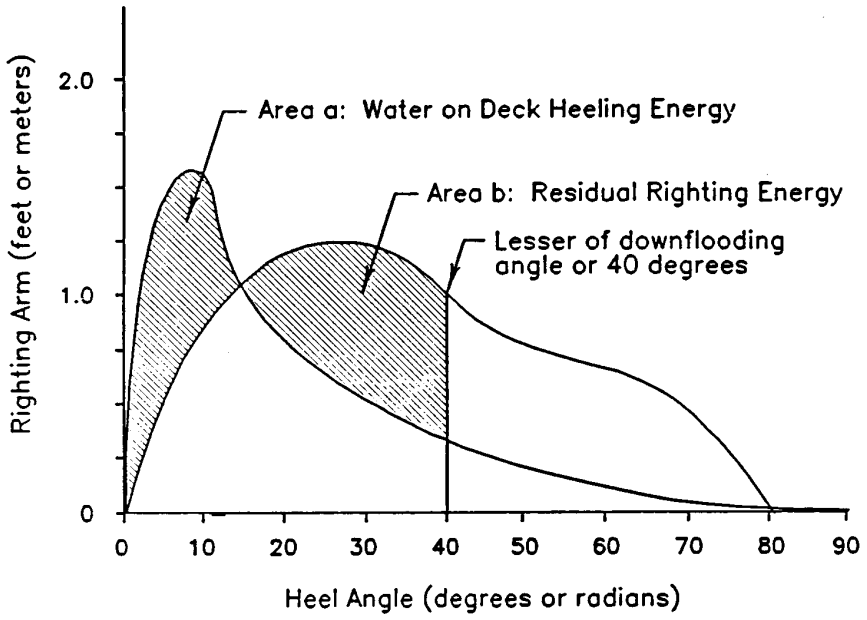

Figure 28.565

§ 28.570 Intact righting energy.

(a) Except as provided in paragraph (c) of this section, each vessel must have the following properties in each condition of loading:

(1) An initial metacentric height (GM) of at least 1.15 feet (0.35 meters);

(2) A righting arm (GZ) of at least 0.66 feet (0.2 meters) at an angle of heel not less than 30° (0.52 radians);

(3) A maximum righting arm that occurs at an angle of heel not less than 25° (0.44 radians);

(4) An area under each righting arm curve of at least 16.9 foot-degrees (0.090 meter-radians) up to the lesser of 40° (0.70 radians) or the angle of downflooding;

(5) An area under each righting arm curve of at least 10.3 foot-degrees (0.055 meter-radians) up to an angle of heel of 30° (0.52 radians);

(6) An area under each righting arm curve of at least 5.6 foot-degrees (0.030 meter-radians) between 30° (0.52 radians) and the lesser of 40° (0.70 radians) or the angle of downflooding; and

(7) Except as provided by paragraph (b) of this section, positive righting arms through an angle of heel of 60° (1.05 radians).

(b) In lieu of meeting the requirements of paragraph (a)(7) of this section, a vessel may comply with the following provisions:

(1) Hatches in the watertight/weathertight envelope must be normally kept closed at sea (e.g., the live tank hatch is only opened intermittently, under controlled conditions); or

(2) Unintentional flooding through these hatches must not result in progressive flooding to other spaces; and

(3) In all cases, a vessel must have positive righting arms through an angle of heel of at least 50° (0.87 radians) and the intact stability analysis must consider that spaces accessed by such hatches to be flooded full or flooded to the level having the most detrimental effect on stability when free surface effects are considered.

(c) In lieu of meeting the requirements of paragraph (a) of this section, a vessel may comply with the provisions of § 170.173(c) of this chapter, provided that righting arms are positive to an angle of heel of not less than 50° (0.87 radians).

(d) For the purpose of paragraphs (a) and (c) of this section, at each angle of heel a vessel's righting arm must be calculated assuming the vessel is permitted to trim free until the trimming moment is zero.

§ 28.575 Severe wind and roll.

(a) Each vessel must meet paragraphs (f) and (g) of this section when subjected to the gust wind heeling arm and the angle of roll to windward as specified in this section.

(b) The gust wind heeling arm, L_w in figure 28.575 of this chapter, must be calculated by the following formula:

$0.00216E_n(V_n^2A_nZ_n)/W$,

where:

E_n=series summation notation where n varies from 1 to the number of elements in the series;

V_n=S[0.124LN(0.3048h_n)+0.772], in feet per second S[0.127LN(h_n)+0.772], in meters per second and is the wind speed for profile element ''n'' on a vessel;

S=64 (19.5, if metric units are used) for a vessel that operates on protected waters; or 85.3 (26, if metric units are used) for a vessel that operates on waters other than protected waters;

LN=natural logarithm;

h_n=the vertical distance from the centroid of area A_n to the waterline for profile element n, in feet (meters);

A_n=projected lateral area for profile element n, in square feet (square meters);

Z_n=the vertical distance between the centroid of A_n and a point at the center of the underwater lateral area or a point at approximately one-half of the draft, for profile element n, in feet; and

W=displacement of the loaded vessel, in pounds (Newtons).

(c) The angle of roll to windward, A_1, is measured from the equilibrium angle, A_{el}, and is calculated by the following formula:

A_1=109kXY[Square root of (rs)], in degrees,

where:

s,X,Y=factors from table 28.575;

r=0.73+0.6 Z_g/d;

Z_g=distance between the center of gravity and the waterline (+ above, − below), in feet (meters);

k=1.0 for round bilged vessels with no bilge keels or bar keels; 0.7 for vessels with sharp bilges, or the value from table 28.575 for vessels with a bar keel, bilge keels, or both;

B=molded breadth of the vessel, in feet (meters);

d=mean molded draft of the vessel, in feet (meters);

C_b=block coefficient;

A_k=aggregate area of bilge keels, the area of the lateral projection of a bar keel, or the sum of these areas, in square feet (square meters);

L=length, in feet (meters);

T=1.108 BC/square root of GM, in seconds; 2.0 BC/square root of GM, if metric units are used;

GM=metacentric height corrected for free surface effects, as explained in § 28.540, in feet (meters);

C=0.373+0.023(B/d)−0.000131L or 0.373+0.023(B/D)−0.00043L, if metric units are used.

(d) The angle of equilibrium, A_{el} in figure 28.575, is calculated by determining the lowest angle at which the gust wind heeling arm, L_w, is equal to the righting arm.

(e) The area ''b'' in figure 28.575 must be measured to the least of the following:

(1) The angle of downflooding, (A_f);

(2) The angle of the second intercept, A_{e2} in figure 28.575, of the wind heeling arm curve, L_w in figure 28.575, and the righting arm curve; or

(3) A heel angle of 50° (0.87 radians).

(f) The angle of equilibrium, A_{el} in figure 28.575, must not exceed 14° (0.24 radians).

(g) Area ''b'' in figure 28.575 must not be less than area ''a'' in figure 28.575.

TABLES 28.575.—Roll Factors

B/d	X
2.4	1.0
2.5	0.98
2.6	0.96
2.7	0.95

TABLES 28.575.—Roll Factors—Continued

B/d	X
2.8	0.93
2.9	0.91
3.0	0.90
3.1	0.88
3.2	0.86
3.3	0.84
3.4	0.82
3.5	0.80

Note. Intermediate values must be obtained by interpolation.

C_b	Y
0.45	0.75
0.50	0.82
0.55	0.89
0.60	0.95
0.93	0.97
0.70	1.0

Note. Intermediate values must be obtained by interpolation.

$100A_k/(LB)$	k
0	1.0
1.0	0.98
1.5	0.95
2.0	0.88
2.5	0.79
3.0	0.74
3.5	0.72
4.0	0.70

Note. Intermediate values must be obtained by interpolation.

T	S
6	0.100
7	0.098
8	0.093
12	0.065
14	0.053
16	0.044
18	0.038
20	0.035

Note: Intermediate values must be obtained by interpolation.

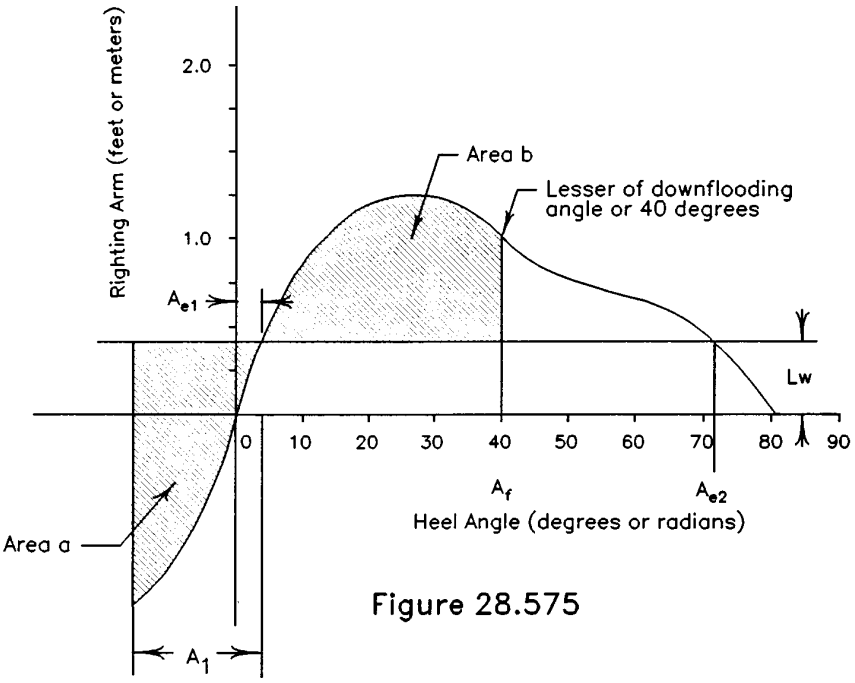

Figure 28.575

[56 FR 40393, Aug. 14, 1991, CGD 88–079; 56 FR 47679, Sept. 20, 1991, CGD 88–079, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995]

§ 28.580 Unintentional flooding.

(a) *Applicability.* Except for an open boat that operates on protected waters and as provided by paragraph (i) of this section, each vessel built on or after September 15, 1991 must comply with the requirements of this section.

(b) *Collision bulkhead.* A watertight collision bulkhead must be fitted and must meet the following:

(1) Openings in the collision bulkhead must be kept to a minimum, and each must be fitted with a watertight closure device;

(2) A collision bulkhead must not be fitted with a door below the bulkhead deck;

(3) A penetration or opening in a collision bulkhead must be—

(i) Located as high and as far inboard as practicable; and

(ii) Fitted with a means to rapidly make it watertight which is operable from a location aft of the collision bulkhead;

(4) The collision bulkhead must be located at least 5 percent of the length from the forward perpendicular unless the vessel has a bulbous bow, in which case the forward reference point will be extended by half the distance between the vessel's forward perpendicular and the forwardmost point of the bulbous bow as shown in figure 28.580; and

(5) The collision bulkhead must not be stepped below the bulkhead deck.

(c) Each vessel must meet the survival conditions in paragraph (f) of this section in each condition of loading and operation with the extent and character of damage specified in paragraphs (d) and (e) of this section.

(d) *Extent and character of damage.* Except where a lesser extent of damage or a smaller penetration would be more disabling, in evaluating the damage

stability of a vessel the following penetration must be assumed:

(1) Longitudinal extent—L/10, or 10 feet (3.05 meters) plus 0.03L, whichever is less. Transverse watertight bulkheads that are separated by at least this distance may be assumed to remain effective;

(2) Transverse extent—30 inches (0.76 meters) from the side measured at right angles to the centerline at the level of the deepest operating waterline; and

(3) Vertical extent—from the baseline upward without limit.

(e) Each space containing a through hull fitting, such as the lazarette and the engineroom, must be assumed to be flooded.

(f) *Survival conditions.* A vessel is presumed to survive the assumed damage and unintentional flooding described in paragraphs (d) and (e) of this section if:

(1) The angle of equilibrium after flooding does not exceed 25° (0.44 radians); and

(2) Through an angle of 20° (0.35 radians) beyond the angle of equilibrium after flooding, the following are met—

(i) The righting arm curve is positive;

(ii) The maximum righting arm is at least 4 inches (102 millimeters);

(iii) Each submerged opening is capable of being made weathertight; and

(iv) The heeling arm caused by deploying all fully loaded davit-launched survival craft on one side of a vessel does not exceed the righting arm at any angle of heel beyond the equilibrium angle when launching is assumed on the damaged side.

(g) *Permeability.* The permeability of each space must not be less than the following:

(1) For an accommodations space—95 percent;

(2) For a propulsion machinery space—85 percent;

(3) For a tightly packed storage space—60 percent;

(4) For a void or an auxiliary machinery space—95 percent;

(5) For an empty fish hold—95 percent;

(6) For a full fish hold—50 percent; and

(7) For tanks—95 percent (less if a tank must be full to attain the draft under consideration.)

(h) *Buoyancy of superstructure.* A deckhouse or a superstructure may be included in the buoyant volume of a vessel provided it is:

(1) Sufficiently strong to withstand the impact of waves;

(2) Fitted with a weathertight or watertight closure device for each opening;

(3) Equipped with an efficient, hinged, inside deadlight, for each window and each portlight, arranged so that it can be effectively closed watertight; and

(4) Fitted with interior access from the spaces below.

(i) A vessel may obtain and maintain a Load Line Certificate under subchapter E of this chapter in lieu of meeting the requirements of paragraphs (c) through (g) of this section.

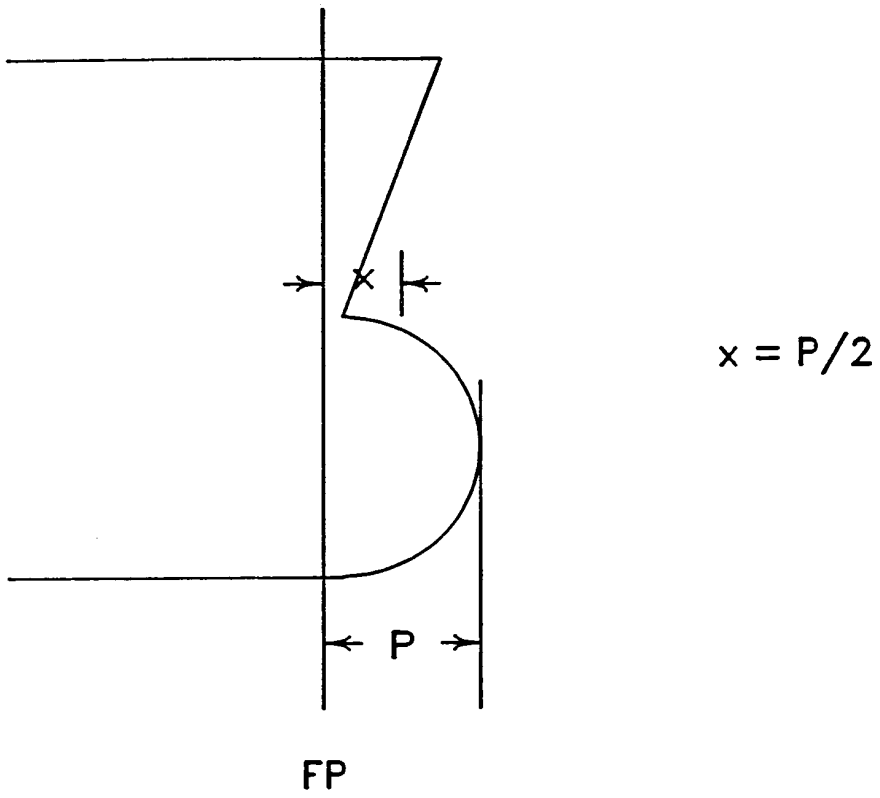

Figure 28.580

[CGD 88–079, 56 FR 40393, Aug. 14, 1991; 56 FR 47679, Sept. 20, 1991, as amended by CGD 88–079, 57 FR 364, Jan. 6, 1992]

§28.590 [Reserved]

§28.600 [Reserved]

§28.610 [Reserved]

§28.620 [Reserved]

§28.630 [Reserved]

Subpart F—Fish Processing Vessel

§28.700 Applicability.

Each fish processing vessel which is not subject to inspection under the provisions of another subchapter of this chapter must meet the requirements of this subpart.

§28.710 Examination and certification of compliance.

(a) At least once in every two years each vessel must be examined for compliance with the regulations of this subchapter by the ABS, a similarly qualified organization, or a surveyor of an accepted organization.

(b) Each individual performing an examination under paragraph (a) of this section, upon finding the vessel to be in compliance with the requirements of this chapter, must provide a written certification of compliance to the owner or operator of the vessel.

(c) Each certification of compliance issued under paragraph (b) of this section must:

(1) Be signed by the individual that performed the examination;

(2) Include the name of the organization the individual performing the examination represents or the name of the accepted organization the individual belongs to; and

(3) State that the vessel has been examined and found to meet the specific requirements of this chapter.

(d) A certification of compliance issued under paragraph (b) of this section must be retained on board the vessel until superseded.

(e) A copy of the certification of compliance issued under paragraph (b) of this section must be forwarded by the organization under whose authority the examination was performed to the Coast Guard District Commander (Attention: Fishing Vessel Safety Coordinator) in charge of the district in which the examination took place.

§28.720 Survey and classification.

(a) Each vessel which is built after or which undergoes a major conversion completed after July 27, 1990, must be classed by the ABS, or a similarly qualified organization.

(b) Each vessel which is classed under paragraph (a) of this section must:

(1) Have on board a certificate of class issued by the organization that classed the vessel.

(2) Meet all survey and classification requirements prescribed by the organization that classed the vessel.

Subpart G—Aleutian Trade Act Vessels

Source: CGD 94–025, 60 FR 54444, Oct. 24, 1995, unless otherwise noted.

§28.800 Applicability and general requirements.

(a) This subpart applies to each fish tender vessel engaged in the Aleutian trade that has not undergone a major conversion and:

(1) Was operated in Aleutian trade before September 8, 1990; or

(2) Was purchased to be used in the Aleutian trade before September 8, 1990, and entered into service in the Aleutian trade before June 1, 1992.

(b) Except as noted otherwise in this subpart, a vessel subject to this subpart must also comply with the requirements of subparts A, B, and C of this part.

(c) Each fish tender vessel engaged in the Aleutian trade that undergoes a major conversion after September 15, 1991 must comply with the additional requirements of subpart D.

(d) A fish tender vessel engaged in the Aleutian trade is subject to inspection under the provisions of 46 U.S.C. 3301 (1), (6), or (7) unless it:

(1) Is not more than 500 gross tons;

(2) Has an incline test performed by a marine surveyor; and

(3) Has written stability instructions posted on board the vessel.

§28.805 Launching of survival craft.

In addition to the survival craft requirements in subpart B, each vessel must have a gate or other opening in the deck rails, lifelines, or bulwarks

adjacent to the stowage location of each survival craft which has a mass of more than 50 kilograms (110 pounds), so that the survival craft can be manually launched.

§ 28.810 Deck rails, lifelines, storm rails and hand grabs.

(a) Except as otherwise provided in paragraph (d) of this section, deck rails, lifelines, grab rails, or equivalent protection must be installed near the periphery of all weather decks accessible to individuals. Where space limitations make deck rails impractical, hand grabs may be substituted.

(b) The height of deck rails, lifelines, or bulkwarks must be at least 1 meter (39½ inches) from the deck, except where this height will interfere with the normal operation of the vessel, a lesser height may be substituted.

(c) All deck rails or lifelines must be permanently supported by stanchions at intervals of not more than 2.3 meters (7 feet). Stanchions must be through bolted or welded to the deck.

(d) Portable stanchions and lifelines may be installed in locations where permanently installed deck rails will impede normal cargo operations or emergency recovery operations.

(e) Deck rails or lifelines must consist of evenly spaced courses. The spacing between courses must not be greater than 0.38 meters (15 inches). The opening below the lowest course must not be more than 0.23 meters (9 inches). Lower courses are not required where all or part of the space below the upper rail is fitted with a bulwark, chain link fencing, wire mesh, or an equivalent.

(f) A suitable storm rail or hand grab must be installed where necessary in a passageway, at a deckhouse side, at a ladder, and a hatch where an individual might have access.

§ 28.815 Bilge pumps, bilge piping, and dewatering systems.

Instead of meeting the requirements of § 28.255, each vessel to which this subpart applies must meet the following requirements:

(a) Each vessel must be equipped with a fixed, self priming, powered, bilge pump, having a minimum capacity rating of 50 gallons per minute, connected to a bilge manifold and piping capable of draining any watertight compartment, other than tanks and small buoyancy compartments, under all service conditions. Large spaces, such as engine rooms and cargo holds must be fitted with more than one suction line.

(b) In addition, each vessel must be fitted with a fixed secondary or backup bilge pump having an independent and separate source of power from the pump required in paragraph (a) of this section. One of the bilge pumps may be attached to the propelling engine.

(c) A portable bilge pump may substitute for the secondary pump required above, as long as it meets the following:

(1) It must be self priming and provided with a suitable suction hose of adequate length to reach the bilges of each watertight compartment it must serve and be fitted with a built-in check valve and strainer.

(2) The portable pump must be of at least the same minimum capacity as that listed in paragraph (a) of this section and fitted with a discharge hose of adequate length to ensure overboard discharge from the lowest compartment in which it can serve.

(3) The portable pump must also be capable of being quickly and efficiently attached to the vessel's fixed bilge suction main and/or discharge piping (such as with ''camlocks'', etc.) for alternate emergency use.

(d) Except for suction lines attached to an individual pump provided for a separate space, or for a portable pump, each individual bilge suction line must be provided with a stop valve at the manifold and a check valve at some accessible point in the bilge line to prevent unintended flooding of a space.

(e) Each bilge suction line and dewatering system must be fitted with a suitable strainer to prevent clogging of the suction line. Strainers must have an open area of not less than three times the open area of the suction line.

(f) Except for a fire pump required by 46 CFR 28.820, a bilge pump may be used for other purposes.

(g) Each vessel must comply with the oil pollution prevention requirements of 33 CFR parts 151 and 155.

§28.820 Fire pumps, fire mains, fire hydrants, and fire hoses.

(a) Each vessel must be equipped with a self-priming, power driven fire pump connected to a fixed piping system. This pump must be capable of delivering an effective stream of water from a hose connected to the highest outlet. The minimum capacity of the power fire pump shall be 50 gallons per minute at a pressure of not less than 60 pounds per square inch at the pump outlet.

(1) If multiple pumps are installed, they may be used for other purposes provided at least one pump is kept available for use on the fire system at all times.

(2) In addition, each vessel must be fitted with a portable fire pump having a minimum capacity of that specified in paragraph (a) of this section, capable of producing a stream of water having a throw of at least 12 meters (39.4 feet) from the nozzle, and capable of being connected to National Standard Fire Hose of the size utilized on board the vessel. If a vessel already has on board a portable pump satisfying the bilge system requirements of §28.760(c), no additional portable pump is required as long as the portable pump is of sufficient size/capacity, and is properly equipped to handle both fire fighting and flood control.

(b) Each vessel must have a sufficient number of fire hydrants to reach any part of the vessel using a single length of hose.

(c) Each fire hydrant must have at least one length of fire hose connected to the outlet at all times, a spanner, and a hose rack or other device for stowing the hose at all times.

(1) All parts of the firemain located on exposed decks shall either be protected against freezing or be fitted with cutout valves and drain valves.

(2) Firehose shall not be used for any other purpose other than fire extinguishing, drills, and testing.

(3) Each length of fire hose must be a minimum of 3.83 centimeters (1½'') diameter lined commercial fire hose and be fitted with a nozzle made of corrosion resistant material capable of providing a solid stream and a spray pattern.

§28.825 Excess fire detection and protection equipment.

Instead of meeting the requirements of §28.155, each vessel to which this subpart applies must meet the following requirements:

(a) Installation of fire detection and protection equipment in excess of that required by the regulations in this Subchapter is permitted provided that the excess equipment does not endanger the vessel or individuals on board in any way. The excess equipment must, at a minimum, be listed and labeled by an independent, nationally recognized testing laboratory and be in accordance with an appropriate industry standard for design, installation, testing, and maintenance.

(b) An existing fixed gas fire extinguishing system that is in excess of the required fire protection equipment required by subparts A, B, and C of this part, may remain in place and continue in service as long as all parts of the system are maintained in good condition to the satisfaction of the Coast Guard Representative, and subject to the following:

(1) A fixed fire extinguishing system capable of automatic discharge upon heat detection, may only be installed in a normally unoccupied space. For the purpose of this section, the machinery space aboard a fish tender operating in the Aleutian trade is considered occupied.

(2) A fixed fire extinguishing system must:

(i) Be capable of manual actuation from outside the space protected;

(ii) Produce an audible alarm to indicate the discharge of the extinguishing agent for 20 seconds before the extinguishing agent for 20 seconds before the agent is released into the space;

(iii) The branch line valves of all fire extinguishing systems shall be plainly and permanently marked indicating the spaces serviced;

(iv) The control cabinets or spaces containing valves or manifolds for the various fire extinguishing systems shall be distinctly marked in conspicuous red letters at least 5.08 centimeters (2 inches) high:

''HALON FIRE SYSTEM''

''CARBON DIOXIDE FIRE SYSTEM'' or

''FOAM FIRE SYSTEM'', as the case may be;

(v) Instructions for the operation of the system must be located in a conspicuous place at or near all pull boxes, stop valve controls, and in the agent storage space;

(vi) If the space or enclosure containing the supply or controls is to be locked, a key to the space or enclosure shall be in a break-glass-type box conspicuously located adjacent to the opening, and;

(vii) Be equipped with a sign at the alarm stating: ''WHEN ALARM SOUNDS—VACATE AT ONCE. CARBON DIOXIDE BEING RELEASED'', or list other fire extinguishing agent.

(3) Any modification, alteration, or new installation of a fixed gas fire extinguishing system must meet the additional requirements of subpart D of this part.

§ 28.830 Fire detection system.

(a) Each accommodation space must be equipped with an independent modular smoke detector or a smoke actuated fire detecting unit installed in accordance with § 76.33 of this chapter.

(b) An independent modular smoke detector must meet UL 217 and be listed as a ''Single Station Smoke Detector—Also Suitable for Use in Recreational Vehicles''.

§ 28.835 Fuel systems.

(a) Portable fuel systems including portable tanks and related fuel lines and accessories are prohibited except where used for outboard engines or portable bilge/fire pumps.

(b) Each integral fuel tank must be fitted with a vent pipe connected to the highest point of the tank terminating in a 180 degree (3.14 radians) bend on a weather deck and be fitted with a flame screen.

(c) Test cocks must not be fitted to fuel oil tanks.

(d) Valves for removing water or impurities from diesel fuel oil systems are permitted in the machinery space provided they are away from any potential sources of ignition. Such valves shall be fitted with caps or plugs to prevent leakage.

(e) Oil piping drains, strainers and other equipment subject to normal oil leakage must be fitted with drip pans or other means to prevent oil draining into the bilge.

(f) All nonmetallic filters and strainers must be fitted with a metal shield attached to their base in such a way as to prevent direct flame impingement in the case of a fire.

(g) Shutoff valves shall be installed in the fuel supply piping lines, one as close to each tank as practicable, and one as close to each fuel pump as practicable. Valves shall be accessible at all times.

(h) Fuel oil piping subject to internal head pressure from diesel oil in a tank must be fitted with a positive shutoff valve, installed to close against the flow at the tank. This valve is to be capable of remote actuation from outside the space in which the tank/piping is located, accessible at all times, and suitably marked.

(i) With the exception of paragraph (j) and (k) of this section, fuel piping shall be steel pipe, annealed seamless copper, brass, nickel copper, or copper nickel alloy tubing having a minimum wall thickness of 0.9 millimeters (0.035 inches).

(j) Flexible connections of a short length (no more than 762mm, (30 inches)), suitable metallic or nonmetallic flexible tubing or hose is permitted in the fuel supply line at or near the engine to prevent damage by vibration. If nonmetallic flexible hose is used it must:

(1) Not exceed the minimum length needed to allow for vibration;

(2) Be visible, easily accessible, and must not penetrate a watertight bulkhead;

(3) Be fabricated with an inner tube and outer-covering of synthetic rubber or other suitable material reinforced with wire braid;

(4) Be fitted with suitable, corrosion resistant, compression fittings; and

(5) Be installed with two hose clamps at each end of the hose, if designed for use with clamps. Clamps must not rely on spring tension and must be installed beyond the bead or flare or over the serrations of the mating spud, pipe, or hose fitting.

(k) Supply piping that conveys fuel oil or lubricating oil to equipment and is in close proximity of equipment or

lines having an open flame or having parts operating above 260° C (500° F) must be of seamless steel.

(l) Existing fuel oil piping may remain in service as long as it is serviceable to the satisfaction of the Coast Guard Representative. Any replacement, alterations, modifications or new installations to the fuel oil piping system must be made in accordance with the material requirements of this section.

§28.840 Means for stopping pumps, ventilation, and machinery.

All electrically driven fuel oil transfer pumps, fuel oil unit and service pumps, and ventilation fans shall be fitted with remote controls from a readily accessible position outside of the space concerned so that they may be stopped in the event of fire occurring in the compartment in which they are located. These controls shall be suitably protected against accidental operation or tampering and shall be suitably marked.

§28.845 General requirements for electrical systems.

(a) Electrical equipment exposed to the weather or in a location exposed to seas must be waterproof or watertight, or enclosed in a watertight housing.

(b) Aluminum must not be used for current carrying parts of electrical equipment or wiring.

(c) As far as practicable, electrical equipment must not be installed in lockers used to store paint, oil, turpentine, or other flammable or combustible liquids. If electrical equipment, such as lighting, is necessary in these spaces, it must be explosion-proof or intrinsically safe.

(d) Explosion-proof and intrinsically safe equipment must meet the requirements of §111.105 of this chapter.

(e) Metallic enclosures and frames of electrical equipment must be grounded.

§28.850 Main source of electrical power.

(a) Applicability: Each vessel that relies on electricity to power any of the following essential loads must have at least two electrical generators to supply:

(1) The propulsion system and its necessary auxiliaries and controls;

(2) Interior lighting;

(3) Steering systems;

(4) Communication systems;

(5) Navigation equipment and navigation lights;

(6) Fire protection or detection equipment;

(7) Bilge pumps; and

(8) General alarm system.

(b) Each generator must be attached to an independent prime mover.

§28.855 Electrical distribution systems.

(a) Each electrical distribution system which has a neutral bus or conductor must have the neutral bus or conductor grounded.

(b) A grounded electrical distribution system must have only one connection to ground. This ground connection must be at the switchboard.

§28.860 Overcurrent protection and switched circuits.

(a) Each power source must be protected against overcurrent. Overcurrent devices for generators must be set at a value not exceeding 115 percent of the generator's full load rating.

(b) Except for a steering circuit, each circuit must be protected against both overload and short circuit. Each overcurrent device in a steering system power and control circuit must provide protection only.

(c) Each ungrounded current carrying conductor must be protected in accordance with its current carrying capacity by a circuit breaker or fuse at the connection to the switchboard or distribution panel bus.

(d) Each circuit breaker and each switch must simultaneously open all ungrounded conductors.

(e) The grounded conductor of a circuit must not be disconnected by a switch or an overcurrent device unless all ungrounded conductors of the circuit are simultaneously disconnected.

(f) Navigation light circuits must be separate, switched circuits having fused disconnect switches or circuit breakers so that only the appropriate navigation lights can be switched on.

(g) A separate circuit with overcurrent protection at the main distribution panel or switchboard must be provided for each radio installation.

§ 28.865 Wiring methods and materials.

(a) All cable and wire must have insulated, stranded copper conductors of the appropriate size and voltage rating of the circuit.

(b) Each conductor must be No. 22 AWG or larger. Conductors in power and lighting circuits must be No. 14 AWG or larger. Conductors must be sized so that the voltage drop at the load terminals is not more than 10 percent.

(c) Cable and wiring not serving equipment in high risk fire areas such as a galley, laundry, or machinery space must be routed as far as practicable from these spaces. As far as practicable, cables serving duplicated essential equipment must be separated so that a casualty that affects one cable does not affect the other. Existing cables and wires may remain as routed; however, any replacement wiring, new cabling and/or alterations must be routed as specified above.

(d) No unused or dead ended cables may remain after the permanent removal or alteration of an electrical device.

(e) Cable and wire for power and lighting circuits must:

(1) For circuits of less than 50 volts, meet 33 CFR 183.425 and 183.430; and

(2) For circuits of 50 volts or greater:

(i) Meet section 310–13 and 310–15 of NFPA 70, except that asbestos insulated cable and dry location cable must not be used;

(ii) Be listed by Underwriters Laboratories Inc. as UL Marine Boat or UL Marine Shipboard cable; or

(iii) Meet § 111.60 of this chapter.

(f) All metallic cable armor must be electrically continuous and grounded to the metal hull or the common ground point at each end of the cable run, except that final sub-circuits (those supplying loads) may be grounded at the supply end only.

(g) Wiring terminations and connections must be made in a fire retardant enclosure such as a junction box, fixture enclosure, or panel enclosure.

(h) Existing cable and wire may remain in place and continue in use as long as it is deemed serviceable to the satisfaction of the Coast Guard Representative. Any new installation, replacement, modification or alteration must be done in accordance with the requirements of this section.

§ 28.870 Emergency source of electrical power.

(a) The following electrical loads must be connected to an independent emergency source of power capable of supplying all connected loads continuously for at least three hours:

(1) Navigation lights;

(2) Fire protection and detection systems;

(3) Communications equipment;

(4) General alarm system; and

(5) Emergency lighting;

(b) The emergency power source must be aft of the collision bulkhead, outside of the machinery space, and above the uppermost continuous deck.

(c) An emergency source of power supplied solely by storage battery must also meet the following requirements:

(1) Each battery must be a lead-acid or alkaline type and be able to withstand vessel pitch, vibration, roll, and exposure to a salt water atmosphere;

(2) A battery cell must not spill electrolyte when the battery is inclined at 30 degrees from the vertical;

(3) Each battery installation must be in a battery room, in a box on dock, or in a well ventilated compartment. The batteries must be protected from falling objects;

(4) Each battery tray must be secured to prevent shifting with the roll and pitch of the vessel and lined with a material that is corrosion resistant to the electrolyte of the battery;

(5) Each battery bank installation must be fitted with its own drip-proof charging system; and

(6) Each deck box used for battery storage must be weathertight, and have holes near the top to allow gas to escape.

§ 28.875 Radar, depth sounding, and auto-pilot.

(a) Each vessel must be fitted with a general marine radar system for surface navigation with a radar screen

mounted at the operating station, and facilities on the bridge for plotting radar readings.

(b) Each vessel must be fitted with a suitable echo depth sounding device.

(c) Except as provided in 33 CFR §164.15, when the automatic pilot is used in areas of high traffic density, conditions of restricted visibility, and all other hazardous navigational situations, the master or person in charge shall ensure that:

(1) It is possible to immediately establish manual control of the unit's steering:

(2) A competent person is ready at all times to take over steering control; and

(3) The changeover from automatic to manual steering and vice versa is made by, or under the supervision of, the officer of the watch.

§28.880 Hydraulic equipment.

(a) Each hydraulic system must be so designed and installed that proper operation of the system is not affected by back pressure in the system.

(b) Piping and piping components must be designed with a burst pressure of not less than four times the system's maximum operating pressure.

(c) Each hydraulic system must be equipped with at least one pressure relieving device set to relieve at the system's maximum operating pressure.

(d) All material in a hydraulic system must be suitable for use with the hydraulic fluid used and must be of such chemical and physical properties as to remain ductile at the lowest operating temperature likely to be encountered by the vessel.

(e) Except for hydraulic steering equipment, controls for operating hydraulic equipment must be located where the operator has an unobstructed view of the controls for operating hydraulic equipment and the adjacent work area. Protection shall be afforded to the operator of hydraulic equipment against falling or swinging objects and/or cargo.

(f) Controls for hydraulic equipment must be so arranged that the operator is able to quickly disengage the equipment in an emergency.

(g) Hydraulically operated machinery must be fail-safe or equipped with a holding device to prevent uncontrolled movement or sudden loss of control due to loss of hydraulic system pressure. A system is considered to be fail-safe if a component failure results in a slow and controlled release of the load so as not to endanger personnel.

(h) Nonmetallic flexible hose assemblies must only be used between two points of relative motion, limited to the least amount of length that will afford maximum multidirectional movement of the equipment served.

(i) Hose end fittings must comply with SAE J1475, (Hydraulic Hose Fittings For Marine Applications). Field attachable fittings must be installed following the manufacturer's recommended practice (method).

(j) Nonmetallic flexible hose shall be marked with the manufacturer's name or trademark, type or catalog number and maximum allowable working pressure.

(k) Existing hydraulic piping, nonmetallic hose assemblies, and components may be continued in service so long as they are maintained in good condition to the satisfaction of the Coast Guard Representative, but all new installations, or replacements shall meet the applicable specifications or requirements of this section.

§28.885 Cargo gear.

(a) The safe working load (SWL) for the assembled gear shall be marked on the heel of each cargo boom, crane, or derrick. These letters and figures are to be in contrasting colors to the background and at least one inch in height. The SWL is construed to be the load the gear is approved to lift, excluding the weight of the gear itself.

(b) All wire rope, chains, rings, hooks, links, shackles, swivels, blocks, and any other loose gear used or intended to be used in cargo loading or unloading must be commensurable with the SWL rating in paragraph (a) of this section. This gear shall be visually inspected by the vessel's captain or his designee at frequent intervals, and in any event not less than once in each operating month.

(c) In addition to the inspection required in paragraph (b) of this section, a biennial, (every second year), thorough examination and proof load test,

at a minimum of the SWL rating, shall be performed and witnessed by competent personnel. The proof load applied to the winches, booms, derricks, cranes and all associated gear shall be lifted with the ship's normal tackle with the boom or derrick at the lowest practicable angle. When the load has been lifted, it shall be swung as far as possible in both directions.

(d) After satisfactory completion of the tests and examinations required in paragraphs (b) and (c) of this section, all results and notations together with the date and location of each shall be maintained and available to Coast Guard representatives upon request.

§ 28.890 Examination and certification of compliance.

(a) At least once in every two years each ATA vessel must be examined for compliance with the regulations of this subchapter by the ABS, a similarly qualified organization, or a surveyor of an accepted organization.

(b) Each individual performing an examination under paragraph (a) of this section, upon finding the vessel to be in compliance with the requirements of this chapter, must provide written certification of compliance to the owner or operator of the vessel.

(c) Each certification of compliance issued under paragraph (b) of this section must:

(1) Be signed by the individual that performed the examination;

(2) Include the name of the organization the individual performing the examination represents or the name of the accepted organization the individual belongs to; and

(3) State that the vessel has been examined and found to meet the specific requirements of this chapter.

(d) A certification of compliance issued under paragraph (b) of this section must be retained on board the vessel until superseded.

(e) A copy of the certification of compliance issued under paragraph (b) of this section must be forwarded by the organization under whose authority the examination was performed to the Coast Guard District Commander (Attention: Fishing Vessel Safety Coordinator) in charge of the district in which the examination took place.

§ 28.895 Loadlines.

(a) A fish tender vessel of not more than 500 gross tons, engaged in the Aleutian trade, is not subject to the loadline provisions of 46 U.S.C. Chapter 51 if it is not on a foreign voyage and the vessel:

(1) operated in this trade before September 8, 1990; or

(2) was purchased to be used in this trade before September 8, 1990 and entered into service before June 1, 1992; and

(3) has not undergone a major conversion; and

(4) has not had a loadline assigned at any time before November 16, 1990.

(b) The exemption from the loadline provision of 46 U.S.C. Chapter 51 set forth in paragraph (a) of this section expires on January 1, 2003.

§ 28.900 Post accident inspection.

The requirements for providing notice and reporting of marine casualties are contained in part 4 of this chapter. The owner of or master of the vessel shall ensure that the survey guidance provided by a Coast Guard Representative is effectively carried out, that the material and the workmanship of such repairs or renewals are in all respects satisfactory, and that the vessel complies in all respects with the regulations in this part.

§ 28.905 Repairs and alterations.

No repairs or alterations affecting the safety of the vessel with regard to the hull, machinery, or equipment, shall be made without the notification of a Coast Guard Representative.

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SUBCHAPTER C—UNINSPECTED VESSELS

EDITORIAL NOTE: This listing is provided for informational purposes only. It is compiled and kept current by the Coast Guard, Department of Transportation.

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SUBCHAPTER D—TANK VESSELS

PART 30—GENERAL PROVISIONS

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AUTHORITY: 46 U.S.C. 2103, 3306, 3703; 49 U.S.C. 5103, 5106; 49 CFR 1.45, 1.46; Section 30.01–2 also issued under the authority of 44 U.S.C. 3507; Section 30.01–5 also issued under the authority of Sec. 4109, Pub. L. 101–380, 104 Stat. 515.

SOURCE: CGFR 65–50, 30 FR 16657, Dec. 30, 1965, unless otherwise noted.

Subpart 30.01—Administration

§ 30.01–1 Purpose of regulations.

(a) The rules and regulations in this subchapter are prescribed for all tank vessels in accordance with the intent of the various statutes administered by the Coast Guard and to provide for a correct and uniform administration of the vessel inspection requirements applicable to tank vessels.

[CGFR 68–32, 33 FR 5712, Apr. 12, 1968]

§ 30.01–2 OMB control numbers assigned pursuant to the Paperwork Reduction Act.

(a) *Purpose.* This section collects and displays the control numbers assigned to information collection and recordkeeping requirements in this subchapter by the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). The Coast Guard intends that this section comply with the requirements of 44 U.S.C. 3507(f) which requires that agencies display a current control number assigned by the Director of the OMB for each approved agency information collection requirement.

(b) *Display.*

46 CFR part or section where identified or described	Current OMB control No.
§ 31.10–5(a)	2115–0131
§ 31.10–21	2115–0554
§ 31.10–22	2115–0554
§ 31.10–32	2115–0131
§ 31.10–33	2115–0131
§ 31.37–15	2115–0131
§ 31.40–35	2115–0131
§ 32.53–85	2115–0505
§ 35.20–7	2115–0589
§ 35.35–30	2115–0506
§ 39.10–13	2115–0505

[49 FR 38120, Sept. 27, 1984, as amended by CGD 89–037, 57 FR 41821, Sept. 11, 1992]

§ 30.01–3 Assignment of functions—TB/ALL.

(a) The Department of Transportation Act (Pub. L. 89–670, 80 Stat. 931–950, 49 U.S.C. 1651–1659), transferred to and vested in the Secretary of Transportation ''* * * all functions, powers, and duties, relating to the Coast Guard, of the Secretary of the Treasury and of other officers and offices of the Department of the Treasury'' (subsection 6(b)(1), 49 U.S.C. 1655(b)). This transfer is subject to certain conditions, modifications, and exceptions as set forth in such act. By a rule in 49 CFR 1.4(a) the Secretary of Transportation delegated to the Commandant, U.S. Coast Guard, authority to exercise certain functions, powers, and duties as set forth in subsections 6(a)(4), 6(b)(1), and 6(g) of such act (49 U.S.C. 1655), subject to conditions, exceptions and modifications as described in 49 CFR part 1. By a rule in 49 CFR 1.9 the Secretary of Transportation continued in effect actions taken prior to April 1, 1967.

(b) The Commandant, U.S. Coast Guard, in a notice dated March 31, 1967, and effective April 1, 1967 (32 FR 5611), approved the continuation of orders, rules, regulations, policies, procedures, privileges, waivers, and other actions, which had been made, allowed, granted, or issued prior to April 1, 1967, and provided that they shall continue in effect according to their terms until modified, terminated, repealed, superseded, or set aside by appropriate authority.

[CGFR 68–32, 33 FR 5712, Apr. 12, 1968]

§ 30.01–5 Application of regulations—TB/ALL.

NOTE: 33 CFR subchapter O (parts 151 through 157) contains additional design, equipment, and operations requirements relating to pollution prevention for vessels that carry oil.

(a) The regulations in this subchapter contain requirements for materials, design, construction, inspection, manning, and operation of tank vessels, including handling and stowage of cargo and duties of officers and crew. However, vessels certificated as passenger, cargo, and miscellaneous vessels, whose principal purpose or use is not the carriage of flammable or combustible liquid cargo in bulk, may

be granted a permit to carry limited quantities of flammable or combustible liquid cargo in bulk in the grades indicated:

(1) Passenger vessels:

(i) Grade E in an integral tank; and

(ii) Grade E in a portable tank, including a marine portable tank (MPT), in accordance with subpart 98.30 or 98.33 of this chapter.

(2) Cargo vessels:

(i) Grades D and E in an integral tank; and

(ii) Grades D and E and certain specifically named Grade C in a portable tank, including an MPT, in accordance with subpart 98.30 or 98.33 of this chapter.

(3) Miscellaneous vessels, such as cable, salvage, pile-driving and oil-drilling-rig vessels:

(i) Grades B, C, D, and E in a fixed independent or integral tank authorized by the Commandant; and

(ii) Grades D and E and certain specifically named Grade C in a portable tank, including an MPT, in accordance with subpart 98.30 or 98.33 of this chapter.

(b) [Reserved]

(c) The vessels and services to which each regulation applies are indicated by letters in the heading of the section or paragraph. The first letter or two letters indicate the type of vessel and the letter or letters following the oblique line indicate the waters in which such vessels may operate. These letters are described as follows:

(1) ''T'' signifies a tankship.

(2) ''B'' signifies a tank barge when it precedes an oblique line; or it signifies service on bays, sounds, and lakes other than the Great Lakes when it follows an oblique line.

(3) ''ALL'' signifies service on all waters.

(4) ''O'' signifies service on ocean waters.

(5) ''C'' signifies services on coastwise waters.

(6) ''L'' signifies service on Great Lakes waters.

(7) ''R'' signifies service on river waters.

(d) This subchapter shall be applicable to all United States flag vessels indicated in Column 3 of Table 30.01–5(d), except as follows:

(1) Any vessel operating exclusively on inland waters which are not navigable waters of the United States.

(2) Any vessel while laid up and dismantled and out of commission.

(3) With the exception of vessels of the U.S. Maritime Administration, any vessel with title vested in the United States and which is used for public purposes.

TABLE 30.01–5(d)

Method of propulsion	Size or other limitations[1]	Classes of vessels (including motorboats) examined or inspected under various Coast Guard regulations[1]					
		Vessels inspected and certificated under subchapter D—Tank Vessels[2]	Vessels inspected and certificated under either subchapter H—Passenger Vessels[2 3 4 5] or subchapter T—Small Passenger Vessels[2 3 4]	Vessels inspected and certificated under subchapter I—Cargo and Miscellaneous Vessels[2 5]	Vessels subject to provisions of subchapter C—Uninspected Vessels[2 3 6 7 8]	Vessels subject to provisions of subchapter U—Oceanographic Vessels[2 5 6 7 9]	Vessels subject to the provisions of subchapter O—Certain Bulk Dangerous Cargoes[10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Steam	Vessels not over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	All tugboats and towboats.	All vessels except those covered by columns 3, 4, 5, and 7.	None	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.
	Vessels over 65 feet in length.	All vessels carrying combustible or flammable liquid cargo in bulk.	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels of not over 15 gross tons which carry more than 6 passengers.[7] 3. All other vessels carrying passengers,[7] except: a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4.	None	All vessels engaged in oceanographic research.	Do.

			c. Towing and fishing vessels, in other than ocean and coastwise service, may carry persons on the legitimate business of the vessel, in addition to crew, but not to exceed one for each net ton of the vessel.				
Motor	Vessels not over 15 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All vessels except those covered by columns 3, 4, 5, and 7.	None	Do.
	Vessels over 15 gross tons except seagoing motor vessels of 300 gross tons and over.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All vessels not over 65 feet in length which carry more than 6 passengers.[7] 3. All other vessels of over 65 feet in length carrying passengers for hire except documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels carrying freight for hire except those covered by columns 3 and 4.	All vessels except those covered by columns 3, 4, 5, and 7.	None	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.

TABLE 30.01–5(d)—Continued

Method of propulsion	Size or other limitations[1]	Classes of vessels (including motorboats) examined or inspected under various Coast Guard regulations[1]					
		Vessels inspected and certificated under subchapter D—Tank Vessels[2]	Vessels inspected and certificated under either subchapter H—Passenger Vessels[2 3 4 5] or subchapter T—Small Passenger Vessels[2 3 4]	Vessels inspected and certificated under subchapter I—Cargo and Miscellaneous Vessels[2 5]	Vessels subject to provisions of subchapter C—Uninspected Vessels[2 3 6 7 8]	Vessels subject to provisions of subchapter U—Oceanographic Vessels[2 5 6 7 9]	Vessels subject to the provisions of subchapter O—Certain Bulk Dangerous Cargoes[10]
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Seagoing motor vessels of 300 gross tons and over.	All vessels carrying combustible or flammable liquid cargo in bulk.[5]	1. All vessels carrying more than 12 passengers on an international voyage, except yachts. 2. All other vessels carrying passengers,[7] except: a. Yachts. b. Documented cargo or tank vessels issued a permit to carry not more than 16 persons in addition to the crew.	All vessels except those covered by columns 3 and 4, and those engaged in the fishing, oystering, clamming, crabbing, or any other branch of the fishery, kelp, or sponge industry.	All vessels except those covered by columns 3, 4, 5, and 7.	All vessels engaged in oceanographic research.	Do.

Sail	Vessels not over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying more than 6 passengers.[7]	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	None	None	Do.
	Vessels over 700 gross tons.	All vessels carrying combustible or flammable liquid cargo in bulk.	All vessels carrying passengers for hire.	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 146.	None	None	Do.
Non-self-propelled	Vessels less than 100 gross tons.	All vessels carrying combustible or liquid cargo in bulk.	Those vessels carrying dangerous cargoes when required by 49 CFR parts 171–179.	Those vessels carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All barges carrying passengers except those covered by column 4.	None	All tank barges carrying in bulk the cargoes listed in Table 151.05 of this chapter.[11]
	Vessels 100 gross tons or over.	All vessels carrying combustible or flammable liquid cargo in bulk.	All seagoing barges except those covered by columns 3 and 4; and those inland barges carrying dangerous cargoes when required by 49 CFR parts 171–179.	All seagoing barges except those covered by columns 3 and 4; and those inland barges carrying dangerous cargoes when required by 46 CFR part 98 or 49 CFR parts 171–179.	All barges carrying passengers except columns 4 and 7.	All seagoing barges engaged in oceanographic research.	All vessels carrying in bulk the cargoes listed in Table I of Pt. 153 and Table 4 of Pt. 154.

[1] Where length is used in this table it means the length measured from end to end over the deck, excluding sheer. This expression means a straight line measurement of the overall length from the foremost part of the vessel to the aftermost part of the vessel, measured parallel to the centerline.

[2] Subchapters E (Load Lines), F (Marine Engineering), J (Electrical Engineering), and N (Dangerous Cargoes) of this chapter may also be applicable under certain conditions. The provisions of 49 CFR parts 171–179 apply whenever hazardous materials are on board vessels (including motorboats), except when specifically exempted by law.

[3] Public nautical schoolships, other than vessels of the Navy and Coast Guard, shall meet the requirements of part 167 of subchapter R (Nautical Schools) of this chapter. Civilian nautical schoolships, as defined by 46 U.S.C. 1331, shall meet the requirements of subchapter H (Passenger Vessels) and part 168 of subchapter R (Nautical Schools) of this chapter.

[4] Subchapter H (Passenger Vessels) of this chapter covers only those vessels of 100 gross tons or more. Subchapter T (Small Passenger Vessels) of this chapter covers only those vessels of less than 100 gross tons.

[5] Vessels covered by subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter, where the principal purpose or use of the vessel is not for the carriage of liquid cargo, may be granted a permit to carry a limited amount of flammable or combustible liquid cargo in bulk. The portion of the vessel used for the carriage of the flammable or combustible liquid cargo shall meet the requirements of subchapter D (Tank Vessels) in addition to the requirements of subchapter H (Passenger Vessels) or I (Cargo and Miscellaneous Vessels) of this chapter.

[6] Any vessel on an international voyage is subject to the requirements of the International Convention for Safety of Life at Sea, 1974.

[7] The meaning of the term *passenger* is as defined in the Act of May 10, 1956 (Sec. 1, 70 Stat. 151; 46 U.S.C. 390). On oceanographic vessels scientific personnel on board shall not be deemed to be passengers or seamen, but for calculations of lifesaving equipment, etc., shall be counted as persons.

[8] Boilers and machinery are subject to examination on vessels over 40 feet in length.

[9] Under 46 U.S.C. 441 an *oceanographic research vessel* is a vessel "* * * being employed exclusively in instruction in oceanography or limnology, or both, or exclusively in oceanographic research, * * *." Under 46 U.S.C. 443, "an oceanographic research vessel shall not be deemed to be engaged in trade or commerce." If or when an oceanographic vessel engages in trade or commerce, such vessel cannot operate under its certificate of inspection as an oceanographic vessel, but shall be inspected and certificated for the service in which engaged, and the scientific personnel aboard then become persons employed in the business of the vessel.

[10] Bulk dangerous cargoes are cargoes specified in Table 151.01–10(b) in Table I of part 153 of this chapter.

[11] For manned tank barges see § 151.01–10(e) of this chapter.

(e) This subchapter shall be applicable to all foreign flag vessels carrying combustible or flammable liquid cargo in bulk while in the navigable waters over which the United States has jurisdiction, except that:

(1) A vessel of a foreign nation signatory to the International Convention for Safety of Life at Sea, 1974, which has on board a current valid Safety Equipment Certificate, or a vessel of a foreign nation having inspection laws approximating those of the United States, together with reciprocal inspection arrangements with the United States and which has on board a current valid certificate of inspection issued by its government under such arrangements, in either case, shall be subject only to the requirements of § 35.01–1 and the safety and cargo handling requirements in subparts 35.30 and 35.35 of this subchapter. In addition, these vessels shall report marine casualties occurring while they are in the navigable waters of the United States as required by subpart 35.15.

(2) A foreign flag vessel, except a public vessel, which operates on or enters the navigable waters of the United States, or which transfers oil in any port or place subject to the jurisdiction of the United States, must comply with the provisions of § 31.10–21a and subparts 32.53, 32.59 and 34.05 of this chapter, as applicable.

(f) Notwithstanding the exceptions previously noted in paragraph (e) of this section, foreign vessels of novel design or construction, or whose operation involves potential unusual risks, shall be subject to inspection to the extent necessary to safeguard life and property in United States ports, as further provided by § 2.01–13 of subchapter A (Procedures applicable to the Public) of this chapter.

(g) Manned barges carrying any of the cargoes listed in Table 30.25–5 will be considered individually by the Commandant and may be required to comply with the requirements of subchapter O of this chapter, as applicable, as well as the requirements of this subchapter.

(h) Subpart 30.30 contains procedures for evaluating vessel personnel licensing and certification programs of foreign countries which license or certificate personnel serving on tank vessels that enter or operate in U.S. navigable waters and ports.

EDITORIAL NOTE: For Federal Register citations affecting §30.01–5, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 30.01–6 Application to vessels on an international voyage.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, the regulations in this subchapter that apply to a vessel on an *international voyage* apply to a vessel that:

(1) Is mechanically propelled and of at least 500 gross tons; and

(2) Is engaged on a voyage:

(i) From a country to which the International Convention for Safety of Life at Sea, 1974 (SOLAS 74) applies, to a port outside that country or the reverse;

(ii) From any territory, including the Commonwealth of Puerto Rico, all possessions of the United States, and all lands held by the United States under a protectorate or mandate, whose international relations are the responsibility of a contracting SOLAS 74 government, or which is administered by the United Nations, to a port outside that territory or the reverse; or

(b) The regulations that apply to a vessel on an *international voyage* in this subchapter do not apply to ships engaged on a voyage solely on the Great Lakes and the St. Lawrence River as far east as a straight line drawn from Cap des Rosiers to West Point, Anticosti Island and, on the north side of Anticosti Island, the 63rd Meridian;

(c) The Commandant or his authorized representative may exempt any vessel on an international voyage from the requirements of this subchapter if the vessel:

(1) Makes a single international voyage in exceptional circumstances; and

(2) Meets safety requirements prescribed for the voyage by the Commandant.

(d) The Commandant or his authorized representative may exempt any vessel from the construction requirements of this subchapter if the vessel does not proceed more than 20 nautical

miles from the nearest land in the course of its voyage.

[CGD 72–131R, 38 FR 29320, Oct. 24, 1973, as amended by CGD 80–123, 45 FR 64586, Sept. 30, 1980; CGD 90–008, 55 FR 30660, July 26, 1990; CGD 84–069, 61 FR 25286, May 20, 1996]

§30.01–7 Ocean or unlimited coastwise vessels on inland and Great Lakes Routes—TB/OC.

(a) Vessels inspected and certificated for ocean or unlimited coastwise routes shall be considered suitable for navigation insofar as the provisions of this subchapter are concerned on any inland route, including the Great Lakes.

§30.01–10 Application of regulations governing alterations or repairs—TB/ALL.

When major alterations or major repairs of tank vessels become necessary the work shall be done under the direction of the Officer in Charge, Marine Inspection, and shall be in accordance with the regulations in effect for new construction insofar as possible. When minor alterations or minor repairs of tank vessels become necessary such work shall be under the direction of the Officer in Charge, Marine Inspection, and shall be in accordance with the regulations in effect at the time the vessel was contracted for or built, or in accordance with the regulations in effect for new construction insofar as possible.

§30.01–15 Effective date of regulations—TB/ALL.

(a) The regulations in this subchapter are effective on and after November 10, 1936: *Provided,* That amendments, revisions, or additions shall become effective ninety (90) days after the date of publication in the FEDERAL REGISTER unless the Commandant shall fix a different time.

(b) The regulations in this subchapter are not retroactive in effect unless specifically made so at the time the regulations are issued. Changes in specification requirements of articles of equipment, or materials used in construction of tank vessels, shall not apply to such items which have been passed as satisfactory until replacement shall become necessary, unless a specific finding is made that such equipment or material used is unsafe or hazardous and has to be removed from tank vessels.

§30.01–20 Portable tanks—interpretive rulings—TB/ALL.

(a) The phrase *drums, barrels, or other packages,* as used in R.S. 4417a, as amended (46 U.S.C. 391a), and in R.S. 4472, as amended (46 U.S.C. 170), is interpreted to mean portable tanks having a maximum capacity of 110 U.S. gallons and Department of Transportation specification cylinders having a water capacity of not more than 1,000 pounds, which are actually loaded and discharged from vessels with their contents intact.

(b) The phrase *inflammable or combustible liquid cargo in bulk* as used in R.S. 4417a, as amended (46 U.S.C. 391a), and in R.S. 4472, as amended (46 U.S.C. 170), is interpreted to include such cargo in portable tanks of a capacity of more than 110 U.S. gallons.

(c) The phrase *liquid cargo* as used in R.S. 4417a, as amended (46 U.S.C. 391a), is interpreted to mean flammable or combustible liquids.

[CGFR 69–72, 34 FR 17480, Oct. 29, 1969]

Subpart 30.10—Definitions

§30.10–1 Definition of terms—TB/ALL.

Certain terms used in the regulations in this subchapter are defined in this subpart.

§30.10–2 Accommodation space—TB/ALL.

The term *accommodation space* means any public space such as a hall, dining room, mess room, lounge, corridor, lavatory, cabin, office, hospital, cinema, game and hobby room, pantry that contains no cooking appliances, and a similar space open to the passengers and crew.

[CGD 74–127, 41 FR 3842, Jan. 26, 1976]

§30.10–3 Approved—TB/ALL.

The term *approved* means approved by the Commandant unless otherwise stated.

§ 30.10–5 Cargo—TB/ALL.

The term *cargo* means combustible liquid, flammable liquid, or liquefied flammable gas unless otherwise stated.

§ 30.10–5a Cargo area—TB/ALL.

The term *cargo area* means that part of a vessel that includes the cargo tanks and other tanks into which cargo or cargo vapors are intentionally introduced, holds containing these tanks, all intervening space within, between, below, or outboard of these tanks or holds, and the deck area over the length and beam of the vessel above these tanks, holds, or spaces.

[CGD 74–127, 41 FR 3842, Jan. 26, 1976]

§ 30.10–5b Cargo control station—TB/ALL.

The term *cargo control station* means a location that is manned during cargo transfer operations for the purpose of directing or controlling the loading or unloading of cargo.

[CGD 74–127, 41 FR 3842, Jan. 26, 1976]

§ 30.10–6 Cargo handling room—TB/ALL.

The term *cargo handling room* means any enclosed space where cargo is pumped, compressed, or processed. Examples of *cargo handling rooms* are pump rooms, compressor rooms, and cargo valve rooms.

[CGFR 68–65, 33 FR 19983, Dec. 28, 1968]

§ 30.10–6a Category A machinery space—TB/ALL.

The term *Category A machinery space* means any space and trunks and ducts to such a space that contains:

(a) Internal combustion machinery used for main propulsion;

(b) Internal combustion machinery used for purposes other than main propulsion where the total aggregate power is at least 500 brake horsepower;

(c) Internal combustion machinery that uses a fuel that has a flash point of less than 43.3°C (110°F); or

(d) One or more oil fired boilers or oil fuel units.

[CGD 74–127, 41 FR 3842, Jan. 26, 1976]

§ 30.10–7 Certificated—TB/ALL.

The term *certificated* when applied to tank vessels refers to a vessel covered by a certificate of inspection issued by the Coast Guard; when applied to men employed on tank vessels, the term refers to a certificate of ability issued by the Coast Guard.

§ 30.10–9 Classification requirements—TB/ALL.

The term *classification requirements* means applicable rules and supplementary requirements of the American Bureau of Shipping, or other recognized classification society.

§ 30.10–11 Coastwise—TB/C.

Under this designation shall be included all tank vessels normally navigating the waters of any ocean or the Gulf of Mexico 20 nautical miles or less offshore.

§ 30.10–13 Cofferdam—TB/ALL.

The term *cofferdam* means a void or empty space separating two or more compartments for the purpose of isolation or to prevent the contents of one compartment from entering another in the event of the failure of the walls of one to retain their tightness.

§ 30.10–14 Combination carrier—TB/ALL.

The term *combination carrier* means a tank vessel designed to carry alternatively liquid and solid cargoes in bulk.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–15 Combustible liquid—TB/ALL.

The term *combustible liquid* means any liquid having a flashpoint above 80° F. (as determined from an open-cup tester, as used for test of burning oils). In the regulations of this subchapter, combustible liquids are referred to by grades, as follows:

(a) *Grade D.* Any combustible liquid having a flashpoint below 150° F. and above 80° F.

(b) *Grade E.* Any combustible liquid having a flashpoint of 150° F. or above.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49023, Sept. 26, 1977]

§ 30.10–17 Commandant—TB/ALL.

The term *Commandant* means the Commandant of the Coast Guard.

§ 30.10–19 Coast Guard District Commander—TB/ALL.

The term *Coast Guard District Commander* means an officer of the Coast Guard designated as such by the Commandant to command all Coast Guard activities within his district which include the enforcement and administration of title 52, R.S., acts amendatory thereof or supplemental thereto, rules and regulations thereunder and the inspections required thereby.

§ 30.10–19a Control space—TB/ALL.

The term *control space* means an enclosed space in which is located a ship's radio, main navigating equipment, or emergency source of power or in which is located centralized fire recording or fire control equipment, but not including firefighting apparatus that must be located in the cargo area or individual pieces of firefighting equipment.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–20 Deadweight or DWT—TB/ALL.

The term *deadweight* or *DWT* means the difference in metric tons between the lightweight displacement and the total displacement of a vessel measured in water of specific gravity 1.025 at the load waterline corresponding to the summer freeboard assigned according to 46 CFR, subchapter E.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–21 Flammable or inflammable—TB/ALL.

The words *flammable* and *inflammable* are interchangeable or synonymous terms for the purpose of the regulations in this subchapter.

§ 30.10–22 Flammable liquid—TB/ALL.

The term *flammable liquid* means any liquid which gives off flammable vapors (as determined by flashpoint from an open-cup tester, as used for test of burning oils) at or below a temperature of 80° F. Flammable liquids are referred to by grades as follows:

(a) *Grade A.* Any flammable liquid having a Reid[1] vapor pressure of 14 pounds or more.

(b) *Grade B.* Any flammable liquid having a Reid[1] vapor pressure under 14 pounds and over 8½ pounds.

(c) *Grade C.* Any flammable liquid having a Reid[1] vapor pressure of 8½ pounds or less and a flashpoint of 80° F. or below.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49023, Sept. 26, 1977]

§ 30.10–23 Flame arrester—TB/ALL.

The term *flame arrester* means any device or assembly of a cellular, tubular, pressure, or other type used for preventing the passage of flames into enclosed spaces.

§ 30.10–25 Flame screen—TB/ALL.

The term *flame screen* means a fitted single screen of corrosion-resistant wire of at least 30 by 30 mesh, or two fitted screens, both of corrosion-resistant wire, of at least 20 by 20 mesh, spaced not less than ½ inch or more than 1½ inches apart.

§ 30.10–27 Flashpoint—TB/ALL.

The term *flashpoint* indicates the temperature in degrees Fahrenheit at which a liquid gives off a flammable vapor when heated in an open-cup tester. For the purpose of the regulations in this subchapter, flashpoints determined by other testing methods will be equivalent to those determined with an open-cup tester, as follows:

TABLE 30.10–27—EQUIVALENT FLASHPOINTS

[In degrees Farenheit]

Open-cup tester	Tag closed-cup tester (A.S.T.M.)	Pensky-Martens closed tester (A.S.T.M.)
80	75	.....
150	.....	140

[1] American Society for Testing Materials Standard D–323 (most recent revision), Method of Test for Vapor Pressure of Petroleum Products (Reid Method).

§ 30.10–29 Gas free—TB/ALL.

The term *gas free* means free from dangerous concentrations of flammable or toxic gases.

§ 30.10–31 General rules and regulations—TB/ALL.

The term *general rules and regulations* means the requirements contained in this chapter.

§ 30.10–33 Great Lakes—TB/L.

Under this designation shall be included all tank vessels navigating the Great Lakes.

§ 30.10–35 Headquarters—TB/ALL.

The term *Headquarters* means the Office of the Commandant, U.S. Coast Guard, Washington, DC 20593–0001.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGD 88–070, 53 FR 34533, Sept. 7, 1988]

§ 30.10–37 Keel laying date—TB/ALL.

The term *keel laying date* means the date upon which progressive construction identifiable with a specific vessel begins, including construction of the first module or prefabricated section of the hull that is identifiable with that vessel.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–38 Lightweight—TB/ALL.

The term *lightweight* means the displacement of a vessel in metric tons without cargo, oil fuel, lubricating oil, ballast water, fresh water, feedwater in tanks, consumable stores, and persons and their effects.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–39 Liquefied flammable gas—TB/ALL.

The term *liquefied flammable gas* means any flammable gas having a Reid vapor pressure exceeding 40 pounds, which has been liquefied.

[CGFR 66–33, 31 FR 15267, Dec. 6, 1966]

§ 30.10–41 Lakes, bays, and sounds—TB/B.

Under this designation shall be included all tank vessels navigating the waters of any of the lakes, bays, or sounds other than the waters of the Great Lakes.

§ 30.10–42 Machinery space—TB/ALL.

The term *machinery space* means any space that contains machinery and related equipment including Category A machinery spaces, propelling machinery, boilers, oil fuel units, steam and internal combustion engines, generators and centralized electrical machinery, oil filling stations, refrigeration, stabilizing, ventilation, and air conditioning machinery, and similar spaces and trunks to such spaces.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–43 Marine inspector or inspector—TB/ALL.

The terms *marine inspector* or *inspector* mean any person from the civilian or military branch of the Coast Guard assigned under the superintendence and direction of an Officer in Charge, Marine Inspection, or any other person as may be designated for the performance of duties with respect to the enforcement and administration of title 52, R.S., acts amendatory thereof or supplemental thereto, rules and regulations thereunder, and the inspections required thereby.

§ 30.10–45 Ocean—TB/O.

Under this designation shall be included all tank vessels normally navigating the waters of any ocean or the Gulf of Mexico more than 20 nautical miles offshore.

§ 30.10–47 Officer in Charge, Marine Inspection—TB/ALL.

The term *Officer in Charge, Marine Inspection,* means any person from the civilian or military branch of the Coast Guard designated as such by the Commandant and who under the superintendence and direction of the Coast Guard District Commander is in charge of an inspection zone for the performance of duties with respect to the enforcement and administration of title 52, R.S., acts amendatory thereof or supplemental thereto, rules and regulations thereunder and the inspections required thereby.

§ 30.10–48 Oil fuel—TB/ALL.

The term *oil fuel* means oil used as fuel for machinery in the vessel in which it is carried.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–48a Oil fuel unit—TB/ALL.

The term *oil fuel unit* means the equipment used for the preparation of oil fuel for delivery to an oil fired boiler, the equipment used for the preparation of heated oil fuel for delivery to an internal combustion engine, and any oil fuel pressure pump, filter, and heater that deals with oil at a pressure of more than 1.8 kilograms per square centimeter (25 p.s.i.) gauge.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–49 Permit—TB/ALL.

The term *permit* refers to endorsement on the certificate of inspection, authorizing the presence on board of liquid flammable or combustible cargoes in bulk, issued by an Officer in Charge, Marine Inspection, for a tank vessel which is found to be in substantial compliance with the regulations in this subchapter.

§ 30.10–50 Pilot boarding equipment and point of access.

(a) *Pilot boarding equipment* means a pilot ladder, accommodation ladder, pilot hoist, or combination of them as required by this subchapter.

(b) *Point of access* means the place on deck of a vessel where a person steps onto or off of pilot boarding equipment.

[CGD 79–032, 49 FR 25455, June 21, 1984]

§ 30.10–55 Pressure vacuum relief valve—TB/ALL.

The term *pressure vacuum relief valve* means any device or assembly of a mechanical, liquid, weight, or other type used for the automatic regulation of pressure or vacuum in enclosed places.

§ 30.10–57 Recognized classification society—TB/ALL.

The term *recognized classification society* means the American Bureau of Shipping or other classification society recognized by the Commandant.

§ 30.10–59 Reid vapor pressure—TB/ALL.

The term *Reid vapor pressure* means the vapor pressure of a liquid at a temperature of 100° F., expressed in pounds per square inch absolute, as determined by the *Reid Method* as described in the American Society for Testing Materials Standard D–323 (most recent revision), Method of Test for Vapor Pressure of Petroleum Products. This Standard is available at Headquarters for reading purposes or it may be purchased from the Society at 1916 Race Street, Philadelphia, PA 19103.

§ 30.10–61 Rivers—TB/R.

Under this designation shall be included all tank vessels whose navigation is restricted to rivers and/or to canals, exclusively.

§ 30.10–62a Service spaces—TB/ALL.

Service spaces are spaces that are used for galleys, pantries containing cooking appliances, lockers, storerooms, paint and lamp rooms and similar spaces that contain highly combustible materials, laundries, garbage and trash disposal and stowage rooms, workshops other than those forming part of the machinery spaces, and similar spaces and trunks to such spaces.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976]

§ 30.10–63 Spark arrester—TB/ALL.

The term *spark arrester* means any device, assembly, or method of a mechanical, centrifugal, cooling, or other type and of a size suitable for the retention or quenching of sparks in exhaust pipes from internal combustion engines.

§ 30.10–65 Tank barge—B/ALL.

The term *tank barge* means any tank vessel not equipped with means of self-propulsion.

§ 30.10–67 Tankship—T/ALL.

The term *tankship* means any tank vessel propelled by power or sail.

§ 30.10–69 Tank vessel—TB/ALL.

The term *tank vessel* means any vessel especially constructed or converted to carry liquid bulk cargo in tanks.

§ 30.10–71 Tankerman—TB/ALL.

The following ratings are established in part 13 of this chapter. The terms for the ratings identify persons holding valid merchant mariners' documents for service in the ratings issued under that part:

(a) Tankerman-PIC.
(b) Tankerman-PIC (Barge).
(c) Restricted Tankerman-PIC.
(d) Restricted Tankerman-PIC (Barge).
(e) Tankerman-Assistant.
(f) Tankerman-Engineer.

[CGD 79–116, 60 FR 17155, Apr. 4, 1995]

Subpart 30.15—Equivalents

§ 30.15–1 Conditions under which equivalents may be used—TB/ALL.

(a) Where in this subchapter it is provided that a particular fitting, material, appliance, apparatus, or equipment, or type thereof, shall be fitted or carried in a vessel, or that any particular provision shall be made or arrangement shall be adopted, the Commandant may accept in substitution therefor any other fitting, material, apparatus, or equipment, or type thereof, or any other arrangement: *Provided*, That he shall have been satisfied by suitable trials that the fitting, material, appliance, apparatus, or equipment, or type thereof, or the provision or arrangement is at least as effective as that specified in this subchapter.

(b) In any case where it is shown to the satisfaction of the Commandant that the use of any particular equipment, apparatus, or arrangement not specifically required by law is unreasonable or impracticable, the Commandant may permit the use of alternate equipment, apparatus, or arrangement to such an extent and upon such conditions as will insure, to his satisfaction, a degree of safety consistent with the minimum standards set forth in this subchapter.

Subpart 30.20—Enforcement and Rights of Appeal

§ 30.20–1 Enforcement—TB/ALL.

The Officer in Charge, Marine Inspection, under the superintendence of the Coast Guard District Commander, is responsible for the performance of duties within his jurisdiction with respect to the enforcement and administration of title 52, R.S., acts amendatory thereof or supplemental thereto, rules and regulations thereunder, and the inspections required thereby.

§ 30.20–10 Penalties for violations of tank vessel regulations—TB/ALL.

(a) The provisions of R.S. 4417a, as amended (46 U.S.C. 391a) provide the following penalty:

> (7) The owner, master, or person in charge of any vessel subject to the provisions in this section, or any or all of them, who shall violate the provisions of this section, or of the rules and regulations established hereunder, shall be subject to a fine of not more than $1,000 or imprisonment for not more than one year, or both such fine and penalty.

(b) Certificates of inspection for tank vessels may also be revoked or suspended by the Coast Guard where such process is authorized by law. This may occur if the vessel does not meet the requirements of law or regulations in this chapter or if there is a failure to maintain the safety requirements requisite to the issuance of a certificate of inspection.

§ 30.20–50 Right of appeal.

Any person directly affected by a decision or action taken under this subchapter, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50380, Dec. 6, 1989]

Subpart 30.25—Commodities Regulated

§ 30.25–1 Cargoes carried in vessels certificated under the rules of this subchapter.

The cargoes listed in Table 30.25–1 are flammable or combustible and when transported in bulk must be in vessels certificated under the rules of this subchapter. A mixture or blend of two or more cargoes appearing in Table 30.25–1 may be transported under the provisions of this subchapter. A category A, B, or C noxious liquid substance (NLS) cargo, as defined in § 153.2 of this chapter, that is listed in Table 30.25–1 and

any mixture containing one or more category A, B, or C NLS cargoes listed in Table 30.25–1 may be carried in bulk under this subchapter if the vessel is not regulated under part 153 of this chapter. If the vessel is regulated under § 153.1 of this chapter, category A, B, and C NLS cargoes must be carried under part 153, or, as an alternative in the case of category C oil-like NLS, under 33 CFR part 151. Requirements for category D NLS cargoes and mixtures of non-NLS cargoes with category D NLS cargoes are in 33 CFR part 151.

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES

Cargoes	Pollution category
Acetone	III
Acetophenone	@D
•Acrylonitrile-Styrene copolymer dispersion in Polyether polyol	**D**
•Alcohols (C13 and above), *see* **Alcohols (C13+)**	.....
Alcohols (C13+)	III
Alcoholic beverages, n.o.s.	III
Alcohol(C6–C17)(secondary) poly(3-6)ethoxylates	A
Alcohol(C6–C17)(secondary) poly(7-12)ethoxylates	B
•Alcohol(C12–C15) poly(1-3)ethoxylates, *see* **Alcohol(C12–C15) poly(1-6)ethoxylates**	A
•Alcohol(C12–C15) poly(3-11)ethoxylates, *see* **Alcohol(C12–C15) poly(1-6),** *or* **poly(7-19)ethoxylates**	A
Alcohol(C12–C15) poly(1-6)ethoxylates	A
Alcohol(C12–C15) poly(7-19)ethoxylates	B
Alcohol(C12–C15) poly(20+)ethoxylates	C
n-Alkanes (C10+)	III
iso- & cyclo-Alkanes (C10–C11)	D
iso- & cyclo-Alkanes (C12+)	III
Alkaryl polyether (C9–C20)	B
Alkenyl(C11+) amine	D
Alkenylsuccinic anhydride	#
Alkyl(C8+)amine, Alkenyl (C12+) acid ester mixture	D
•Alkyl(C9–C17) benzenes, *see* **Alkyl(C9+)benzenes**	**III**
Alkyl(C9+)benzenes	III
Alkylbenzenesulfonic acid (4% or less)	#
Alkyl dithiothiadiazole (C6–C24)	D
Alkyl ester copolymer (C6–C18)	[D]
Alkyl phenol sulfide (C8–C40)	[D]
•*Alkyl phthalates (n-), see individual phthalates*	.....
Aminoethyldiethanolamine, Aminoethylethanolamine solution	III
•Amyl acetate (iso-, n-), *see* **Amyl acetate (all isomers)**	C
Amyl acetate (all isomers)	C
Amyl alcohol (iso-, n-, sec-, primary)	D
Amyl alcohol (tert-)	III
Amylene, *see* Pentene (all isomers)	C
Amyl methyl ketone, *see* Methyl amyl ketone	D
Animal and Fish oils, n.o.s. (*see also* Oil, edible, *or* Oil, misc.)	D

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Including:	
Cod liver oil	
Lanolin	
Neatsfoot oil	
Pilchard oil	
Sperm oil	
Animal and Fish acid oils and distillates, n.o.s.	D
Including:	
Animal acid oil	
Fish acid oil	
Lard acid oil	
Mixed acid oil	
Mixed general acid oil	
Mixed hard acid oil	
Mixed soft acid oil	
Aryl polyolefin (C11–C50)	D
Asphalt	I
Asphalt blending stocks:	
Roofers flux	I
Straight run residue	I
+Barium long chain alkaryl sulfonate (C11–C50)	[B]
+Barium long chain alkyl(C8–C14)phenate sulfide	[A]
Behenyl alcohol	III
Benzene tricarboxylic acid trioctyl ester	III
Benzyl alcohol	C
Brake fluid base mixtures *(containing Poly(2-8)alkylene(C2–C3) glycols, Polyalkylene(C2–C10) glycol monoalkyl(C1–C4) ethers, and their borate esters)*	D
Butane	LFG
Butene, see Butylene.	
Butene oligomer	B
•(iso-, n-) Butyl acetate *see* **Butyl acetate (all isomers)**	C
•sec-Butyl acetate *see* **Butyl acetate (all isomers)**	**C**
Butyl acetate (all isomers)	C
Butyl alcohol (iso-, n-, sec-, tert-)	III
Butyl benzyl phthalate	A
Butylene	LFG
Butylene glycol	D
•*1,3-Butylene glycol, see* Butylene glycol	.....
Butylene polyglycol, *see* Butylene glycol	@D
iso-Butyl formate	D
n-Butyl formate	@D
Butyl heptyl ketone	[C]
•*Butyl methyl ketone, see* Methyl butyl ketone	.....
Butyl stearate	III
Butyl toluene	@A
•gamma-Butyrolactone	D
Calcium alkyl(C9)phenol sulfide, polyolefin phosphorosulfide mixture	A
•Calcium alkyl salicylate, *see* **Calcium long chain alkyl salicylate (C13+)**	C
Calcium long chain alkaryl sulfonate (C11–C50)	D
Calcium long chain alkyl phenate (C8–C40)	[D]
Calcium long chain alkyl phenate sulfide (C8–C40)	D
Calcium long chain alkyl salicylate (C13+)	C
•Calcium long chain **alkyl** phenolic amine (C8–C40)	III
Caprolactam solutions	D
•*Cetyl alcohol (hexadecanol), see* Alcohols **(C13+)**	.....
Cetyl-Stearyl alcohol	III
†Coal tar	A

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
•Cumene (*isopropylbenzene*), *see* **Propylbenzene (all isomers)**	**A**
Cyclohexane	C
•Cyclohexanol	**D**
1,3-Cyclopentadiene dimer (molten)	B
•*Cyclopentadiene polymers, see* 1,3-Cyclopentadiene dimer (molten)	.....
•p-Cymene	C
Decahydronaphthalene	D
•iso-Decaldehyde	@C
•n-Decaldehyde	@B
•Decane, *see* **n-Alkanes (C10+)**	**III**
Decene	B
Decyl acetate	B
Decyl alcohol (all isomers)	B
Decylbenzene (n-)	D
Detergent alkylate	D
Diacetone alcohol	D
Dialkyl(C10–C14) benzenes	D
Dialkyl(C7–C13) phthalates	D
Including:.	
Diisodecyl phthalate.	
Diisononyl phthalate.	
Dinonyl phthalate.	
Ditridecyl phthalate.	
Diundecyl phthalate.	
•Dibutyl carbinol, *see* **Nonyl alcohol (all isomers)**	**C**
•*ortho*-Dibutyl phthalate	A
Dicyclopentadiene, *see* 1,3-Cyclopentadiene dimer (molten)	B
Diethylbenzene	**A**
Diethylene glycol	**D**
Diethylene glycol butyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether**	**D**
Diethylene glycol butyl ether acetate, *see* **Poly(2–8)alkylene glycol monoalkyl(C1–C6) ether acetate**	D
Diethylene glycol dibutyl ether	D
Diethylene glycol diethyl ether	III
Diethylene glycol ethyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether**	**D**
•Diethylene glycol ethyl ether acetate, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether acetate**	D
Diethylene glycol n-hexyl ether, *see* Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether	D
•Diethylene glycol methyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	D
•Diethylene glycol methyl ether acetate, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether acetate**	D
Diethylene glycol phenyl ether	#
•Diethylene glycol phthalate	**D**
Diethylene glycol propyl ether, *see* Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether	D
Di-(2-ethylhexyl)adipate	D
•Di-(2-ethylhexyl)phthalate, *see* **Dialkyl(C7–C13) phthalates**	D
Diethyl phthalate	C
Diglycidyl ether of Bisphenol A	B
Diheptyl phthalate	III
Dihexyl phthalate	III
•Diisobutylcarbinol, *see* **Nonyl alcohol (all isomers)**	**C**
Diisobutylene	B
Diisobutyl ketone	D
Diisobutyl phthalate	B
•Diisodecyl phthalate, *see* **Dialkyl(C7–C13) phthalates**	D

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Diisononyl adipate	D
•Diisononyl phthalate, *see* **Dialkyl(C7–C13) phthalates**	D
Diisooctyl phthalate	III
Diisopropylbenzene (*all isomers*)	A
Diisopropyl naphthalene	D
Dimethyl adipate	B
•*Dimethylbenzene, see* Xylenes	.....
Dimethyl glutarate	C
Dimethyl phthalate	C
•Dimethylpolysiloxane, *see* **Polydimethylsiloxane**	**III**
2,2-Dimethylpropane-1,3-diol	D
Dimethyl succinate	C
•Dinonyl phthalate, *see* **Dialkyl(C7–C13) phthalates**	D
Dioctyl phthalate	III
Dipentene	C
Diphenyl	A
Diphenyl, Diphenyl ether mixture	A
Diphenyl ether	A
Diphenyl ether, Biphenyl phenyl ether mixture	A
Dipropylene glycol	III
Dipropylene glycol butyl ether, *see* Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether	D
Dipropylene glycol dibenzoate	[D]
•Dipropylene glycol methyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	D
Distillates:	
Flashed feed stocks	I
Straight run	I
•Ditridecyl phthalate, *see* **Dialkyl(C7–C13) phthalates**	D
•Diundecyl phthalate, *see* **Dialkyl(C7–C13) phthalates**	D
Dodecane (all isomers)	III
Dodecanol	B
Dodecene (all isomers)	B
Dodecyl alcohol, *see* Dodecanol	B
Dodecylbenzene	III
Dodecyl phenol	A
Dodecyl xylene	III
Drilling mud (low toxicity) *(if flammable or combustible)*	[III]
Ethane	LFG
2-Ethoxyethyl acetate	C
•*Ethoxylated alcohols, C11–C15, see the alcohol polyethoxylates*	.....
Ethoxy triglycol *(crude)*	D
Ethyl acetate	D
Ethyl acetoacetate	D
Ethyl alcohol	III
Ethyl amyl ketone	C
Ethylbenzene	**B**
Ethyl butanol	@D
Ethyl butyrate	C
Ethyl cyclohexane	C
2-Ethyl-2-(hydroxymethyl) propane-1,3-diol, C8–C10 ester	D
Ethylene	LFG
Ethylene carbonate	III
Ethylene glycol	D
Ethylene glycol acetate	D
Ethylene glycol butyl ether acetate	C
Ethylene glycol diacetate	C
Ethylene glycol dibutyl ether	[D]
Ethylene glycol ethyl ether acetate, *see* 2-Ethoxyethyl acetate	C
Ethylene glycol methyl butyl ether	D
Ethylene glycol methyl ether acetate	**C**

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Ethylene glycol phenyl ether	D
Ethylene glycol phenyl ether, Diethylene glycol phenyl ether mixture	D
Ethylene-Propylene copolymer *(in liquid mixtures)*	[III]
Ethyl-3-ethoxypropionate	C
•*2-Ethylhexaldehyde, see* Octyl aldehydes	.....
•2-Ethylhexanoic acid, *see* **Octanoic acid (all isomers)**	D
2-Ethylhexanol, *see* Octanol (all isomers)	@C
•*Ethylhexoic acid, see* 2-Ethylhexanoic acid	.....
Ethyl hexyl phthalate	C
Ethyl propionate	D
Ethyl toluene	B
•Fatty acid (saturated, C13 and above), *see* **Fatty acid (saturated, C13+)**	III
Fatty acid (saturated, C13+)	III
Formamide	D
Furfuryl alcohol	C
†Gas oil, cracked	I
Gasoline blending stocks:	
Alkylates	I
†Reformates	I
Gasolines:	
†Automotive *(containing not over 4.23 grams lead per gallon)*	I
†Aviation *(containing not over 4.86 grams lead per gallon)*	I
Casinghead *(natural)*	I
Polymer	I
†Straight run	I
Glycerine	III
Glycerine (83%), Dioxanedimethanol (17%) mixture	D
•*Glycerol, see* Glycerine	.....
Glycerol monooleate	D
Glycerol polyalkoxylate	III
Glyceryl triacetate	III
•*Glycidyl ester of tertiary carboxylic acid, see* Glycidyl ester of tridecyl acetic acid	.....
Glycidyl ester of C10 trialkylacetic acid, *see* Glycidyl ester of tridecyl acetic acid	B
Glycidyl ester of tridecyl acetic acid	B
•*Glycidyl ester of versatic acid, see* Glycidyl ester of tridecyl acetic acid	.....
•*Glycol diacetate, see* Ethylene glycol diacetate	.....
•*Glycol triacetate, see* Glyceryl triacetate	.....
Glyoxal solution (40% or less)	D
•Heptadecane, *see* **n-Alkanes (C10+)**	**III**
Heptane (all isomers)	C
Heptanoic acid	D
Heptanol (all isomers)	C
Heptene (all isomers)	C
Heptyl acetate	B
•*Herbicide (C15 -H22 -NO2 -Cl), see* Metolachlor	.....
•Hexaethylene glycol, *see* **Polyethylene glycol**	**III**
Hexamethylene glycol	III
Hexamethylenetetramine solutions	D
Hexane (all isomers)	C
Hexanoic acid	D
Hexanol	D
Hexene (all isomers)	C
Hexyl acetate	B
Hexylene glycol	III
•*Hog grease, see* Lard	.....
2-Hydroxy-4-(methylthio)butanoic acid	C
Hydroxy terminated polybutadiene, *see* Polybutadiene, hydroxyl terminated.	

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Isophorone	D
Jet fuels:	
†JP-4	I
JP-5 *(kerosene, heavy)*	I
JP-8	@I
Kerosene	I
Lactic acid	D
Lard	III
Latex (ammonia (1% or less) inhibited)	D
Latex, liquid synthetic	III
including:	
Styrene-butadiene rubber	III
Carboxylated styrene-butadiene copolymer	III
Lecithin (*soyabean*)	[D]
Long chain alkaryl polyether (C11–C20)	C
Long chain alkaryl sulfonic acid (C16–C60)	D
•Long chain alkylphenate/Phenol sulfide **mixture**	III
Magnesium long chain alkaryl sulfonate (C11–C50)	D
Magnesium long chain alkyl phenate sulfide (C8–C20)	[D]
Magnesium long chain alkyl salicylate (C11+)	C
•Magnesium nonyl phenol sulfide, *see* **Magnesium long chain alkyl phenate sulfide (C8–C20)**	[D]
•Magnesium sulfonate, *see* **Magnesium long chain alkaryl sulfonate (C11–C50)**	D
2-Mercaptobenzothiazol *(in liquid mixtures)*	#
Methane	LFG
3-Methoxy-1-butanol	III
3-Methoxybutyl acetate	D
1-Methoxy-2-propyl acetate	#
•Methoxy triglycol *(triethylene glycol methyl ether), see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	.....
Methyl acetate	III
Methyl acetoacetate	D
Methyl alcohol	**D**
Methyl amyl acetate	C
Methyl amyl alcohol	C
•Methyl amyl ketone	**D**
•*Methyl butanol, see the amyl alcohols*	.....
Methyl butenol	D
Methyl butyl ketone	D
Methyl butynol	D
Methyl butyrate	C
Methyl ethyl ketone	III
Methyl heptyl ketone	B
Methyl isobutyl carbinol, *see* Methyl amyl alcohol	C
Methyl isobutyl ketone	D
3-Methyl-3-methoxybutanol	III
3-Methyl-3-methoxybutyl acetate	III
Methyl naphthalene	A
•Methyl pentene, *see* **Hexene (all isomers)**	.....
+Methyl propyl ketone	D
•N-Methyl-2-pyrrolidone	**D**
Methyl tert-butyl ether	D
Metolachlor	B
Mineral spirits	I
•Myrcene	**D**
Naphtha:	
•†Aromatic *(having less than 10% Benzene)*	@I
Heavy	@I
Paraffinic	@I
†Petroleum	I
†Solvent	@I

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Stoddard Solvent	@I
†Varnish makers' and painters' (75%)	@I
N-Methylglucamine solution (70% or less)	III
n-Pentyl propionate	C
Naphthalene sulfonic acid-formaldehyde copolymer, sodium salt solution	D
Naphthenic acid	A
Nonane (all isomers)	C
Nonanoic acid (all isomers)	D
Nonanoic, Tridecanoic acid mixture	@D
•Nonene **(all isomers)**	B
Nonyl acetate	C
•Nonyl alcohol (all isomers)	**C**
Nonyl methacrylate *monomer*	D
Nonyl phenol	A
Nonyl phenol poly(4-12)ethoxylates	B
•Nonyl phenol sulfide (90% or less), *see* **Alkyl phenol sulfide (C8–C40)**	.....
Noxious liquid, N.F., (1) n.o.s. (''trade name'' contains ''principle components'') ST 1, Cat A *(if combustible)*	A
Noxious liquid, F., (2) n.o.s. (''trade name'' contains ''principle components'') ST 1, Cat A	A
Noxious liquid, N.F., (3) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat A *(if combustible)*	A
Noxious liquid, F., (4) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat A	A
Noxious liquid, N.F., (5) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat B *(if combustible)*	B
Noxious liquid, N.F., (6) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat B, mp. equal to or greater than 15 deg. C *(if combustible)*	B
Noxious liquid, F., (7) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat B	B
Noxious liquid, F., (8) n.o.s. (''trade name'' contains ''principle components'') ST 2, Cat B, mp. equal to or greater than 15 deg. C	B
Noxious liquid, N.F., (9) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat A *(if combustible)*	A
Noxious liquid, F., (10) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat A	A
Noxious liquid, N.F., (11) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat B *(if combustible)*	B
Noxious liquid, N.F., (12) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat B, mp. equal to or greater than 15 deg. C *(if combustible)*	B
Noxious liquid, F., (13) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat B	B
Noxious liquid, F., (14) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat B, mp. equal to or greater than 15 deg. C	B
Noxious liquid, N.F., (15) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat C *(if combustible)*	C
Noxious liquid, F., (16) n.o.s. (''trade name'' contains ''principle components'') ST 3, Cat C	C

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Noxious liquid, n.o.s. (17) (''trade name,'' contains ''principal components''), Category D *(if flammable or combustible)*	D
Non-noxious liquid, n.o.s. (18) (''trade name,'' contains ''principal components''), Appendix III *(if flammable or combustible)*	III
•*Octadecene, see the olefin or alpha-olefin entries*	.....
Octadecenoamide solution *(oleamide)*	[D]
Octane (all isomers)	C
Octanoic acid (all isomers)	D
Octanol (all isomers)	C
Octene (all isomers)	B
Octyl acetate	**C**
•*Octyl alcohol (iso-, n-), see* Octanol (all isomers)	.....
Octyl aldehydes	B
Octyl decyl adipate	III
•*Octyl phthalate (Di-(2-ethylhexyl)phthalate), see* **Dialkyl(C7–C13) phthalates**	.....
Oil, edible:	
Beechnut	D
Castor	D
Cocoa butter	D
Coconut	D
Cod liver	D
Corn	D
Cottonseed	D
Fish, *n.o.s.*	D
Groundnut	D
Hazelnut	D
Lard	@III
Maize, *see* Corn oil	D
Nutmeg butter	D
Olive	D
Palm	D
Palm kernel	D
Peanut	D
Poppy	D
Raisin seed	D
Rapeseed	D
Rice bran	D
Safflower	D
Salad	D
Sesame	D
Soya bean	D
Sunflower, *see* Sunflower seed	D
Sunflower seed	D
Tucum	D
Vegetable, *n.o.s.*	D
Walnut	D
Oil, fuel:	
No. 1 *(kerosene)*	I
No. 1-D	I
No. 2	I
No. 2-D	I
No. 4	I
No. 5	I
No. 6	I
Oil, misc:	
Aliphatic	@I
Animal, *n.o.s.*	D
Aromatic	I
Clarified	I
Coal	#
•*Coconut oil, esterified, see* Coconut oil, fatty acid methyl ester	.....
Coconut oil, fatty acid	C
Coconut oil, fatty acid methyl ester	D
•*Coconut oil, methyl ester, see* Coconut oil, fatty acid methyl ester	.....

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Cottonseed, fatty acid, *see* Cottonseed oil, fatty acid	C
†Crude	I
Diesel	I
Gas, high pour	@I
Gas, low pour	@I
Gas, low sulfur	@I
Heartcut distillate	I
Lanolin	D
Linseed	D
Lubricating	I
Mineral	I
Mineral seal	@I
Motor	I
Neatsfoot	D
Oiticica	D
Palm oil, fatty acid methyl ester	D
•*Palm oil, methyl ester, see* Palm oil, fatty acid methyl ester	.....
Penetrating	I
Perilla	D
Pilchard	D
Pine	C
Residual	I
Road	I
Rosin	B
Seal	I
Soapstock	#
Soya bean (epoxidized)	[D]
Sperm	D
Spindle	I
Tall	B
Tall, fatty acid	C
Transformer	I
Tung	D
Turbine	I
Whale	D
alpha-Olefins (C6–C18)	B
alpha-Olefins (C13–C18)	III
Olefin mixtures (C5–C7)	C
Olefin mixtures (C5–C15)	B
•Olefins (**C13+**, all isomers)	III
Olefin/Alkyl ester copolymer (molecular weight 2000+)	D
Oleic acid	D
•*Oleyl alcohol (octadecenol), see* Alcohols (**C13+**)	.....
•*Organic amine 70, see* Aminoethyldiethanolamine, Aminoethylethanolamine solution	.....
Palm kernel acid oil, methyl ester	[D]
Palm stearin	D
•n-Paraffins (C10–C20), *see* **n-Alkanes (C10+)**	III
•*Pentadecanol, see* Alcohols (**C13+**)	.....
•*Pentaethylene glycol, see* Polyethylene glycols	.....
Pentaethylenehexamine	D
Pentane (all isomers)	C
Pentanoic acid	D
Pentene (all isomers)	C
Petrolatum	III
1-Phenyl-1-xylyl ethane	C
Phosphosulfurized bicyclic terpene	#
•*Phthalate plasticizers, see individual phthalates*	.....
Pinene, *see the alpha- or beta- isomers*	.....
alpha-Pinene	A
beta-Pinene	B
Polyalkylene glycols, Polyalkylene glycol monoalkyl ethers mixtures	@D

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Polyalkylene glycol butyl ether, *see* Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether	D
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	D
Including:.	
Diethylene glycol butyl ether.	
Diethylene glycol ethyl ether.	
Diethylene glycol n-hexyl ether.	
Diethylene glycol methyl ether.	
Diethylene glycol n-propyl ether.	
Dipropylene glycol butyl ether.	
Dipropylene glycol methyl ether.	
Polypropylene glycol methyl ether.	
Triethylene glycol butyl ether.	
Triethylene glycol ethyl ether.	
Triethylene glycol methyl ether.	
Tripropylene glycol methyl ether.	
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	D
Including:.	
Diethylene glycol butyl ether acetate.	
Diethylene glycol ethyl ether acetate.	
Diethylene glycol methyl ether acetate.	
Polyalkylene oxide polyol	C
Polyalkyl methacrylate (C1–C20)	*[D]*
Polybutadiene, hydroxyl terminated	[III]
Polybutene	III
Polybutenyl succinimide	[D]
Polydimethylsiloxane	#
Polyether (molecular weight 2000+)	D
Polyethylene glycol	III
Polyethylene glycol dimethyl ether	III
Polyethylene glycol monoalkyl ether, *see* Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether	D
Polyglycerine, Sodium salts solution (containing less than 3% Sodium hydroxide)	III
•Polyglycerol	**III**
•Poly**(4+)**isobutylene	**III**
Polymerized esters	#
Polyolefin (molecular weight 300+)	III
Polyolefin amide alkeneamine (C28+)	D
Polyolefin amide alkeneamine borate (C28–C250)	D
•Polyolefin amide alkeneamine/Molybdenum oxysulfide mixture	III
Polyolefin amide alkeneamine polyol	D
Polyolefin anhydride	D
Polyolefin ester (C28–C250)	D
Polyolefin phenolic amine (C28–C250)	D
Polyolefin phosphorosulfide, barium derivative (C28–C250)	C
•Poly(20)oxyethylene sorbitan monooleate	**III**
•Poly**(5+)**propylene	**III**
Polypropylene glycol	D
Polypropylene glycol methyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether**	**D**
Polysiloxane	III
•Potassium oleate	**C**
Propane	LFG
•n-Propoxypropanol **(propylene glycol propyl ether),** *see* **Propylene glycol monoalkyl ether**	**D**
•iso-Propyl acetate	III
•n-Propyl acetate	D
•iso-Propyl alcohol	III
•n-Propyl alcohol	III
•iso-Propylbenzene (*cumene*), *see* **Propylbenzene (all isomers)**	**A**
•n-Propylbenzene, *see* **Propylbenzene (all isomers)**	**A**

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Propylbenzene (all isomers)	A
iso-Propylcyclohexane	C
Propylene	LFG
Propylene-butylene copolymer	III
Propylene carbonate	[III]
Propylene dimer	C
Propylene glycol	III
Propylene glycol n-butyl ether, *see* **Propylene glycol monoalkyl ether**	D
•Propylene glycol ethyl ether, *see* **Propylene glycol monoalkyl ether**	D
•Propylene glycol methyl ether, *see* **Propylene glycol monoalkyl ether**	D
Propylene glycol methyl ether acetate	D
Propylene glycol monoalkyl ether	D
Including:.	
n-Propoxypropanol.	
Propylene glycol n-butyl ether.	
Propylene glycol ethyl ether.	
Propylene glycol methyl ether.	
Propylene glycol phenyl ether	[D]
Propylene glycol propyl ether, *see* Propylene glycol monoalkyl ether	D
Propylene polymer *(in liquid mixtures)*	#
Propylene tetramer	B
Propylene trimer	B
•*Pseudocumene, see* **Trimethylbenzenes**	.....
•*Rum, see* Alcoholic beverages, n.o.s.	.....
•Sodium acetate, Glycol, Water **mixture (containing 1% or less, Sodium hydroxide)** (*if flammable or combustible*)	#
•Sodium acetate solution	**D**
•Sodium benzoate *solution*	**D**
Sodium long chain alkyl salicylate (C13+)	[C]
Soyabean oil (epoxidized)	[D]
•Stearic acid, *see* **Fatty acid (saturated, C13+)**	**III**
Stearyl alcohol *(octadecanol)*	III
Sulfohydrocarbon (C3–C88)	D
Sulfohydrocarbon, long chain (C18+) alkylamine	B
Sulfolane	**D**
Tallow	D
•Tallow alcohol, *see* Alcohols **(C13+)**	**III**
Tallow fatty acid	D
Tallow *alkyl* nitrile	#
•Tetradecanol, *see* **Alcohols (C13+)**	III
•*Tetradecene, see the olefin or alpha-olefin entries*	.....
•Tetradecylbenzene	**[D]**
Tetraethylene glycol	III
Tetrahydronaphthalene	C
•*Tetrapropylbenzene, see* Alkyl(**C9+**)benzenes	.....
Toluene	C
•Triarylphosphate, *see* **Triisopropylated phenyl phosphates**	A
Tributyl phosphate	B
Tricresyl phosphate (less than 1% of the ortho isomer)	A
•Tridecane, *see* **n-Alkanes (C10+)**	III
Tridecanoic acid	**B**
•*Tridecanol, see* Alcohols **(C13+)**	.....
•Tridecene, *see* **Olefins (C13+)**	III
Tridecyl acetate	III
•Tridecylbenzene	**[D]**
Triethylbenzene	A
Triethylene glycol	III

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Triethylene glycol butyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether**	**D**
Triethylene glycol butyl ether mixture	#
Triethylene glycol di-(2-ethylbutyrate)	[C]
Triethylene glycol ether mixture	#
•Triethylene glycol ethyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	D
•Triethylene glycol methyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	D
Triethyl phosphate	D
Triisooctyl trimellitate	#
Triisopropanolamine	III
Triisopropylated phenyl phosphates	A
Trimethylbenzene (all isomers)	**A**
Trimethylol propane polyethoxylate	D
•2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	**III**
2,2,4-Trimethyl-3-pentanol-1-isobutyrate	#
Tripropylene, *see* Propylene trimer	@B
Tripropylene glycol	III
•Tripropylene glycol methyl ether, *see* **Poly(2-8)alkylene glycol monoalkyl(C1–C6) ether**	D
Trixylenyl phosphate	A
Trixylyl phosphate, *see* Trixylenyl phosphate	A
Turpentine	B
•†Turpentine substitute, *see* White spirit (low (15–20%) aromatic)	@B
•*Undecanol, see 1*-Undecyl alcohol	.....
Undecene	B
•*1*-Undecyl alcohol	B
•Undecylbenzene	**[D]**
Vegetable oils, n.o.s. (*see also* Oil, edible)	D
Including:	
Beechnut oil	
Castor oil	
Cocoa butter	
Coconut oil	
Corn oil	
Cottonseed oil	
Groundnut oil	
Hazelnut oil	
Linseed oil	
Nutmeg butter	
Oiticica oil	
Olive oil	
Palm kernel oil	
Palm oil	
Peel oil (oranges and lemons)	
Perilla oil	
Poppy oil	
Raisin seed oil	
Rapeseed oil	
Rice bran oil	
Safflower oil	
Salad oil	
Sesame oil	
Soya bean oil	
Sunflower seed oil	
Tucum oil	
Tung oil	
Walnut oil	
Vegetable acid oils and distillates, n.o.s.	D

TABLE 30.25–1—LIST OF FLAMMABLE AND COMBUSTIBLE BULK LIQUID CARGOES—Continued

Cargoes	Pollution category
Including:	
Corn acid oil	
Cottonseed acid oil	
Dark mixed acid oil	
Groundnut acid oil	
Mixed acid oil	
Mixed general acid oil	
Mixed hard acid oil	
Mixed soft acid oil	
Rapeseed acid oil	
Safflower acid oil	
Soya acid oil	
Sunflower seed acid oil	
•Waxes:	**D**
Candelilla	@D
Carnauba	@D
Paraffin	III
•†*White spirit, see* White spirit (low (15–20%) aromatic)	
†White spirit (low (15–20%) aromatic)	B
•*Wine, see* Alcoholic beverages, n.o.s.	
Xylenes *(ortho-, meta-, para-)*	C
Zinc alkaryl dithiophosphate (C7–C16)	C
Zinc alkenyl carboxamide	D
Zinc alkyl dithiophosphate (C3–C14)	B

denotes newly added products.

Items with a bullet (•) or in **boldface** are changes since October 1, 1993.

NOTE: See table 2 of part 153 for additional cargoes permitted to be carried by tank barge.

Explanation of Symbols: As used in this table the following stands for:

A, B, C, D—NLS Category of Annex II of MARPOL 73/78.

I—Considered an ''oil'' under Annex I of MARPOL 73/78.

III—Appendix III of Annex II (non-NLS cargoes) of MARPOL 73/78.

LFG—Liquefied flammable gas.

#—No determination of NLS status. For shipping on an oceangoing vessel, see 46 CFR 153.900(c).

[ ]—A NLS category in brackets indicates that the product is provisionally categorized and that further data are necessary to complete the evaluation of its pollution hazards. Until the hazard evaluation is completed, the pollution category assigned is used.

@—The NLS category has been assigned by the U.S. Coast Guard, in absence of one assigned by the IMO. The category is based upon a GESAMP Hazard Profile or by analogy to a closely related product having an NLS assigned.

†—The provisions contained in 46 CFR part 197, subpart C, may apply to this cargo.

Abbreviations for Noxious liquid Cargoes:

N.F.—non-flammable (flash point greater than 60 degrees C (140 degrees F) cc).

F.—flammable (flash point less than or equal to 60 degrees C (140 degrees F) cc).

n.o.s.—not otherwise specified.

ST—Ship type.

Cat—Pollution category.

Words in italics are not part of the the cargo name but may be used in addition to the cargo name.

When one entry references another entry by use of the word ''*see*'', and both names are in roman type, either name may be used as the cargo name (e.g., Diethyl ether, *see* Ethyl ether). However, the referenced entry is preferred.

[CGD 81–101, 53 FR 28972, Aug. 1, 1988, as amended by CGD 88–100, 54 FR 40009, Sept. 29, 1989; CGD 88–100, 55 FR 17276, Apr. 24, 1990; CGD 88–040, 56 FR 52122, Oct. 17, 1991; CGD 92–100, 59 FR 17005, Apr. 11, 1994; CGD 94–900, 59 FR 45135, Aug. 31, 1994; CGD 94–902, 60 FR 34042, 34045, June 29, 1995; CGD 95–900, 60 FR 39267, Aug. 2, 1995]

§ 30.25–3 Benzene.

The provisions contained in 46 CFR part 197, subpart C, apply to liquid cargoes containing 0.5% or more benzene by volume.

[CGD 88–040, 56 FR 65006, Dec. 13, 1991]

Subpart 30.30—Interim Procedures for Evaluating Vessel Personnel Licensing and Certification Programs of Foreign Countries

SOURCE: CGD 79–081a, 45 FR 23427, Apr. 7, 1980, unless otherwise noted.

§ 30.30–1 Scope and purpose.

(a) This subpart contains procedures for evaluating vessel personnel licensing and certification programs of foreign countries. Evaluations are done for countries which license or certificate personnel serving on tank vessels that enter or operate in U.S. navigable waters and ports.

(b) The purpose of each evaluation is to determine whether a foreign licensing and certification program has standards that are comparable to or more stringent than U.S. standards.

(c) A determination that licensing and certification standards of a foreign country are not comparable to or more stringent than U.S. standards will subject tank vessels manned with officers licensed by that country to the prohibition in 33 U.S.C. 1228(a)(5) on operation with those officers in U.S. navigable waters and ports.

§ 30.30–3 Evaluation materials.

The materials to be submitted for evaluation must include the English text of the following:

(a) All laws, decrees, orders, and regulations relating to manning, training, qualification, and watchkeeping of personnel on tank vessels engaged in foreign trade.

(b) A copy of each type of license and certificate issued by the country to tank vessel personnel.

§ 30.30–5 Submission of evaluation materials.

(a) The evaluation materials listed in § 30.30–3 should be sent to Commandant (G–MOC), U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593. The materials should include the name and address of the person to whom correspondence concerning the evaluation can be sent.

(b) Updated materials may be submitted at any time during the evaluation process.

[CGD 79–081a, 45 FR 23427, Apr. 7, 1980, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

§ 30.30–7 Availability of materials.

Evaluation materials submitted in accordance with this subpart will be available for inspection and copying between 7:30 a.m. and 4:30 p.m., Monday through Thursday, except holidays, at Coast Guard Headquarters, room 1104, 2100 Second Street, SW., Washington, DC 20593. Telephone: (202) 267–2978.

[CGD 79–081a, 45 FR 23427, Apr. 7, 1980, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995]

§ 30.30–9 Evaluation.

Materials submitted in accordance with this subpart will be evaluated by comparison to the regulations in parts 5, 10, and 12 of this chapter, and by comparison to the U.S. laws referenced in those regulations.

§ 30.30–11 Determinations.

(a) After evaluation of materials submitted in accordance with this subpart, a determination will be made as to whether the licensing and certification program described by the materials has standards that are comparable to or more stringent than standards set by the regulations and laws referenced in § 30.30–9.

(b) Notice of each determination made in accordance with this section and a brief explanation of reasons therefor will be published in the FEDERAL REGISTER. A copy of this notice will also be sent to the person whose name is provided in accordance with § 30.30–5.

(c) Each determination remains in effect for 5 years unless sooner cancelled.

(d) Any request to reconsider a determination must be submitted to the address listed in § 30.30–5 and must include a statement of reasons in support. The person submitting the request will be notified in writing of the action taken.

PART 31—INSPECTION AND CERTIFICATION

Subpart 31.01—General

Sec.

31.01–1 Inspections required—TB/ALL.
31.01–5 Scope of initial inspection—TB/ALL.
31.01–10 Authority of marine inspectors—TB/ALL.
31.01–15 Application for inspection—TB/ALL.
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Subpart 31.05—Certificates of Inspection

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31.05–15 Certificate of inspection; terms; endorsements—TB/ALL.

Subpart 31.10—Inspections

31.10–1 Recognized classification society—TB/ALL.
31.10–5 Inspection of new tank vessels—TB/ALL.
31.10–10 Vessels converted to tank vessels—TB/ALL.
31.10–15 Inspection for certification—TB/ALL.
31.10–16 Inspection and certification of cargo gear—TB/ALL.
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31.10–19 All firefighting equipment may be tested—TB/ALL.
31.10–20 Definitions relating to hull examinations—T/B ALL.
31.10–21 Drydock examination, internal structural examination, cargo tank internal examination, and underwater survey intervals—TB/ALL.

31.01–21a Periodic gauging of tank vessel midbodies more than 30 years old that carry certain oil cargoes—TB/ALL.
31.10–22 Notice and plans required.
31.10–24 Integral fuel oil tank examinations—T/ALL.
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31.10–32 Loading information—TB/ALL.
31.10–33 Bulk grain cargoes—TB/ALL.
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31.10–40 Inspection during trial trip—T/ALL.
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Subpart 31.15—Manning of Tank Vessels

31.15–1 Licensed officers and crews—TB/ALL.
31.15–5 Tank barges—B/ALL.
31.15–10 Towing vessels may carry persons in addition to crew—B/LBR.

Subpart 31.20—Waters Operated Over

31.20–1 Waters—TB/ALL.

Subpart 31.25—Load Lines

31.25–1 Load lines required—TB/OCL.

Subpart 31.30—Marine Engineering

31.30–1 Marine engineering regulations and material specifications—TB/ALL.

Subpart 31.35—Electrical Engineering

31.35–1 Electrical installations, lighting and power equipment, batteries, etc.—TB/ALL.
31.35–5 Communications; alarm systems, telephone and voice tube systems, engine telegraph systems, etc.—TB/ALL.

Subpart 31.36—Lifesaving Appliances and Arrangements

31.36–1 Lifesaving appliances and arrangements—TB/ALL.

Subpart 31.37—Inspection of Cargo Gear

31.37–1 When made—TB/ALL.
31.37–3 Definitions of terms and words used in this subpart—TB/ALL.
31.37–5 Tests and examinations of shipboard cargo gear—TB/ALL.
31.37–15 Cargo gear plans required when plans are not approved by a classification society or recognized cargo gear organization—TB/ALL.
31.37–20 Cargo gear plans approved by a classification society—TB/ALL.
31.37–23 Cargo gear plans approved by a recognized cargo gear organization—TB/ALL.
31.37–25 Factors of safety.
31.37–30 Loose gear certificates and tests—TB/ALL.
31.37–35 Test and certification of wire rope—TB/ALL.
31.37–40 Proof test of cargo gear as a unit—TB/ALL.
31.37–45 Marking of booms and cranes—TB/ALL.
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31.37–60 Additions to gear—TB/ALL.
31.37–65 Alterations, renewals, or repairs of cargo gear—TB/ALL.
31.37–70 Responsibility of ship's officer for inspection of cargo gear—TB/ALL.
31.37–75 Records regarding cargo gear—TB/ALL.
31.37–80 Advance notice that cargo gear testing is desired—TB/ALL.
31.37–85 Responsibility for conducting required tests and examinations—TB/ALL.

Subpart 31.40—Certificates Under International Convention for Safety of Life at Sea, 1974

31.40–1 Application—T/ALL.
31.40–5 Cargo Ship Safety Construction Certificate—T/ALL.
31.40–10 Cargo Ship Safety Equipment Certificate—T/ALL.
31.40–15 Cargo Ship Safety Radiotelegraphy Certificate—T/ALL.
31.40–20 Cargo Ship Safety Radiotelephony Certificate—T/ALL.
31.40–25—Exemption Certificate—T/ALL.
31.40–35 Posting of Convention certificates—T/ALL.
31.40–40 Duration of Convention certificates—T/ALL.
31.40–45 American Bureau of Shipping—T/ALL.

AUTHORITY: 33 U.S.C. 1321(j); 46 U.S.C. 2103, 3306, 3703; 49 U.S.C. 5103, 5106; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; 49 CFR 1.46. Section 31.10–21a also issued under the authority of Sect. 4109, Pub. L. 101–380, 104 Stat. 515.

SOURCE: CGFR 65–50, 30 FR 16662, Dec. 30, 1965, unless otherwise noted.

Subpart 31.01—General

§ 31.01–1 Inspections required—TB/ALL.

(a) Every tank vessel subject to the regulations in this subchapter shall be inspected biennially, annually, or

oftener, if necessary, by the Coast Guard to see that the hull, boilers, machinery, equipment, apparatus for storage, and appliances of the vessel comply with marine inspection laws, and the regulations in this subchapter, and when applicable, subchapters E, F, J, O, Q, S, and W of this chapter and 33 CFR parts 155 and 157.

(b) Tank vessels which are laid up, dismantled, and out of commission are exempt from inspections required by law or regulations in this subchapter, provided that such vessels are cleaned of all cargo residue and maintained in a gas free condition.

(c) For inspection and tests of tanks containing certain dangerous cargoes in bulk, see part 98 and subchapter O of this chapter.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 70–10, 35 FR 3709, Feb. 25, 1970; CGD 80–009, 48 FR 36458, Aug. 11, 1983; CGD 79–023, 48 FR 51006, Nov. 4, 1983; CGD 84–069, 61 FR 25286, May 20, 1996]

§ 31.01–5 Scope of initial inspection—TB/ALL.

The initial inspection, which may consist of a series of inspections during the construction of a vessel, shall include a complete inspection of the structure, including the outside of the vessel's bottom, the machinery, unfired pressure vessels, equipment and the inside and outside of the boilers. The inspection shall be such as to insure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, piping, main and auxiliary machinery, electrical installations, lifesaving appliances, fire-detecting and extinguishing equipment, pilot boarding equipment and other equipment fully comply with the applicable regulations for such vessel and are in accordance with approved plans, and determine that the vessel is in possession of a valid certificate issued by the Federal Communications Commission, if any. The inspection shall be such as to ensure that the workmanship of all parts of the vessel and its equipment is in all respects satisfactory and that the vessel is provided with lights, means of making sound signals, and distress signals as required by applicable statutes and regulations.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGFR 68–82, 33 FR 18804, Dec. 18, 1968; CGD 82–036, 48 FR 654, Jan. 6, 1983; CGD 79–032, 49 FR 25455, June 21, 1984; CGD 95–012, 60 FR 48049, Sept. 18, 1995]

§ 31.01–10 Authority of marine inspectors—TB/ALL.

Inspectors may at any time lawfully inspect any tank vessel.

§ 31.01–15 Application for inspection—TB/ALL.

(a) Application in writing for the inspection incident to the issuance or reissuance of a certificate of inspection to every tank vessel required to be inspected by law and the regulations in this subchapter shall be made by the master, owner, or agent to the Officer in Charge, Marine Inspection, at any local marine inspection office, U.S. Coast Guard, where the vessel may be operated.

(b) The application should be on Form CG–3752, Application for Inspection of U.S. Vessel, which requires information on name and type of vessel, nature of employment and route in which to be operated, grade or type of cargo to be carried, place where and date when the vessel may be inspected, and that no other application has been made to any Officer in Charge, Marine Inspection, since the issuance of the last valid certificate of inspection.

§ 31.01–20 Application for inspection of a new tank vessel or conversion of a vessel to a tank vessel—TB/ALL.

Prior to the commencement of the construction of any new tank vessel, or prior to the commencement of the conversion of any vessel to a tank vessel, application for the approval of contract plans and specifications and for a certificate of inspection shall be made in writing to the Coast Guard and no such construction or conversion shall be proceeded with until such approval is granted. (See § 31.10–1.)

Subpart 31.05—Certificates of Inspection

§ 31.05–1 Issuance of certificate of inspection—TB/ALL.

(a) When a tank vessel is found to comply with the regulations in this subchapter, and applicable provisions of subchapters E, F, J, O, Q, S, and W of this chapter and 33 CFR parts 155 and 157, a certificate of inspection will be issued to it, or to its owners, by the Officer in Charge, Marine Inspection.

(b) Certificates of inspection for tank vessels shall be similar in form to certificates issued to other cargo vessels, and in addition to the manning requirements and waters over which they may be operated, they shall be appropriately endorsed *Inspected and approved for the carriage of flammable or combustible liquids of Grade A, B, C, D, or E* (as the case may be), and such endorsement shall serve as a permit for such vessel to operate. The endorsement for the carriage of liquefied flammable gases is set forth in § 38.01–5 of this subchapter.

(c) The certificate of inspection shall be delivered to the master or owner of the tank vessel to which it relates.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49024, Sept. 26, 1977; CGD 79–023, 48 FR 51006, Nov. 4, 1983; CGD 84–069, 61 FR 25286, May 20, 1996]

§ 31.05–5 Posting the certificate of inspection—TB/ALL.

The certificate of inspection shall be framed under glass and posted in a conspicuous part of the vessel, except that where it is not practicable to so expose the certificate of inspection it shall be carried in the vessel in such manner as authorized by the Officer in Charge, Marine Inspection.

§ 31.05–10 Period of validity of certificate of inspection—TB/ALL.

(a) Certificates of inspection will be issued for periods of either 1 or 2 years.

(b) Application may be made by the master, owner, or agent for inspection and issuance of a new certificate of inspection at any time during the period of validity of the current certificate.

(c) Certificates of inspection may be revoked or suspended by the Coast Guard where such process is authorized by law. This may occur if the vessel does not meet the requirements of law or regulations in this chapter or if there is a failure to maintain the safety requirements requisite to the issuance of a certificate of inspection.

[CGFR 68–82, 33 FR 18804, Dec. 18, 1968, as amended by CGD 95–012, 60 FR 48049, Sept. 18, 1995]

§ 31.05–15 Certificate of inspection; terms; endorsements—TB/ALL.

The terms, endorsements and conditions set forth on a certificate of inspection shall have the same force and effect as the regulations contained in this subchapter.

Subpart 31.10—Inspections

§ 31.10–1 Recognized classification society—TB/ALL.

(a) In the inspection of hulls, boilers, and machinery, the current standards established by the American Bureau of Shipping and designated *Rules for Building and Classing Steel Vessels* respecting material and construction of hulls, boilers, and machinery, except as otherwise provided for by law and regulations in this chapter, shall be accepted as standard by the Coast Guard.

(b) The current standards established by the American Bureau of Shipping in effect at the time of construction of the vessel, or otherwise as applicable, shall be used. The book *Rules for Building and Classing Steel Vessels* is usually published annually and may be purchased from the American Bureau of Shipping, Two World Trade Center, 106th Floor, New York, NY 10048. These standards may be also examined at the office of the Commandant (G–M), U.S. Coast Guard, Washington, DC 20593–0001, or at the office of any Coast Guard District Commander or Officer in Charge, Marine Inspection.

(c) The approved plans and certificate of the American Bureau of Shipping, or other recognized classification society for classed vessels, may be accepted by the Coast Guard as evidence of the structural efficiency of the hull and reliability of machinery of vessels subject to the regulations in this subchapter, except as otherwise provided

for by laws and regulations in this chapter.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGD 88–070, 53 FR 34533, Sept. 7, 1988; 53 FR 37570, Sept. 27, 1988; 53 FR 44011, Nov. 1, 1988; CGD 95–072, 60 FR 50461, Sept. 29, 1995]

§ 31.10–5 Inspection of new tank vessels—TB/ALL.

(a) *Plans.* Triplicate copies of contract plans and specifications shall be forwarded to the Officer in Charge, Marine Inspection, in whose district the construction will take place, for submission to Headquarters for approval, but if the tank vessel is to be classed, such plans and specifications shall first be approved by a recognized classification society. If the plans and specifications are found to be in substantial agreement with the regulations in this chapter, they shall be approved, properly stamped and dated and distributed as follows: One set to owner or builder; one set to Officer in Charge, Marine Inspection, of the district in which the vessel is to be built; and one set shall be retained at Headquarters. If such plans and specifications are not approved, Headquarters shall notify the owner or builder promptly wherein they fail to comply with the regulations in this chapter. For list of electrical plans see subchapter J (Electrical Engineering) of this chapter.

(1) The plans and specifications shall include the arrangement of the cargo gear. The principal details of the gear and the safe working load for each component part shall be shown. (See § 31.10–16 and subpart 31.37 for applicable requirements.)

(2) For vessels of 100 meters (328 feet) or more in length contracted for on or after September 7, 1990, a plan must be included which shows how visibility from the navigation bridge will meet the standards contained in § 32.16–1 of this subchapter.

(b) *Inspection.* During construction, and upon completion of each tank vessel, it shall be inspected by the Officer in Charge, Marine Inspection, to determine whether it has been built in accordance with the approved plans and specifications, and, if so, a certificate of inspection endorsed as a permit for the carriage of flammable or combustible liquids in bulk for the proper grade or grades of cargo shall be issued to the vessel or its owner.

(c) *Certificate of class may be accepted.* In the event such tank vessel is classed by the American Bureau of Shipping or other recognized classification society, the approved plans and certificates of such society may be accepted by the Coast Guard as evidence of the structural efficiency of the hull and reliability of machinery, except as otherwise provided for by law and the rules and regulations in this subchapter.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 74–125A, 47 FR 15230, Apr. 8, 1982; CGD 85–099, 55 FR 32247, Aug. 8, 1990]

§ 31.10–10 Vessels converted to tank vessels—TB/ALL.

The procedure for the inspection of vessels converted to tank vessels shall conform to the inspection for new tank vessels as called for in § 31.10–5(b), and such vessels shall comply with the requirements of inspections for converted vessels as set forth in the regulations in this subchapter.

§ 31.10–15 Inspection for certification—TB/ALL.

(a) The Officer in Charge, Marine Inspection, shall once in every 2 years, at least, carefully inspect such tank vessel within his jurisdiction and shall satisfy himself that every such vessel so inspected is of a structure suitable for the carriage of flammable and/or combustible liquids in bulk and for the proper grade or grades of such cargo in the service in which she is employed. If the Officer in Charge, Marine Inspection, deems it expedient, he may direct the vessel to be put in motion, and may adopt any other suitable means to test her sufficiency and that of her equipment.

(b) The inspection for certification shall include an inspection of the structure, boilers, and other pressure vessels, machinery and equipment. The inspection shall be such as to insure that the vessel, as regards the structure, boilers, and other pressure vessels and their appurtenances, piping, main and auxiliary machinery, electrical installations, life-saving appliances, fire-detecting and extinguishing equipment, pilot boarding equipment, and

other equipment is in satisfactory condition and fit for the service for which it is intended, and that it complies with the applicable regulations for such vessels, and determine that the vessel is in possession of a valid certificate issued by the Federal Communications Commission, if required. The lights, means of making sound signals, and distress signals carried by the vessel shall also be subject to the abovementioned inspection for the purpose of ensuring that they comply with the requirements of the applicable statutes and regulations.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGFR 68–82, 33 FR 18804, Dec. 18, 1968; CGD 82–036, 48 FR 655, Jan. 6, 1983; CGD 79–032, 49 FR 25455, June 21, 1984; CGD 95–012, 60 FR 48049, Sept. 18, 1995; CGD 95–027, 61 FR 25997, May 23, 1996]

§ 31.10–16 Inspection and certification of cargo gear—TB/ALL.

(a) An inspection of the cargo gear shall be required. The inspection may consist of tests and examinations to determine the condition and suitability of the cargo gear. Current valid certificates and registers of cargo gear, issued by recognized nonprofit organizations or associations approved by the Commandant may be accepted as prima facie evidence of the condition and suitability of the cargo gear. Cargo gear certificates and registers will not be issued by the Coast Guard.

(b) Every acceptable cargo gear certificate and/or register shall be properly executed by a person authorized to do so and shall:

(1) Certify as to the tests and examinations conducted;

(2) Show the dates on which the tests and examinations were conducted; and

(3) Indicate that the cargo gear therein described complies with standards equal to or exceeding those set forth in subpart 31.37.

(c) Competent persons for the purposes of this section and subpart 31.37 are:

(1) Coast Guard marine inspectors;

(2) Surveyors of the organizations or associations approved by the Commandant;

(3) Such other persons as are authorized by the regulations in subpart 31.37 as may be required; and,

(4) Responsible officials or employees of the testing laboratories, companies, or organizations who conduct tests of pieces of loose cargo gear, wire rope, or the annealing of gear as may be required.

(d) The registers issued in connection with cargo gear certification must have all required entries fully completed as of the dates indicated, shall be kept current, and shall include the following:

(1) A register of the cargo handling machinery and the gear accessory thereto carried on the vessel named therein;

(2) Certification of the testing and examination of winches, derricks, and their accessory gear;

(3) Certification of the testing and examination of cranes, hoists, and their accessory gear;

(4) Certification of the testing and examination of chains, rings, hooks, shackles, swivels, and blocks;

(5) Certification of the testing and examination of wire rope;

(6) Certification of the heat treatment of chains, rings, hooks, shackles, and swivels which require such treatment; and,

(7) Certification of the annual thorough examinations of gear not required to be periodically heat treated.

(e) It is the responsibility of the master to have a ship's officer inspect cargo gear when required by subpart 31.37. For those inspected vessels which do not have valid cargo gear certificates and registers as provided by this section, such vessels will be required to have their shipboard cargo gear undergo tests and inspections in accordance with the provisions of subpart 31.37.

§ 31.10–17 Reinspection—TB/ALL.

(a) At least one reinspection shall be made on each vessel holding a certificate of inspection valid for two years. This reinspection will be made, where possible, between the tenth and fourteenth month of the period for which the certificate is valid. No written application for reinspection will be required.

(b) The inspector shall examine all accessible parts of the vessel's hull, machinery, and equipment to be assured that it is in a satisfactory condition.

(c) In general, the scope of the reinspection shall be the same as for the inspection for certification, but will be in less detail unless it is determined that a major change has occurred since the last inspection.

(d) Nothing in this subpart shall be construed as limiting the inspector from making such tests or inspections as he deems necessary to be assured of the seaworthiness of the vessel.

(e) If the reinspection reveals deficiencies in the maintenance as called for by the regulations in this subchapter, such necessary repairs or improvements shall be made as may be ordered.

§ 31.10–18 Firefighting equipment: General—TB/ALL.

(a) It shall be the duty of the owner, master, or person in charge of a tank vessel to require and have performed at least once in every 12 months, the tests and inspections of all hand portable fire extinguishers, semiportable fire extinguishing systems, and fixed fire extinguishing systems on board, as described in paragraphs (b), (c), and (d) of this section. The owner, master, or person in charge shall keep records of such tests and inspections showing the dates when performed, the number and/or other identification of each unit tested and inspected, and the name(s) of the person(s) and/or company conducting the tests and inspections. Such records shall be made available to the marine inspector upon request and shall be kept for the period of validity of the vessel's current certificate of inspection. Where practicable, these records should be kept in or with the vessel's logbook. The conduct of these tests and inspections does not relieve the owner, master, or person in charge of his responsibility to maintain this firefighting equipment in proper condition at all times.

(b) The following tests and inspections of portable fire extinguishing equipment shall be made:

TABLE 31.10–18(b)

Type unit	Test
Soda acid	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge.
Foam	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge.
Pump tank (water or antifreeze).	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge with clean water or antifreeze.
Cartridge operated (water, antifreeze or loaded stream).	Examine pressure cartridge and replace if end is punctured or if cartridge is otherwise determined to have leaked or to be in unsuitable condition. Remove liquid, clean hose and inside of extinguisher thoroughly. Recharge with clean water, solution, or antifreeze. Insert charged cartridge.
Stored pressure (water, antifreeze or loaded stream).	See that pressure gage is in operating range. If not, or if seal is broken, weigh or otherwise determine that full charge is in extinguisher. Recharge if pressure is low or if extinguishing agent is needed.
Carbon dioxide	Weigh cylinders. Recharge if weight loss exceeds 10 percent of weight of charge. Inspect hose and nozzle to be sure they are clear.[1]
Dry chemical (cartridge-operated type).	Examine pressure cartridge and replace if end is punctured or if cartridge is otherwise determined to have leaked or to be in unsuitable condition. Inspect hose and nozzle to see if they are clear. Insert charged cartridge. Be sure dry chemical is freeflowing (not caked) and chamber contains full charge.
Dry chemical (stored pressure type).	See that pressure gage is in operating range. If not, or if seal is broken, weigh or otherwise determine that full charge of dry chemical is in extinguisher. Recharge if pressure is low or if dry chemical is needed.
Vaporizing liquid[2] (pump type).	Pump a few strokes into clean pail and replace liquid. Keep water out of extinguisher or liquid. Keep extinguisher completely full of liquid.
Vaporizing liquid[2] (stored pressure type).	See that pressure gage is in operating range. Weigh or check liquid level to determine that full charge of liquid is in extinguisher. Recharge if pressure is low or if liquid is needed.

[1] Cylinders must be tested and marked, and all flexible connections and discharge hoses of semi-portable carbon dioxide and halon extinguishers must be tested or renewed, as required by §§ 147.60 and 147.65 of this chapter.

[2] Vaporizing-liquid type fire extinguishers containing carbon tetrachloride or chlorobromomethane or other toxic vaporizing liquids shall be removed from all vessels.

(c) The following tests and inspections of fixed fire extinguishing equipment shall be made:

TABLE 31.10–18(c)

Type system	Test
Foam	Systems utilizing a soda solution shall have such solution replaced. In all cases, ascertain that powder is not caked.
Carbon dioxide	Weigh cylinders. Recharge if weight loss exceeds 10 percent of weight of charge.[1]

[1] Cylinders must be tested and marked, and all flexible connections on fixed carbon dioxide and halon extinguishers must be tested or renewed, as required by §§ 147.60 and 147.65 of this chapter.

(d) Deck foam systems shall be tested biennially by discharging foam for approximately 15 seconds from any nozzle designated by the marine inspector. It shall not be required to deliver foam from all foam outlets, but all lines and nozzles shall be tested with water to prove them to be clear of obstruction. Prior to the biennial inspection of deck foam systems utilizing a mechanical foam system, a representative sample of the foam liquid shall be submitted to the manufacturer who will issue a certificate indicating gravity, pH, percentage of water dilution and solid content.

(e) At each inspection for certification and at such other times as considered necessary, the inspector shall determine that all fire extinguishing equipment is in suitable condition and that the tests and inspections required by paragraphs (b) through (i) of this section have been conducted. In addition, the marine inspector may require such tests as are considered necessary to determine the condition of the equipment.

(f) On all fire extinguishing systems, all the piping, controls, valves, and alarms shall be checked by the marine inspector to ascertain that the system is in good operating condition.

(g) The fire main system shall be operated and the pressure checked at the most remote and highest outlets by the marine inspector. All fire hose shall be subjected to a test pressure equivalent to the maximum pressure to which they may be subjected in service, but not less than 100 p.s.i. The marine inspector shall check that the hose couplings are securely fastened in accordance with the regulations of this subchapter.

(h) At each inspection for certification and at such other times as considered necessary, all carbon dioxide cylinders for fixed, semiportable, and portable systems shall be examined and replaced if any corrosion is found. They shall also be checked by weighing to determine their contents, and if found to be more than 10 percent under the required contents of carbon dioxide, they shall be recharged.

(i) Steam smothering lines shall be tested with at least 50 pounds per square inch of air pressure or by blowing steam through the lines at the working pressure and a survey made for detecting corrosion and defects using hammer test or such other means as may be necessary.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGD 84–044, 53 FR 7748, Mar. 10, 1988]

§ 31.10–18a Liquefied gas vessels: additional firefighting equipment inspections.

(a) Once during each 12 month period after the month an original Certificate of Inspection is issued for a liquefied gas vessel under § 31.05–1, the master shall ensure that the firefighting systems required in part 154 of this chapter for a liquefied gas vessel meets the following:

(1) The exterior water spray system must past a water spray test.

(2) The dry chemical system must meet the manufacturer's specifications for—

(i) The amount of dry chemical powder; and

(ii) The pressure for nitrogen bottles.

(3) The piping, valves, and controls of the system must be operable.

(b) On the same date that the requirements under paragraph (a) of this section are met, the master shall record in the vessel's official logbook the following information:

(1) The date of the inspection.

(2) The identification of each device inspected.

(3) The name of the inspector.

[CGD 74–289, 44 FR 26006, May 3, 1979]

§ 31.10–19 All firefighting equipment may be tested—TB/ALL.

(a) During the inspection of firefighting equipment, the Officer in Charge, Marine Inspection, may require fire apparatus to be tested, and

used, except as provided under §§ 31.10–18(h) and 34.15–90(a) of this subchapter.

§ 31.10–20 Definitions relating to hull examinations—T/B ALL.

As used in this part—

(a) *Drydock examination* means hauling out a vessel or placing a vessel in a drydock or slipway for an examination of all accessible parts of the vessel's underwater body and all through-hull fittings, sea chests, sea valves, sea strainers, and valves for the emergency bilge suction.

(b) *Internal structural examination* means an examination of the vessel while afloat or in drydock and consists of a complete examination of the vessel's main strength members, including the major internal framing, the hull plating, voids, and ballast tanks, but not including cargo or fuel oil tanks.

(c) *Cargo tank internal examination* means an examination of the vessel while afloat or in drydock and consists of an examination of the internals of all cargo tanks; except, if the vessel is certificated to carry cargoes regulated under part 38 or subchapter O of this chapter, the cargo tank internal examination must be accomplished as specified in parts 38 and 151 of this chapter respectively.

(d) *Underwater survey* means the examination, while the vessel is afloat, of all accessible parts of the vessel's underwater body and all through-hull fittings, sea chests, sea valves, sea strainers, and valves for the emergency bilge suction.

[CGD 84–024, 52 FR 39649, Oct. 23, 1987, as amended at 53 FR 32229, Aug. 24, 1988]

§ 31.10–21 Drydock examination, internal structural examination, cargo tank internal examination, and underwater survey intervals—TB/ALL.

(a) Except as provided in paragraphs (b) through (g) of this section, each tank vessel must undergo drydock, internal structural, and cargo tank internal examinations as follows:

(1) Except under paragraph (a)(2) of this section, vessels that operate in salt water must be inspected in accordance with the intervals set forth in table 31.10–21(a). Where table 31.10–21(a) indicates a 2.5 year examination interval, it means a vessel must undergo two examinations within any five year period. No more than three years may elapse between any two examinations.

TABLE 31.10-21(a).--SALT WATER SERVICE VESSELS EXAMINATION INTERVALS IN YEARS

	Ship and single hull barge[9]	Double hull barge with internal framing[1]	Double hull barge with external framing[2]	Single hull barge with independent tanks[3, 9]	Wood hull ship and barge	Ship and single hull barge Grade D and E cargoes only[4, 9]	Double hull barge Grade D and E cargoes only[5]	Single hull asphalt barge[6, 9]	Double hull asphalt barge[7]
Drydock.....	2.5	5.0	5.0	5.0	2.5	2.5	5.0	2.5	5.0
Internal structural.....	2.5	2.5	2.5	2.5	5.0	5.0	2.5	10.0	2.5
Cargo tank internal..	[8]2.5	[8]5.0	[8]10.0	[8]10.0	[8]2.5	5.0	10.0	10.0	15.0

Notes:

[1]Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.

[2]Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the external tank surface accessible for examination from voids, double bottoms, and other similar spaces.

[3]Applicable to single hull tank barges with independent cargo tanks where the cargo tanks are not a contiguous part of the hull structure and which has adequate clearance between the tanks and between the tanks and the vessel's hull to provide access for examination of all tank surfaces and the hull structure.

[4]Applicable to single hull tankships and tank barges certificated for the carriage of Grade D and E cargoes only.

[5]Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of Grade D and E cargoes only.

[6]Applicable to single hull tank barges certificated for the carriage of asphalt only.

[7]Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.

[8]Or as specified in part 38 or 151 as applicable

[9]Enhanced survey requirements apply as specified in 33 CFR part 157.

(2) Vessels that operate in fresh water at least six months in every 12 month period since the last drydock examination must be examined in accordance with the intervals set forth in table 31.10–21(b). Where table 31.10–21(b) indicates a 2.5 year examination interval, it means a vessel must undergo two examinations within any five year period. No more than three years may elapse between any two examinations.

TABLE 31.10-21(b).-- FRESH WATER SERVICE VESSELS EXAMINATION INTERVALS IN YEARS

	Ship and single hull barge[9]	Double hull barge with internal framing[1]	Double hull barge with external framing[2]	Single hull barge with independent tanks[3, 9]	Wood hull ship and barge	Ship and single hull barge Grade D and E cargoes only[4, 9]	Double hull barge Grade D and E cargoes only[5]	Single hull asphalt barge[6, 9]	Double hull asphalt barge[7]
Drydock.....	5.0	10.0	10.0	10.0	2.5	5.0	10.0	5.0	10.0
Internal structural.....	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	5.0
Cargo tank internal..	[8]5.0	[8]5.0	[8]10.0	[8]10.0	[8]2.5	5.0	10.0	10.0	15.0

Notes:

[1]Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.

[2]Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the external tank surface accessible for examination from voids, double bottoms, and other similar spaces.

[3]Applicable to single hull tank barges with independent cargo tanks where the cargo tanks are not a contiguous part of the hull structure and which has adequate clearance between the tanks and between the tanks and the vessel's hull to provide access for examination of all tank surfaces and the hull structure.

[4]Applicable to single hull tankships and tank barges certificated for the carriage of Grade D and E cargoes only.

[5]Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of Grade D and E cargoes only.

[6]Applicable to single hull tank barges certificated for the carriage of asphalt only.

[7]Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.

[8]Or as specified in part 38 or 151 as applicable

[9]Enhanced survey requirements apply as specified in 33 CFR part 157.

(b) During each inspection or reinspection for certification, all wing voids, rakes, cofferdams, and other void spaces on tank barges must be opened and checked from on-deck for the presence of water or cargo indicating hull damage or cargo tank leakage. If water or cargo is not present, these spaces need not be gas freed, ventilated, cleaned, or otherwise prepared for personnel entry. If water or cargo is present, an internal structural examination may be required.

(c) If, during an internal structural examination, cargo tank internal examination, or underwater survey, damage or deterioration to the hull plating, structural members, or cargo tanks is discovered, the Officer in Charge, Marine Inspection, may require the vessel to be drydocked or otherwise taken out of service to further assess the extent of the damage and to effect permanent repairs.

(d) Vessels less than 15 years of age (except wooden hull vessels) that are in salt water service with a 2.5 year drydock interval (as indicated in table 31.10–21(a) of this section) or that are in fresh water service with a five year drydock interval (as indicated in table 31.10–21(b) of this section) may be considered for an underwater survey instead of alternate drydock examinations, provided the vessel is fitted with an effective hull protection system. Vessel owners or operators must apply to the Officer in Charge, Marine Inspection, for approval of underwater surveys instead of alternate drydock examinations for each vessel. The application must include the following information:

(1) The procedure to be followed in carrying out the underwater survey.

(2) The location where the underwater survey will be accomplished.

(3) The method to be used to accurately determine the diver location relative to the hull.

(4) The means that will be provided for examining sea chests, sea valves, and other through-hull fittings.

(5) The means that will be provided for taking shaft bearing clearances.

(6) The condition of the vessel, including the anticipated draft of the vessel at the time of the survey.

(7) A description of the hull protection system.

(e) Vessels otherwise qualifying under paragraph (d) of this section, that are 15 years of age or older may be considered for continued participation in the underwater survey program on a case-by-case basis, if—

(1) Before the vessel's next scheduled drydocking, the owner or operator submits a request for continued participation to Commandant (G–MOC);

(2) During the vessel's next drydocking after the request is submitted, no appreciable hull deterioration is indicated as a result of a complete set of hull gaugings; and

(3) The results of the hull gauging and the results of the Coast Guard drydock examination together with the recommendation of the Officer in Charge, Marine Inspection, are submitted to Commandant (G–MOC) for final approval.

(f) Each vessel which has not met with the applicable examination schedules in paragraphs (a) through (e) of this section because it is on a voyage, must undergo the required examinations upon completion of the voyage.

(g) The Commandant (G–MOC) may authorize extensions to the examination intervals specified in paragraph (a) of this section.

[CGD 84–024, 52 FR 39649, Oct. 23, 1987, as amended at 53 FR 32230, Aug. 24, 1988; 53 FR 34872, Sept. 8, 1988; CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 91–045, 61 FR 39792, July 30, 1996; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

EFFECTIVE DATE NOTES: 1. At 61 FR 39792, July 30, 1996, in § 31.10–21, Table 31.10–21(a) was revised, effective November 27, 1996. For the convenience of the user, the superseded text is set forth as follows:

§ 31.10–21 Drydock examination, internal structural examination, cargo tank internal examination, and underwater survey intervals—TB/ALL.

(a) * * *

(1) * * *

TABLE 31.10–21(a)—SALT WATER SERVICE VESSELS EXAMINATION INTERVALS IN YEARS

	Single hull ship and barge	Double hull barge with internal framing [1]	Double hull barge with external framing [2]	Single hull barge with independent tanks [3]	Wood hull ship and barge	Single hull ship and barge Grade D and E cargoes only [4]	Double hull barge Grade D and E cargoes only [5]	Single hull asphalt barge [6]	Double hull asphalt barge [7]
Drydock	2.5	5.0	5.0	5.0	2.5	2.5	5.0	2.5	5.0
Internal structural	2.5	2.5	2.5	2.5	5.0	5.0	2.5	10.0	2.5
Cargo tank internal	[8] 2.5	[8] 5.0	[8] 10.0	[8] 10.0	[8] 2.5	5.0	10.0	10.0	15.0

Notes:

[1] Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.

[2] Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the external tank surface accessible for examination from voids, double bottoms, and other similar spaces.

[3] Applicable to single hull tank barges with independent cargo tanks where the cargo tanks are not a contiguous part of the hull structure and which has adequate clearance between the tanks and between the tanks and the vessel's hull to provide access for examination of all tank surfaces and the hull structure.

[4] Applicable to single hull tank ships and tank barges certificated for the carriage of Grade D and E cargos only.

[5] Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of Grade D and E cargos only.

[6] Applicable to single hull tank barges certificated for the carriage of asphalt only.

[7] Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.

[8] Or as specified in part 38 or 151 as applicable.

* * * * *

EFFECTIVE DATE NOTES: 2. At 61 FR 39793, July 30, 1996, in § 31.10–21, Table 31.10–21(b) was revised, effective November 27, 1996. For the convenience of the user, the superseded text is set forth as follows:

§ 31.10–21 Drydock examination, internal structural examination, cargo tank internal examination, and underwater survey intervals—TB/ALL.

(a) * * *

(2) * * *

TABLE 31.10–21(b)—FRESH WATER SERVICE VESSELS EXAMINATION INTERVALS IN YEARS

	Single hull ship and barge	Double hull barge with internal framing [1]	Double hull barge with external framing [2]	Single hull barge with independent tanks [3]	Wood hull ship and barge	Single hull ship and barge grade D and E cargoes only [4]	Double hull barge grade D and E cargoes only [5]	Single hull asphalt barge [6]	Double hull asphalt barge [7]
Drydock	5.0	10.0	10.0	10.0	2.5	5.0	10.0	5.0	10.0
Internal structural	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	5.0
Cargo tank internal	[8] 5.0	[8] 5.0	[8] 10.0	[8] 10.0	[8] 2.5	5.0	10.0	10.0	15.0

Notes:

[1] Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.

[2] Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the external tank surface accessible for examination from voids, double bottoms, and other similar spaces.

[3] Applicable to single hull tank barges with independent cargo tanks where the cargo tanks are not a contiguous part of the hull structure and which has adequate clearance between the tanks and between the tanks and the vessel's hull to provide access for examination of all tank surfaces and the hull structure.

[4] Applicable to single hull tank ships and tank barges certificated for the carriage of grade D and E cargos only.

[5] Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of grade D and E cargos only.

[6] Applicable to single hull tank barges certificated for the carriage of asphalt only.

[7] Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.

[8] Or as specified in part 38 or 151 as applicable.

* * * * *

§ 31.10–21a Periodic gauging of tank vessel midbodies more than 30 years old that carry certain oil cargoes—TB/ALL.

(a) As used in this section, the term ''midbody'' means the 40-percent midship length (0.40L) of the tank vessel. The age of the midbody is determined from its year of original construction.

(b) Midbodies of all tank vessels certificated to carry a pollution category I oil cargo listed in 46 CFR Table 30.25–1 must undergo an initial gauging survey and periodic regauging surveys as follows:

(1) An initial midbody gauging survey must be accomplished no later than the next drydocking inspection after the midbody becomes 30 years old.

(2) Regaugings:

(i) Midbodies of double hull tank vessels, or single hull tank vessels with independent tanks, that operated in fresh water at least 6 months in every 12-month period since the last drydock examination must be regauged at intervals not exceeding 10 years;

(ii) Midbodies of all other tank vessels must be regauged at intervals not exceeding 5 years.

(c) The midbody gauging survey must be comprised of at least three transverse (girth) belts of deck, bottom, side, inner hull, trunk, and longitudinal bulkhead plating and attached longitudinal members. The number and specific locations of the gauging points shall be to the satisfaction of the Officer in Charge of Marine Inspection (OCMI).

(d) Except as provided in paragraph (f) of this section, within 60 days of the vessel's required compliance date the owner or operator shall submit the following to the OCMI that issued the vessel's current Certificate of Inspection:

(1) The gauging survey results.

(2) An engineering analysis signed by a registered Professional Engineer licensed by any state of the United States or the District of Columbia, or signed by a Coast Guard-approved organization, that—

(i) Certifies the vessel's compliance with the minimum section modulus and plating thickness requirements of subpart 32.59 of this chapter; or

(ii) Proposes structural repairs and/or modifications that will bring the vessel up to the required strength standards.

(e) The vessel owner or operator shall keep a permanent copy of the Coast Guard-approved gauging report available for inspection by the OCMI.

(f) Instead of the submittals required by paragraphs (c) and (d) of this section, current classification with the American Bureau of Shipping or another recognized classification society, or a load line certificate issued in accordance with the International Convention on Load Lines or the International Voyage Load Line Act, may be submitted as evidence of compliance with the requirements of this section.

[CGD 91–209, 58 FR 52602, Oct. 8, 1993]

§ 31.10–22 Notice and plans required.

(a) The master, owner, operator, or agent of the vessel shall notify the Officer in Charge, Marine Inspection, whenever the vessel is to be drydocked regardless of the reason for drydocking.

(b) Each vessel, except barges, that holds a Load Line Certificate must have on board a plan showing the vessel's scantlings. This plan must be made available to the Coast Guard marine inspector whenever the vessel undergoes a drydock examination, internal structural examination, cargo tank internal examination, or underwater survey or whenever repairs are made to the vessel's hull.

(c) Each barge that holds a Load Line Certificate must have a plan showing the vessel's scantlings. The plan need not be maintained on board the barge but must be made available to the Coast Guard marine inspector whenever the barge undergoes a drydock examination, internal structural examination, cargo tank internal examination or underwater survey or whenever repairs are made to the barge's hull.

[CGD 84–024, 52 FR 39651, Oct. 23, 1987]

§ 31.10–24 Integral fuel oil tank examinations—T/ALL.

(a) Each fuel oil tank with at least one side integral to the vessel's hull and located within the hull (*integral fuel oil tank*) is subject to inspection as provided in this section. The owner or

operator of the vessel shall have the tanks cleaned out and gas freed as necessary to permit internal examination of the tank or tanks designated by the marine inspector. The owner or operator shall arrange for an examination of the fuel tanks of each vessel during an internal structural examination at intervals not to exceed five years.

(b) Integral non-double-bottom fuel oil tanks need not be cleaned out and internally examined if the marine inspector is able to determine by external examination that the general condition of the tanks is satisfactory.

(c) Double-bottom fuel oil tanks on vessels less than 10 years of age need not be cleaned out and internally examined if the marine inspector is able to determine by external examination that the general condition of the tanks is satisfactory.

(d) All double-bottom fuel oil tanks on vessels 10 years of age or older but less than 15 years of age need not be cleaned out and internally examined if the marine inspector is able to determine by internal examination of at least one forward double-bottom fuel oil tank, and by external examination of all other double-bottom fuel oil tanks on the vessel, that the general condition of the tanks is satisfactory.

(e) All double-bottom fuel oil tanks on vessels 15 years of age or older but less than 25 years of age need not be cleaned out and internally examined if the marine inspector is able to determine by internal examination of at least one forward, one amidships, and one aft double-bottom fuel oil tank, and by external examination of all other double-bottom fuel oil tanks on the vessel, that the general condition of the tanks is satisfactory.

(f) All double-bottom fuel oil tanks on vessels 25 years of age or older need not be cleaned out and internally examined if the marine inspector is able to determine by internal examination of at least one double-bottom fuel oil tank in way of each cargo tank, and by external examination of all other double-bottom fuel oil tanks, that the general condition of the tanks is satisfactory.

[CGD 84–024, 52 FR 39651, Oct. 23, 1987, as amended at 53 FR 32230, Aug. 24, 1988]

§ 31.10–25 Inspection covering repairs and alterations involving safety—TB/ALL.

No extensive alterations involving the safety of a tank vessel either in regard to hull or machinery shall be made without the approval of the Commandant. Before such alterations are carried out, copies of plans and specifications in triplicate for the work involved shall be forwarded to the Officer in Charge, Marine Inspection, in whose zone the repairs will be made, for submission to Headquarters for approval. If approved one set of the plans and specifications, properly stamped and dated, shall be returned to the owner or to the repair yard designated by the owner; one set to the Officer in Charge, Marine Inspection, who forwarded the plans and specifications to Headquarters; and one set shall be retained at Headquarters. If such plans and specifications are not approved, the Commandant shall promptly notify the owner or designated shipyard wherein they fail to comply with the regulations in this chapter. No extensive repairs to the hull or machinery which affect the safety of a vessel shall be made without the knowledge of the Officer in Charge, Marine Inspection.

§ 31.10–30 Stability requirements—TB/ALL.

Each tank vessel must meet the applicable requirements in subchapter S of this chapter.

[CGD 79–023, 48 FR 51006, Nov. 4, 1983]

§ 31.10–32 Loading information—TB/ALL.

(a) This section applies to each tankship and tank barge the construction of which begins on or after September 6, 1977.

(b) Each tank vessel over 300 feet in length must have the loading information prescribed in either § 42.15–1(a) or § 45.105(a) of this chapter. For tank vessels subject to the Load Line Acts the information must be approved by the Commandant or by a recognized classification society that is approved by the Commandant. For tank vessels not subject to the Load Line Acts loading information must be approved by the Commandant. If the vessel is a tankship, the approved information must be

provided to the master of the vessel. If the vessel is a tank barge, the information must be provided to the person in charge of handling the cargo during loading or off-loading of the barge.

[CGD 75–041, 42 FR 28887, June 6, 1977; 42 FR 35650, July 11, 1977]

§ 31.10–33 Bulk grain cargoes—TB/ALL.

(a) Tank vessels that are designed to carry bulk liquids and that have two or more longitudinal divisions may carry grain in bulk if each tank, other than one pair of wing tanks, is trimmed full; or

(1) The owner submits calculations to either the Commandant or the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007–2914, showing that under the most unfavorable loading conditions, the vessel will not heel more than 5 degrees due to a grain shift having a resulting grain surface of 12 degrees to the horizontal; and

(2) The master complies with part C of the Annex to International Maritime Organization (IMO, formerly Inter-Governmental Maritime Consultative Organization or IMCO) Resolution A.264(VIII), where applicable. As used in Resolution A.264 (VIII), the term *Administration* means *U.S. Coast Guard*. Copies of Resolution A.264(VIII) may be obtained from the National Cargo Bureau, Inc., 30 Vesey Street, New York, NY 10007–2914, the Commandant (G–M), U.S. Coast Guard, Washington, DC 20593–0001; or the office of any Coast Guard District Commander or Officer in Charge, Marine Inspection. The provisions of IMO Resolution A.264 (VIII) are published separately in U.S. Coast Guard Navigation and Inspection Circular No. 3–75 dated August 20, 1975.

(b) Notwithstanding the provisions of 46 CFR 56.50–50, bilges must be properly prepared and sounding pipes in place, clear and operable. If bilges are not present, suctions must be boxed.

(c) The vessel must comply with 46 CFR 93.20–15.

(d) Tank vessels that carry grain in bulk, but that do not meet the requirements of paragraph (a) of this section, must meet the requirements of 46 CFR 93.20.

[CGD 74–182, 40 FR 36343, Aug. 20, 1975, as amended by CGD 80–123, 45 FR 64586, Sept. 30, 1980; CGD 82–072, 47 FR 28677, July 1, 1982; CGD 82–063b, 48 FR 4781, Feb. 3, 1983; CGD 88–070, 53 FR 34533, Sept. 7, 1988; CGD 95–072, 60 FR 50461, Sept. 29, 1995]

§ 31.10–35 Permit to proceed to another port for repair—TB/ALL.

(a) The Officer in Charge, Marine Inspection, may issue a permit to proceed to another port for repair, Form CG–948, to a vessel if in his judgment it can be done with safety even if the certificate of inspection of the vessel has expired or is about to expire.

(b) Such permit will only be issued upon the written application of the master, owner or agent of the vessel.

(c) The permit will state upon its face the conditions under which it is issued and whether or not the vessel is permitted to carry freight or passengers. Passengers may not be carried if the certificate of inspection has expired.

(d) The permit shall be carried in a manner similar to that described in § 31.05–5 for a certificate of inspection.

§ 31.10–40 Inspection during trial trip—T/ALL.

On the trial trip of each new or converted tankship, an inspector shall be present to observe from the standpoint of safety in the carriage of flammable and/or combustible liquids in bulk, the operation of boilers, engines, steering gear, and auxiliaries; and if not satisfied with the performance of such boilers and machinery, appliances, and apparatus for stowage, he shall make such requirements as in his judgment will overcome any deficiencies which may have come under his observation.

§ 31.10–45 Inspection of crew accommodations—TB/ALL.

Crew's quarters shall be inspected to determine their sanitary condition. The Officer in Charge, Marine Inspection, upon completing such inspection, shall notify the master or officer in charge of the vessel of his findings, which shall be entered in the vessel's log book.

§ 31.10–50 Inspection of bilges—TB/ALL.

(a) When inspecting oil-burning vessels, either internal-combustion type or steam-driven type, the marine inspector shall examine the tank tops and bilges in the fireroom and engineroom to see that there is no accumulation of oil which might create a fire hazard.

Subpart 31.15—Manning of Tank Vessels

§ 31.15–1 Licensed officers and crews—TB/ALL.

The Officer in Charge, Marine Inspection (OCMI), that inspects the vessel enters on the Certificate of Inspection (COI) for each tank vessel the complement of officers and crew that are required by statute and regulation and that in the judgment of the OCMI are necessary for its safe operation. The OCMI may change the complement from time to time by endorsement to the COI for changes in conditions of employment.

[CGD 79–116, 60 FR 17155, Apr. 4, 1995]

§ 31.15–5 Tank barges—B/ALL.

Tank barges subject to the provisions of this subchapter need not be manned unless, in the judgment of the Officer in Charge, Marine Inspection, such manning is necessary for the protection of life and property and for the safe operation of the vessel.

[CGD 81–059, 54 FR 151, Jan. 4, 1989]

§ 31.15–10 Towing vessels may carry persons in addition to crew—B/LBR.

(a) Towing vessels engaged in towing tank barges on the Great Lakes, inland waters, or rivers, may be authorized by the Coast Guard District Commander of the district to carry on board such number of persons in addition to its crew as shall be deemed necessary to carry on the legitimate business of such towing vessel or barge, not exceeding, however, one person to every net ton of the towing vessel.

(b) A Coast Guard District Commander granting a license to a vessel engaged in towing to carry persons in addition to its crew shall notify the Officer in Charge, Marine Inspection, in whose jurisdiction the vessel receiving the permit is engaged, and the Officer in Charge, Marine Inspection, shall keep a record of the same.

Subpart 31.20—Waters Operated Over

§ 31.20–1 Waters—TB/ALL.

The certificate of inspection shall show the waters over which the tank vessel is permitted to operate, such as: all waters; oceans; coastwise; Great Lakes; bays, sounds, and lakes other than the Great Lakes; rivers; or inland waters tributary to the Gulf of Mexico.

Subpart 31.25—Load Lines

§ 31.25–1 Load lines required—TB/OCL.

All tank vessels of 150 gross tons or over, or 79 feet in length or greater, navigating the oceans, coastwise waters, and Great Lakes are subject to the regulations in parts 42 to 45, inclusive, subchapter E (Load Lines), of this chapter, as applicable.

[CGFR 69–72, 34 FR 17481, Oct. 29, 1969]

Subpart 31.30—Marine Engineering

§ 31.30–1 Marine engineering regulations and material specifications—TB/ALL.

(a) All tank vessels are subject to the regulations contained in parts 50 to 63, inclusive, of subchapter F (Marine Engineering) of this chapter, whenever applicable, except as such regulations are modified by the regulations in this subchapter for tank vessels.

[CGFR 68–82, 33 FR 18804, Dec. 18, 1968]

Subpart 31.35—Electrical Engineering

§ 31.35–1 Electrical installations, lighting and power equipment, batteries, etc.—TB/ALL.

All tank vessels are subject to the regulations contained in subchapter J (Electrical Engineering) of this chapter except as such regulations are modified

by the regulations in this subchapter for tank vessels.

§ 31.35–5 Communications; alarm systems, telephone and voice tube systems, engine telegraph systems, etc.—TB/ALL.

All tank vessels are subject to the regulations contained in subchapter J (Electrical Engineering) of this chapter except as such regulations are modified by the regulations in this subchapter for tank vessels.

Subpart 31.36—Lifesaving Appliances and Arrangements

§ 31.36–1 Lifesaving appliances and arrangements—TB/ALL.

All lifesaving appliances and arrangements on tank vessels must be in accordance with subchapter W (Lifesaving Appliances and Arrangements) of this chapter.

[CGD 84–069, 61 FR 25286, May 20, 1996]

Subpart 31.37—Inspection of Cargo Gear

§ 31.37–1 When made—TB/ALL.

(a) The specific tests and examinations shall be made at the intervals stated in the regulations in this subpart.

(b) A thorough examination of the assembled gear shall be made at least once in every year.

(c) An inspection to determine the condition and suitability of shipboard cargo gear will be made by a marine inspector at each inspection for certification. Inspections may be made at such other times as considered necessary by the Officer in Charge, Marine Inspection.

(d) For vessels fitted with cargo gear, an initial inspection of the assembled units under proof loads shall be conducted, followed by a complete dismantling or disassembling of such gear and a thorough examination of the parts to ascertain its condition. Subsequent tests of the assembled units under proof loads, followed by a dismantling or disassembling of such gear and a thorough examination shall be made once every five years, or oftener if necessary.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 87–089, 55 FR 21550, May 25, 1990]

§ 31.37–3 Definitions of terms and words used in this subpart—TB/ALL.

(a) *Cargo gear.* The term *cargo gear* includes masts, stays, booms, winches, cranes, elevators, conveyors, standing and running gear forming that part of the shipboard cargo gear used in connection with the loading or unloading of dry cargo. This term does not include the gear used for handling cargo hoses or ship stores' only.

(b) *Dismantling or disassembling of gear.* The *dismantling* or *disassembling* of gear contemplated is the taking apart of units of gear to the extent necessary to determine the suitability of such gear for continued service and as may be specifically required to carry out the intent of a particular provision in this subpart. After proof load tests, the disassembling need not include the sheaves and pins of the blocks included in the test unless there appears to be evidence of deformation or failure.

(c) *Thorough examination.* The *thorough examination* contemplated is a visual examination, supplemented if necessary by other means such as by a hammer test or by a test with electronic or ultrasonic devices.

(d) *Ton.* The word *ton* means a ton of 2,240 pounds.

(e) *Safe working load.* The *safe working load* (SWL) contemplated is the load the gear is approved to lift, excluding the weight of the gear itself.

§ 31.37–5 Tests and examinations of shipboard cargo gear—TB/ALL.

(a) For vessels fitted with cargo gear and without valid cargo gear certificates and registers issued by organizations or associations recognized by the Coast Guard, inspections shall be made by those competent persons described in paragraphs (c) (1) and (2) of § 31.10–16, to determine the condition and suitability of the shipboard cargo gear. For the initial and subsequent fifth year inspections, all the cranes, winches, hoists, derrick booms, derrick and

mast bands, and all parts used in loading or unloading cargo shall be assembled in units and such assembled units shall then be tested under proof loads. The proof loads shall be handled for various types of units as required by specific regulations in this subpart. After the proof load tests of the assembled units of gear have been made, such gear shall be disassembled or dismantled so as to permit them to be thoroughly examined. The sheaves and pins of the blocks included in these proof load tests need not be removed unless there appears to be evidence of deformation or failure.

(b) For vessels fitted with cargo gear and holding valid cargo gear certificates and registers issued by organizations or associations recognized by the Coast Guard, the marine inspectors may accept such certificates as prima facie evidence of compliance with the requirements in this subpart. If an Officer in Charge, Marine Inspection, is in doubt as to the condition and suitability of shipboard cargo gear for such a vessel, the tests and examinations, or such portions thereof as deemed necessary, provided for in this subpart will be required.

(c) If any part or portion of the gear fails or becomes defective during such tests, such defective equipment shall be satisfactorily repaired or replaced.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 87–089, 55 FR 21550, May 25, 1990]

§ 31.37–15 Cargo gear plans required when plans are not approved by a classification society or recognized cargo gear organization—TB/ALL.

(a) For a new vessel or vessel applying for initial inspection, the following plans of cargo gear are required to be submitted in triplicate to the Officer in Charge, Marine Inspection, for approval:

(1) Plans showing a stress diagram with the principal details of the gear.

(2) Plans containing a diagram showing the arrangement of the assembled gear and indicating the safe working load for each component part.

(b) The safe working load on which the design of any component part of the cargo gear is to be based, shall be taken as the maximum resultant load upon the component part in the design conditions assumed. The safe working load of the assembly is the load the gear is approved to lift, excluding the weight of the gear itself.

(c) One approved copy of each set of cargo gear plans shall be retained on the vessel.

§ 31.37–20 Cargo gear plans approved by a classification society—TB/ALL.

(a) The plans required by § 31.37–15 (a) need not be submitted to the Officer in Charge, Marine Inspection, for approval if such plans are or have been approved by the American Bureau of Shipping or similar classification society recognized by the Commandant.

(b) One approved copy of each set of cargo gear plans shall be retained on the vessel.

§ 31.37–23 Cargo gear plans approved by a recognized cargo gear organization—TB/ALL.

(a) The plans required by § 31.37–15 (a) need not be submitted to the Officer in Charge, Marine Inspection, for approval if such plans are or have been approved by a recognized cargo gear organization listed in paragraph (b) of this section.

(b) The following cargo gear organizations are recognized as having the technical competence to handle the required review of cargo gear plans, including stress and arrangement diagrams, and this recognition will continue in effect until suspended, canceled, or modified by proper authority:

(1) International Cargo Gear Bureau, Inc., with home office at 17 Battery Place, New York, NY 10004.

(c) One approved copy of each set of cargo gear plans shall be retained on the vessel.

[33 FR 14703, Oct. 2, 1968]

§ 31.37–25 Factors of safety.

(a) Except as provided in paragraph (b) of this section, in the design of cargo gear, the minimal safety factors in Table 31.37–25(a) must be used to meet the requirements of § 31.37–15.

(b) The Commandant may permit the use of safety factors different than those in Table 31.37–25(a) in the design of cargo gear that he considers special.

TABLE 31.37–25(a)

Safe working loads for component parts	Safety factors based on[1]—		
	Ultimate strength	Yield point	Breaking test load
All metal structural parts except steel booms, stayed masts, pins and connections:			
5 tons or less working load of the assembled gear	5.00	[2]2.75	.....
15 tons working load of the assembled gear	4.00	[2]2.20	.....
60 tons or more working load of the assembled gear	3.75	[2]2.05	.....
Steel booms:			
10 tons or less working load of the assembled gear	.....	3.00	.....
13 tons or more working load of the assembled gear	.....	2.50	.....
Stayed masts:			
10 tons or less working load of assembled gear	5.00	.....	.....
13 tons or more working load of assembled gear	4.00	.....	.....
Pins and connections:			
10 tons or less working load of assembled gear	.....	[2]3.00	.....
13 tons or more working load of assembled gear	.....	[2]2.50	.....
Wire rope:			
10 tons or less working load	.....	.....	5.00
13 tons or more working load	.....	.....	4.00
Fiber rope:			
For running rigging	7.00	.....	.....
For fixed gear and vangs	5.00	.....	.....
Wooden structural parts	8.00	.....	.....
Chains	4.50	.....	.....

[1] Intermediate values of safety factors may be used.
[2] The minimum yield point for design purposes shall not be considered greater than 72 percent of the minimum ultimate strength of the steel.

[CGD 72–150R, 37 FR 20826, Oct. 5, 1972; 37 FR 21816, Oct. 14, 1972]

§ 31.37–30 Loose gear certificates and tests—TB/ALL.

(a)(1) Evidence of compliance with the proof load test requirements in this section for all chains, rings, hooks, links, shackles, swivels, blocks, and any other loose gear whether accessory to a machine or not, but which is used as ship's cargo gear, shall be listed on an appropriate certificate.

(2) This evidence of test and the recording thereof is required only once with respect to each article of gear so long as each article is identified and the certificates required are available on the vessel.

(3) Proof loads applied to the articles of loose gear shall be as shown in Table 31.37–30(a)(3).

(b) All chains, rings, hooks, links, shackles, swivels, blocks and any other loose gear, whether accessory to a machine or not, but which are used or intended for use as ship's cargo gear, shall bear a mark or number by which each piece can be identified when listed on a loose gear certificate. The safe working load ''SWL'' shall be marked on all blocks.

(c) The loose gear certificate shall show the distinguishing number or mark applied to the article of gear; a description of the article of gear; the date when the test proof load was applied; and the safe working load. The forms for loose gear certificates shall be as prescribed by and acceptable to associations or organizations approved by the Commandant and shall be suitable for the purposes described in this section.

(d) After being tested, all of the gear shall be examined to ascertain whether any part has been damaged, permanently deformed by the test, or has other visible defects. The pins and sheaves of all tested blocks shall be removed for this purpose. If damaged during these tests, such gear shall be satisfactorily repaired or replaced.

(e) The required examinations as set forth in paragraph (d) of this section may be accomplished by mechanical, electrical or other means provided the method employed is equal in efficiency to the visual examination of disassembled gear.

TABLE 31.37–30(a)(3)

Articles of gear	Proof load
Chains, rings, hooks, links, shackles, swivels.	Twice the safe working load.
Single sheave block	Four times the safe working load.[1]
Multiple sheave block with safe working load up to and including 20 tons.	Twice the safe working load.
Multiple sheave block with safe working load over 20 tons up to and including 40 tons.	20 tons in excess of the safe working load.
Multiple sheave block over 40 tons	One and a half times the safe working load.

TABLE 31.37–30(a)(3)—Continued

Articles of gear	Proof load
Chain fall blocks used with roller chains (pitched chains), and rings, hooks, shackles, or swivels permanently attached thereto.	Do.

[1] The proof load applied to the block is equivalent to twice the maximum resultant load on the eye or pin when lifting the safe working load attached to a rope which passes around the sheave of the block. The proof load is, therefore, equal to four times the safe working load or twice the safe working load when the load is attached directly to the block instead of a rope passing around the sheave.

§ 31.37–35 Test and certification of wire rope—TB/ALL.

(a) All wire rope used as shipboard cargo gear shall be able to withstand a breaking test load of at least five times the safe working load. In the case of gear with a lifting capacity of over 10 tons, the breaking test load of wire rope shall be at least four times the safe working load. All wire rope shall be identified and described in a wire rope certificate. Such certificate shall be furnished and attested to by the manufacturer or a testing agency and shall certify:

(1) The breaking test load of a sample of the wire rope, which should be at least five times the safe working load or at least four times the safe working load if part of gear with a lifting capacity of over 10 tons;

(2) The name and address of the manufacturer;

(3) The diameter of the rope in inches and/or fractions thereof;

(4) The number of strands and the number of wires in each strand;

(5) The quality of the wire (e.g., improved plow steel);

(6) The date of the test; and,

(7) The load at which the sample broke.

(b) The forms for the wire rope certificate shall be prescribed by and acceptable to associations or organizations approved by the Commandant and shall be suitable for the purposes described in this section.

(c) In addition to the manufacturers' or testing agencies' attestations, a sample of the wire rope may be tested to destruction if required by the marine inspector when a visual inspection indicates an apparent defective condition.

§ 31.37–40 Proof test of cargo gear as a unit—TB/ALL.

(a) Winches with their accessory gear, including the derricks and attachments, at least once in each five years, shall be tested as a unit with proof loads exceeding the safe working load as set forth in Table 31.37–40(a).

TABLE 31.37–40(a)

Safe working load of assembled gear	Proof load
Not exceeding 20 tons	25 percent in excess.
Over 20 tons but not exceeding 50 tons.	5 tons in excess.
Over 50 tons	10 percent in excess.

(b) The proof load applied to winches and their gear shall be lifted with the ship's normal tackle, including the winches, and with the boom at an angle which should not be greater than 15 degrees to the horizontal or to the lowest angle approved in association with the design, or when these angles are impracticable, to the lowest practicable angle. When the load has been lifted, it shall be swung as far as possible in both directions.

(1) Where electrical winches are fitted with electromagnetic brakes, or where electrohydraulic winches are fitted with electromagnetic or hydraulic brakes at the winch, mechanical brakes for manual operation will not be required, but if so fitted shall be in satisfactory operating condition.

(2) Current for electric winch operation during the test shall be taken from the ship's circuits. Shore current may be used if it passes through the ship's switchboard.

(c) Cranes and other hoisting machines with their accessory gear at least once in each five years, shall be tested, with a proof load which shall exceed the safe working load as set forth in Table 31.37–40(a).

(d) The proof load applied to cranes and hoists shall be lifted, topped, and swung (slewed) as far as possible in each direction. If the boom of the crane has a movable radius, it shall be tested with a proof load as set forth in this section at the maximum and minimum radii of the boom. In the case of hydraulic cranes whose capacity is limited by pressure, and with which it is not possible to lift a load 25 percent in excess of the safe working load, the

greatest possible load in excess of the safe working load shall be used. These tests and the amounts of the loads shall be recorded.

(e) After satisfactory completion of the proof load testing of the cargo gear in accordance with paragraphs (a) through (d) of this section, the cargo gear and all component parts shall be given a thorough visual examination, supplemented as necessary by other means such as a hammer test or with electronic or ultrasonic devices, to determine if any of the parts were damaged, deformed, or otherwise rendered unsafe for further use. If found defective, such gear shall be replaced.

(1) When the test is being conducted for the first time on a vessel, accessory gear shall be dismantled or disassembled for examination after the test. The sheaves and pins of the blocks included in this test need not be removed unless there appears to be evidence of deformation or failure.

(2) For subsequent tests such parts of the machinery and gear shall be dismantled and/or disassembled after the test as necessary to determine its suitability for continued service.

(f) Appropriate means shall be provided to prevent the foot of the boom from being accidentally lifted from the socket during the test.

(g) Vessels whose cargo gear has been in use but are without the valid registers and certificates described in § 31.10–16 will be inspected for defective cargo gear. The gear shall then be tested and examined as prescribed in this section. If the movable weights for proof testing are not reasonably available, a spring or hydraulic scale certified for accuracy may be used. Whenever such scales are used, the proof load shall be applied with the boom swung out as far as possible in one direction and then in the other direction, and at such intermediate positions as may be indicated. At any position, the indicator of the scale must maintain a constant reading under the proof load for a period of five minutes.

(h) On all types of winches and cranes efficient means shall be provided to stop and hold the proof load in any position, and the efficiency of such means shall be demonstrated.

(1) Electric winches, electrohydraulic winches fitted with electromagnetic or hydraulic brakes at the winch, or cranes shall be equipped so that a failure of the electric power shall stop the motion and set the brakes without any action on the part of the operator.

(2) Current for electric winches and cranes operation during the tests shall be taken from the ship's circuits. Shore current may be used if it passes through the ship's switchboard.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 87–089, 55 FR 21550, May 25, 1990]

§ 31.37–45 Marking of booms and cranes—TB/ALL.

(a) The safe working load (abbreviated ''SWL'') for the assembled gear shall be marked on the heel of each boom, with the minimum angle to the horizontal for which the gear is designed. These letters and figures shall be in contrasting colors to the background and at least one inch in height.

(b) Where booms are rated at varying capacities depending on the radii, tables indicating the maximum safe working loads for the various working angles of the boom and the maximum and minimum radii at which the boom may be safely used shall be conspicuously posted near the controls and visible to the operator when working the gear.

§ 31.37–50 Use of wire rope and chains—TB/ALL.

(a) An eye splice made in any wire rope used as cargo gear, with or without a thimble, shall have at least three tucks with whole strands and two tucks with one half of the wire cut from the tucking strand: *Provided,* That this requirement shall not preclude the use of any other form of splice or connection if it is as efficient as the splice specified.

(b) Single wire rope cargo falls, wire rope pendants, topping lifts and preventers shall consist of clear lengths without splices except at the working ends. Wire rope clips shall not be used to form eyes in the working ends of single wire rope cargo falls.

(c) Wire rope shall not be used for shipboard cargo gear if in any length of

8 diameters, the number of visible broken wires exceeds ten percent of the total number of wires in the rope, or if the rope shows other signs of excessive wear, corrosion, kinking, or defect.

(d) Hoisting or sling chains used for shipboard cargo gear shall not be used if a length of chain has been stretched more than five percent of the original length, or the chain has become unsafe through overloading or faulty heat treatment, or whenever other external defects are evident.

(e) Chains used for shipboard cargo gear shall not be shortened by knotting, bolting, or wiring the links. The use of chains having a knot or kink as shipboard cargo gear is prohibited.

§ 31.37–55 Annealing—TB/ALL.

(a) Chains, hooks, rings, links, shackles, and swivels of wrought iron used as cargo gear shall be annealed at the following intervals:

(1) Wrought iron chains and gear in general use and of one half inch or less, at least once in every six months.

(2) All other wrought iron chains and gear, including topping lift chains, in general use, at least once in every twelve months.

(b) The annealing shall be done in a suitable closed oven and not over an open fire. Wrought iron shall be annealed at a temperature of between 1100° and 1200° Fahrenheit for a period of between 30 and 60 minutes. After being annealed, the article shall be allowed to cool slowly and shall be then tested completely for defects.

(c) Heat treatment of the cargo gear shall be done only by reputable firms having suitable equipment and personnel trained for this purpose. A certificate attesting to the annealing shall be furnished for all gear so treated.

(d) The heat treatment of chains, hooks, rings, links, shackles, and swivels of materials other than wrought iron used as cargo gear, if required, shall be effected in accordance with the manufacturer's instructions.

§ 31.37–60 Additions to gear—TB/ALL.

(a) When articles of loose gear and/or wire rope conforming with the requirements in this subpart are added to installed gear, or used as replacements in such gear from time to time, a record shall be maintained on the vessel which shall identify each article and the certificate accompanying it.

§ 31.37–65 Alterations, renewals, or repairs of cargo gear—TB/ALL.

(a) Whenever important repairs, renewals, or alterations are indicated or intended for the masts, booms, and permanent fittings of the cargo gear, such repairs, renewals, or alterations shall be undertaken only after compliance with § 31.10–25.

(b) Tests and examinations of the repairs, renewals, or alterations will be in accordance with § 31.37–40.

(c) When welding is used to lengthen, alter, or repair chains, rings, hooks, links, shackles, or swivels, they shall be properly heat treated and shall, before being again put into use, be tested and examined in accordance with the provisions of § 31.37–30.

§ 31.37–70 Responsibility of ship's officer for inspection of cargo gear—TB/ALL.

(a) All wire rope, chains other than bridle chains attached to booms or masts, and all rings, hooks, links, shackles, swivels, and blocks used in loading or unloading shall be visually inspected by a ship's officer designated for that purpose by the master.

(b) These inspections by a ship's officer shall be made at frequent intervals, and in any event not less than once in each month.

(c) Immediately after such an inspection by a ship's officer notations of such an inspection shall be made in record form which shall be in or kept with the cargo gear register if carried. In addition, the same notations of inspections together with the dates shall be entered in the Official Logbook for those vessels required to carry this record, or such information shall be kept with the log records maintained on vessels not required to carry the Official Logbook. (See § 31.37–75 for entries required to be kept.)

§ 31.37–75 Records regarding cargo gear—TB/ALL.

(a) The cargo gear records described in this subpart shall be maintained on the vessel and shall be made available to Coast Guard officials upon request.

These records shall be kept for the periods of time they are valid and, in addition, until the next Coast Guard inspection for certification of the vessel. The certificates of manufacturers and/or testing laboratories, companies, or organizations shall be maintained on the vessel so long as the gear described in such certificates is on board the vessel.

(b) The records of all the inspections of cargo gear made by the ship's officers in accordance with §31.37–70 shall be maintained on the vessel for periods of time which agree with those periods as covered by the current Coast Guard certificate of inspection issued to the vessel. These records shall show the dates of inspections, identify articles inspected, the conditions observed, and the name of the officer performing the inspection.

(c) The records of all tests and examinations conducted by or under the supervision of surveyors of the organizations or associations approved by the Commandant shall be maintained on the vessel.

(d) The Coast Guard will not issue cargo gear certificates and/or registers. The Coast Guard's records of inspections, tests, and examinations of a particular vessel's cargo gear made by a marine inspector or conducted under the supervision of the Coast Guard will be maintained in the Office of the Officer in Charge, Marine Inspection, having jurisdiction over the vessel at the time such work was performed. The original certificates or certified copies of certificates of manufacturers and/or testing laboratories, companies, or organizations for loose cargo gear, wire rope, or the annealing of gear shall be maintained on the vessel.

§ 31.37–80 Advance notice that cargo gear testing is desired—TB/ALL.

(a) The owner, agent, or master of a vessel shall give an advance notice when it is desired that the tests and examinations of cargo gear be made by or under the supervision of the marine inspectors. This advance notice shall be given to the Officer in Charge, Marine Inspection, in whose marine inspection zone the vessel is available for such inspection and examination.

(b) For the initial inspection and examination of cargo gear by the Coast Guard, the advance notice shall be to the cognizant Officer in Charge, Marine Inspection, as early as possible and shall include sketches and/or drawings showing each unit of cargo gear, the identification of component parts and the safe working loads. Copies of original certificates of manufacturers and/or testing laboratories, companies, or organizations maintained on the vessel may be accepted by the cognizant Officer in Charge, Marine Inspection, when satisfied such certificates properly describe the qualities of the component parts of the gear in question.

§ 31.37–85 Responsibility for conducting required tests and examinations—TB/ALL.

(a) The vessel's owners and/or operators shall furnish and pay the expenses required in conducting the tests and examinations prescribed by the regulations in this subpart, including the supplying of all instruments, other equipment, and personnel including personnel supervision for performance of all work required.

(b) The Coast Guard's participation in these required tests and examinations shall be confined to witnessing required tests and examinations with the view to determining whether or not the gear is satisfactory for the purpose intended. In the event it is determined that the gear is defective or unable to meet the standards set forth in this subpart, such gear, or portions thereof, shall be replaced to the satisfaction of the Officer in Charge, Marine Inspection, having jurisdiction over the vessel.

Subpart 31.40—Certificates Under International Convention for Safety of Life at Sea, 1974

§ 31.40–1 Application—T/ALL

The provisions of this subpart shall apply to all tankships on an international voyage.

[CGD 95–012, 60 FR 48049, Sept. 18, 1995]

§ 31.40–5 Cargo Ship Safety Construction Certificate—T/ALL.

(a) All tankships on an international voyage are required to have a Cargo Ship Safety Construction Certificate. This certificate shall be issued by the U.S. Coast Guard or the American Bureau of Shipping to certain vessels on behalf of the United States of America as provided in Regulation 12, Chapter I, of the International Convention for Safety of Life at Sea, 1974.

(b) All such tankships shall meet the applicable requirements of this chapter for tankships on an international voyage.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 90–008, 55 FR 30660, July 26, 1990]

§ 31.40–10 Cargo Ship Safety Equipment Certificate—T/ALL.

(a) All tankships on an international voyage are required to have a Cargo Ship Safety Equipment Certificate.

(b) All such tankships shall meet the applicable requirements of this chapter for tankships on an international voyage.

§ 31.40–15 Cargo Ship Safety Radiotelegraphy Certificate—T/ALL.

(a) The application for a Cargo Ship Safety Radiotelegraphy Certificate is made on FCC Form 801 to the local office of the Federal Communications Commission.

(b) Where applicable, a Cargo Ship Safety Radiotelegraphy Certificate will be issued by the Federal Communications Commission to a tankship meeting its requirements for a tankship fitted with a radiotelegraph installation.

§ 31.40–20 Cargo Ship Safety Radiotelephony Certificate—T/ALL.

(a) The application for a Cargo Ship Safety Radiotelephony Certificate is made on FCC Form 801 to the local office of the Federal Communications Commission.

(b) Where applicable, a Cargo Ship Safety Radiotelephony Certificate will be issued by the Federal Communications Commission to a tankship meeting its requirements for a tankship fitted with a radiotelephone installation.

§ 31.40–25 Exemption Certificate—T/ALL.

(a) A tankship may be exempted by the Commandant from complying with certain requirements of the Convention under his administration upon request made in writing to him and transmitted via the Officer in Charge, Marine Inspection.

(b) When an exemption is granted to a tankship by the Commandant under and in accordance with the Convention, an Exemption Certificate describing such exemption shall be issued through the appropriate Officer in Charge, Marine Inspection, in addition to other required certificates.

§ 31.40–35 Posting of Convention certificates—T/ALL.

(a) The certificates described in this subpart, or certified copies thereof, when issued to a vessel shall be posted in a prominent and accessible place on the tankship.

(b) The certificates shall be carried in a manner similar to that described in § 31.05–5 for a certificate of inspection.

§ 31.40–40 Duration of Convention certificates—T/ALL.

(a) A Cargo Ship Safety Equipment Certificate shall be issued for a period of not more than 24 months.

(b) A Cargo Ship Safety Construction Certificate shall be issued for a period of not more than 60 months.

(c) A Cargo Ship Safety Radiotelegraphy Certificate and a Cargo Ship Safety Radiotelephony Certificate shall be issued for a period of not more than 12 months.

(d) An Exemption Certificate shall not be valid for longer than the period of the certificate to which it refers.

(e) A Convention certificate may be withdrawn, revoked, or suspended at any time when it is determined the vessel is no longer in compliance with

applicable requirements. (See § 2.01–70 of this chapter for procedures governing appeals.)

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 95–012, 60 FR 48049, Sept. 18, 1995]

§ 31.40–45 American Bureau of Shipping—T/ALL.

(a) The American Bureau of Shipping, with its home office at Two World Trade Center, 106th Floor, New York, NY 10048, is hereby designated as an organization duly authorized to issue the *Cargo Ship Safety Construction Certificate* to certain tankships on behalf of the United States of America as provided in Regulation 12, chapter I, of the International Convention for Safety of Life at Sea, 1974, and executive order 12234 and the certificate shall be subject to the requirements in this subpart. The American Bureau of Shipping is authorized to place the official seal of the United States of America on the certificate. This designation and delegation to the American Bureau of Shipping shall be in effect from May 26, 1965, until terminated by proper authority and notice of cancellation is published in the FEDERAL REGISTER.

(b) At the option of the owner or agent of a tankship on an international voyage and on direct application to the American Bureau of Shipping, the Bureau may issue to such tankship a Cargo Ship Safety Construction Certificate, having a period of validity of not more than 60 months after ascertaining that the tankship:

(1) Has met the applicable requirements of the Convention; and,

(2) Is currently classed by the Bureau and classification requirements have been dealt with to the satisfaction of the Bureau.

(c) When the Bureau determines that a tankship to which it has issued a Cargo Ship Safety Construction Certificate no longer complies with the Bureau's applicable requirements for classification, the Bureau shall immediately furnish to the Coast Guard all relevant information, which will be used by the Coast Guard to determine whether or not to withdraw, revoke or suspend the Cargo Ship Safety Construction Certificate.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGD 90–008, 55 FR 30660, July 26, 1990; CGD 96–041, 61 FR 50726, Sept. 27, 1996]

PART 32—SPECIAL EQUIPMENT, MACHINERY, AND HULL REQUIREMENTS

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32.01–1 Incorporation by reference.

Subpart 32.02—Safety Requirements

Sec.
32.02–1 Means of escape—T/ALL.
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Subpart 32.05—Markings

32.05–1 Draft marks and draft indicating systems—TB/ALL.
32.05–5 Vessel's name on equipment—TB/ALL.
32.05–10 Name of tankship—T/ALL.
32.05–15 Name of tank barge—B/ALL.

Subpart 32.15—Navigation Equipment

32.15–5 Whistles—T/ALL.
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32.15–15 Anchors, Chains, and Hawsers—TB/ALL.
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Subpart 32.16—Navigation Bridge Visibility

32.16–1 Navigation bridge visibility-T/ALL.

Subpart 32.20—Equipment Installations

32.20–1 Equipment installations on vessels during World War II—TB/ALL.
32.20–5 Pressure vacuum relief valves—TB/ALL.
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Subpart 32.25—General Alarm Systems

32.25–1 General alarm systems for tankships and manned tank barges.

Subpart 32.30—Sound Powered Telephone, Voice Tube, and Engine Order Telegraph Systems

32.30–1 Voice tubes or telephone equipment—T/ALL.
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Subpart 32.35—Main and Auxiliary Machinery

32.35–1 Boilers and machinery—TB/ALL.
32.35–5 Installation of internal combustion engines—TB/ALL.
32.35–10 Steering apparatus on tank vessels—TB/ALL.
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Subpart 32.40—Accommodations for Officers and Crew

32.40–1 Application—TB/ALL.
32.40–5 Intent—T/ALL.
32.40–10 Location of crew spaces—T/ALL.
32.40–15 Construction—T/ALL.
32.40–20 Sleeping accommodations—T/ALL.
32.40–25 Washrooms and toilet rooms—T/ALL.
32.40–30 Messrooms—T/ALL.
32.40–35 Hospital space—T/ALL.
32.40–40 Other spaces—T/ALL.
32.40–45 Lighting—T/ALL.
32.40–50 Heating and cooling—T/ALL.
32.40–55 Insect screens—T/ALL.
32.40–60 Crew accommodations on tankships of less than 100 gross tons and manned tank barges—T/ALL.
32.40–65 Crew accommodations on tankships constructed before June 15, 1987—T/ALL.

Subpart 32.45—Electrical Installations

32.45–1 Installation and details.

Subpart 32.50—Pumps, Piping, and Hose for Cargo Handling

32.50–1 Cargo pumps for tank vessels constructed on or after November 10, 1936—TB/ALL.
32.50–3 Cargo discharge—TB/ALL.
32.50–5 Cargo pump gauges on tank vessels constructed on or after November 10, 1936—TB/ALL.
32.50–10 Cargo pumps on tank vessels with independent cargo tanks which were constructed prior to November 10, 1936—TB/ALL.
32.50–15 Cargo piping on tank vessels constructed on or after July 1, 1951—TB/ALL.
32.50–20 Cargo piping for tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.
32.50–25 Cargo pumps and piping on tank vessels constructed prior to November 10, 1936—TB/ALL.
32.50–30 Cargo hose—TB/ALL.
32.50–35 Remote manual shutdown for internal combustion engine driven cargo pump on tank vessels—TB/ALL.

Subpart 32.52—Bilge Systems

32.52–1 Bilge pumps on tank vessels constructed or converted on or after November 19, 1952—TB/ALL.
32.52–5 Bilge piping for pump rooms and adjacent cofferdams on tank vessels constructed or converted on or after November 19, 1952—TB/ALL.
32.52–10 Bilge pumps and piping on tank vessels constructed or converted prior to November 19, 1952—TB/ALL.

Subpart 32.53—Inert Gas System

32.53–1 Application—T/ALL.
32.53–3 Exemptions.
32.53–5 Operation—T/ALL.
32.53–10 General—T/ALL.
32.53–15 Approval—T/ALL.
32.53–20 Inert gas generators—T/ALL.
32.53–25 Gas supply—T/ALL.
32.53–30 Positive pressure—T/ALL.
32.53–35 Gas scrubber—T/ALL.
32.53–40 Scrubber: Cooling water supply—T/ALL.
32.53–45 Blowers—T/ALL.
32.53–50 Gas distribution lines: Non-return devices—T/ALL.
32.53–55 Stop valves—T/ALL.
32.53–60 Instrumentation—T/ALL.
32.53–65 Portable instruments—T/ALL.
32.53–70 Alarms and controls—T/ALL.
32.53–75 Gas main: Automatic shutdown valve—T/ALL.
32.53–80 Tank cleaning—T/ALL.
32.53–85 Instruction manual—T/ALL.

Subpart 32.55—Ventilation and Venting

32.55–1 Ventilation of tank vessels constructed on or after July 1, 1951—TB/ALL.
32.55–5 Ventilation of tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.
32.55–10 Ventilation of tank vessels contracted prior to November 10, 1936—TB/ALL.
32.55–15 Ventilation for hold spaces—TB/ALL.
32.55–20 Venting of cargo tanks of tankships constructed on or after July 1, 1951—T/ALL.
32.55–25 Venting of cargo tanks of tank barges constructed on or after July 1, 1951—B/ALL.

32.55–30 Venting of cargo tanks of tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.
32.55–35 Venting of cargo tanks on tank vessels constructed prior to November 10, 1936—TB/ALL.
32.55–40 [Reserved]
32.55–45 Venting of cofferdams and void spaces of tank vessels constructed on or after November 10, 1936—TB/ALL.
32.55–50 Ventilation of tankships that have a keel laying date on or after January 1, 1975—T/ALL.

Subpart 32.56—Structural Fire Protection for Tank Ships With a Keel Laying Date On or After January 1, 1975

32.56–1 Application—T/ALL.
32.56–5 General—T/ALL.
32.56–10 Navigation positions—T/ALL.
32.56–15 Deck spills—T/ALL.
32.56–20 Insulation of exterior boundaries: Superstructures and deckhouses—T/ALL.
32.56–21 Openings in exterior boundaries: Accommodation, service, and control spaces—T/ALL.
32.56–22 Openings in and insulation of boundaries: Other spaces—T/ALL.
32.56–25 Category A machinery spaces: Windows and port lights—T/ALL.
32.56–30 Category A machinery spaces: Bulkheads and decks—T/ALL.
32.56–35 Doors—T/ALL.
32.56–40 Category A machinery spaces: Insulation—T/ALL.
32.56–45 Draft stops—T/ALL.
32.56–50 Combustible veneers—T/ALL.
32.56–55 Control spaces—T/ALL.
32.56–60 Ventilation ducts—T/ALL.

Subpart 32.57—Structural Fire Protection for Tank Vessels Contracted for On or After January 1, 1963

32.57–1 Application—TB/ALL.
32.57–5 Definitions—TB/ALL.
32.57–10 Construction—TB/ALL.

Subpart 32.59—Minimum Longitudinal Strength and Plating Thickness Requirements for Unclassed Tank Vessels That Carry Certail Oil Cargoes—TB/ALL

32.59–1 Minimum section modulus and plating thickness requirements—TB/ALL.

Subpart 32.60—Hull Requirements for Tank Vessels Constructed On or After July 1, 1951

32.60–1 Scantlings, material, and workmanship—TB/ALL.
32.60–5 Subdivision of cargo space—TB/ALL.
32.60–10 Segregation of cargo; Grade A, B, C, or D—TB/ALL.
32.60–15 Segregation of cargo; Grade E—TB/ALL.
32.60–20 Pumprooms on tank vessels carrying Grade A, B, C, D and/or E liquid cargo—TB/ALL.
32.60–25 Living quarters—TB/ALL.
32.60–30 Tank vessels with independent tanks—TB/ALL.
32.60–35 Tank vessels carrying Grade A liquid cargo—TB/ALL.
32.60–40 Construction and testing of cargo tanks and bulkheads—TB/ALL.
32.60–45 Segregation of spaces containing the emergency source of electric power—TB/ALL.

Subpart 32.63—Hull and Cargo Tank Requirements for Tank Barges Constructed or Converted On or After July 1, 1964, and Carrying Certain Dangerous Bulk Cargoes

32.63–1 Application—B/ALL.
32.63–5 Barge hull classifications—B/ALL.
32.63–8 Alternative arrangements—B/ALL.
32.63–10 Rakes and coamings—B/ALL.
32.63–20 Hull structure—B/ALL.
32.63–25 Cargo tanks and supports—B/ALL.

Subpart 32.65—Hull Requirements for Tank Vessels Constructed On or After November 10, 1936, and Prior to July 1, 1951

32.65–1 Application—TB/ALL.
32.65–5 Scantlings, material, and workmanship—TB/ALL.
32.65–10 Subdivision of cargo space—TB/ALL.
32.65–15 Cofferdams—TB/ALL.
32.65–20 Pumprooms—TB/ALL.
32.65–25 Living quarters—TB/ALL.
32.65–30 Tank vessels with independent tanks—TB/ALL.
32.65–35 Tank vessels carrying Grade A liquids—TB/ALL.
32.65–40 Construction and testing of cargo tanks and bulkheads—TB/ALL.

Subpart 32.70—Hull Requirements for Steel Hull Tank Vessels Constructed Prior to November 10, 1936

32.70–1 Application—TB/ALL.
32.70–5 Hull requirements; general—TB/ALL.
32.70–10 Cofferdams—TB/ALL.
32.70–15 Pumprooms—TB/ALL.
32.70–20 Pump-engine compartment—TB/ALL.
32.70–25 Cargo tanks—TB/ALL.

Subpart 32.75—Hull Requirements for Wood Hull Tank Vessels Constructed Prior to November 10, 1936

32.75–1 Application—TB/ALL.
32.75–5 Hull requirements; general—TB/ALL.
32.75–10 Cargo tanks—TB/ALL.
32.75–15 Electric bonding and grounding for tanks—TB/ALL.
32.75–20 Hold spaces and bulkheads—TB/ALL.

Subpart 32.80—Tank Barges Constructed of Materials Other Than Steel or Iron

32.80–1 General requirements—B/ALL.

Subpart 32.85—Lamp and Paint Rooms and Similar Compartments on Tankships

32.85–1 Fireproofing of lamp, oil and paint rooms—T/ALL.

Subpart 32.90—Pilot Boarding Equipment

32.90–1 Pilot boarding equipment.

AUTHORITY: 46 U.S.C. 2103, 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46; Subpart 32.59 also issued under the authority of Sect. 4109, Pub. L. 101–380, 104 Stat. 515.

SOURCE: CGFR 65–50, 30 FR 16671, Dec. 30, 1965, unless otherwise noted.

Subpart 32.01—General

§ 32.01–1 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). 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 make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Design and Engineering Standards (G–MSE), 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:

American Bureau of Shipping (ABS)

Two World Trade Center, 106th Floor, New York, NY 10048

Rules for Building and Classing Steel Vessels, 1989.....32.15–15; 32.60–10; 32.65–40

American Society for Testing and Materials (ASTM)

1916 Race Street, Philadelphia, PA 19103

ASTM F–1273, Standard Specification for Tank Vent Flame Arresters, 1991 .....32.20–10

[CGD88–032, 56 FR 35820, July 29, 1991, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

Subpart 32.02—Safety Requirements

§ 32.02–1 Means of escape—T/ALL.

On all tankships where the plans and arrangements will possibly permit, all passageways leading to living quarters, or places where anyone may be regularly employed, shall be provided with not less than two avenues of escape so located that if one of such avenues is not available another may be. The locality and arrangement of such additional means of escape shall be determined by the inspectors as will in their judgment best carry out the purpose for which this provision was made.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965. Redesignated by CGD 88–032, 56 FR 35820, July 29, 1991]

§ 32.02–5 Communication between deckhouses—TB/OCLB.

On all tank vessels where the distance between deckhouses is more than 46 meters (150 feet), a fixed means of facilitating communication between both ends of the vessel, such as a raised fore and aft bridge or side tunnels, must be provided. Previously approved arrangements may be retained so long as they are maintained in satisfactory condition to the satisfaction of the Officer in Charge, Marine Inspection.

[CGD 95–027, 61 FR 25997, May 23, 1996]

§ 32.02–10 Rails—TB/ALL.

(a) All tank vessels, except unmanned tank barges, contracted for on or after July 1, 1969, shall have efficient guard rails or bulwarks on decks and bridges. THe height of rails or bulwarks shall be at least 39½ inches from

the deck except that where this height would interfere with the normal operation of the vessel, a lesser height may be approved by the Commandant. At exposed peripheries of the freeboard and superstructure decks the rails shall be in at least three courses including the top. The opening below the lowest course shall not be more than 9 inches. The courses shall not be more than 15 inches apart. In the case of ships with rounded gunwales, the guard rail supports shall be placed on the flat of the deck. On other decks and bridges the rails shall be in at least two courses, including the top, approximately evenly spaced. All rails shall consist of solid or tubular sections or chains or wire rope or a combination thereof.

(b) Where it can be shown to the satisfaction of the Commandant that a vessel is engaged exclusively on voyages of a sheltered nature, the provisions of paragraph (a) of this section may be relaxed.

(c) Tank vessels contracted for prior to July 1, 1969, except unmanned tank barges, assigned a deeper load line under part 42 of subchapter E (Load Lines) of this chapter shall have efficient guard rails or bulwarks as required by paragraph (a) of this section. Otherwise, existing rails and bulwarks previously approved approved will be considered satisfactory so long as they are maintained in good condition. Minor repairs and alterations may be made to the same standards as the original construction.

(d) All tank vessels in ocean and coastwise service, except unmanned tank barges, constructed on or after June 15, 1987, must have suitable storm rails installed in all passageways and at the deckhouse sides on weather decks where persons on board might have normal access. Storm rails must be installed on both sides of passageways which are six feet or more in width. Tank vessels to which this paragraph applies constructed prior to June 15, 1987, may retain previously accepted or approved installations so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

[CGFR 69–72, 34 FR 17481, Oct. 29, 1969, as amended by CGD 84–073; 52 FR 18362, May 15, 1987; 52 FR 22751, June 15, 1987. Redesignated by CGD 88–032, 56 FR 35820, July 29, 1991]

§ 32.02–15 Guards at dangerous places—TB/ALL.

All exposed and dangerous places such as gears and machinery shall be properly protected with covers, guards or rails in order that the danger of accidents may be minimized. On vessels equipped with radio communication, the lead-ins shall be efficiently incased or insulated to insure against accidental shock. Such lead-ins shall be located so as not to interfere with the launching of lifeboats and life rafts.

[CGFR 65–50, 30 FR 16671, Dec 30, 1965. Redesignated by CGD 88–032, 56 FR 35820, July 29, 1991]

Subpart 32.05—Markings

§ 32.05–1 Draft marks and draft indicating systems—TB/ALL.

(a) All vessels must have draft marks plainly and legibly visible upon the stem and upon the sternpost or rudderpost or at any place at the stern of the vessel as may be necessary for easy observance. The bottom of each mark must indicate the draft.

(b) The draft must be taken from the bottom of the keel to the surface of the water at the location of the marks.

(c) In cases where the keel does not extend forward or aft to the location of the draft marks, due to raked stem or cutaway skeg, the datum line from which the drafts shall be taken, shall be obtained by projecting the line of the bottom of the keel forward or aft, as the case may be, to the location of the draft marks.

(d) In cases where a vessel may have a skeg or other appendage extending locally below the line of the keel, the draft at the end of the vessel adjacent to such appendage shall be measured to a line tangent to the lowest part of such appendage and parallel to the line of the bottom of the keel.

(e) Draft marks must be separated so that the projections of the marks onto

a vertical plane are of uniform height equal to the vertical spacing between consecutive marks.

(f) Draft marks must be painted in contrasting color to the hull.

(g) In cases where draft marks are obscured due to operational constraints or by protrusions, the vessel must be fitted with a reliable draft indicating system from which the bow and stern drafts can be determined.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGD 89–037, 57 FR 41821, Sept. 11, 1992]

§ 32.05–5 Vessel's name on equipment—TB/ALL.

The equipment of all tank vessels, such as fire hose, fire axes, lifeboats, life rafts, life preservers, and lifeboats, shall be painted or branded with the name of the vessel upon which they are used.

§ 32.05–10 Name of tankship—T/ALL.

Every tankship shall have the name marked upon each bow and upon the stern, and the home port shall also be marked upon the stern. The name shall be in a light color on a dark ground, or in a dark color on a light ground, and shall be distinctly visible. The smallest letters used shall be not less than 4 inches in size. In addition, every tankship shall have her name conspicuously displayed in distinct plain letters, of not less than 6 inches in size, on each outer side of the pilothouse.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by CGFR 72–104R, 37 FR 14233, July 18, 1972]

§ 32.05–15 Name of tank barge—B/ALL.

Every tank barge shall have its name or number carved, punch-marked, or welded on the main beam, inside the cargo hatch, or other suitable permanent part of the vessel's structure for the purpose of identification. The vessel's name or number shall be so displayed at the highest part of the vessel's hull or permanent structure that the name or number can be seen from either side.

[CGFR 65–50, 30 FR 16657, Dec. 30, 1965, as amended by CGFR 72–104R, 37 FR 14233, July 18, 1972]

Subpart 32.15—Navigation Equipment

§ 32.15–5 Whistles—T/ALL.

(a) [Reserved]

(b) On tankships contracted for on and after November 19, 1955 means shall be provided to operate the whistle from a position adjacent to the main steering station and from the steering station on top of the pilothouse where such steering station is fitted. Details of the whistle operating devices shall meet the requirements of subchapter J (Electrical Engineering) of this chapter.

NOTE: Appendix A in 33 CFR subchapter D contains the International Regulations for Preventing Collisions at Sea, 1972.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGD 74–125A, 47 FR 15230, Apr. 8, 1982; CGD 82–036, 48 FR 654, Jan. 6, 1983]

§ 32.15–10 Sounding machines—T/OCL.

All mechanically propelled vessels in ocean or coastwise service of 500 gross tons and over, and all mechanically propelled vessels in of 500 gross tons and over and certificated for service on the River St. Lawrence eastward of the lower exit of the St. Lambert Lock at Montreal, Canada, must be fitted with an efficient electronic deep-sea sounding apparatus.

[CGD 95–027, 61 FR 25997, May 23, 1996]

§ 32.15–15 Anchors, Chains, and Hawsers—TB/ALL

(a) *Application.* The provisions of this section, with the exception of paragraph (d), apply to every tankship and manned seagoing barge constructed on or after June 15, 1987. Tankships and manned seagoing barges constructed prior to June 15, 1987 must meet the requirements of paragraph (d) of this section.

(b) *Ocean, Coastwise, or Great Lakes Service.* Tankships in ocean, coastwise, or Great Lakes service and manned seagoing barges must be fitted with anchors, chains and hawsers in general agreement with the standards established by the American Bureau of Shipping. The current standards of other recognized classification societies may also be accepted upon approval by the Commandant.

(c) *Lakes, Bays, and Sounds, or River Service.* Tankships in lakes, bays, and sounds, or river service must be fitted with such ground tackle and hawsers as deemed necessary by the Officer in Charge, Marine Inspection, depending upon the size of the tankship and the waters on which it operates.

(d) *Tankships and Barges Constructed Prior to June 15, 1987.* For tankships and manned seagoing barges constructed prior to June 15, 1987, the installations previously accepted or approved will be considered satisfactory for the same service so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. If the service of the tank vessel is changed, the suitability of the equipment will be evaluated by the Officer in Charge, Marine Inspection.

[CGD 84–073, 52 FR 18362, May 15, 1987; 52 FR 22751, June 15, 1987]

§ 32.15–30 Radar—T/OC.

All tankships of 1,600 gross tons and over in ocean or coastwise service must be fitted with a marine radar system for surface navigation. Facilities for plotting radar readings must be provided on the bridge.

[CGD 74–074, 42 FR 5963, Jan. 31, 1977]

§ 32.15–35 Magnetic Compass and Gyrocompass—T/OC.

(a) All tankships in ocean or coastwise service must be fitted with a magnetic compass.

(b) All tankships of 1,600 gross tons and over in ocean or coastwise service must be fitted with a gyrocompass in addition to the magnetic compass.

(c) Each tankship must have an illuminated repeater for the gyrocompass required under paragraph (b) that is at the main steering stand unless the gyrocompass is illuminated and is at the main steering stand.

[CGD 74–074, 42 FR 5963, Jan. 31, 1977]

Subpart 32.16—Navigation Bridge Visibility

§ 32.16–1 Navigation bridge visibility-T/ALL.

Each tankship which is 100 meters (328 feet) or more in length and contracted for on or after September 7, 1990, must meet the following requirements:

(a) The field of vision from the navigation bridge, whether the vessel is in a laden or unladen condition, must be such that:

(1) From the conning position, the view of the sea surface is not obscured forward of the bow by more than the lesser of two ship lengths or 500 meters (1,640 feet) from dead ahead to 10 degrees on either side of the vessel. Within this arc of visibility any blind sector caused by cargo, cargo gear, or other permanent obstruction must not exceed 5 degrees.

(2) From the conning position, the horizontal field of vision extends over an arc from at least 22.5 degrees abaft the beam on one side of the vessel, through dead ahead, to at least 22.5 degrees abaft the beam on the other side of the vessel. Blind sectors forward of the beam caused by cargo, cargo gear, or other permanent obstruction must not exceed 10 degrees each, nor total more than 20 degrees, including any blind sector within the arc of visibility described in paragraph (a)(1) of this section.

(3) From each bridge wing, the field of vision extends over an arc from at least 45 degrees on the opposite bow, through dead ahead, to at least dead astern.

(4) From the main steering position, the field of vision extends over an arc from dead ahead to at least 60 degrees on either side of the vessel.

(5) From each bridge wing, the respective side of the vessel is visible forward and aft.

(b) Windows fitted on the navigation bridge must be arranged so that:

(1) Framing between windows is kept to a minimum and is not installed immediately in front of any work station.

(2) Front windows are inclined from the vertical plane, top out, at an angle of not less than 10 degrees and not more than 25 degrees;

(3) The height of the lower edge of the front windows is limited to prevent any obstruction of the forward view previously described in this section; and

(4) The height of the upper edge of the front windows allows a forward

view of the horizon at the conning position, for a person with a height of eye of 1.8 meters (71 inches), when the vessel is at a forward pitch angle of 20 degrees.

(c) Polarized or tinted windows must not be fitted.

[CGD 85–099, 55 FR 32247, Aug. 8, 1990]

Subpart 32.20—Equipment Installations

§ 32.20–1 Equipment installations on vessels during World War II—TB/ALL.

Boilers, pressure vessels, machinery, piping, electrical and other installations, including lifesaving, firefighting and other safety equipment, installed on vessels during the Unlimited National Emergency declared by the President on May 27, 1941, and prior to the termination of title V of the Second War Powers Act, as extended (sec. 501, 56 Stat. 180, 50 U.S.C. 635), which do not fully meet the detailed requirements of the regulations in this chapter, may be continued in service if found to be satisfactory by the Commandant for the purpose intended. In each instance prior to final action by the Commandant, the Officer in Charge, Marine Inspection, shall notify Headquarters of the facts in the case, together with recommendations relative to suitability for retention.

§ 32.20–5 Pressure vacuum relief valves—TB/ALL.

The pressure vacuum relief valve shall be of a type and size approved by the Commandant for the purpose intended. For specifications and procedures re approval, see subpart 162.017 of subchapter Q (Specifications) of this chapter.

§ 32.20–10 Flame arresters—TB/ALL.

Flame arresters must be of a type and size suitable for the purpose intended and meet ASTM F–1273.

[CGD 88–032, 56 FR 35821, July 29, 1991]

§ 32.20–20 Liquid level gaging—T/ALL.

On tankships, the construction or conversion of which is started on or after July 1, 1951, a method for determining the level of the liquid in a cargo tank without opening ullage holes, cargo hatches, or Butterworth plates, shall be provided on all tankships certificated for the carriage of Grade A liquids: *Provided*, That ullage holes fitted with sounding pipes tightly secured to the underside of the tank tops, open at the bottom, and extending to within 18 inches or less of the bottom of the tank shall be considered as complying with the foregoing requirement.

Subpart 32.25—General Alarm Systems

§ 32.25–1 General alarm systems for tankships and manned tank barges.

A general alarm system must be installed on tankships and manned tank barges which meets the requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

Subpart 32.30—Sound Powered Telephone, Voice Tube, and Engine Order Telegraph Systems

§ 32.30–1 Voice tubes or telephone equipment—T/ALL.

Each tankships must have communication equipment which meets the requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

§ 32.30–5 Engine order telegraph equipment—T/ALL.

Each tankship must have an engine order telegraph system which meets the requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

Subpart 32.35—Main and Auxiliary Machinery

§ 32.35–1 Boilers and machinery—TB/ALL.

Boilers, main and auxiliary machinery, and piping systems shall conform to the requirements of subchapter F (Marine Engineering) of this chapter,

except as otherwise provided for in this subchapter.

§ 32.35–5 Installation of internal combustion engines—TB/ALL.

Each internal combustion engine located on the weather deck shall be provided with a ventilated metal hood or, where space permits, with a well-ventilated metal housing of sufficient size to allow for proper operation and maintenance.

§ 32.35–10 Steering apparatus on tank vessels—TB/ALL.

Tank vessels shall be provided with steering apparatus as required by part 58 of subchapter F (Marine Engineering) of this chapter.

[CGFR 68–82, 33 FR 18805, Dec. 18, 1968]

§ 32.35–15 Installation of air compressors on tank vessels contracted for on or after June 15, 1977—TB/ALL.

No tank vessel, except an oil pollution clean-up vessel, that carries petroleum products grades A thru D contracted for on or after June 15, 1977 may have an air compressor on an air compressor intake installed in any of the following cargo areas:

(a) A cargo handling room.

(b) An enclosed space containing cargo piping.

(c) A space in which cargo hose is stowed.

(d) A space adjacent to a cargo tank or cargo tank hold.

(e) A space within three meters of any of the following:

(1) A cargo tank opening.

(2) An outlet for cargo gas or vapor.

(3) A cargo pipe flange.

(4) A cargo valve.

(5) An entrance or ventilation opening to a cargo handling room.

(f) Except for tank barges, the cargo deck space. For the purpose of this paragraph, *cargo deck space* means the volume bounded by the open deck over the cargo tank block, including all ballast tanks within the cargo tank block, extending to the full width of the vessel, plus three meters (about 10 feet) fore and aft of the cargo tank block and up to a height of 2.4 meters (about 8 feet) above the deck.

(g) An enclosed space having an opening into a location described in paragraphs (a)–(f) of this section.

(h) A location similar to those described in paragraphs (a)–(g) of this section in which cargo vapors or gases may be present.

[CGD 75–017, 42 FR 25735, May 19, 1977, as amended by CGD 75–017, 42 FR 45677, Sept. 12, 1977]

Subpart 32.40—Accommodations for Officers and Crew

SOURCE: CGD 95–027, 61 FR 25997, May 23, 1996, unless otherwise noted.

§ 32.40–1 Application—TB/ALL.

(a) The provisions of this subpart, except § 32.40–60 and § 32.40–65, apply to all tankships of 100 gross tons and over constructed on or after June 15, 1987.

(b) Tankships of less than 100 gross tons and manned tank barges must meet the requirements of § 32.40–60.

(c) Tankships of 100 gross tons and over constructed prior to June 15, 1987, must meet the requirements of § 32.40–65.

§ 32.40–5 Intent—T/ALL.

The accommodations provided for officers and crew on all vessels must be securely constructed, properly lighted, heated, drained, ventilated, equipped, located, arranged and insulated from undue noise, heat and odors.

§ 32.40–10 Location of crew spaces—T/ALL.

(a) Crew quarters must not be located farther forward in the vessel than a vertical plane located at 5 percent of the vessel's length abaft the forward side of the stem at the designed summer load water line. However, for vessels in other than ocean or coastwise service, this distance need not exceed 8.5 meters (28 feet). For the purposes of this paragraph, the vessel's length must be as defined in § 43.15–1 of subchapter E (Load Lines) of this chapter. Unless approved by the Commandant, no section of the deck head of the crew spaces may be below the deepest load line.

(b) There must be no direct communication, except through solid, close

fitted doors or hatches between crew spaces and chain lockers, or machinery spaces.

§ 32.40–15 Construction—T/ALL.

All crew spaces are to be constructed and arranged in a manner suitable to the purpose for which they are intended and so that they can be kept in a clean, workable and sanitary condition.

§ 32.40–20 Sleeping accommodations—T/ALL.

(a) Where practicable, each licensed officer shall be provided with a separate stateroom.

(b) Sleeping accommodations for the crew must be divided into rooms, no one of which may berth more than 4 persons.

(c) Each room must be of such size that there is at least 2.78 square meters (30 square feet) of deck area and a volume of at least 5.8 cubic meters (210 cubic feet) for each person accommodated. The clear head room must not be less than 190 centimeters (75 inches). In measuring sleeping accommodations any furnishings contained therein for the use of the occupants are not to be deducted from the total volume or from the deck area.

(d) Each person shall have a separate berth and not more than one berth may be placed above another. The berth must be composed of materials not likely to corrode. The overall size of a berth must not be less than 68 centimeters (27 inches) wide by 190 centimeters (75 inches) long, except by special permission of the Commandant. Where two tiers of berths are fitted, the bottom of the lower berth must not be less than 30 centimeters (12 inches) above the deck. The berths must not be obstructed by pipes, ventilating ducts, or other installations.

(e) A locker must be provided for each person accommodated in a room.

§ 32.40–25 Washrooms and toilet rooms—T/ALL.

(a) At least 1 toilet, 1 washbasin, and 1 shower or bathtub must be provided for each 8 members or portion thereof in the crew who do not occupy sleeping accommodations to which private or semi-private facilities are attached.

(b) The toilet rooms and washrooms must be located convenient to the sleeping quarters of the crew to which they are allotted but must not open directly into such quarters except when they are provided as private or semi-private facilities.

(c) All washbasins, showers, and bathtubs must be equipped with adequate plumbing, including hot and cold running water. All toilets must be installed with adequate plumbing for flushing.

(d) At least 1 washbasin must be fitted in each toilet room, except where private or semi-private facilities are provided and washbasins are installed in the sleeping rooms.

(e) Where more than 1 toilet is located in a space or compartment, each toilet must be separated by partitions.

§ 32.40–30 Messrooms—T/ALL.

(a) Messrooms must be located as near to the galley as is practicable except where the messroom is equipped with a steam table.

(b) Each messroom must seat the number of persons expected to eat in the messroom at one time.

§ 32.40–35 Hospital space—T/ALL.

(a) Each vessel which in the ordinary course of its trade makes voyages of more than 3 days duration between ports and which carries a crew of 12 or more, must be provided with a hospital space. This space must be situated with due regard to the comfort of the sick so that they may receive proper attention in all weathers.

(b) The hospital must be suitably separated from other spaces and must be used for the care of the sick and for no other purpose.

(c) The hospital must be fitted with berths in the ratio of 1 berth to every 12 members of the crew or portion thereof who are not berthed in single occupancy rooms, but the number of berths need not exceed 6.

(d) The hospital must have a toilet, washbasin, and bathtub or shower conveniently situated. Other necessary suitable equipment such as a clothes locker, a table, and a seat must be provided.

§ 32.40–40 Other spaces—T/ALL.

Each vessel must have—

(a) Sufficient facilities where the crew may wash and dry their own clothes, including at least 1 sink supplied with hot and cold fresh water;

(b) Recreation spaces; and

(c) A space or spaces of adequate size available on an open deck to which the crew has access when off duty.

§ 32.40–45 Lighting—T/ALL.

Each berth must have a light.

§ 32.40–50 Heating and cooling—T/ALL.

(a) All manned spaces must be adequately heated and cooled in a manner suitable to the purpose of the space.

(b) The heating and cooling system for accommodations must be capable of maintaining a temperature of 21 °C (70 °F) under normal operating conditions without curtailing ventilation.

(c) Radiators and other heating apparatus must be so placed and shielded, where necessary, to avoid risk of fire, danger or discomfort to the occupants. Pipes leading to radiators or heating apparatus must be insulated where those pipes create a hazard to persons occupying the space.

§ 32.40–55 Insect screens—T/ALL.

Provisions shall be made to protect the crew quarters against the admission of insects.

§ 32.40–60 Crew accommodations on tankships of less than 100 gross tons and manned tank barges—TB/ALL.

(a) The crew accommodations on all tankships of less than 100 gross tons and all manned tank barges must have sufficient size and equipment, and be adequately constructed to provide for the protection of the crew in manner practicable for the size, facilities, and service of the tank vessel.

(b) The crew accommodations must be consistent with the principles underlying the requirements for crew accommodations of tankships of 100 gross tons or more.

§ 32.40–65 Crew accommodations on tankships constructed before June 15, 1987—T/ALL.

All tankships of 100 gross tons and over constructed before June 15, 1987, may retain previously accepted or approved installations and arrangements so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

Subpart 32.45—Electrical Installations

§ 32.45–1 Installation and details.

The installation of all electrical engineering or interior communications systems, together with the details of design, construction, and installation, must meet the requirements of subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

Subpart 32.50—Pumps, Piping, and Hose for Cargo Handling

§ 32.50–1 Cargo pumps for tank vessels constructed on or after November 10, 1936—TB/ALL.

On all tank vessels, the construction or conversion of which is started on or after November 10, 1936, the cargo pumps shall be designed and installed to minimize the danger of sparking. Special care shall be exercised in the design of packing spaces in order to secure ample depth and accessibility of glands. Where cargo pump shafts pierce gastight bulkheads, stuffing boxes with readily accessible gastight glands shall be provided.

§ 32.50–3 Cargo discharge—TB/ALL.

(a) Pumps or other acceptable means shall be used to discharge cargo from gravity type cargo tanks vented at gauge pressures of 4 pounds per square inch or less.

(b) The use of compressed air as the primary means of discharging cargo from such tanks is prohibited.

§ 32.50–5 Cargo pump gauges on tank vessels constructed on or after November 10, 1936—TB/ALL.

(a) [Reserved]

(b) A pressure gage shall be installed for each pump discharge, and it shall be located at a point visible with respect to the pump controls.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGD 73–254, 40 FR 40163, Sept. 2, 1975]

§ 32.50–10 Cargo pumps on tank vessels with independent cargo tanks which were constructed prior to November 10, 1936—TB/ALL.

(a) Cargo pumps on tank vessels, the construction or conversion of which was started prior to November 10, 1936, may be located in a hold space containing independent cargo tanks or on deck. If the pump driving unit is of the type permitted in cargo pumprooms, it also may be located in the hold space. If other types of driving units are used, they shall be located on deck or in an engine compartment. If the pump drive shaft passes through decks or bulkheads into a hold space or pumproom, it shall be provided with suitable stuffing boxes at such points.

§ 32.50–15 Cargo piping on tank vessels constructed on or after July 1, 1951—TB/ALL.

(a) On all tank vessels, the construction or conversion of which is started on or after July 1, 1951, the cargo piping shall be:

(1) A fixed cargo piping system shall be installed on a tank vessel carrying Grade A, B, or C cargo. The piping shall be arranged so as to avoid excessive stresses at the joints. For sizes exceeding 2 inches in diameter, flanged, welded, or other approved types of joints shall be employed. Packing material shall be suitable for the cargo carried. Connections at bulkheads shall be made so that the plating does not form part of a flanged joint. Piping may be carried through bunker spaces and deep tanks provided it is run through a pipe tunnel. The tunnel may be omitted where the pipe is extra heavy, all joints are welded, and bends are installed to provide for expansion and contraction.

(2) Tank vessels carrying only Grades D and E cargo may use a portable piping system in lieu of a fixed piping system meeting the requirements of paragraph (a)(1) of this section, provided:

(i) The hose complies with 33 CFR 154.500 or the portable piping complies with part 56 of this chapter;

(ii) The connections comply with 33 CFR 156.130;

(iii) A shutoff valve is at or near the point of entry into the tank;

(iv) Except for the carriage of animal fats and vegetable oils, the system has a closure which forms a vapor-tight seal on the tank opening through which the cargo is transferred, is bolted or dogged in place, and has the hose and drop line connected to it; and

(v) Except for the carriage of animal fats and vegetable oils, the system has a metallic drop line which complies with 46 CFR 153.282.

(3) Cargo piping shall not pass through spaces containing machinery where sources of vapor ignition are normally present: *Provided,* That, in special cases the Commandant may permit the piping to pass through such spaces if Grade E liquids only are involved.

(b) Valve operating rods in cargo tanks shall be solid, except that tank barges having plug cocks inside the cargo tanks may have operating rods of extra heavy pipe with the annular space between the lubricant tube and the pipe wall sealed with a nonsoluble material to prevent penetration of the cargo. Valve operating rods shall be of ample size, well guided and supported, and attached to the valve stems in a manner so as to prevent the operating rods from working loose. Where the operating rods pass through a deck, gastight stuffing boxes shall be fitted. The leads of operating rods shall be as direct as possible. Valves shall be of suitable design for the intended service.

(c) All cargo loading and discharge hose connections shall be fitted with valves or blind flanges.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGD 80–009, 48 FR 36458, Aug. 11, 1983]

§ 32.50–20 Cargo piping for tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.

(a) On tank vessels, the construction or conversion of which is started on or after November 10, 1936, and prior to July 1, 1951, the piping shall be arranged so as to avoid excessive stresses

at the joints. For sizes exceeding 2 inches in diameter, flanged, welded, or other approved types of joints shall be employed. Packing material shall be suitable for the cargo carried. Connections at bulkheads shall be made so that the plating does not form part of a flanged joint. Piping may be carried through bunker spaces and deep tanks provided it is run through a pipe tunnel. The tunnel may be omitted where the pipe is extra heavy, all joints are welded, and bends are installed to provide for expansion and contraction.

(b) Cargo piping shall not pass through spaces containing machinery where sources of vapor ignition are normally present: *Provided*, That in special cases the Commandant may permit the piping to pass through such spaces if Grade E liquids only are involved.

(c) Valve operating rods in the cargo tanks shall be solid and of ample size, well guided and supported, and attached to the valve stems in a manner to guard against their working loose. Where such valve rods pass through the deck, gas tight stuffing boxes shall be fitted. The leads of valve rods shall be as direct as possible. All valves and fittings shall be of material, design, and manufacture for the intended service on the cargo system; either rising or nonrising stem valves may be used.

§ 32.50–25 Cargo pumps and piping on tank vessels constructed prior to November 10, 1936—TB/ALL.

On tank vessels, the construction or conversion of which was started prior to November 10, 1936, cargo pumps and piping which do not fully comply with the regulations in this subchapter shall be made as nearly equal to the requirements for tank vessels constructed between November 10, 1936, and July 1, 1951, as is necessary in the interest of safety. Cargo pipe lines may pass through cargo pump engine compartments provided no cargo valves are located therein.

§ 32.50–30 Cargo hose—TB/ALL.

Cargo hose carried on tank vessels must be suitable for oil service and designed to withstand the pressure of the shutoff head of the cargo pump or pump relief valve setting, less static head, but in no case less than 150 pounds per square inch.

NOTE: For additional requirements concerning cargo hose, see 33 CFR 154.500, 155.800 and 156.170.

[CGD 80–009, 48 FR 36458, Aug. 11, 1983]

§ 32.50–35 Remote manual shutdown for internal combustion engine driven cargo pump on tank vessels—TB/ALL.

(a) Any tank vessel which is equipped with an internal combustion engine driven cargo pump on the weather deck shall be provided with a minimum of one remote manual shutdown station, conspicuously marked, and located at the midpoint of such vessel, or 100 feet from the engine, whichever is the more practical. The remote quick acting manual shutdown shall be installed on the engine so as to provide a quick and effective means of stopping the engine (such as by cutting off the intake air).

(b) This regulation applies to all installations of this type on tank vessels, but for such installations now on existing tankships at the date of next biennial inspection or October 1, 1963, whichever occurs later.

Subpart 32.52—Bilge Systems

§ 32.52–1 Bilge pumps on tank vessels constructed or converted on or after November 19, 1952—TB/ALL.

The number and arrangement of bilge pumps on each tank vessel shall conform to the requirements of subchapter F (Marine Engineering) of this chapter, except as hereinafter provided in this subpart.

§ 32.52–5 Bilge piping for pump rooms and adjacent cofferdams on tank vessels constructed or converted on or after November 19, 1952—TB/ALL.

(a) Provisions shall be made for removing drainage from the pumproom bilges and adjacent cofferdams. A separate bilge pump, ejector, or bilge suction from a cargo pump or cargo stripping pump may be provided for this purpose. The bilge pump shall not be located in nor shall the piping pass through spaces containing machinery where sources of vapor ignition are normally present.

(b) Where a bilge suction is provided from a cargo or stripping pump, a stopcheck valve shall be fitted in the suction branch, and an additional stop valve shall be fitted also if the bilge suction branch can be subjected to a head of oil from the filling line.

(c) Means shall be provided for controlling the cargo or pump room bilge pumps and their suctions or discharges in order that a flooded pump room may be pumped out. Suitable portable or manually operated pumps may be accepted as complying with this provision, or alternatively, the pump controls shall be arranged so that they are operable from inside the pump room and either from an accessible position outside the pump room, or from the pump room casing above the freeboard deck.

§32.52–10 Bilge pumps and piping on tank vessels constructed or converted prior to November 19, 1952—TB/ALL.

(a) On tank vessels, the construction or conversion of which was started prior to November 19, 1952, bilge pumps and piping which do not fully comply with the regulations of this subchapter shall be made as nearly equal to the requirements for tank vessels constructed on or after November 19, 1952, as is necessary in the interest of safety.

(b) Bilge suctions from hold spaces containing independent cargo tanks may be connected to cargo pumps or stripping pumps, provided the installation complies with the requirements of §32.52–5(b).

Subpart 32.53—Inert Gas System

SOURCE: CGD 74–127, 41 FR 3843, Jan. 26, 1976, unless otherwise noted.

§32.53–1 Application—T/ALL.

(a) Except as provided in paragraphs (b) and (c) of this section, this subpart applies to:

(1) A U.S. crude oil tanker or product carrier of 100,000 DWT tons (metric) or more or combination carrier of 50,000 DWT tons (metric) or more, that has a keel laying date on or after January 1, 1975.

(2) A new (as defined in 46 U.S.C. 391a(2)) crude oil tanker or product carrier, or foreign flag crude oil tanker or product carrier of 20,000 DWT tons or more entering the navigable waters of the U.S.

(3) A crude oil tanker that is equipped with a cargo tank cleaning system that uses crude oil washing.

(4) An existing product carrier of 20,000 deadweight tons (metric) or more that has tank washing machines with a capacity of more than 60 cubic meters per hour after May 31, 1983.

(5) Any other U.S. or foreign flag:

(i) Crude oil tanker or product carrier of 70,000 deadweight tons (metric) and over after May 31, 1981;

(ii) Crude oil tanker between 20,000 and 70,000 deadweight tons (metric) after May 31, 1983;

(iii) Product carrier between 40,000 and 70,000 deadweight tons (metric) after May 31, 1983.

(b) This subpart does not apply to vessels designed to carry only:

(1) Liquefied gas cargo; or

(2) Grade E cargo that is carried at a temperature lower than 5° C below its flash point.

(c) This part does not apply to the following:

(1) Vessels under subsections (4) and (5) of Sec. 5, Port and Tanker Safety Act of 1978 (Pub. L. 95–474, 92 Stat. 1480, 46 U.S.C. 391a).

(2) Any foreign vessel not destined for, or departing from, a port or place subject to the jurisdiction of the United States, that is in innocent passage through the territorial seas of the United States or is in transit through the navigable waters of the United States which form a part of an international strait.

[CGD 77–057a, 44 FR 66501, Nov. 19, 1979]

§32.53–3 Exemptions.

(a) The Chief, Marine Safety and Environmental Protection grants exemptions for crude oil tankers of less than 40,000 deadweight tons not fitted with high capacity tank washing machines, if the vessel's owner can show that compliance would be unreasonable and impracticable due to the vessel's design characteristics.

(b) Requests for exemptions must be submitted in writing to: Commandant

(G–MSO), U.S. Coast Guard, Washington, DC 20593–0001.

(c) Each request must be supported by documentation showing that:

(1) The system would be detrimental to the safe operation of the vessel;

(2) It is physically impracticable to install the system; or

(3) Adequate maintenance of the system would be impossible.

(d) The vessel's owner may request a conference. The exemption request file will be available for use in the conference and additional arguments or evidence in any form may be presented. The conference will be recorded. The presiding officer summarizes the material presented at the conference and submits written recommendations to the Chief, Office of Marine Safety and Environmental Protection.

(e) The Chief, Office of Marine Safety and Environmental Protection reviews the exemption request file and decides whether to grant or deny the exemption. The decision shall include an explanation of the basis on which the exemption is granted or denied, and constitutes final agency action.

[CGD 77–057a, 44 FR 66502, Nov. 19, 1979, as amended by CGD 82–063b, 48 FR 29486, June 27, 1983; CGD 88–070, 53 FR 34534, Sept. 7, 1988; CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 32.53–5 Operation—T/ALL.

The master of each tankship to which this subpart applies shall ensure that the inert gas system is operated as necessary to maintain an inert atmosphere in the cargo tanks at the pressure required under § 32.53–30, except when the cargo tanks are gas free.

§ 32.53–10 General—T/ALL.

(a) Each tankship to which this subpart applies must have an inert gas system that meets the requirements of this subpart and is approved in accordance with 46 CFR 50.20.

(b) Each inert gas system must be designed to supply the cargo tanks a gas or a mixture of gases that has an oxygen content of 5% or less by volume.

(c) Each inert gas system must be designed to eliminate the need for fresh air in the cargo tanks during normal operations except during gas freeing.

(d) Each cargo and cargo slop tank must be capable of being purged with inert gas.

(e) Each inert gas system that is designed to purge the tanks with fresh air must have blank flanges for installation on all fresh air inlets when they are not in use.

(f) Each inert gas system must be designed to minimize the risk of ignition from the generation of static electricity.

§ 32.53–15 Approval—T/ALL.

(a) The installer of each inert gas system must submit a description and specifications of the supply and distribution systems, including all control and monitoring devices, to the appropriate Coast Guard technical office in accordance with 46 CFR 50.20 for approval.

(b) Each inert gas system must meet the requirements of 46 CFR part 56, except:

(1) The 50 p.s.i. minimum design pressure does not apply, but valves, fittings, and vessels such as scrubbers must be designed for the maximum pressure and temperature they may encounter in service; and

(2) The only initial service test the system is required to pass is an initial service leak test.

§ 32.53–20 Inert gas generators—T/ALL.

Systems employing inert gas generators must meet the requirements of 46 CFR 63.05–20 for control of the generator. Plans for each inert gas generator must be submitted for approval in accordance with 46 CFR 63.05–5.

§ 32.53–25 Gas supply—T/ALL.

Each inert gas system must be capable of supplying inert gas at a capacity of 125 percent of the combined maximum rated capacities of all cargo pumps which can be simultaneously operated.

§ 32.53–30 Positive pressure—T/ALL.

Each inert gas system must be designed to enable the operator to maintain a gas pressure of 100 millimeters (4 inches) of water on filled cargo tanks and during loading and unloading of cargo tanks.

§ 32.53–35 Gas scrubber—T/ALL.

If the inert gas production process uses heated gas or introduces contaminants into the system, the system must have a scrubber or other device that reduces solid and sulphur combustion products and cools the inert gas.

§ 32.53–40 Scrubber: Cooling water supply—T/ALL.

(a) The cooling water system of each inert gas system that uses a scrubber must furnish an adequate supply of water to each scrubber without interfering with the water supply to the firefighting system.

(b) An alternate water supply must be available to each scrubber.

§ 32.53–45 Blowers—T/ALL.

(a) Each inert gas system must have at least two independent blowers that together are capable of delivering the amount of gas required by § 32.53–25 of this subpart.

(b) Each inert gas system must be designed to prevent the pressure exerted on the tanks from exceeding their maximum design pressure.

§ 32.53–50 Gas distribution lines: Non-return devices—T/ALL.

(a) Two non-return devices, one of which is a water seal, must be fitted in the inert gas main.

(b) The water supply system must be designed to ensure that an adequate supply of water to the water seal can be maintained manually or automatically at all times.

§ 32.53–55 Stop valves—T/ALL.

(a) Stop valves or other means of closure such as spectacle flanges must be fitted in each branch pipe at each tank.

(b) Each stop valve or other device must be a type that provides visible indication of whether it is open or closed.

§ 32.53–60 Instrumentation—T/ALL.

(a) Each inert gas system must be equipped with the following instruments with sensors fitted downstream of the blowers:

(1) Oxygen concentration indicator and permanent recorder.

(2) Pressure indicator and permanent recorder.

(3) Temperature indicator.

(b) Each instrument listed in paragraph (a) of this section must operate continuously when inert gas is being supplied to the tanks.

(c) Each inert gas system must have readouts of oxygen concentration, pressure, and temperature provided at the cargo control station and the location of the person in charge of the main propulsion machinery.

§ 32.53–65 Portable instruments—T/ALL.

(a) Each ship that has an inert gas system must have portable instruments for measuring concentrations of oxygen and hydrocarbon vapor in an inert atmosphere.

(b) Each tank must have fittings which allow the use of portable instruments.

§ 32.53–70 Alarms and controls—T/ALL.

(a) Alarms must sound at the location of the controls for the main propulsion machinery.

(b) Each inert gas system must have the following:

(1) An alarm that gives an audible and visual warning when the oxygen content of the inert gas exceeds 8 percent by volume.

(2) An alarm that gives an audible and visual warning when the gas pressure in the inert gas main downstream of all non-return devices is less than 100 millimeters (4 inches) of water.

(3) An alarm that gives an audible and visual warning and a control that automatically shuts off the system's blowers upon loss of normal water supply at the water seal.

(4) An alarm that gives an audible and visual warning and a control that automatically shuts off the system's blowers when the temperature of the inert gas that is being delivered to the cargo tanks is more than 65.6° C (150° F).

(5) An alarm that gives an audible and visual warning and a control that automatically shuts off the system's blowers upon loss of normal cooling water supply to any scrubber.

§ 32.53–75 Gas main: Automatic shut-down valve—T/ALL.

(a) The gas main of each inert gas system must have an automatic shut-down valve that is fitted where the gas main leaves the production plant.

(b) Each shut-down valve must be designed to close automatically upon blower failure.

§ 32.53–80 Tank cleaning—T/ALL.

Each inert gas system must be capable of maintaining an inert atmosphere within tanks that are being mechanically washed.

§ 32.53–85 Instruction manual—T/ALL.

(a) The master of each ship that has an inert gas system must have on board the ship an instruction manual that contains instructions for the safe operation and maintenance of the inert gas system.

(b) If a vapor collection system required to meet part 39 of this subchapter is connected to the inert gas system, the instruction manual required by paragraph (a) of this section must include procedures relating to vapor collection operations.

[CGD 74–127, 41 FR 3843, Jan. 26, 1976, as amended by CGD 88–102, 55 FR 25446, June 21, 1990]

Subpart 32.55—Ventilation and Venting

§ 32.55–1 Ventilation of tank vessels constructed on or after July 1, 1951—TB/ALL.

(a) On all tanks vessels, the construction or conversion of which is started on or after July 1, 1951, all enclosed parts of the vessel, other than cargo, fuel and water tanks, cofferdams and void spaces, shall be provided with efficient means of ventilation.

(b) Compartments containing machinery where sources of vapor ignition are normally present shall be ventilated in such a way as to remove vapors from points near the floor level or the bilges. Effective steam or air actuated gas ejectors, blowers or ventilators fitted with heads for natural ventilation, with at least one duct extending to immediately below the floor plates will be approved for this purpose. Machinery spaces below the freeboard deck, in which fuels with flash point of 110° F or lower are used, shall be equipped with power ventilation. (See § 32.60–20 for other requirements concerning pumprooms.)

§ 32.55–5 Ventilation of tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.

(a) On tank vessels, the construction or conversion of which was started on or after November 10, 1936, and prior to July 1, 1951, all enclosed parts of the vessel, other than cargo, fuel, and water tanks and cofferdams, shall be provided with efficient means of ventilation.

(b) Pumprooms and compartments containing machinery where sources of vapor ignition are normally present shall be ventilated in such a way as to remove vapors from points near the floor level or the bilges. Effective steam or air actuated gas ejectors or blowers or ventilators fitted with heads for natural ventilation, will be approved for this purpose. (See § 32.65–20 for other requirements concerning pumprooms.)

§ 32.55–10 Ventilation of tank vessels contracted prior to November 10, 1936—TB/ALL.

Ventilation of tank vessels, the construction or conversion of which was started prior to November 10, 1936, shall be equal to the requirements of tank vessels constructed before July 1, 1951, where the changes are, in the opinion of the Officer in Charge, Marine Inspection, necessary in the interest of safety.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 66–33, 31 FR 15268, Dec. 6, 1966]

§ 32.55–15 Ventilation for hold spaces—TB/ALL.

Hold spaces containing independent cargo tanks shall be considered to be equivalent to cargo pumprooms and shall be ventilated and safeguarded as such.

§ 32.55–20 Venting of cargo tanks of tankships constructed on or after July 1, 1951—T/ALL.

(a) *Venting required.* (1) On all tankships, the construction or conversion of which is started on or after July 1, 1951, each cargo tank shall be equipped with a vent. The diameter of a vent shall be not less than 2½ inches.

(2) In any case where a venting system is required for a particular grade of liquid, the venting system permitted for a higher grade of liquid may be used instead.

(b) *Grade A liquids.* (1) Cargo tanks in which Grade A liquids are to be transported must be fitted with a venting system consisting of a branch vent line from each cargo tank connected to a vent header which must extend to a height above the weather deck equal to at least 13.1 feet and must terminate at a comparable distance from any living or working space, ventilator inlet, or source of ignition. When special conditions will prevent the vent line or header outlets being permanently installed at a height above the deck of 13.1 feet an adjustable system must be provided which, when extended vertically, is capable of reaching a height of 13.1 feet.

(2) A weather hood may be installed at the vent outlet providing it is of such design as not to direct the flow of vapor below the horizontal.

(3) The branch vent lines shall consist of either:

(i) Pipe with no valves or other hindrances to a free flow of gas; or,

(ii) Piping fitted with a pressure vacuum relief valve, provided means are supplied for relieving all internal pressure on cargo tanks by fitting the valve with a positive means for opening its pressure valve to allow free passage of gases through the branch vent line or by the installation of a by-pass fitted with a manually operated stop valve.

(4) The vent header shall be fitted with a flame arrester or pressure vacuum relief valve. If a pressure vacuum relief valve is used in the header, means shall be provided for relieving all internal pressure on cargo tanks by fitting the valve with a positive means for opening its pressure valve to allow free passage of gases through the header or by the installation of a by-pass fitted with a manually operated stop valve. A suitable means of relieving pressure shall be fitted in the header in order to prevent excess pressure being built up in the tanks, in the event of overfilling of the latter. The vent header system shall be provided with suitable connections for flushing and draining. The vent header system shall be of sufficient capacity as to be able to carry off all displaced air and vapors during loading of the cargo tanks without opening of ullage plates, cargo hatches, etc. See § 32.20–20 for liquid level gaging requirements.

(c) *Grade B or C liquids.* Cargo tanks in which Grade B or C liquids are to be transported shall be fitted with either individual pressure-vacuum relief valves which shall extend to a reasonable height above the weather deck or shall be fitted with a venting system consisting of branch vent lines connected to a vent header which shall extend to a reasonable height above the weather deck and be fitted with a flame arrester or a pressure-vacuum relief valve. The vent header system, if fitted, shall be provided with suitable connections for flushing and draining, and if desired, stop valves may be placed in the individual branch vent lines provided that each stop valve is bypassed by a pressure-vacuum relief valve.

(d) *Grade D or E liquids.* Cargo tanks in which Grade D or E liquids only are to be transported shall be fitted with gooseneck vents and flame screens.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGD 73–96, 42 FR 49024, Sept. 26, 1977]

§ 32.55–25 Venting of cargo tanks of tank barges constructed on or after July 1, 1951—B/ALL.

(a) *Venting required.* (1) On all tank barges, subject to the provisions of this subchapter the construction or conversion of which is started on or after July 1, 1951, each cargo tank shall be equipped with a vent. The diameter of a vent shall be not less than 2½ inches.

(2) In any case where a venting system is required for a particular grade of liquid, the venting system permitted for a higher grade of liquid may be used instead.

(b) *Grade A, B, or C liquids.* Cargo tanks in which Grade A, B, or C liquids are to be transported shall be fitted with either individual pressure-vacuum relief valves which shall extend to a reasonable height above the weather deck or shall be fitted with a venting system consisting of branch vent lines connected to a vent header which shall extend to a reasonable height above the weather deck and be fitted with a pressure-vacuum relief valve. The vent header system, if fitted, shall be provided with suitable connections for flushing and draining, and if desired, stop valves may be placed in the individual branch vent lines: *Provided,* That each such stop valve is bypassed by a pressure-vacuum relief valve.

(c) *Grade D or E liquids.* Cargo tanks in which Grade D or E liquids only are to be transported shall be fitted with gooseneck vents and flame screens.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 70–10, 35 FR 3709, Feb. 25, 1970]

§ 32.55–30 Venting of cargo tanks of tank vessels constructed between November 10, 1936, and July 1, 1951—TB/ALL.

(a) *Venting required.* On all tank vessels, the construction or alteration of which is started on or after November 10, 1936, and prior to July 1, 1951, each cargo tank shall be equipped with a vent. The details of the venting system shall meet the requirements of this section, or alternatively, the requirements of either § 32.55–20 or § 32.55–25, as applicable, shall be met.

(b) *Grade A liquids.* (1) Cargo tanks in which Grade A liquids are to be transported shall be fitted with a venting system consisting of branch vent line from each cargo tank connected to a vent header which shall extend to a reasonable height above the weather deck and be fitted with a flame arrester or pressure-vacuum relief valve. Each branch vent line may be provided with a manually operated control valve, provided it is bypassed with a pressure-vacuum relief valve or each cargo tank to which such a branch vent line is connected is fitted with an independent pressure-vacuum relief valve. The vent header system shall be provided with suitable connections for flushing and draining.

(2) In barges with independent tanks carrying Grade A liquids, separate discharge pipes may be fitted to each pressure-vacuum relief valve, or the pressure-vacuum relief valve may be elevated, so that in either case the discharge from such valve will not be less than 7 feet above the deck where practicable.

(c) *Grade B or C liquids.* Cargo tanks in which Grade B or C liquids are to be transported shall be fitted with individual pressure-vacuum relief valves or shall be fitted with a venting system consisting of branch vent lines connected to a vent header which shall extend to a reasonable height above the weather deck and be fitted with a flame arrester or a pressure-vacuum relief valve.

(d) *Grade D or E liquids.* Cargo tanks in which Grade D or E liquids only are to be transported shall be fitted with gooseneck vents and flame screens unless such tanks are vented by pressure-vacuum relief valves or a venting system of branch vent lines and a vent header.

§ 32.55–35 Venting of cargo tanks on tank vessels constructed prior to November 10, 1936—TB/ALL.

The venting of cargo tanks of tank vessels, the construction or alteration of which was started prior to November 10, 1936, shall be made to equal the requirements of tank vessels constructed before July 1, 1951, where the changes are, in the opinion of the Officer in Charge, Marine Inspection, necessary in the interests of safety: *Provided,* That on such vessels carrying Grade A cargo the requirements in § 32.55–30(b) shall be met.

§ 32.55–40 [Reserved]

§ 32.55–45 Venting of cofferdams and void spaces of tank vessels constructed on or after November 10, 1936—TB/ALL.

(a) Except as provided in paragraph (b) of this section, on all tank vessels, the construction or conversion of which was started on or after November 10, 1936, cofferdams and void spaces shall be provided with gooseneck vents fitted with a flame screen or pressure-

vacuum relief valves. The diameter of a vent shall be not less than 2½ inches.

(b) On unmanned tank barges not fitted with fixed bilge systems in the cofferdams and void spaces, vents for cofferdams and void spaces will not be required.

§ 32.55–50 Ventilation of tankships that have a keel laying date on or after January 1, 1975—T/ALL.

Each tankship that has a keel laying date on or after January 1, 1975, must have deckhouse and superstructure ventilation inlets and outlets and other openings to the exterior arranged to minimize the admission of flammable gas to enclosed spaces that contain a source of ignition.

[CGD 74–127, 41 FR 3844, Jan. 26, 1976]

Subpart 32.56—Structural Fire Protection for Tank Ships With a Keel Laying Date on or After January 1, 1975

SOURCE: CGD 74–127, 41 FR 3844, Jan. 26, 1976, unless otherwise noted.

§ 32.56–1 Application—T/ALL.

This subpart applies to all tankships that have a keel laying date on or after January 1, 1975.

§ 32.56–5 General—T/ALL.

(a) Except as provided in paragraphs (c) and (d) of this section, each category A machinery space must be aft of the cargo area and pumprooms.

(b) Except as provided in paragraphs (c), (d), and (e) of this section, each accommodation space, service space except isolated storage spaces, and control space and each main cargo control station must be aft of:

(1) The cargo area;

(2) All cargo pumprooms; and

(3) All cofferdams that isolate the cargo area from category A machinery spaces.

(c) Except as provided in paragraph (e) of this section, any pumproom may be recessed below accommodation, service, and control spaces and recessed into any category A machinery space if the distance between the deckhead of the recess and the underside of the accommodation, service, or control space is at least equal to the height of the recess.

(d) Accommodation, service, control and certain machinery spaces, such as spaces for bow thrusters, windlass, and emergency fire pumps, may be located forward of the cargo area and pumprooms if it is demonstrated to the Commandant that the overall degree of safety of the vessel is improved and that the degree of fire and life safety for these spaces is not less than the degree of fire and life safety for similar spaces located aft.

(e) On liquefied gas carriers:

(1) Main cargo control stations may be located in the cargo area;

(2) Accommodation, service, and control spaces may be located over cofferdams that isolate cargo tanks other than integral tanks from category A machinery spaces;

(3) Pumprooms may not be recessed into any space below deck.

§ 32.56–10 Navigation positions—T/ALL.

(a) No navigation position may be above the cargo area unless it is approved by the Commandant as necessary for the safe operation of the vessel.

(b) Each navigation position that is above the cargo area must be separated from the deck by an unenclosed space that extends at least 2 meters (6.6 feet) from the deck to the navigation position.

(c) Openings to navigation positions above cargo areas, except air locks, must be at least 2.4 meters (7.9 feet) above the deck.

§ 32.56–15 Deck spills—T/ALL.

A coaming or other barrier at least .3 meters (1 foot) higher than adjacent spill containment barrier must be provided to prevent cargo spills from flowing aft of the housefront.

§ 32.56–20 Insulation of exterior boundaries: Superstructures and deckhouses—T/ALL.

The following exterior boundaries of superstructures and deckhouses that contain accommodation, service, and control spaces, except wheelhouses, must be insulated to ''A–60'' Class:

(a) The exterior boundaries that face the cargo area.

(b) The portion of the exterior bulkheads and decks within 3 meters (10 feet) of these boundaries.

§ 32.56–21 Openings in exterior boundaries: Accommodation, service, and control spaces—T/ALL.

The following exterior boundaries of accommodation, service, and control spaces, except wheelhouses, must have no openings, and portlights must be of a fixed type with easily operable steel covers on the inside:

(a) The exterior boundaries that face the cargo area.

(b) The portion of the exterior boundaries within 3 meters (10 feet) or the length of the vessel divided by 25, whichever is greater, except that the distance need not exceed 5 meters (16.4 feet), of these boundaries.

§ 32.56–22 Openings in and insulation of boundaries: Other spaces—T/ALL.

If openings are fitted into the following exterior boundaries of any space other than an accommodation, service, or control space, the interior of the space must be insulated to ''A–60'' Class and the space must not provide access to any accommodation, service, or control space:

(a) The exterior boundaries that face the cargo area.

(b) The portion of the exterior boundaries within 3 meters (10 feet) or the length of the vessel divided by 25, whichever is greater, except that the distance need not exceed 5 meters (16.4 feet), of these boundaries.

§ 32.56–25 Category A machinery spaces: Windows and port lights—T/ALL.

(a) Except as provided in paragraph (b) of this section and subpart 111.105, of this chapter, boundaries of category A machinery spaces and boundaries of cargo pumprooms must not be pierced for windows or portlights.

(b) Skylights that can be closed from outside the spaces they serve may be fitted in boundaries of category A machinery spaces.

[CGD 74–127, 41 FR 3844, Jan. 26, 1976, as amended by CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

§ 32.56–30 Category A machinery spaces: Bulkheads and decks—T/ALL.

(a) Bulkheads and decks that separate category A machinery spaces from cargo pumprooms must be ''A'' Class construction.

(b) Bulkheads and decks that separate category A machinery spaces or cargo pumprooms, including the pumproom entrance, from accommodation, service, or control spaces must be ''A–60'' Class construction.

§ 32.56–35 Doors—T/ALL.

(a) Casing doors in category A machinery spaces and all elevator doors must be self-closing and must meet the requirements of 46 CFR 72.05–25(b).

(b) If a means of holding a door open is used, it must be a magnetic holdback or equivalent device that is operated from the bridge or other suitable remote control position.

§ 32.56–40 Category A machinery spaces: Insulation—T/ALL.

Structural insulation within category A machinery spaces must have a barrier such as metal foil, sheet metal, cementitious coating, or other vapor barrier so that the surface of that insulation is impervious to oil and oil vapors.

[CGD 74–127, 41 FR 3844, Jan. 26, 1976, as amended by CGD 74–127, 41 FR 4826, Feb. 2, 1976]

§ 32.56–45 Draft stops—T/ALL.

(a) Where ceilings or linings are fitted in accommodation, service, or control spaces, ''B'' Class bulkheads, except those that form passageways, may stop at the ceiling or lining if draft stops of ''B'' Class construction are fitted between the ceiling or lining and the deck or shell at intervals of 14 meters (45 feet) or less.

(b) Spaces behind the linings of stairways and other trunks must have draft stops at each deck.

§ 32.56–50 Combustible veneers—T/ALL.

(a) Except as provided in paragraph (b) of this section combustible veneers on bulkheads, linings, and ceilings within accommodation, service, or control spaces must be 2 millimeters (.079 inches) or less in thickness.

(b) Veneers on bulkheads, linings, and ceilings in concealed spaces, corridors, stairway enclosures, or control spaces must be an approved interior finish material or a reasonable number of coats of paint.

§ 32.56–55 Control spaces—T/ALL.

Bulkheads and decks that separate control spaces from adjacent spaces must be ''A'' Class construction and insulated against fire. 46 CFR Table 72.05–10(e) of the Passenger Vessel Regulations may be used as a guide.

§ 32.56–60 Ventilation ducts—T/ALL.

(a) Each duct for ventilation of Category A machinery spaces that passes through accommodation, service, or control spaces must be:

(1) Constructed of steel and insulated to ''A–60'' Class; or

(2) Constructed of steel, fitted with an automatic fire damper at each boundary where it enters and leaves the Category A machinery space, and insulated to ''A–60'' Class for a distance of 5 meters (16.4 feet) beyond each machinery space boundary.

(b) Each duct for ventilation of accommodation, service, and control spaces that passes through Category A machinery spaces must be constructed of steel and be fitted with an automatic fire damper at each Category A machinery space boundary.

Subpart 32.57—Structural Fire Protection for Tank Vessels Contracted for On or After January 1, 1963

§ 32.57–1 Application—TB/ALL.

(a) The provisions of this subpart shall apply to all tank vessels contracted for on or after January 1, 1963.

§ 32.57–5 Definitions—TB/ALL.

(a) *Standard fire test.* A ''standard fire test'' is one which develops in the test furnace a series of time temperature relationships as follows:

5 minutes—1,000° F.
10 minutes—1,300° F.
30 minutes—1,550° F.
60 minutes—1,700° F.

(b) *''A'' Class divisions.* ''A'' Class divisions such as bulkheads and decks, means divisions that are composed of steel or an equivalent metal, suitably stiffened, and made intact with the main structure of the vessel, including the shell, structural bulkheads, or decks. They are constructed so that, if subjected to the standard fire test, they are capable of preventing the passage of flame and smoke for one hour. In addition, they are insulated with approved structural insulation, bulkhead panels, or deck coverings so that the average temperature on the unexposed side does not rise more than 139° C (250° F) above the original temperature, nor does the temperature at any one point, including any joint, rise more than 181° C (325° F) above the original temperature, within the time listed below:

Class A–60	60 minutes
Class A–30	30 minutes
Class A–15	15 minutes
Class A–0	0 minutes with no insulation requirement

(c) *''B'' Class bulkheads.* Bulkheads of the ''B'' Class shall be constructed with approved incombustible materials and made intact from deck to deck and to shell or other boundaries. They shall be so constructed that, if subjected to the standard fire test, they would be capable of preventing the passage of flame for one-half hour.

(d) *''C'' Class divisions.* Bulkheads or decks of the ''C'' Class shall be constructed of approved incombustible materials, but need meet no requirements relative to the passage of flame.

(e) *Steel.* Where the term ''steel or other equivalent metal'' is used in this subpart, it is intended to require a material which, by itself or due to insulation provided, has structural and integrity qualities equivalent to steel at the end of the applicable fire exposure.

(f) *Approved material.* Where in this subpart approved materials are required, they refer to materials approved under the applicable subparts of subchapter Q (Specifications) of this chapter, as follows:

Deck Coverings	164.006
Structural Insulations	164.007
Bulkhead Panels	164.008
Incombustible Materials	164.009
Interior Finishes	164.012

(g) *Stairtower.* A stairtower is a stairway which penetrates more than a single deck within the same enclosure.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 67–90, 33 FR 1015, Jan. 26, 1968; CGD 74–127, 41 FR 3845, Jan. 26, 1976; CGD 75–032, 41 FR 17910, Apr. 29, 1976]

§ 32.57–10 Construction—TB/ALL.

(a) The hull, superstructure, structural bulkheads, decks, and deckhouses shall be constructed of steel. Alternately, the Commandant may permit the use of other suitable material in special cases, having in mind the risk of fire.

(b) Bulkheads of galleys, paint and lamp lockers, and emergency generator rooms shall be of ''A'' Class construction.

(c) The boundary bulkheads and decks separating the accommodations and control stations from cargo, and machinery spaces and from galleys, main pantries and storerooms other than small service lockers shall be of ''A'' Class Construction.

(d) The following conditions apply within accommodation, service, and control spaces:

(1) Corridor bulkheads in accommodation areas shall be of ''A'' or ''B'' Class intact from deck to deck Stateroom doors in such bulkheads may have a louver in the lower half.

(2) Stairtowers, elevator, dumbwaiter, and other trunks shall be of ''A'' Class construction.

(3) Bulkheads not already specified to be of ''A'' or ''B'' Class construction may be of ''A'', ''B'', or ''C'' Class Construction.

(4) The integrity of any deck in way of a stairway opening, other than a stairtower, shall be maintained by means of ''A'' or ''B'' Class bulkheads and doors at one level. The integrity of a stairtower shall be maintained by ''A'' Class doors at every level. The doors shall be of the self-closing type. Such doors shall be fitted with a suitable kickout panel in the lower half. Holdback hooks, or other means of permanently holding the door open will not be permitted. However, magnetic holdbacks operated from the bridge or from other suitable remote control positions are acceptable.

(5) Interior stairs, including stringers and treads shall be of steel or other suitable material having in mind the risk of fire. This is not intended to preclude the use of other material for nosing, walking surfaces, etc., over the steel.

(6) Except for washrooms and toilet spaces, deck coverings within accommodation spaces shall be of an approved type. However, overlays for leveling or finishing purposes which do not meet the requirements for an approved deck covering may be used in thicknesses not exceeding ⅜ of an inch.

(7) Except as provided in paragraph (d)(7–a) of this section, ceilings, linings, and insulation, including pipe and duct laggings, must be made of approved incombustible material.

(7–a) Combustible insulations and vapor barriers that have a maximum extent of burning of 122 millimeters (5 inches) or less when tested in accordance with American Society for Testing and Materials (ASTM) Specification D–1692, ''Rate of Burning or Extent of Burning of Cellular Plastics Using a Supported Specimen by a Horizontal Screen'', may be used within refrigerated compartments.

(8) Any sheathing, furring or holding pieces incidental to the securing of any bulkhead, ceiling, lining, or insulation shall be of approved incombustible materials.

(9) Bulkheads, linings and ceilings may have a combustible veneer within a room not to exceed 2 millimeters (.079 inch) in thickness. However, combustible veneers, trim, decorations, etc., shall not be used in corridors or hidden spaces. This is not intended to preclude the use of an approved interior finish or a reasonable number of coats of paint.

(e) Wood hatch covers may be used between cargo spaces or between stores spaces. Hatch covers in other locations shall be of steel or equivalent metal construction. Tonnage openings shall be closed by means of steel plates or equivalent metal construction.

(f) Nitrocellulose or other highly flammable or noxious fume-producing paints or lacquers shall not be used.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 66–33, 31 FR 15268, Dec. 6, 1966; CGFR 67–90, 33 FR 1015, Jan. 26, 1968; CGD 74–127, 41 FR 3845, Jan. 26, 1976]

Subpart 32.59—Minimum Longitudinal Strength and Plating Thickness Requirements for Unclassed Tank Vessels That Carry Certain Oil Cargoes—TB/ALL

§ 32.59–1 Minimum section modulus and plating thickness requirements—TB/ALL.

(a) As used in this seciton, *Rule* means the current Rules of the American Bureau of Shipping or other recognized classification society, as appropriate for the vessel's present service and regardless of the year the vessel was constructed.

(b) The requirements of this section apply to all in-service, unclassed tank vessels certificated to carry a pollution category I oil cargo listed in 46 CFR Table 30.25–1.

(c) For all vessels except those limited on their Certificate of Inspection to river routes only, the minimum midship section modulus must be—

(1) At least 90 percent of that required by Rule; or

(2) Where there is no specific Rule requirment, at least 100 percent of that which is necessary to meet the bending moment developed under a full load condition in still water, using a permissible bending stress of 12.74 kN/cm^2 (1.30 t/cm^2, 8.25 Ltf/in^2).

(d) Within the 40-percent midship length, the average flange and web thicknesses of each longitudinal stiffener must be as follows:

(1) For deck and bottom stiffeners: at least 85 percent of Rule thickness, unless a buckling analysis demonstrates that lesser thicknesses can be safely tolerated. However, the average thickness must never be less than 80 percent of Rule thickness; and

(2) For side stiffeners: at least 75 percent of Rule thickness.

(e) Within the 40-percent midship length, the average thickness for longitudinal strength plating must be at least as follows:

(1) Weather deck: 75 percent of Rule thickness;

(2) Hatch: 70 percent of Rule thickness;

(3) Trunk: 75 percent of Rule thickness;

(4) Sheer strake: 75 percent of Rule thickness;

(5) Outer sideshell: 75 percent of Rule thickness;

(6) Inner sideshell: 75 percent of Rule thickness;

(7) Outer bottom; 75 percent of Rule thickness;

(8) Inner bottom: 70 percent of Rule thickness;

(9) Keel: 75 percent of Rule thickness;

(10) Bulkheads: 75 percent of Rule thickness.

[CGD 91–209, 58 FR 52602, Oct. 8, 1993]

Subpart 32.60—Hull Requirements for Tank Vessels Constructed On or After July 1, 1951

NOTE: Requirements for double hull construction for vessels carrying oil, as defined in 33 CFR 157.03, in bulk as cargo are found in 33 CFR 157.10d.

§ 32.60–1 Scantlings, material, and workmanship—TB/ALL.

(a) All tank vessels, the construction or conversion of which is started on or after July 1, 1951, shall conform to the requirements in this subpart in construction of hulls. The hull and deckhouses shall be of steel or iron construction except that the pilothouse and decks over quarters may be constructed of wood. Scantlings, material, and workmanship, subdivision of cargo spaces, fitting of cofferdams, and testing of tanks shall be at least equivalent to the requirements of the American Bureau of Shipping or other recognized classification society.

(b) See subpart 32.57 for structural fire protection requirements for tank vessels contracted for on or after January 1, 1963.

§ 32.60–5 Subdivision of cargo space—TB/ALL.

The cargo space shall be divided into tight compartments as necessary to

avoid excessive stresses and to provide stability.

§ 32.60–10 Segregation of cargo; Grade A, B, C, or D—TB/ALL.

(a) *General.* The galleys, living quarters, navigation spaces, general cargo spaces, boiler rooms, and enclosed spaces where sources of vapor ignition are normally present, shall be segregated from cargo tanks by cofferdams or pump rooms or tanks, either empty or used to carry liquid having a flashpoint of 150° F. or above, or deck spaces enclosed or open.

(b) *Cargo tank spaces.* Cargo tank spaces shall extend to the main deck, with hatches and vents located on the weather deck. Liquids having a flash point of not less than 150° F. may be carried in the bulk tanks located beyond the segregating cofferdams and/or pump rooms.

(c) *Enclosed spaces.* (1) Cargo and vent piping passing through enclosed spaces immediately above the bulk cargo tanks shall be continuous except that flanged joints connecting pipe sections will be permitted.

(2) No openings to cargo tank shall be permitted other than stuffing boxes through which valve control rods or permanently installed gage tapes extend and openings for use of tank cleaning machines. Openings for tank cleaning machines, when not in use, shall be kept closed by means of gastight bolted plates and when in use shall be made essentially gas and watertight by covers through which hose or pipe to the tank cleaning machines extend.

(3) The overhead in way of quarters shall be gastight.

(d) *Stowage spaces.* The spaces described in paragraph (c) of this section may be used for stowage purposes and for general cargo provided that adequate ventilation is furnished.

(e) *Openings.* (1) Except as provided in paragraph (c) of this section, there shall be no manholes or other openings from cargo tanks to any other enclosed spaces. An exception may be made to allow direct access from cargo tanks to innerbottoms through gas tight bolted manholes, provided:

(i) The innerbottom tanks are voids or ballast tanks only, and

(ii) The innerbottom tanks are protected from sources of ignition similar to the cargo tanks, and any bilge or ballast pumping system serving the innerbottom tanks are treated like cargo pumping systems.

(2) Any vents, sounding tubes, and similar piping passing through such tanks shall be run in a suitable trunk; or such piping shall have a wall thickness equal to or greater than the innerbottom plating, but not less than schedule 80, and shall be welded continuously on both sides of the innerbottom plating.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 69–72, 34 FR 17481, Oct. 29, 1969]

§ 32.60–15 Segregation of cargo; Grade E—TB/ALL.

(a) *General.* The galleys, living quarters, navigation spaces, general cargo spaces, boilerrooms, and enclosed spaces containing machinery, where sources of vapor ignition are normally present, shall be segregated from the cargo tanks by tight bulkheads and intervening spaces are not required.

(b) *Cargo tank spaces.* Cargo tank spaces can be terminated at any deck with hatches on the same deck, but the vent lines shall be extended to the weather deck. Butterworth openings and extension rods may be located on the tank top.

§ 32.60–20 Pumprooms on tank vessels carrying Grade A, B, C, D and/or E liquid cargo—TB/ALL.

(a) *Cargo pumps.* In tank vessels carrying Grade A, B, C, or D liquid cargo, cargo pumps shall be isolated from source of vapor ignition by gastight bulkheads. A gastight bulkhead between the pumproom and the pump engine room may be pierced for drive shaft and pump engine control rods provided such openings are fitted with stuffing boxes or other approved gland arrangement. A steam driven pump shall not be considered a source of vapor ignition provided the steam temperature does not exceed 500° F.

(b) *Ventilation for pumprooms on tank vessels the construction or conversion of which is started between July 1, 1951, and January 1, 1963.* (1) Pumprooms of all

tank vessels, the construction or conversion of which is started between July 1, 1951, and January 1, 1963, shall be ventilated in such a way as to remove vapors from points near the floor level or bilges. Pumprooms on tankships handling Grade A, B, or C liquid cargo, with machinery located below the freeboard deck, shall be equipped with power ventilation. Pumprooms equipped with power ventilation shall have the ventilation outlets terminate more than six feet from any opening to the interior part of the vessel which normally contains sources of vapor ignition.

(2) For all tank vessels, the construction or conversion of which is started between October 1, 1959, and January 1, 1963, the power ventilation shall not produce a source of vapor ignition in either the pumproom or the ventilation systems associated with the pumproom. The capacity of power ventilation units shall be sufficient to effect a complete change of air in not more than 3 minutes, based upon the volume of the pumproom and associated trunks up to the deck at which access from the weather is provided.

(c) *Ventilation for pumprooms on tank vessels the construction or conversion of which is started on or after January 1, 1963.* (1) For all tank vessels, the construction or conversion of which is started on or after January 1, 1963, the cargo pumprooms shall be fitted in accordance with paragraphs (a) and (d) of this section. Cargo pumprooms on these vessels shall be ventilated in such a way as to remove vapors from points near the floor level or bilges. Cargo pumprooms on tank vessels handling Grade A, B, or C liquid cargo, shall be equipped with power ventilation of the exhaust type having capacity sufficient to effect a complete change of air in not more than 3 minutes based upon the volume of the pumproom and associated trunks up to the deck at which access from the weather is provided.

(2) The power ventilation units shall not produce a source of vapor ignition in either the pumproom or the ventilation systems associated with the pumproom. Inlets to exhaust ducts shall be provided and located near the floor level at points where concentrations of vapors may be expected. Ventilation from the weather deck shall be provided. Power supply ventilation may be fitted in lieu of natural ventilation, but when fitted shall be arranged to avoid turbulence in the cargo pumproom. Cargo pumprooms equipped with power ventilation shall have the ventilation outlets terminate more than 6 feet from any opening to the interior part of the vessel which normally contains sources of vapor ignition, and shall be so located as to minimize the possibility of recirculating contaminated air through the pumproom.

(3) Cargo pumprooms handling Grade D and/or E liquid cargo only shall be fitted with at least two ducts extended to the weather deck, one of which shall be extended to a point near the floor level. This does not preclude installation of power ventilation, if desired.

(4) The ventilation required in this paragraph shall be sufficient to properly ventilate the pumproom with the access openings closed.

(d) *Access.* The access to a cargo pumproom in a tank vessel carrying Grade A, B, C, or D liquid cargo shall be from the open deck.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970]

§ 32.60–25 Living quarters—TB/ALL.

(a) For living quarters the partitions and sheathing shall be of an approved fire resistive construction. The specification for incombustible materials is in subchapter Q (Specifications) of this chapter.

(b) See subpart 32.57 for structural fire protection for tank vessels contracted for on or after January 1, 1963.

§ 32.60–30 Tank vessels with independent tanks—TB/ALL.

(a) Independent cargo tanks may be located in hold spaces or in other cargo tanks; however, a working space of at least 15 inches shall be maintained around each independent tank, or else provisions shall be made for moving such tanks to furnish such working space, except that less than 15 inches around such tanks may be permitted if in the judgment of the Officer in Charge, Marine Inspection, having jurisdiction, a satisfactory inspection of

the cargo tanks and hull structure can be made.

(b) When an independent cargo tank is located in an enclosed space other than a cargo tank, such enclosed space shall be considered as equivalent to a pumproom and shall be safeguarded as such as required by this subpart.

(c) Cargo tanks independent of the hull structure shall be supported in saddles or on foundations of steel or other suitable material and securely attached in place to preclude the cargo from being damaged or shifting as a result of collision. The arrangement shall be such as to permit longitudinal and circumferential, or athwartship and vertical, expansion of the cargo tanks. Each tank shall be supported so as to prevent the concentration of excessive loads on the supporting portion of the shell.

§ 32.60–35 Tank vessels carrying Grade A liquid cargo—TB/ALL.

(a) Grade A liquids having a Reid vapor pressure in excess of 25 pounds per square inch shall be transported in cargo tanks which are independent of the hull.

(b) Barges carrying Grade A liquids having a Reid vapor pressure in excess of 25 pounds per square inch shall be of a Type III barge hull as defined in § 32.63–5(b)(3).

[CGFR 70–10, 35 FR 3709, Feb. 25, 1970]

§ 32.60–40 Construction and testing of cargo tanks and bulkheads—TB/ALL.

(a) All cargo tanks vented at gage pressure of 4 pounds per square inch or less shall be constructed and tested as required by standards established by the American Bureau of Shipping or other recognized classification society. The design of cargo tanks integral with the hull and vented at a gage pressure exceeding 4 pounds per square inch but not exceeding 10 pounds per square inch gage pressure will be given special consideration by the Commandant.

(b) Cargo tanks vented at a gage pressure exceeding 10 pounds per square inch are considered to be pressure vessels and shall be of cylindrical or similar design and shall meet the requirements of subchapter F (Marine Engineering) of this chapter.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 68–82, 33 FR 18805, Dec. 18, 1968]

§ 32.60–45 Segregation of spaces containing the emergency source of electric power—TB/ALL.

(a) The provisions of this section shall apply to all vessels contracted for on or after October 1, 1958.

(b) When a compartment containing the emergency source of electric power, or vital components thereof, adjoins a space containing either the ship's service generators or machinery necessary for the operation of the ship's service generators, all common bulkheads and/or decks shall be protected by approved ''structural insulation'' or other approved material. This protection shall be such as to be capable of preventing an excessive temperature rise in the space containing the emergency source of electric power, or vital components thereof, for a period of at least one hour in the event of fire in the adjoining space. Bulkheads or decks meeting Class A–60 requirements, as defined by § 72.05–10 of subchapter H (Passenger Vessels) of this chapter, will be considered as meeting the requirements of this paragraph.

Subpart 32.63—Hull and Cargo Tank Requirements for Tank Barges Constructed or Converted On or After July 1, 1964, and Carrying Certain Dangerous Bulk Cargoes

§ 32.63–1 Application—B/ALL.

(a) The requirements of this subpart shall apply to all tank barges, the construction or conversion of which is started on or after July 1, 1964, and carrying those cargoes listed in Table 30.25–1 which are defined as:

(1) Flammable liquids having a Reid vapor pressure in excess of 25 pounds per square inch, absolute, in independent tanks (part 32).

(2) Liquefied flammable gases (part 38 of this subchapter).

[CGFR 70–10, 35 FR 3709, Feb. 25, 1970]

§ 32.63–5 Barge hull classifications—B/ALL.

(a) Each barge subject to the provision of this subpart shall be assigned a hull type number. The Commandant will designate the barge hull types to be used for carrying cargoes in order to insure that the vessel is designed consistent with the degree and nature of the hazard of the commodity carried.

(b) For this purpose the barge hull types shall be as follows:

(1) *Type I barge hull.* Barge hulls classed as Type I are those designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo to the waterways and/or atmosphere.

(2) *Type II barge hull.* Barge hulls classed as Type II are those designed to carry products which require substantial preventive measures to preclude uncontrolled release to the atmosphere, but whose uncontrolled release to the waterways does not constitute a longlasting public or operating personnel hazard, though local and temporary pollution may occur.

(3) *Type III barge hull.* Barge hulls classed as Type III are those designed to carry products of sufficient hazard to require a moderate degree of control.

§ 32.63–8 Alternative arrangements—B/ALL.

(a) Alternative arrangements, differing from those specifically required by this subpart, may be considered and approved by the Commandant, if it is demonstrated to his satisfaction that a degree of safety is obtained which is consistent with the intent of this subpart.

§ 32.63–10 Rakes and coamings—B/ALL.

(a) Each barge hull shall be constructed with a suitable blow form (length, shape, and height of headlog) to protect against diving at the maximum speed at which the barge is designed to be towed. In any integrated tow, only the lead barge need comply with this requirement. In any case, the operator of the towing vessel shall be guided by appropriate speed limitations.

(b) All open hopper type barge hulls shall be provided with coamings around the hopper space and, additionally, a 36-inch minimum height plowshare breakwater on the forward rake. Coamings shall have a minimum height of 36 inches forward graduated to a minimum height of 24 inches at midlength and 18 inches thereafter.

§ 32.63–20 Hull structure—B/ALL.

(a) *General.* In addition to complying with the requirements of § 32.60–1, as applicable, barge hulls of Types I and II shall comply with the provisions of this section.

(b) *Types I and II barge hull.* Under an assumed grounding condition such that the forward rake bulkhead rests upon a pinnacle at the water surface, the maximum hull bending stress shall not exceed the following limits:

(1) Independent tanks may be installed in such a manner that they do not contribute to the strength and stiffness of the barge. In such case, the hull stress shall not exceed either 50 percent of the minimum ultimate tensile strength of the material or 70 percent of the yield strength when specified, whichever is greater.

(2) The Commandant may consider a reduction in hull stress when independent tanks are installed in such a manner as to contribute to the strength and stiffness of the barge and this is accounted for in determining the effective section modulus of the barge. In such case, the hull stress shall not exceed the percentage stress values prescribed in paragraph (b)(1) of this section multiplied by the quantity (1.5 − SWT/UTS), where SWT is the stress calculated without including the effect of the tanks, and UTS is the minimum ultimate tensile strength of the material. The value SWT, however, shall in no case be more than 75 percent of UTS.

§ 32.63–25 Cargo tanks and supports—B/ALL.

(a) *General.* Saddles and hold-down securing straps for independent cargo tanks shall be designed to prevent tank failure due to loads induced in the saddles or straps by barge deflection.

(b) *Collision protection.* (1) All independent cargo tanks installed on Type

I and Type II barge hulls shall be protected with suitable collision chocks or collision straps to withstand a longitudinal collision load of one and one-half times the weight of the tank and cargo. All other independent cargo tanks shall be provided with suitable collision chocks or collision straps to withstand a longitudinal collision load equal to the weight of the tank and cargo.

(2) All cargo tanks shall be so located as to reduce the likelihood of their being damaged in the event of collision. This protection shall be obtained by locating the cargo tanks not less than 4 feet from the side shell and boxend for Type I hulls and 3 feet for Type II barge hulls, and not less than 25 feet from the headlog at the bow for both types.

(c) *Cargo tank design*—(1) *Types I and II barge hulls.* (i) In addition to requirements provided for in applicable regulations for a specific commodity, cargoes subject to the provisions of this subpart shall be transported in cargo tanks meeting the requirements of this paragraph. Pressure vessel-type cargo tanks shall have sufficient additional strength so as to limit the maximum combined tank stress, including saddle horn and bending stresses, to 1.5 times the maximum allowable hoop stress in still water, and to the yield strength of the tank material or 70 percent of the minimum ultimate tensile strength of the tank material, if less, in the grounded condition as required by § 32.63–20(b).

(ii) Gravity type cargo tanks shall have sufficient additional strength to limit the maximum combined tank stress, including saddle horn and bending stresses, to the yield strength of the tank material or 70 percent of the minimum ultimate tensile strength of the tank material, if less, in the grounded condition as required by § 32.63–20(b).

(2) *Type III barge hulls.* In addition to the requirements of this paragraph, pressure vessel-type cargo tanks shall have sufficient additional strength so as to limit the maximum combined stress, including saddle horn and bending stresses, to 1.5 times the maximum allowable hoop stress.

Subpart 32.65—Hull Requirements for Tank Vessels Constructed On or After November 10, 1936, and Prior to July 1, 1951

§ 32.65–1 Application—TB/ALL.

The requirements in this subpart apply to all tank vessels, the construction or conversion of which was started on or after November 10, 1936, and prior to July 1, 1951.

§ 32.65–5 Scantlings, material, and workmanship—TB/ALL.

The hull and deck houses shall be of steel or iron construction except that the pilothouse and decks over quarters may be constructed of wood. Scantlings, material, and workmanship, subdivision of cargo spaces, fitting of cofferdams, and testing of tanks shall be at least equivalent to the requirements of the American Bureau of Shipping or other recognized classification society.

§ 32.65–10 Subdivision of cargo space—TB/ALL.

The cargo space shall be divided into tight compartments as necessary to avoid excessive stresses and to provide stability.

§ 32.65–15 Cofferdams—TB/ALL.

Tank vessels equipped to carry Grade A, B, C, or D liquids shall have their galleys, living quarters, general cargo spaces, boiler rooms, and enclosed spaces containing propelling machinery or other machinery where sources of vapor ignition are normally present, segregated from their cargo tanks by cofferdams or equivalent pumprooms, tanks, or air spaces.

§ 32.65–20 Pumprooms—TB/ALL.

(a) Tank vessels handling Grade A, B, C, or D liquids shall have their cargo pumps isolated from all sources of vapor ignition by gastight bulkheads. Totally enclosed motors of the ''explosion proof'' type, motors ventilated on both the intake and exhaust by ducts to atmosphere, and engines driven by steam shall not be considered to be sources of vapor ignition. The gastight bulkhead between the pumproom and the pump-engine compartment may be

pierced by fixed lights, drive shaft and pump-engine control rods, provided that the shafts and rods are fitted with stuffing boxes where they pass through the gastight bulkheads. The access to a cargo pumproom handling such liquids shall be from the open deck. (See § 32.60–20.0.)

§ 32.65–25 Living quarters—TB/ALL.

Partitions and sheathing shall be of approved fire-resistive construction.

§ 32.65–30 Tank vessels with independent tanks—TB/ALL.

Independent cargo tanks may be located in hold spaces or in other cargo tanks but in all cases a working space of at least 15 inches shall be provided around such independent tanks, or else provisions shall be made for moving them to secure such space. When independent cargo tanks are located in an enclosed space other than a cargo tank, such enclosed space shall be considered as equivalent to a pumproom, and shall be safeguarded as such, as required in the regulations in this subchapter.

§ 32.65–35 Tank vessels carrying Grade A liquids—TB/ALL.

Cargo tanks for Grade A liquids having a Reid vapor pressure in excess of 25 pounds shall be independent of the hull.

§ 32.65–40 Construction and testing of cargo tanks and bulkheads—TB/ALL.

(a) All cargo tanks to be vented at gage pressures of 4 pounds per square inch or less shall be constructed and tested as required by the requirements of the American Bureau of Shipping or other recognized classification society.

(b) All cargo tanks to be vented at gage pressures above 4 pounds per square inch shall be considered as pressure vessels and shall meet the requirements for such vessels as to construction and testing, as set forth in subchapter F (Marine Engineering) of this chapter.

(c) Gastight bulkheads shall be subjected to a thorough hose test.

[CGFR 65–50, 30 FR 16671, Dec. 30, 1965, as amended by CGFR 68–82, 33 FR 18805, Dec. 18, 1968]

Subpart 32.70—Hull Requirements for Steel Hull Tank Vessels Constructed Prior to November 10, 1936

§ 32.70–1 Application—TB/ALL.

All steel hull tank vessels, the construction or conversion of which was started prior to November 10, 1936, shall conform to the requirements in this subpart.

§ 32.70–5 Hull requirements; general—TB/ALL.

The scantlings, material, and workmanship, the subdivision of cargo spaces, the arrangement of cofferdams, the testing of tanks and cofferdams, shall be at least equivalent to the requirements of a recognized classification society for the particular service specified in the application for the certificate of inspection and permit for the transportation of liquid flammable cargoes in bulk as of the date when the tank vessel was built or as of the date when the vessel was converted into a tank vessel. In the absence of such classification requirements, the Officer in Charge, Marine Inspection, shall satisfy himself that the vessel's structure as specified in this section is safe for the service to be specified in its certificate of inspection.

[CGFR 66–33, 31 FR 15268, Dec. 6, 1966]

§ 32.70–10 Cofferdams—TB/ALL.

Tank vessels carrying Grade A, B, or C liquids shall be required to conform to the construction requirements in regard to vertical cofferdams in § 32.65–15, except that a dry cargo compartment shall be considered to be equivalent to a cofferdam, and except as provided for in § 32.70–20.

§ 32.70–15 Pumprooms—TB/ALL.

Tank vessels handling Grade A, B, C or D liquid cargo shall meet the requirements for tank vessels in § 32.65–20 except that the electrical installation shall comply with the requirements of § 32.45–10(c).

§ 32.70–20 Pump-engine compartment—TB/ALL.

No cofferdam will be required between a cargo tank and a compartment

containing pumping engines and their auxiliaries which are used exclusively during pumping operations, provided the pumping engine compartment contains no cargo valves and is well ventilated and provided further that internal combustion exhaust within the compartment are completely water jacketed or insulated and that gasoline engine intakes are fitted with effective flame arresters.

§ 32.70–25 Cargo tanks—TB/ALL.

Cargo tanks shall comply with the conditions specified in §§ 32.65–30 and 32.65–35, and shall pass the tests required in § 32.65–40: *Provided, however,* That less than 15 inches around such tanks may be accepted if in the judgment of the Officer in Charge, Marine Inspection, making the inspection, a satisfactory inspection of the cargo tanks and hull structure can be made.

Subpart 32.75—Hull Requirements for Wood Hull Tank Vessels Constructed Prior to November 10, 1936

§ 32.75–1 Application—TB/ALL.

All wood hull tank vessels, the construction or conversion of which was started prior to November 10, 1936, shall conform to the requirements in this subpart.

§ 32.75–5 Hull requirements; general—TB/ALL.

The scantlings, material, and workmanship, and the fitting and fastening of parts shall be at least equivalent to the requirements of a recognized classification society for the particular service specified in the application for certificate of inspection and permit for the transportation of liquid flammable cargoes in bulk as of the date when the tank vessel was built, or as of the date when the vessel was converted into a tank vessel. In the absence of such classification requirements, the Officer in Charge, Marine Inspection, shall satisfy himself that the vessel's structure as specified in this section is safe for the service to be specified in its certificate of inspection.

§ 32.75–10 Cargo tanks—TB/ALL.

Cargo tanks shall be independent of the wood hull, shall be made of steel or iron, and shall pass the tests required in § 32.65–40(a), (b). Where cargo tanks in wood hulls are not arranged to provide working space around them they shall be so constructed as to allow inspection of the hull, tanks, and bilges, and they shall be so installed that they can be moved to allow repairs to the hull structure and to themselves.

§ 32.75–15 Electric bonding and grounding for tanks—TB/ALL.

All independent cargo tanks in wood hull tank vessels shall be electrically bonded together with stranded copper cable of not less than No. 4B and S gage and one end of this cable shall be grounded to a copper or brass plate of not less than 2 square feet in area and one-sixteenth inch in thickness and this plate shall be securely fastened to the hull, on the outside, at a point where it shall be covered by water when the tank vessel is unloaded.

§ 32.75–20 Hold spaces and bulkheads—TB/ALL.

In wood hull tank vessels containing independent cargo tanks for the transportation of Grade A, B, C, or D liquids, the hold spaces shall be considered as equivalent to a pumproom and shall be safeguarded and ventilated as such as required by § 32.65–20. Where the hold spaces contain equipment or operations which are sources of vapor ignition, such equipment or operations shall be isolated from other spaces by gastight bulkhead or, if it is impracticable to construct a gastight bulkhead, two structurally tight bulkheads without openings, separated by a well-ventilated air space 24 inches wide, where possible may be used.

Subpart 32.80—Tank Barges Constructed of Materials Other Than Steel or Iron

§ 32.80–1 General requirements—B/ALL.

All tank barges with hulls constructed of materials other than iron or steel, the construction or conversion

of which was started prior to September 2, 1945, and to which certificates of inspection were issued prior to March 2, 1946, shall be considered the same as tank barges constructed prior to November 10, 1936.

Subpart 32.85—Lamp and Paint Rooms and Similar Compartments on Tankships

§ 32.85–1 Fireproofing of lamp, oil and paint rooms—T/ALL.

Lamp, oil and paint rooms shall be wholly and tightly lined with metal.

Subpart 32.90—Pilot Boarding Equipment

§ 32.90–1 Pilot boarding equipment.

(a) This section applies to each vessel that normally embarks or disembarks a pilot from a pilot boat or other vessel.

(b) Each vessel must have suitable pilot boarding equipment available for use on each side of the vessel. If a vessel has only one set of equipment, the equipment must be capable of being easily transferred to and rigged for use on either side of the vessel.

(c) Pilot boarding equipment must be capable of resting firmly against the vessel's side and be secured so that it is clear from overboard discharges.

(d) Each vessel must have lighting positioned to provide adequate illumination for the pilot boarding equipment and each point of access.

(e) Each vessel must have a point of access that has:

(1) a gateway in the rails or bulwark with adequate handholds; or

(2) Two handhold stanchions and a bulwark ladder that is securely attached to the bulwark rail and deck.

(f) The pilot boarding equipment required by paragraph (b) of this section must include at least one pilot ladder approved under subpart 163.003 of this chapter. Each pilot ladder must be of a single length and capable of extending from the point of access to the water's edge during each condition of loading and trim, with an adverse list of 15°.

(g) Whenever the distance from the water's edge to the point of access is more than 30 feet, access from a pilot ladder to the vessel must be by way of an accommodation ladder or equally safe and convenient means.

(h) Pilot hoists, if used, must be approved under subpart 163.002 of this chapter.

[CGD 79–032, 49 FR 25455, June 21, 1984]

PART 34—FIREFIGHTING EQUIPMENT

Subpart 34.01—General

34.01–1 Applicability—TB/ALL.
34.01–5 Equipment installed but not required—TB/ALL.
34.01–10 Protection for unusual arrangements or special products—TB/ALL.
34.01–15 Incorporation by reference.

Subpart 34.05—Firefighting Equipment, Where Required

34.05–1 Fire main system—T/ALL.
34.05–5 Fire-extinguishing systems—T/ALL.
34.05–10 Portable and semiportable extinguishers—TB/ALL.
34.05–20 Fire axes—T/ALL.

Subpart 34.10—Fire Main System, Details

34.10–1 Application—TB/ALL.
34.10–5 Fire pumps—T/ALL.
34.10–10 Fire station hydrants, hose and nozzles—T/ALL.
34.10–15 Piping—T/ALL.
34.10–90 Installations contracted for prior to May 26, 1965—T/ALL.

Subpart 34.13—Steam Smothering System

34.13–1 Application—T/ALL.

Subpart 34.15—Carbon Dioxide Extinguishing Systems, Details

34.15–1 Application—T/ALL.
34.15–5 Quantity, pipe sizes, and discharge rates—T/ALL.
34.15–10 Controls—T/ALL.
34.15–15 Piping—T/ALL.
34.15–20 Carbon dioxide storage—T/ALL.
34.15–25 Discharge outlets—T/ALL.
34.15–30 Alarms—T/ALL.
34.15–35 Enclosure openings—T/ALL.
34.15–40 Pressure relief—T/ALL.
34.15–90 Installations contracted for prior to January 1, 1962—T/ALL.

Subpart 34.17—Fixed Foam Extinguishing Systems, Details

34.17–1 Application—T/ALL.
34.17–5 Quantity of foam required—T/ALL.
34.17–10 Controls—T/ALL.
34.17–15 Piping—T/ALL.

34.17–20 Discharge outlets—T/ALL.
34.17–25 Additional protection required—T/ALL.
34.17–90 Installations contracted for prior to January 1, 1962—T/ALL.

Subpart 34.20—Deck Foam System, Details

34.20–1 Application—T/ALL.
34.20–3 Cargo area definition—T/ALL.
34.20–5 Quantity of foam required—T/ALL.
34.20–10 Controls—T/ALL.
34.20–15 Piping—T/ALL.
34.20–20 Discharge outlets—T/ALL.
34.20–25 Foam monitor capacity—T/ALL.
34.20–90 Installations contracted for prior to January 1, 1970—T/ALL.

Subpart 34.25—Water Spray Extinguishing Systems, Details

34.25–1 Application—T/ALL.
34.25–5 Capacity and arrangement—T/ALL.
34.25–10 Controls—T/ALL.
34.25–15 Piping—T/ALL.
34.25–20 Spray nozzles—T/ALL.
34.25–90 Installations contracted for prior to January 1, 1964—T/ALL.

Subpart 34.50—Portable and Semiportable Extinguishers

34.50–1 Application—TB/ALL.
34.50–5 Classification—TB/ALL.
34.50–10 Location—TB/ALL.
34.50–15 Spare charges—TB/ALL.
34.50–20 Semiportable fire extinguishers—TB/ALL.
34.50–90 Vessels contracted for prior to January 1, 1962—TB/ALL.

Subpart 34.60—Fire Axes

34.60–1 Application—T/ALL.
34.60–5 Number required—T/ALL.
34.60–10 Location—T/ALL.

AUTHORITY: 46 U.S.C. 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16694, Dec. 30, 1965, unless otherwise noted.

Subpart 34.01—General

§ 34.01–1 Applicability—TB/ALL.

(a) The provisions of this part shall apply to all tank vessels except as otherwise noted in this part.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 88–032, 56 FR 35821, July 29, 1991]

§ 34.01–5 Equipment installed but not required—TB/ALL.

(a) Where firefighting equipment is not required, but is installed, the equipment and its installation shall be of an approved type.

§ 34.01–10 Protection for unusual arrangements or special products—TB/ALL.

(a) The provisions of this part contemplate fire protection for tank vessels of conventional design carrying the usual liquid petroleum products in internal tanks. Whenever unusual arrangements exist or special cargoes are carried upon which the vessel's normal firefighting equipment will be ineffective, additional suitable firefighting equipment of approved type shall be carried.

§ 34.01–15 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). 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 make the material available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Design and Engineering Standards (G–MSE), 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:

American Society for Testing and Materials (ASTM)

1916 Race Street, Philadelphia, PA 19103

ASTM F–1121, Standard Specification for International Shore Connections for Marine Fire Applications, 1987 ..... 34.10–15

[CGD 88–032, 56 FR 35821, July 29, 1991, as amended by CGD 95–072, 60 FR 50461, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

Subpart 34.05—Firefighting Equipment, Where Required

§ 34.05–1 Fire main system—T/ALL.

(a) Fire pumps, piping, hydrants, hose and nozzles shall be installed on all tankships.

(b) The arrangements and details of the fire main system shall be as set forth in subpart 34.10.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 77–057a, 44 FR 66502, Nov. 19, 1979]

§ 34.05–5 Fire-extinguishing systems—T/ALL.

(a) Approved fire extinguishing systems must be installed on all tankships in the following locations. Previously approved installations may be retained as long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(1) *Dry cargo compartments.* A carbon dioxide or water spray system must be installed for the protection of all dry cargo compartments. Where such compartments are readily accessible by means of doors such spaces need be protected only by the fire main system.

(2) *Cargo tanks.* A deck foam system must be installed for the protection of all cargo tank spaces. Where a deck foam system is installed, an approved inert gas, steam or other system may also be installed for the purposes of fire prevention or inerting of cargo tanks. For vessels under 100 feet in length, the semiportable equipment required by footnote 1 of table 34.05–5(a) will be considered as meeting the requirements of this subparagraph.

(3) *Lamp and paint lockers and similar spaces.* A carbon dioxide or water spray system must be installed in all lamp and paint lockers, oil rooms, and similar spaces.

(4) *Pumprooms.* A carbon dioxide, inert gas, foam or water spray system must be installed for the protection of all pumprooms.

(5) *Boilerrooms.* On tankships contracted for on or after November 19, 1952, a carbon dioxide or foam system shall be installed for the protection of all spaces containing oil fired boilers, either main or auxiliary, their fuel oil service pumps and/or such fuel oil units as the heaters, strainers, valves, manifolds, etc., that are subject to the discharge pressure of the fuel oil service pumps.

(6) *Machinery spaces.* A carbon dioxide system shall be installed for the protection of machinery spaces containing internal combustion propelling engines using fuel having a flashpoint of less than 110 degrees F.

(7) *Internal combustion installations.* Fire-extinguishing systems shall be provided for internal combustion installations in accordance with the following:

(i) If a fire-extinguishing system is installed to protect an internal combustion installation, the system shall be of the carbon dioxide type.

(ii) On vessels of 1,000 gross tons and over on an international voyage, the construction or conversion of which is contracted for on or after May 26, 1965, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b.h.p. or greater, or their fuel oil units, including purifiers, valves, and manifolds.

(iii) On vessels of 1,000 gross tons and over, the construction, conversion or automation of which is contracted for on or after January 1, 1968, a fixed carbon dioxide system shall be installed in all spaces containing internal combustion or gas turbine main propulsion machinery, auxiliaries with an aggregate power of 1,000 b.h.p. or greater, or their fuel oil units, including purifiers, valves and manifolds.

(8) *Enclosed ventilating system.* On tankships contracted for on or after January 1, 1962, where an enclosed ventilating system is installed for electric propulsion motors or generators, a carbon dioxide extinguishing system shall be installed in such system.

(b) The arrangements and details of the fire-extinguishing systems shall be as set forth in subparts 34.10 through 34.20.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 67–90, 33 FR 1015, Jan. 26, 1968; CGD 77–057a, 44 FR 66502, Nov. 19, 1979; CGD 95–027, 61 FR 25998, May 23, 1996]

§ 34.05–10 Portable and semiportable extinguishers—TB/ALL.

(a) All portable and semiportable extinguishers on board tank vessels shall be of an approved type.

(b) The type, size, location and arrangement of portable and semiportable extinguishers shall be as set forth in subpart 34.50.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970]

§ 34.05–20 Fire axes—T/ALL.

(a) Fire axes shall be provided on all tankships.

(b) The location and arrangement of fire axes shall be as set forth in subpart 34.60.

Subpart 34.10—Fire Main System, Details

§ 34.10–1 Application—TB/ALL.

(a) On all tankships the provisions of this subpart, with the exception of § 34.10–90, shall apply to all fire main installations contracted for on or after May 26, 1965. Installations contracted for prior to May 26, 1965, shall meet the requirements of § 34.10–90.

(b) If a fire main system is installed on a tank barge, the system shall meet the intent of this subpart insofar as reasonable and practicable.

§ 34.10–5 Fire pumps—T/ALL.

(a) Tankships shall be equipped with independently driven fire pumps in accordance with Table 34.10–5(a).

TABLE 34.10–5(a)—FIRE PUMPS

Size vessel, L.O.A. (feet)		Minimum number of pumps	Powerful streams of water per pump	Minimum hydrant and hose size (inches)	
Over—	Not over—			Exterior stations	Interior stations
	100	([1])	.....	.....	.....
100	250	[2] 1	[3] 2	1½	1½
250	400	2	[3] 2	1½	1½
400	650	2	[3] 2	[4] 2½	1½
650	.....	2	[3] 3	[4] 2½	1½

[1] Vessels of 65 feet and not over 100 feet shall be equipped with 2 B–V extinguishers. (Refer to Table 34.50–5(c).) Vessels under 65 feet shall be equipped with 1 B–V extinguisher. (Refer to Table 34.50–5(c).)

[2] Vessels of 1,000 gross tons and over on an international voyage shall have at least 2 fire pumps.

[3] From hydrants having greatest pressure drop between fire-pump(s) and nozzles.

[4] Where 2½-inch hydrant size is required, two 1½-inch outlets may be substituted therefor with two 1½-inch hoses.

(b) Each pump shall be capable of delivering simultaneously the number of streams of water required by Table 34.10–5(a) from the outlets having the greatest pressure drop between fire pump(s) and nozzles at a Pitot tube pressure of approximately 75 p.s.i. Where 1½-inch hose is permitted in lieu of 2½-inch hose by footnote 3 of Table 34.10–5(a), the pump capacity shall be determined on the basis that both hoses are used.

(c) On tankships of 1,000 gross tons and over on an international voyage, each required fire pump, while delivering water through the fire main system at a pressure corresponding to that required by § 34.10–15(e), shall have a minimum capacity of at least two-thirds of that required for an independent bilge pump if no length correction is taken for the cargo tank space. However, in no case shall the capacity of each fire pump be less than that otherwise required by this section.

(d) Fire pumps shall be fitted on the discharge side with relief valves set to relieve at 25 p.s.i. in excess of the pressure necessary to maintain the requirements of paragraph (b) of this section.

(e) Fire pumps shall be fitted with a pressure gage on the discharge side of the pumps.

(f) Fire pumps may be used for other purposes provided at least one of the required pumps is kept available for use on the fire system at all times. Unless specifically approved by the Commandant no branch lines shall be connected to the fire mains for other than fire, deck wash or tank cleaning purposes. Other discharge lines shall lead from a discharge manifold near the fire pump. In no case shall a pump having connection to an oil line be used as a fire pump.

(g) On all vessels where two fire pumps are required, they shall be located in separate spaces, and the arrangement of pumps, sea connections, and sources of power shall be such as to insure that a fire in any one space will not put all of the fire pumps out of operation. However, where it is shown to the satisfaction of the Commandant that it is unreasonable or impracticable to meet this requirement due to the size, or arrangement of the vessel, or for other reasons, the installation of a

total flooding carbon dioxide system may be accepted as an alternate method of extinguishing any fire which would affect the powering and operation of at least one of the required fire pumps.

§ 34.10–10 Fire station hydrants, hose and nozzles—T/ALL.

(a) The size of fire station hydrants and hose required shall be as noted in Table 34.10–5(a).

(b) Fire hydrants shall be of sufficient number and so located that any part of living quarters, storerooms, working spaces and weather decks accessible to crew while at sea may be reached with two effective spray patterns of water, one of which shall be from a single 50-foot length of hose. In main machinery spaces all portions of such spaces shall be capable of being reached by at least 2 effective spray patterns of water, each of which shall be from a single 50-foot length of hose from separate outlets.

(c) The outlets at the fire station hydrant shall be limited to any position from the horizontal to the vertical pointing downward so that hose will lead horizontally or downward to minimize possibility of kinking.

(d) All fire station hydrants shall be equipped with spanners suitable for use on the hose at that station.

(e) Each fire station hydrant must have at least 1 length of firehose. Each firehose on the hydrant must have a combination solid stream and water spray firehose nozzle that meets the requirements in subpart 162.027 of this chapter. Firehose nozzles previously approved under subpart 162.027 of this chapter may be retained so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. A suitable hose rack or other device must be provided. Hose racks on weather decks must be located to afford protection from heavy seas. The hose must be stored in a location that is readily visible.

TABLE 34.10–10(E) HYDRANTS WITH COAST GUARD APPROVED LOW-VELOCITY WATER SPRAY APPLICATORS

Location	Number of hydrants with approved applicators	Approved applicator length (feet)
Living space	1	4
Weather deck	4	10 or 12
Machinery space	2	4

(f) Each combination firehose nozzle previously approved under subpart 162.027 of this chapter in the locations listed in table 34.10–10(E) must have a low-velocity water spray applicator also previously approved under subpart 162.027 of this chapter that is of the length listed in that table.

(g) The pipes and fire station hydrants shall be so placed that the fire hose may be easily coupled to them. All hydrants shall be so located as to be readily accessible. If deck cargo is carried, it shall not interfere with access to the fire station hydrants, and the pipes shall be arranged as far as practicable to avoid risk of damage by such cargo.

(h) Each fire station hydrant or ''y'' branch shall be equipped with a valve so that the hose may be removed while there is pressure on the fire main.

(i) Fire station hydrant connections shall be brass, bronze, or other equivalent metal. National Standard fire hose coupling threads shall be used for the 1½-inch and 2½-inch sizes, i.e., 9 threads per inch for 1½-inch hose and 7½ threads per inch for 2½-inch hose.

(j) Fire hose shall be 50 feet in length except on weather decks the hose shall be increased in length if necessary to enable a single length to be goose-necked over each side of the vessel. If two fire mains are installed on the weather decks, the length of hose shall be such that it may be goose-necked over the side from the nearest fire main.

(k) Fire hose when part of the fire equipment shall not be used for any other purpose than fire extinguishing, fire drills, and testing.

(l) Fire hose shall be connected to outlets at all times. However, in heavy weather on open decks where no protection is afforded the hose may be removed temporarily from the hydrant and stowed in an accessible location nearby. While in port, fire hose in way of cargo area shall be kept ready for immediate use. The fire hose may be temporarily removed when it will interfere with the handling of cargo.

(m) Each section of fire hose used after January 1, 1980 must be lined commercial fire hose that conforms to Underwriters' Laboratories, Inc. Standard 19 or Federal Specification ZZ–H–451E. Hose that bears the label of Underwriters' Laboratories, Inc. as lined fire hose is accepted as conforming to this requirement. Each section of replacement fire hose or any section of new fire hose placed aboard a vessel after January 1, 1977 must also conform to the specification required by this paragraph.

(n) Coupling shall conform to the requirements of paragraph (h) of this section.

(o) Each low-velocity water spray applicator under paragraph (f) of this section must have fixed brackets, hooks, or other means for stowing next to the hydrant.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 74–60, 41 FR 43151, Sept. 30, 1976; CGD 76–086, 44 FR 2391, Jan. 11, 1979; CGD 95–027, 61 FR 25999, May 23, 1996]

§ 34.10–15 Piping—T/ALL.

(a) All piping, valves and fittings shall meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(b) An adequate number of valves shall be installed to isolate damaged sections of piping except on self-propelled vessels carrying bulk liquefied gases that must have stop valves:

(1) At cross connections;

(2) At the front of the after deck house; and

(3) In the cargo area spaced 40 m (131 ft.) or less between hydrants.

(c) All distribution valves shall be marked as required by § 35.40–10 of this subchapter.

(d) Tankships of 500 gross tons and over on an international voyage must be provided with at least one international shore connection which meets ASTM F–1121. Facilities must be available enabling such a connection to be used on either side of the vessel.

(e) For tankships on an international voyage, the diameter of the fire main shall be sufficient for the effective distribution of the maximum required discharge from two fire pumps operating simultaneously. This requirement is in addition to § 34.10–5(b). The discharge of this quantity of water through hoses and nozzles at a sufficient number of adjacent hydrants shall be at a minimum Pitot tube pressure of approximately 71 pounds per square inch on self-propelled vessels that carry bulk liquefied gases and approximately 50 pounds per square inch on other tankships.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 74–289, 44 FR 26006, May 3, 1979, CGD 88–032, 56 FR 35821, July 29, 1991]

§ 34.10–90 Installations contracted for prior to May 26, 1965—T/ALL.

(a) Installations contracted for prior to January 1, 1962, shall meet the following requirements:

(1) Existing arrangements, materials and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) Except as further modified by this paragraph, the details of the systems shall be in general agreement with §§ 34.10–5 through 34.10–15 insofar as is reasonable and practicable.

(3) Tankships of less than 500 gross tons shall be equipped with an efficient hand pump capable of delivering 50 gallons per minute or a power-driven pump of equivalent capacity. However, on tankships of 20 gross tons or under where it is impracticable to install a hand or power-operated fire pump, or on tankships with only one man in the crew, at least one additional B–II fire extinguisher may be accepted in lieu of a fire pump.

(4) Tankships of 500 gross tons and over but not over 1,000 gross tons shall

be provided with one independently power-driven pump.

(5) Tankships of over 1,000 gross tons shall be provided with two independently power-driven pumps.

(6) On tankships of 500 gross tons and over, the capacity of the combined fire pump installation shall be one-fifth gallon per minute per gross ton of the ship. The maximum total fire pump capacity required for any tankship shall be 800 gallons per minute.

(7) Each fire pump on a tankship of 500 gross tons or more must deliver enough water to the fire main so that the topmost outlet on the fire main emits two jets of water at a Pitot tube pressure of 50 pounds per square inch through two combination solid stream and water spray firehose nozzles meeting paragraph (10) of this section.

(8) On oil-burning tankships, provided with two fire pumps, where the engine and fire rooms are not entirely separated by iron or steel bulkheads, or if fuel can drain from fireroom bilges into the engineroom, one of the fire pumps shall be located in an accessible space separate from the machinery compartment. On all tankships contracted for on or after November 19, 1952, the requirements of paragraph (f) of §34.10–5 shall be met.

(9) Fire hydrant outlets shall have a minimum diameter of 1½ inches.

(10) Each fire station hydrant on a tankship of 500 gross tons or more must have at least 1 length of firehose. Each firehose on the hydrant must have a combination solid stream and water spray firehose nozzle that meets the requirements of subpart 162.027. Firehose nozzles previously approved under subpart 162.027 of this chapter may be retained so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(11) On each tankship of 1000 gross tons or more, the firehose nozzle required by paragraph (a)(10) of this section on each of the following hydrants must have a low-velocity water-spray applicator that was previously approved under subpart 162.027 and that connects to that nozzle when the nozzle itself was previously approved under subpart 162.027—

(i) At least two hydrants in the Machinery and boiler spaces; and

(ii) At least 25 percent of other hydrants.

(12) Vessels contracted for on or after July 1, 1954, shall meet the requirements of §34.10–10(h).

(b) Installations contracted for on or after January 1, 1962, but prior to May 26, 1965, shall meet the following requirements:

(1) Existing arrangements, materials, facilities, and equipment, except firehose nozzles, previously approved shall be considered satisfactory as long as they meet the minimum requirements of this paragraph and they are maintained in good conditions to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) Each fire station hydrant must have at least 1 length of firehose. Each firehose on the hydrant must have a combination solid stream and water spray firehose nozzle that meets the requirements of subpart 162.027. Firehose nozzles previously approved under subpart 162.027 of this chapter may be retained so long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. If the firehose nozzles were previously approved under subpart 162.027, each of the number of hydrants in the locations listed in table 34.10–10(E) must have a low-velocity water spray applicator that—

(i) Was previously approved under subpart 162.027 of this chapter;

(ii) Is the length listed in table 34.10–10(E); and

(iii) Meets §34.10–10(o).

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 76–086, 44 FR 2391, Jan. 11, 1979; CGD 95–027, 61 FR 25999, May 23, 1996]

Subpart 34.13—Steam Smothering Systems

SOURCE: CGD 95–027, 61 FR 25999, May 23, 1996.

§34.13–1 Application—T/ALL.

Steam smothering fire extinguishing systems are not permitted on vessels contracted for on or after January 1,

1962. Previously approved installations may be retained as long as they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

Subpart 34.15—Carbon Dioxide Extinguishing Systems, Details

§ 34.15–1 Application—T/ALL.

(a) Where a carbon dioxide extinguishing system is installed, the provisions of this subpart, with the exception of § 34.15–90, shall apply to all installations contracted for on or after January 1, 1962. Installations contracted for prior to January 1, 1962, shall meet the requirements of § 34.15–90.

(b) The requirements of this subpart are based on a ''high pressure system,'' i.e., one in which the carbon dioxide is stored in liquid form at atmospheric temperature. Details for ''low pressure systems,'' i.e., those in which the carbon dioxide is stored in liquid form at a continuously controlled low temperature, may be specifically approved by the Commandant where it is demonstrated that a comparable degree of safety and fire extinguishing ability is achieved.

§ 34.15–5 Quantity, pipe sizes, and discharge rates—T/ALL.

(a) *General.* (1) The amount of carbon dioxide required for each space shall be as determined by paragraphs (b) through (e) of this section.

(b) *Total available supply.* (1) A separate supply of carbon dioxide need not be provided for each space protected. The total available supply shall be at least sufficient for the space requiring the greatest amount.

(c) *Dry cargo spaces.* (1) The number of pounds of carbon dioxide required for each space shall be equal to the gross volume of the space in cubic feet divided by 30.

(2) Although separate piping shall be led to each cargo hold and 'tween deck, for the purpose of determining the amount of carbon dioxide required, a cargo compartment will be considered as the space between watertight or firescreen bulkheads and from the tank top or lowest deck to the deck head of the uppermost space on which cargo may be carried. If a trunk extends beyond such deck, the trunk volume shall be included. Tonnage openings shall be considered as sealed for this purpose.

(3) Branch lines to the various cargo holds and 'tween decks shall not be less than ¾-inch standard pipe size.

(4) No specific discharge rate need be applied to such systems.

(d) *Enclosed ventilation systems for rotating electrical propulsion equipment.* (1) The number of pounds of carbon dioxide required for the initial charge shall be equal to the gross volume of the system divided by 10 for systems having a volume of less than 2,000 cubic feet, and divided by 12 for systems having a volume of 2,000 cubic feet or more.

(2) The piping for the initial charge shall be in accordance with Table 34.15–5(e)(5), and the discharge of the required amount shall be completed within 2 minutes.

(3) In addition to the above there shall be sufficient carbon dioxide available to permit delayed discharges of such quantity as to maintain at least a 25 percent concentration until the equipment can be stopped. If the initial discharge is such as to achieve this concentration until the equipment is stopped, no delayed discharge need be provided.

(4) The piping for the delayed discharge shall not be less than ½-inch standard pipe, and no specific discharge rate need be applied to such systems. On small systems, this pipe may be incorporated with the initial discharge piping.

(e) *Machinery spaces, pumprooms, paint lockers, and similar spaces.* (1) Except as provided in paragraph (e)(4) of this section, the number of pounds of carbon dioxide required for each space shall be equal to the gross volume of the space divided by the appropriate factor noted in Table 34.15–5(e)(1). If fuel can drain from the compartment being protected to an adjacent compartment, or if the compartments are not entirely separate, the requirements for both compartments shall be used to determine the amount of carbon dioxide to be provided. The carbon dioxide shall be arranged to discharge into both such compartments simultaneously.

TABLE 34.15–5(e)(1)

Gross volume of compartment, cubic feet		Factor
Over	Not Over	
	500	15
500	1,600	16
1,600	4,500	18
4,000	50,000	20
50,000	.....	22

(2) For the purpose of the above requirement of this paragraph, the volume of a machinery space shall be taken as exclusive of the normal machinery casing unless the boiler, internal combustion propelling machinery, or fuel oil installations subject to the discharge pressure of the fuel oil service pump extend into such space, in which case the volume shall be taken to the top of the casing or the next material reduction in casing area, whichever is lower. The terms ''normal machinery casing'' and ''material reduction in casing area'' shall be defined as follows:

(i) By ''normal machinery casing'' shall be meant a casing the area of which is not more than 40 percent of the maximum area of the machinery space.

(ii) By ''material reduction in casing area'' shall be meant a reduction to at least 40 percent of the casing area.

(3) For the purpose of the above requirements of this paragraph, the volume of a pumproom shall include the pumproom and all associated trunks up to the deck at which access from the weather is provided.

(4) For tankships on an international voyage contracted for on or after May 26, 1965, the amount of carbon dioxide required for a space containing propulsion boilers or internal combustion propulsion machinery shall be as given by paragraphs (e) (1) and (2) of this section or by dividing the entire volume, including the casing, by a factor of 25, whichever is the larger.

(5) Branch lines in the various spaces shall be noted in Table 34.15–5(e)(5).

TABLE 34.15–5(e)(5)

Maximum quantity of carbon dioxide required, pounds	Minimum pipe sizes, inches	Maximum quantity of carbon dioxide required, pounds	Minimum pipe size inches
100	½	2,500	2½

TABLE 34.15–5(e)(5)—Continued

Maximum quantity of carbon dioxide required, pounds	Minimum pipe sizes, inches	Maximum quantity of carbon dioxide required, pounds	Minimum pipe size inches
225	¾	4,450	3
300	1	7,100	3½
600	1¼	10,450	4
1,000	1½	15,000	4½
2,450	2	.....	.....

(6) Distribution piping within the space shall be proportioned from the supply line to give proper distribution to the outlets without throttling.

(7) The number, type and location of discharge outlets shall be such as to give a uniform distribution throughout the space.

(8) The total area of all discharge outlets shall not exceed 85 percent nor be less than 35 percent of the nominal cylinder outlet area or the area of the supply pipe, whichever is smaller. The nominal cylinder outlet area in square inches shall be determined by multiplying the factor 0.0022 by the number of pounds of carbon dioxide required, except that in no case shall this outlet area be less than 0.110 square inches.

(9) The discharge of at least 85 percent of the required amount of carbon dioxide shall be complete within 2 minutes.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended at 45 FR 64188, Sept. 29, 1980]

§ 34.15–10 Controls—T/ALL.

(a) Except as noted in § 34.15–20(b), all controls and valves for the operation of the system shall be outside the space protected, and shall not be located in any space that might be cut off or made inaccessible in the event of fire in any of the spaces protected.

(b) If the same cylinders are used to protect more than one space, a manifold with normally closed stop valves shall be used to direct the carbon dioxide into the proper space. If cylinders are used to protect only one space, a normally closed stop valve shall be installed between the cylinders and the space except for systems of the type indicated in § 34.15–5(e) which contain not more than 300 pounds of carbon dioxide.

(c) Distribution piping to the dry cargo spaces shall be controlled from not more than two stations. One of the stations controlling the system for the main machinery space shall be located as convenient as practicable to one of the main-escapes from the space. All control stations and the individual valves and controls shall be marked as required by § 35.40–10 of the subchapter.

(d) Systems of the type indicated in § 34.15–5(e) shall be actuated at each station by one control operating the valve to the space and a separate control releasing at least the required amount of carbon dioxide. These two controls shall be located in a box or other enclosure clearly identified for the particular space. Systems installed without a stop valve shall be operated by one control releasing at least the required amount of carbon dioxide.

(e) Where provisions are made for the simultaneous release of a given amount of carbon dioxide by operation of a remote control, provisions shall also be made for manual control at the cylinders. Where gas pressure from pilot cylinders is used as a means for releasing the remaining cylinders, not less than two pilot cylinders shall be used for systems consisting of more than two cylinders. Each of the pilot cylinders shall be capable of manual control at the cylinder, but the remaining cylinders need not be capable of individual manual control.

(f) Systems of the type indicated in § 34.15–5(e), which are of more than 300 pounds of carbon dioxide shall be fitted with an approved delayed discharge so arranged that the alarm will be sounded for at least 20 seconds before the carbon dioxide is released into the space. Such systems of not more than 300 pounds of carbon dioxide shall also have a similar delayed discharge, except for spaces which have a suitable horizontal escape.

(g) All distribution valves and controls shall be of an approved type. All controls shall be suitably protected.

(h) Complete but simple instructions for the operation of the systems must be located in a conspicuous place at or near all pull boxes, stop valve controls and in the CO_2 cylinder storage room. On systems in which the CO_2 cylinders are not within the protected space, these instructions must also include a schematic diagram of the system and instructions detailing alternate methods of discharging the system should the manual release or stop valve controls fail to operate. Each control valve to branch lines must be marked to indicate the related space served.

(i) If the space or enclosure containing the carbon dioxide supply or controls is to be locked, a key to the space or enclosure shall be in a break-glass-type box conspicuously located adjacent to the opening.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 74–100R, 40 FR 6208, Feb. 10, 1975]

§ 34.15–15 Piping—T/ALL.

(a) The piping, valves, and fittings shall have a bursting pressure of not less than 6,000 pounds p.s.i.

(b) All piping, in nominal sizes not over ¾-inch shall be at least Schedule 40 (standard weight) and in nominal sizes over ¾-inch, shall be at least Schedule 80 (extra heavy).

(c) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.

(d) A pressure relief valve or equivalent set to relieve between 2,400 and 2,800 pounds p.s.i. shall be installed in the distributing manifold or such other location as to protect the piping in the event that all branch line shut- off valves are closed.

(e) All deadend lines shall extend at least 2 inches beyond the last orifice and shall be closed with cap or plug.

(f) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.

(g) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture. Drains and dirt traps shall be located in accessible locations where possible.

(h) Piping shall be used for no other purpose except that it may be incorporated with the fire-detecting system.

(i) Piping passing through living quarters shall not be fitted with drains or other openings within such spaces.

(j) Installation test requirements are:

(1) Upon completion of the piping installation, and before the cylinders are

connected, a pressure test shall be applied as set forth in this paragraph. Only carbon dioxide or other inert gas shall be used for this test.

(2) The piping from the cylinders to the stop valves in the manifold shall be subjected to a pressure of 1,000 pounds p.s.i. With no additional gas being introduced to the system, it shall be demonstrated that the leakage of the system is such as not to permit a pressure drop of more than 150 pounds per square inch per minute for 2-minute period.

(3) The individual branch lines to the various spaces protected shall be subjected to a test similar to that described in the preceding paragraph with the exception that the pressure used shall be 600 pounds p.s.i. in lieu of 1,000 pounds p.s.i. For the purpose of this test, the distribution piping shall be capped within the space protected at the first joint ahead of the nozzles.

(4) In lieu of the tests prescribed in the preceding paragraphs in this section, small independent systems protecting spaces such as emergency generator rooms, lamp lockers, etc., may be tested by blowing out the piping with the air at a pressure of at least 100 pounds p.s.i.

§ 34.15–20 Carbon dioxide storage—T/ALL.

(a) Except as provided in paragraph (b) of this section, the cylinders shall be located outside the spaces protected, and shall not be located in any space that might be cut off or made inaccessible in the event of a fire in any of the spaces protected.

(b) Systems of the type indicated in § 34.15–5(e), consisting of not more than 300 pounds of carbon dioxide, may have the cylinders located within the space protected. If the cylinder stowage is within the space protected, the system shall be arranged in an approved manner to be automatically operated by a heat actuator within the space in addition to the regular remote and local controls.

(c) The space containing the cylinders shall be properly ventilated and designed to preclude an anticipated ambient temperature in excess of 130 degrees F.

(d) Cylinders shall be securely fastened and supported, and where necessary, protected against injury.

(e) Cylinders shall be so mounted as to be readily accessible and capable of easy removal for recharging and inspection. Provisions shall be available for weighing the cylinders.

(f) Where subject to moisture, cylinders shall be so installed as to provide a space of at least 2 inches between the flooring and the bottom of the cylinders.

(g) Cylinders shall be mounted in an upright position or inclined not more than 30 degrees from the vertical. However, cylinders which are fitted with flexible or bent siphon tubes may be inclined not more than 80 degrees from the vertical.

(h) Where check valves are not fitted on each independent cylinder discharge, plugs or caps shall be provided for closing outlets when cylinders are removed for inspection or refilling.

(i) All cylinders used for storing carbon dioxide must be fabricated, tested, and marked in accordance with §§ 147.60 and 147.65 of this chapter.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended at 53 FR 7748, Mar. 10, 1988]

§ 34.15–25 Discharge outlets—T/ALL.

(a) Discharge outlets shall be of an approved type.

§ 34.15–30 Alarms—T/ALL.

(a) Spaces required to have a delayed discharge by § 34.15–10(f) which are protected by a carbon dioxide extinguishing system and are normally accessible to persons on board while the vessel is being navigated, other than paint and lamp lockers and similar small spaces, shall be fitted with an approved audible alarm in such spaces which will be automatically sounded before the carbon dioxide is admitted to the space. The alarm shall be conspicuously and centrally located and shall be marked as required by § 35.40–7 of this subchapter. Such alarms shall be so arranged as to sound during the 20-second delay period prior to the discharge of carbon dioxide into the space, and the alarm shall depend on no source of power other than the carbon dioxide.

§ 34.15–35 Enclosure openings—T/ALL.

(a) Except for cargo spaces, the operation of the carbon dioxide system shall automatically shut down any mechanical ventilation to that space. This will not be required where the carbon dioxide system is a secondary system in addition to another approved primary system protecting the space.

(b) Where natural ventilation is provided for spaces protected by a carbon dioxide extinguishing system, provisions shall be made for easily and effectively closing off the ventilation.

(c) Means shall be provided for closing all other openings to the space protected from outside such space. In this respect, relatively tight doors, shutters, or dampers shall be provided for openings in the lower portion of the space. The construction shall be such that openings in the upper portion of the space can be closed off either by permanently installed means or by the use of canvas or other material which is normally carried by the vessel.

§ 34.15–40 Pressure relief—T/ALL.

(a) Where necessary, relatively tight compartments such as refrigeration spaces, paint lockers, etc., shall be provided with suitable means for relieving excessive pressure accumulating within the compartment when the carbon dioxide is injected.

§ 34.15–90 Installations contracted for prior to January 1, 1962—T/ALL.

(a) Installations contracted for prior to November 19, 1952, shall meet the requirements of this paragraph.

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 34.15–5 through 34.15–40 insofar as is reasonable and practicable, with the exception of § 34.15–5 (e) (1) through (3) covering spaces other than cargo spaces, which systems may be installed in accordance with paragraphs (a)(4) through (7) of this section.

(3) For cargo tanks at least one pound of carbon dioxide shall be available for each 30 cubic feet of the largest cargo tank. The discharge of the required amount of carbon dioxide shall be complete within 5 minutes.

(4) In boilerrooms, the bilges shall be protected by a system discharging principally below the floor plates. Perforated pipe may be used in lieu of discharge nozzles for such systems. The number of pounds of carbon dioxide shall be equal to the gross volume of the boiler room taken to the top of the boilers divided by 36. In the event of an elevated boilerroom which drains to the machinery space, the system shall be installed in the engineroom bilge and the gross volume shall be taken to the flat on which the boilers are installed.

(5) In machinery spaces where main propulsion internal combustion machinery is installed, the number of pounds of carbon dioxide required shall be equal to the gross volume of the space taken to the underside of the deck forming the hatch opening divided by 22.

(6) In miscellaneous spaces other than cargo or main machinery spaces the number of pounds of carbon dioxide required shall be equal to the gross volume of the space divided by 22.

(7) Branch lines to the various spaces other than cargo and similar spaces shall be as noted in Table 34.15–90(a)(7). This table is based on cylinders having discharge outlets and siphon tubes of ⅜-inch diameter.

TABLE 34.15–90(a)(7)

Number of cylinders		Nominal pipe size, inches
Over	Not over	
	2	½-standard.
2	4	¾-standard.
4	6	1-extra heavy.
6	12	1¼-extra heavy.
12	16	1½-extra heavy.
16	27	2-extra heavy.
27	39	2½-extra heavy.
39	60	3-extra heavy.
60	80	3½-extra heavy.
80	104	4-extra heavy.
104	165	5-extra heavy.

(b) Installations contracted for on or after November 19, 1952, but prior to

January 1, 1962, shall meet the requirements of this paragraph.

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 34.15–5 through 34.15–40 insofar as is reasonable and practicable with the exception that delayed discharges need not be provided for installations made prior to July 1, 1957.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 66–33, 31 FR 15268, Dec. 6, 1966]

Subpart 34.17—Fixed Foam Extinguishing Systems, Details

§ 34.17–1 Application—T/ALL.

(a) Where a fixed foam extinguishing system is installed, the provisions of this subpart with the exception of § 34.17–90, shall apply to all installations contracted for on or after January 1, 1962.

(b) Installations contracted for prior to January 1, 1962, shall meet the requirements of § 34.17–90.

§ 34.17–5 Quantity of foam required—T/ALL.

(a) *Area protected.* (1) For machinery spaces and pumprooms, the system shall be so designed and arranged as to spread a blanket of foam over the entire tank top or bilge of the space protected. The arrangement of piping shall be such as to give a relatively uniform distribution over the entire area protected.

(2) Where an installation is made to protect an oil-fired boiler installation on a flat which is open to or can drain to the lower engineroom or other space, both the flat and the lower space shall be protected simultaneously. The flat shall be fitted with suitable coamings on all openings other than deck drains to properly restrain the oil and foam at that level. Other installations of a similar nature will be considered in a like manner.

(b) *Rate of application.* (1) The rate of discharge to foam outlets protecting the hazard shall be at least as set forth in this paragraph.

(2) For chemical foam systems with stored ''A'' and ''B'' solutions, a total of at least 1.6 gallons per minute of the two solutions shall be discharged for each 10 square feet of area protected.

(3) For other types of foam systems, the water rate to the dry-powder generators or air foam production equipment shall be at least 1.6 gallons per minute for each 10 square feet of area protected.

(c) *Supply of foam-producing material.* (1) There shall be provided a quantity of foam-producing material sufficient to operate the equipment at the minimum discharge rate specified in paragraph (b) of this section for a period of at least 3 minutes.

(d) *Separate supply of foam-producing material.* (1) A separate supply of foam-producing material need not be provided for each space protected. This includes a deck foam system. The total available supply shall be at least sufficient for the space requiring the greatest amount.

(e) *Water supply for required pumps.* (1) The water supply shall be from outside and completely independent of the space protected.

§ 34.17–10 Controls—T/ALL.

(a) The foam agent, its container, measuring devices, and other items peculiar to the system shall be of an approved type.

(b) The foam-producing material container and all controls and valves for the operation of the system shall be outside the space protected and shall not be located in such space as might be cut off or made inaccessible in the event of fire in any of the spaces protected. The control space shall be as convenient as practicable to one of the main escapes from the spaces protected, and shall be marked as required by § 35.40–10 of this subchapter. Where pumps are required, it shall not be necessary that they be started from the control space.

(c) Complete, but simple instructions for the operation of the system shall be

located in a conspicuous place at or near the controls.

(d) The valves to the various spaces served shall be marked as required by § 35.40–10 of this subchapter.

§ 34.17–15 Piping—T/ALL.

(a) All piping, valves, and fittings shall meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(b) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.

(c) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.

(d) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture.

(e) Piping shall not be used for any other purpose than firefighting, drills and testing.

§ 34.17–20 Discharge outlets—T/ALL.

(a) Discharge outlets shall be of an approved type.

§ 34.17–25 Additional protection required—T/ALL.

(a) In order that any residual fires above the floor plates may be extinguished when a foam system is installed for the protection of machinery spaces, at least 2 fire hydrants, in addition to those required for the machinery space by subpart 34.10, shall be installed outside of the machinery space entrance. Such hydrants shall be fitted with sufficient hose so that any part of the machinery space may be reached with at least 2 streams of water, and each hose shall be equipped with an approved combination nozzle and applicator.

§ 34.17–90 Installations contracted for prior to January 1, 1962—T/ALL.

(a) Installations contracted for prior to January 1, 1962, shall meet the following requirements:

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 34.17–5 through 34.17–20, insofar as is reasonable and practicable. Installations contracted for prior to November 19, 1952, need not comply with paragraph (a)(2) of § 34.17–5 and § 34.17–25. A 6-inch blanket of foam in 3 minutes for machinery spaces and pumprooms will be considered as meeting the requirements of § 34.17–5.

(3) Where a system is installed to protect a tank, it shall be so designed and arranged as to spread a blanket of foam over the entire liquid surface of the tank within the range of usual trim. The arrangement of piping shall be such as to give a relatively uniform distribution over the entire area protected.

(4) For tanks, the rate of discharge to foam outlets protecting the hazard shall be as set forth in § 34.17–5(b), except that the value of 1 gallon per minute shall be substituted in both cases for the value of 1.6 gallons per minute. The quantity of foam provided shall be sufficient to operate the equipment for 5 minutes.

(5) On installations installed prior to November 19, 1952, a semiportable foam generator using a dry-chemical mixture or mechanical foam in conjunction with the fire lines may be substituted for the fixed system subject to the following conditions:

(i) There shall be at least one fire pump of suitable capacity available which can be operated and controlled from outside the space protected.

(ii) Stop valves shall be installed in the line so that if any portion of the fire main is ruptured, the foam generator may still be operated. Connections for at least two fire hoses shall be provided between the pump and the stop valve.

(iii) If the foam system is of the portable or semiportable type, the apparatus and chemicals shall be stored in a readily accessible place protected from the weather.

Subpart 34.20—Deck Foam System, Details

§ 34.20–1 Application—T/ALL.

(a) Where a deck foam system is installed, the provisions of this subpart, except § 34.20–90, apply to all installations that are contracted for on or after January 1, 1970, unless otherwise indicated.

(b) Installations contracted for prior to January 1, 1970, shall meet the requirements of § 34.20–90.

(c) Foreign flag crude oil tankers and product carriers required to have fixed deck foam systems by this subpart must have systems that are designed and installed in accordance with Regulation 61 of Chapter II–2 of SOLAS 1974. (Senate Document, 57–1180, GPO, Washington, 1976; ''Message from the President of the United States transmitting, the International Convention for the Safety of Life at Sea, 1974, Done at LONDON, November 1, 1974'').

(46 U.S.C. 391a; 49 CFR 1.46(n)(4))

[CGFR 69–72, 34 FR 17481, Oct. 29, 1969, as amended by CGD 74–127, 41 FR 3846, Jan. 26, 1976; CGD 77–057a, 44 FR 66502, Nov. 19, 1979]

§ 34.20–3 Cargo area definition—T/ALL.

(a) For the purpose of this subpart, the term *cargo area* is defined as the maximum beam of the vessel times the total longitudinal extent of the cargo tank spaces.

§ 34.20–5 Quantity of foam required—T/ALL.

(a) *Area protected.* Systems of this type are designed to give primary protection to the spaces over the cargo tanks.

(b) *Rate of application.* The water rate of the foam production equipment shall be determined as follows:

(1) For usual petroleum products the water rate shall be at least 0.016 gallons per minute for each square foot of the cargo area or 0.24 gallons per minute for each square foot of the horizontal sectional area of the single tank having the largest such area, whichever is greater.

(2) For polar solvent products (e.g. alcohols, ketones, etc.) the water rate shall be determined for each vessel. The rate will depend upon the vessel design, products to be carried and foam system to be used.

(c) *Supply of foam-producing material.* Each deck foam system must have a supply of foam-producing material sufficient to operate the system at its designed rate of foam production for the following periods:

(1) For installations contracted for on or after January 1, 1970, 15 minutes without recharging, except as required in paragraph (c)(2) of this section.

(2) For installations on ships that have a keel laying date on or after January 1, 1975, 20 minutes without recharging.

(d) *Separate supply of foam-producing material.* Where the same foam-producing material may be used for this system as well as a fixed foam system, separate supplies need not be provided for each space protected. The total available supply shall be at least sufficient for the space requiring the greatest amount.

(e) *Water supply.* Suitable pumps shall be provided capable of producing the required water rate. The fire pumps required by subpart 34.10 may be used for this purpose; however, the operation of the deck foam system shall not interfere with the simultaneous use of the fire main system.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 69–72, 34 FR 17481, Oct. 29, 1969; CGD 74–127, 41 FR 3846, Jan. 26, 1976]

§ 34.20–10 Controls—T/ALL.

(a) The foam agent, its container, measuring devices, and other items peculiar to this system shall be of an approved type.

(b) The foam agent container and the main controls for operating the system shall be located in a protected space not likely to be made inaccessible in the event of a fire in any portion of the cargo area.

(c) Complete, but simple instructions for the operation of the system shall be located in a conspicuous place at or near the controls.

(d) All valves shall be marked as required by § 35.40–17.

(e) The deck foam system on each tankship that has a keel laying date on

or after January 1, 1975, must be capable of being actuated, including introduction of foam to the foam main, within three minutes of notification of a fire.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 74–127, 41 FR 3846, Jan. 26, 1976]

§ 34.20–15 Piping—T/ALL.

(a) All piping, valves, and fittings shall meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(b) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved otherwise by the Commandant.

(c) The piping and outlet arrangement shall allow the required rate of applications as contained in § 34.20–5(b), to any portion of the open deck of the cargo area through the use of the mounted and hand-held appliances that are provided. At least 50 percent of the required rate of application shall be from the mounted appliances. One or more hose outlets for hand-held appliances shall be provided at each foam station. For enclosed spaces, application of at least 1.6 gallons per minute water rate for each 10 square feet of the enclosed area for 5 minutes is acceptable. For the purpose of this paragraph, all piping is assumed to be damaged in way of the fire and an adequate number of valves shall be fitted to prevent loss of foam by closing valves to damaged piping.

(d) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.

(e) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture.

(f) Piping shall not be used for any other purpose than firefighting, drills, and testing.

(g) Tankships of 100,000 or more DWT (metric) and combination carriers of 50,000 or more DWT (metric) that have a keel laying date on or after January 1, 1975, must have at least one foam station port and at least one foam station starboard that are separated from each other by a distance equal to at least one-half the beam of the vessel:

(1) At the housefront or aft of the cargo area in a location that is accessible to the crew for fighting a cargo and a pumproom fire; and

(2) If the tankship has a forward accommodations house, at the after boundary of that house.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 72–138, 39 FR 7790, Feb. 28, 1974; CGD 74–127, 41 FR 3846, Jan. 26, 1976]

§ 34.20–20 Discharge outlets—T/ALL.

(a) Discharge outlets shall be of an approved type.

(b) At least one mounted foam appliance shall be provided for each station that is required in § 34.20–15(c).

(c) The number of hand-held appliances provided shall be at least equal to the number of hose outlets at the two foam stations having the most hose outlets. Hand-held appliances shall be stowed in a well marked, readily accessible position that cannot be isolated by a fire involving the cargo tanks.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGD 72–138, 39 FR 7790, Feb. 28, 1974]

§ 34.20–25 Foam monitor capacity—T/ALL.

The capacity of each foam monitor on ships that have a keel laying date on or after January 1, 1975, must be at least 3 liters per minute per square meter (.073 gallons per minute per square foot) of cargo area protected by that monitor.

[CGD 74–127, 41 FR 3846, Jan. 26, 1976]

§ 34.20–90 Installations contracted for prior to January 1, 1970—T/ALL.

(a) Installations contracted for prior to January 1, 1970, shall meet the following requirements:

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) For installations contracted for prior to November 19, 1952, see § 34.17–90(a)(5).

(3) Installations contracted for on or after November 4, 1957, but prior to January 1, 1970, shall meet the requirements of §§ 34.20–5 through 34.20–20 insofar as is reasonable and practicable.

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 69–72, 34 FR 17481, Oct. 29, 1969]

Subpart 34.25—Water Spray Extinguishing Systems, Details

§ 34.25–1 Application—T/ALL.

(a) Where a water spray extinguishing system is installed, the provisions of this subpart, with the exception of § 34.25–90, shall apply to all installations contracted for on or after January 1, 1964. Installations contracted for prior to January 1, 1964, shall meet the requirements of § 34.50–90.

§ 34.25–5 Capacity and arrangement—T/ALL.

(a) The capacity and arrangement shall be such as to effectively blanket the entire area of the space protected. The rate of discharge and the arrangement of piping and spray nozzles shall be such as to give a uniform distribution over the entire area protected.

(b) The spacing of the spray nozzles shall be on the basis of the spray pattern provided by the lowest pressure at any spray nozzle in the system. In no instance shall a system be designed for any spray nozzle to be operated at a pressure less than that for which it was approved. The maximum permissible height of the spray nozzle above the protected area shall not exceed that specified in its approval. Whenever there are obstructions to coverage by the spray patterns, additional spray nozzles shall be installed to provide full coverage.

(c) The water supply shall be from outside the space protected and shall in no way be dependent upon power from the space protected. The pump supplying water for the system shall either be reserved exclusively for the system or it may be one of the fire pumps, provided the capacity of the fire pump as set forth in subpart 34.10 is increased by the required capacity of the system, so that this system may be operated simultaneously with the fire main system.

§ 34.25–10 Controls—T/ALL.

(a) There shall be one control valve for the operation of the system located in an accessible position outside the space protected. The control shall be located as convenient as practicable to one of the main escapes from the space protected, and shall be marked as required by § 35.40–18 of this subchapter. It shall not be necessary to start the pumps from the control space.

(b) Complete, but simple instructions for the operation of the system shall be located in a conspicuous place at or near the controls.

(c) The valve to the space protected shall be marked as required by § 35.40–18 of this subchapter.

§ 34.25–15 Piping—T/ALL.

(a) All piping, valves and fittings shall meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(b) Distribution piping shall be of materials resistant to corrosion, except that steel or iron pipe may be used if inside corrosion resistant coatings which will not flake off and clog the nozzles are applied. Materials readily rendered ineffective by heat of a fire shall not be used. The piping shall be subject to approval for each installation.

(c) All piping, valves, and fittings shall be securely supported, and where necessary, protected against injury.

(d) Drains, strainers, and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture.

(e) Threaded joints shall be metal to metal, with no thread compound used.

(f) Distribution piping shall be used for no other purpose.

(g) All piping shall be thoroughly cleaned and flushed before installation of the water spray nozzles.

§ 34.25–20 Spray nozzles—T/ALL.

(a) Spray nozzles shall be of an approved type.

§ 34.25–90 Installations contracted for prior to January 1, 1964—T/ALL.

(a) Installations contracted for prior to January 1, 1964, shall meet the following requirements:

(1) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and alterations may be made to the same standards as the original installation.

(2) The details of the systems shall be in general agreement with §§ 34.25–5 through 34.25–20 insofar as is reasonable and practicable.

Subpart 34.50—Portable and Semiportable Extinguishers

§ 34.50–1 Application—TB/ALL.

(a) The provisions of this subpart, with the exception of § 34.50–90, shall apply to all vessels contracted for on or after January 1, 1962.

(b) All vessels contracted for prior to January 1, 1962, shall meet the requirements of § 34.50–90.

§ 34.50–5 Classification—TB/ALL.

(a) Portable and semiportable extinguishers shall be classified by a combination letter and number symbol. The letter indicating the type of fire which the unit could be expected to extinguish, and the number indicating the relative size of the unit.

(b) The types of fire will be designated as follows:

(1) ''A'' for fires in ordinary combustible materials such as mattresses, piles of wood, shavings, canvas, etc., where the quenching and cooling effects of quantities of water, or solutions containing large percentages of water, are of first importance.

(2) ''B'' for fires in combustible or flammable liquids such as gasoline, lubricating oil, diesel oil, greases, etc., where a blanketing or smothering effect is essential.

(3) ''C'' for fires in electrical equipment where the use of non-conducting extinguishing agent is of first importance so that electrical shock is not experienced by the firefighter.

(c) The number designations for size will start with ''I'' for the smallest to ''V'' for the largest. Extinguishers which have a gross weight of 55 pounds or less when fully charged are considered portable. Extinguishers which have a gross weight of more than 55 pounds when fully charged are considered semiportable and shall be fitted with suitable hose and nozzle or other practicable means so that all portions of the space concerned may be reached. Examples of size graduations for some of the typical portable and semiportable extinguishers are set forth in Table 34.50–5(c).

TABLE 34.50–5(c)

Classification type (Size)	Soda-acid and water (Gallons)	Foam (Gallons)	Carbon dioxide (Pounds)	Dry chemical (Pounds)
A-II	2½	2½	.....	.....
B-I	.....	1¼	4	2
B-II	.....	2½	15	10
B-III	.....	12	35	20
B-IV	.....	20	50	30
B-V	.....	40	[1] 100	[1] 50
C-I	.....	.....	4	2
CC-II	.....	.....	15	10

[1] For outside use, double the amount shall be carried.

§ 34.50–10 Location—TB/ALL.

(a) Approved portable and semiportable extinguishers shall be installed in accordance with Table 34.50–10(a). The location of the equipment shall be such as in the opinion of the Officer in Charge, Marine Inspection, will be most convenient in case of emergency. Where special circumstances exist, not covered by Table 34.50–10(a), the Officer in Charge, Marine Inspection, may require such additional equipment as he deems necessary for the proper protection of the vessel.

(b) For additional portable extinguishers as a substitute for sand, see § 34.55–10.

(c) Semiportable extinguishers shall be located in the open so as to be readily seen.

(d) If portable extinguishers are not located in the open or behind glass so that they may be readily seen they may be placed in enclosures together

with the fire hose, provided such enclosures are marked as required by § 35.40–25 of this subchapter.

(e) Portable extinguishers and their stations shall be numbered in accordance with § 34.40–25 of this subchapter.

(f) Hand portable or semiportable extinguishers which are required on their nameplates to be protected from freezing shall not be located where freezing temperatures may be expected.

TABLE 34.50–10(a)—PORTABLE AND SEMIPORTABLE EXTINGUISHERS

Tank ships		Area	Tank barges	
Quantity and location	Classification (see § 34.50–5)		Classification (see § 34.50–5)	Quantity and location
		Safety Areas		
1 required	C–II	Wheelhouse and chartroom area.		None required.
1 required in vicinity of exit	C–II[1]	Radio room		None required.
		Accommodation Areas		
1 required in each main passageway on each deck, conveniently located, and so that no room is more than 75 feet from an extinguisher.	A–II or B–II	Staterooms, toilet spaces, public spaces, offices, etc., and associated lockers, storerooms, and pantries..	A–II or B–II	1 required in vicinity of exit
		Service Areas		
1 required for each 2,500 square feet or fraction thereof, suitable for hazard involved.	B–II or C–II	Galleys	B–II or C–II	1 required, suitable for hazard involved.
1 required for each 2,500 square feet or fraction thereof, suitable for hazard involved.	A–II or B–II	Stores areas, including paint and lamp rooms.		None required.
		Machinery Area[2]		
2 required[3]	B–II	Spaces containing oil fired boilers, either main or auxiliary, or any fuel oil units subject to the discharge pressure of the fuel oil service pump.	B–II	1 required.[12]
1 required	and B–V[4].			
1 required for each 1,000 B.H.P., but not less than 2 nor more than 6[5].	B–II	Spaces containing internal combustion or gas turbine propulsion machinery.		None required.
1 required[6 7]	and B–III.			
1 required in vicinity of exit[7]	B–II	Auxiliary spaces containing internal combustion or gas turbine units.	B–II	1 required in vicinity of exit.[7 9 12]
1 required in vicinity of exit[8]	C–II	Auxiliary spaces containing emergency generators.		None required.
		Cargo Areas		
1 required in lower pumproom.	B.II	Pumprooms	B–II	1 required in vicinity of exit.[9 12]
None required		Cargo tank area	B–II	2 required.[10 12]
			and B–V	1 required.[9 11]

[1] Vessels not on an international voyage may substitute 2 C–I.
[2] A C–II shall be immediately available to the service generator and main switchboard areas, and further, a C–II shall be conveniently located not more than 50 feet walking distance from any point in all main machinery operating spaces. These extinguishers need *not* be in addition to other required extinguishers.
[3] Vessels of less than 1,000 gross tons require 1.
[4] Vessels of less than 1,000 gross tons may substitute 1 B–IV.
[5] Only 1 required for vessels under 65 feet in length.
[6] If oil burning donkey boiler fitted in space, the B–V previously required for the protection of the boiler may be substituted. Not required where a fixed carbon dioxide system is installed.
[7] Not required on vessels of less than 300 gross tons if fuel has a flashpoint higher than 110° F.

[8] Not required on vessels of less than 300 gross tons.
[9] Not required if fixed system installed.
[10] If no cargo pump on barge, only one B–II required.
[11] Manned barges of 100 gross tons and over only.
[12] Not required on unmanned barges except during transfer of cargo, or operation of barge machinery, or boilers. (See § 35.35–1(c) of this chapter.)

[CGFR 65–50, 30 FR 16694, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970]

§ 34.50–15 Spare charges—TB/ALL.

(a) Spare charges shall be carried on all vessels for at least 50 percent of each size and each variety, i.e. foam, soda-acid, carbon dioxicde, etc., of portable extinguisher required by § 34.50–10(a). However, if the unit is of such variety that it cannot be readily recharged by the vessel's personnel, one spare unit of the same classification shall be carried in lieu of spare charges for all such units of the same size and variety. This section does not apply to unmanned barges.

(b) Spare charges shall be so packaged as to minimize the hazards to personnel while recharging the units.

§ 34.50–20 Semiportable fire extinguishers—TB/ALL

(a) The frame or support of each size III, IV, and V fire extinguisher required by Table 34.50–10(a) must be welded or otherwise permanently attached to a bulkhead or deck.

(b) If a size III, IV, or V fire extinguisher has wheels and is not required by Table 34.50–10(a), it must be securely stowed when not in use to prevent it from rolling out of control under heavy sea conditions.

[CGD 77–039, 44 FR 34132, June 14, 1979]

§ 34.50–90 Vessels contracted for prior to January 1, 1962—TB/ALL.

(a) Vessels contracted for prior to January 1, 1962, shall meet the following requirements:

(1) The provisions of §§ 34.50–5 through 34.50–15 shall be met with the exception that existing installations may be maintained if in the opinion of the Officer in Charge, Marine Inspection, they are in general agreement with the degree of safety prescribed by Table 34.50–10(a). In such cases, minor modifications may be made to the same standard as the original installation: *Provided,* That in no case will a greater departure from the standards of Table 34.50–10(a) be permitted than presently exists.

Subpart 34.60—Fire Axes

§ 34.60–1 Application—T/ALL.

(a) The provisions of this subpart shall apply to all tankships.

§ 34.60–5 Number required—T/ALL.

(a) All tankships shall carry at least the minimum number of fire axes as set forth in Table 34.60–5(a). Nothing in this paragraph shall be construed as limiting the Officer in Charge, Marine Inspection, from requiring such additional fire axes as he deems necessary for the proper protection of the tankship.

TABLE 34.60–5(a)

Gross tons		Number of axes
Over	Not over	
	50	1
50	200	2
200	500	3
500	1,000	4
1,000	.....	5

§ 34.60–10 Location—T/ALL.

(a) Fire axes shall be distributed throughout the spaces so as to be most readily available in the event of emergency.

(b) If fire axes are not located in the open, or behind glass, so that they may readily be seen, they may be placed in enclosures together with the fire hose, provided such enclosures are marked as required by § 35.40–15 of this subchapter.

PART 35—OPERATIONS

Subpart 35.01—Special Operating Requirements

Sec.
35.01–1 Inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions—TB/ALL.

35.01–3 Incorporation by reference.
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35.01–25 Sacrificial anode installations—TB/ALL.
35.01–35 Repairs and alterations to fire-fighting equipment—TB/ALL.
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35.01–45 Open hopper type barges—B/ALL.
35.01–50 Special operating requirements for tank barges carrying certain dangerous bulk cargoes—B/ALL.
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Subpart 35.03—Work Vests

35.03–1 Application—TB/ALL.
35.03–5 Approved types of work vests—TB/ALL.
35.03–10 Use—TB/ALL.
35.03–15 Shipboard stowage—TB/ALL.
35.03–20 Shipboard inspections—TB/ALL.
35.03–25 Additional requirements for hybrid work vests.

Subpart 35.05—Officers and Crews

35.05–1 Licensed officers and crews of tankships—T/ALL.
35.05–5 [Reserved]
35.05–10 [Reserved]
35.05–15 Tank vessel security—TB/ALL.
35.05–20 Physical condition of crew—TB/ALL.
35.05–25 Illness, alcohol, drugs—TB/ALL.

Subpart 35.07—Logbook Entries

35.07–1 Application—TB/ALL.
35.07–5 Logbooks and records—TB/ALL.
35.07–10 Actions required to be logged—TB/ALL.

Subpart 35.08—Stability Information

35.08–1 Posting of stability letter.

Subpart 35.10—Fire and Emergency Requirements

35.10–1 Emergency training, musters, and drills—T/ALL.
35.10–3 Display of plans—TB/ALL.
35.10–5 Muster lists, emergency signals, and manning—T/ALL.
35.10–15 Emergency lighting and power systems—T/ALL.

Subpart 35.12—Placard of Lifesaving Signals

35.12–1 Application—T/OCLB.
35.12–5 Availability—T/OCLB.

Subpart 35.15—Notice and Reporting of Casualty and Voyage Records

35.15–1 Notice and reporting of casualty and voyage records—TB/ALL.

Subpart 35.20—Navigation

35.20–1 Notice to mariners; aids to navigation—T/OCLB.
35.20–5 Draft of tank ships—T/OC.
35.20–7 Verification of vessel compliance with applicable stability requirements—TB/ALL.
35.20–10 Steering gear test—T/ALL.
35.20–20 Master's and officer's responsibility—TB/ALL.
35.20–30 Flashing the rays of a searchlight or other blinding light—T/ALL.
35.20–35 Whistling—T/ALL.
35.20–40 Maneuvering characteristics—T/OC.
35.20–45 Use of Auto Pilot—T/ALL.

Subpart 35.25—Engine Department

35.25–1 Examination of boilers and machinery by engineer—T/ALL.
35.25–5 Repairs of boilers and unfired pressure vessels and reports of repairs or accidents by chief engineer—TB/ALL.
35.25–10 Requirements for fuel oil—T/ALL.
35.25–15 Carrying of excess steam—TB/ALL.
35.25–20 Breaking of safety valve seal—TB/ALL.

Subpart 35.30—General Safety Rules

35.30–1 Warning signals and signs—TB/ALL.
35.30–5 Fires, matches, and smoking—TB/ALL.
35.30–10 Cargo tank hatches, ullage holes, and Butterworth plates—TB/ALL.
35.30–15 Combustible gas indicator—TB/ALL.
35.30–20 Emergency equipment—TB/ALL.
35.30–25 Explosives—TB/ALL.
35.30–30 Portable electrical equipment—TB/ALL.
35.30–35 Spark producing devices—TB/ALL.
35.30–40 Flammable liquid and gas fuels as ship's stores—TB/ALL.

Subpart 35.35—Cargo Handling

35.35–1 Persons on duty—TB/ALL.
35.35–5 Electric bonding—TB/ALL.
35.35–10 Closing of freeing-ports, scuppers, and sea valves—TB/ALL.
35.35–15 Connecting for cargo transfer—TB/ALL.
35.35–20 Inspection before transfer of cargo—TB/ALL.

35.35–25 Approval to start transfer of cargo—TB/ALL.
35.35–30 ''Declaration of Inspection'' for tank ships—T/ALL.
35.35–35 Duties of person in charge of transfer—TB/ALL.
35.35–40 Conditions under which transfer operations shall not be commenced or if started shall be discontinued—TB/ALL.
35.35–42 Restrictions on vessels alongside a tank vessel loading or unloading cargo of Grade A, B, or C—TB/ALL.
35.35–45 Auxiliary steam, air, or electric current—B/ALL.
35.35–50 Termination of transfer operations—TB/ALL.
35.35–55 Transfer of other cargo or stores on tank vessels—TB/ALL.
35.35–60 Transportation of other cargo or stores on tank barges—B/ALL.
35.35–70 Maintenance of cargo handling equipment—TB/ALL.
35.35–75 Emergencies—TB/ALL.
35.35–85 Air compressors—TB/ALL.

Subpart 35.40—Posting and Marking Requirements —TB/ALL

35.40–1 General alarm contact maker—TB/ALL.
35.40–5 General alarm bells—TB/ALL.
35.40–6 Emergency lights—TB/ALL.
35.40–7 Carbon dioxide alarm—T/ALL.
35.40–10 Steam, foam, or CO_2 fire smothering apparatus—TB/ALL.
35.40–15 Fire hose stations—TB/ALL.
35.40–17 Foam hose/monitor stations—T/ALL.
35.40–18 Water spray systems—TB/ALL.
35.40–20 Emergency equipment—TB/ALL.
35.40–25 Fire extinguishers—TB/ALL.
35.40–30 Instructions for changing steering gear—TB/ALL.
35.40–35 Rudder orders—TB/ALL.
35.40–40 Marking and instructions for fire and emergency equipment—TB/ALL.

AUTHORITY: 33 U.S.C. 1321(j); 46 U.S.C. 3306, 3703, 6101; 49 U.S.C. 5103, 5106; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16704, Dec. 30, 1965, unless otherwise noted.

Subpart 35.01—Special Operating Requirements

§ 35.01–1 Inspection and testing required when making alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions—TB/ALL.

(a) The provisions of ''Standard for the Control of Gas Hazards on Vessels to be Repaired,'' NFPA No. 306, published by National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269, shall be used as a guide in conducting the inspections and issuance of certificates required by this section.

(b) Until an inspection has been made to determine that such operation can be undertaken with safety, no alterations, repairs, or other such operations involving riveting, welding, burning, or like fire-producing actions shall be made:

(1) Within or on the boundaries of cargo tanks which have been used to carry flammable or combustible liquid or chemicals in bulk, or within spaces adjacent to such cargo tanks; or,

(2) Within or on the boundaries of fuel tanks; or,

(3) To pipe lines, heating coils, pumps, fittings, or other appurtenances connected to such cargo or fuel tanks.

(c) Such inspections shall be made and evidenced as follows:

(1) In ports or places in the United States or its territories and possessions, the inspection shall be made by a marine chemist certificated by the National Fire Protection Association; however, if the services of such certified marine chemist are not reasonably available, the Officer in Charge, Marine Inspection, upon the recommendation of the vessel owner and his contractor or their representative, shall select a person who, in the case of an individual vessel, shall be authorized to make such inspection. If the inspection indicates that such operations can be undertaken with safety, a certificate setting forth the fact in writing and qualified as may be required, shall be issued by the certified marine chemist or the authorized person before the work is started. Such qualifications shall include any requirements as may be deemed necessary to maintain, insofar as can reasonably be done, the safe conditions in the spaces certified, throughout the operation and shall include such additional tests and certifications as considered required. Such qualifications and requirements shall include precautions necessary to eliminate or minimize hazards that may be present from protective coatings or residues from cargoes.

(2) When not in such a port or place, and a marine chemist or such person authorized by the Officer in Charge, Marine Inspection, is not reasonably available, the inspection shall be made by the senior officer present and a proper entry shall be made in the vessel's logbook.

(d) It shall be the responsibility of the senior officer present to secure copies of certificates issued by the certified marine chemist or such person authorized by the Officer in Charge, Marine Inspection. It shall be the responsibility of the senior officer present, insofar as the persons under his control are concerned, to maintain a safe condition on the vessel by full observance of all qualifications and requirements listed by the marine chemist in the certificate.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995]

§ 35.01–3 Incorporation by reference.

(a) Certain materials are incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than the one listed in paragraph (b) of this section, notice of the change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, Washington, DC 20408, and at the U.S. Coast Guard, Office of Operating and Environmental Standards, 2100 Second Street SW., Washington, DC 20593–0001, and is available from the address indicated in paragraph (b).

(b) The material approved for incorporation by reference in this part, and the sections affected is:

AMERICAN SOCIETY FOR TESTING AND MATERIALS

1916 Race St., Philadelphia, PA 19103.

ASTM F1014–1986 Standard Specification for Flashlights on Vessels.
Section affected—35.30–20(c)(3)

NOTE: All other documents referenced in this part are still in effect.

[CGD 82–042, 53 FR 17704, May 18, 1988, as amended by CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 35.01–5 Sanitary condition and crew quarters—T/ALL.

It shall be the duty of the master and chief engineer of every tankship to see that such vessel and crew's quarters are kept in a sanitary condition.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 95–027, 61 FR 25999, May 23, 1996]

§ 35.01–10 Shipping papers—TB/ALL.

Each loaded tank vessel shall have on board a bill of lading, manifest, or shipping document giving the name of the consignee and the location of the delivery point, the kind, grades, and approximate quantity of each kind and grade of cargo, and for whose account the cargo is being handled. The tank vessel shall not be delayed in order to secure exact quantities of cargo. Such manifests or bills of lading may be made out by the master, master of the towing vessel, owner, or agent of the owner: *Provided, however,* That in the case of unmanned barges where shipping papers are not available, an entry in the logbook of the towing vessel giving the name of the shipper and location of shipping point, the name of the consignee and location of delivery point, the approximate kind, grade, and quantity of cargo in each barge of the tow, and for whose account the cargo is being handled, shall be considered as complying with the requirements of this section.

§ 35.01–15 Carriage of persons other than crew—TB/ALL.

No person not connected with the operation of a tank ship or tank barge or not having legitimate business with said vessel, shall be permitted aboard while vessel is under way unless specifically allowed by its certificate.

§ 35.01–25 Sacrificial anode installations—TB/ALL.

(a) The installation of magnesium sacrificial anodes in cargo tanks utilized for the carriage of flammable or combustible liquids in bulk is prohibited.

(b) A sacrificial anode using an aluminum alloy will be permitted in cargo tanks under the following criteria:

(1) The maximum allowable energy that can be developed by a falling anode shall be 200 foot-pounds.

(2) No anode shall be installed more than 6 feet above the bottom of the tank. Special consideration will be given when structural design prevents the anodes from falling in event of failure of the attachments.

(3) Each anode shall have at least two welded or bolted connections to the supporting structure. Special consideration will be given to proprietary attachments which provide equally safe installations.

(4) The plans of the anode installation and a chemical analysis of the alloy composition shall be submitted for approval. The anode should be magnesium free and the silicon content limited to trace amounts.

(5) The recommended construction of the anode should utilize a mild steel core with necessary attachments. Other types may be used but will require special consideration.

(c) Sacrificial anodes using materials other than those having aluminum and/or magnesium in whole or in part are permitted.

[CGFR 69–72, 34 FR 17482, Oct. 29, 1969]

§ 35.01–35 Repairs and alterations to firefighting equipment—TB/ALL.

(a) No extensive repairs or alterations, except in emergency, shall be made to any fire-extinguishing apparatus, or other appliance subject to inspection, without advance notice to the Officer in Charge, Marine Inspection. Such repairs or alterations shall so far as is practicable be made with materials and tested in the manner specified within the regulations in this subchapter and subchapter Q (Specifications) of this chapter for new construction.

(b) Emergency repairs or alterations shall be reported as soon as practicable to the Officer in Charge, Marine Inspection, where the vessel may call after such repairs are made.

§ 35.01–40 Prevention of oil pollution—TB/ALL.

A tank vessel must be operated to meet the requirements in:

(a) Section 311 of the Federal Water Pollution Control Act, as amended (86 Stat. 816; 33 U.S.C. 1321);

(b) Section 12 of the Oil Pollution Act, 1961, as amended (75 Stat. 404; 33 U.S.C. 1011); and

(c) 33 CFR parts 151, 155, 156, 157, and 164.

[CGD 73–58R, 39 FR 18767, May 30, 1974, as amended by CGD 91–045, 61 FR 39794, July 30, 1996]

EFFECTIVE DATE NOTE: At 61 FR 39794, July 30, 1996, § 35.01–40 was amended by revising paragraph (c), effective November 27, 1996. For the convenience of the user, the superseded text is set forth as follows:

§ 35.01–40 Prevention of oil pollution—TB/ALL.

* * * * *

(c) 33 CFR parts 151, 155, 156, and 157.

§ 35.01–45 Open hopper type barges—B/ALL.

(a) With the exception of those open hopper type barges constructed or modified in conformance with the requirements of subpart 32.63 of this subchapter, the special operating conditions in this section apply to all other open hopper type barges carrying those cargoes listed in Table 30.25–1, of this chapter, which are defined as:

(1) Flammable liquids having a Reid vapor pressure in excess of 25 pounds per square inch, absolute, in independent tanks (part 32 of this subchapter).

(2) Liquefied flammable gases (part 38 of this subchapter).

(b) All open hopper type barges, while carrying in bulk any of the cargoes described in paragraph (a) of this section, shall be operated in conformance with the provisions in this section. However, the provisions in this section are not applicable to such barges when empty (not necessarily cleaned or gas-freed).

(c)(1) Except as otherwise provided in this section, no such open hopper type barge shall be placed as a lead barge in any tow. Such barges shall be placed in protected positions within the tow so that the danger from diving or swamping will be minimized. Where, due to operating conditions, compliance with this paragraph is impossible, the provisions of paragraph (c)(3) of this section

apply. The person in charge of the towing vessels shall be responsible for compliance with this paragraph.

(2) No such open hopper type barge shall be moved from a loading facility unless all void spaces and bilges are substantially free of water. Periodic inspections and necessary pumping shall be carried out to insure the maintenance of such water-free conditions, in order to minimize the free surface effect in both the longitudinal and transverse directions. Except when otherwise considered necessary for inspection or pumping, all hatch covers and other hull closure devices for void spaces and hull compartments shall be closed and secured at all times. In the case of unmanned barges, the person in charge of the towing vessel shall be deemed to be in charge of the barge, and all requirements to be carried out on the barge shall be carried out by or under the direction of such person.

(3) When an open hopper type barge is in an exposed position, such that protection from swamping provided by adjoining barges cannot be obtained from location within the two alone, it shall be the responsibility of the person in charge of the towing vessel to control speed so as to insure protection against diving and swamping of the barge, having due regard to its design and freeboard, and to the operating conditions.

(d) To show that special operating requirements apply to a specific open hopper type barge, additional placards or signs shall be displayed in at least four different locations on the barge when the cargoes described in paragraph (a) of this section are carried in any form in the cargo tanks. The placards or signs shall be posted on the barge approximately amidships on each side and near the centerline of each end, facing outboard. Racks, or other suitable means, for mounting such placards or signs shall be so arranged as to provide clear visibility and shall be protected from becoming readily damaged or obscured. The placards or signs shall be at least equal in dimensions to the DOT standard tank car ''Dangerous'' placard (10¾ inches square or larger), and shall display a circle (10 inches in diameter or larger) with alternating quadrants of white and red, and so mounted that the red quadrants are centered on the vertical axis. The shipper and/or owner of the barge shall be responsible for the installation of the required placards or signs, including maintenance of them while such barge is in temporary storage with cargo aboard. The person in charge of the towing vessel shall be responsible for the continued maintenance of the placards or signs while such barge is in transit.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGFR 70–10, 35 FR 3709, Feb. 25, 1970; CGD 86–033, 53 FR 36024, Sept. 16, 1988]

§ 35.01–50 Special operating requirements for tank barges carrying certain dangerous bulk cargoes—B/ALL.

(a) The requirements of this section shall apply to all tank barges carrying those cargoes listed on Table 30.25–1, of this chapter, which are defined as:

(1) Flammable liquids having a Reid vapor pressure in excess of 25 pounds per square inch, absolute, in independent tanks (part 32 of this subchapter).

(2) Liquefied flammable gases (part 38 of this subchapter).

(b) All tank barges constructed or modified in conformance with the requirements of subpart 32.63 of this subchapter are exempt from the provisions of § 35.01–45.

(c) When it is necessary to operate box or square-end barges as lead barges of tows, the person in charge of the towing vessel shall control the speed to insure protection against diving and swamping of such barges, having due regard to their design and freeboard, and to the operating conditions.

(d) All barges, while carrying in bulk any of the cargoes described in paragraph (a) of this section, shall be operated in conformance with the provisions of this section. However, the provisions of this section are not applicable to such barges when empty and gas-freed.

(e) Barges shall not be moved from a loading facility unless all bilges and void spaces (except those used for ballasting) are substantially free of water. Periodic inspections and necessary pumping shall be carried out to insure maintenance of such water-free condition in order to minimize the free

surface effects, both in the longitudinal and transverse directions. Except when otherwise considered necessary for inspection or pumping, all hatch covers and other hull closure devices for void spaces and hull compartments other than cargo spaces shall be closed and secured at all times.

(f) During the time the cargo tanks contain dangerous cargoes described in paragraph (a) of this section in any amount, in the liquid or gaseous state, the barge shall be under constant surveillance.

(1) A strict watch of each unmanned barge in tow shall be maintained from the towing vessel while underway.

(2) A towing vessel engaged in transporting such unmanned barges shall not leave them unattended. When a barge is moored, but not gas free, it shall be under the observation of a watchman who may be a member of the complement of the towing vessel, or a terminal employee, or other person. Such person shall be responsible for the security of the barge and for keeping unauthorized persons off the barge.

(g) The owner, operator, master, or person in charge of any barge carrying dangerous cargoes described in paragraph (a) of this section shall insure that, while the barge is being towed and during cargo transfer operations, the persons as required by § 31.15–5 of this subchapter and § 35.35–1 are provided.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGFR 70–10, 35 FR 3709, Feb. 25, 1970; CGD 73–243, 45 FR 18000, Mar. 20, 1980]

§ 35.01–55 Pilot boarding operation.

(a) The master shall ensure that pilot boarding equipment is maintained as follows:

(1) The equipment must be kept clean and in good working order.

(2) Each damaged step or spreader step on a pilot ladder must be replaced in kind with an approved replacement step or spreader step, prior to further use of the ladder. The replacement step or spreader step must be secured by the method used in the original construction of the ladder, and in accordance with manufacturer instructions.

(b) The master shall ensure compliance with the following during pilot boarding operations:

(1) Only approved pilot boarding equipment may be used.

(2) The pilot boarding equipment must rest firmly against the hull of the vessel and be clear of overboard discharges.

(3) Two man ropes, a safety line and an approved lifebuoy with an approved water light must be at the point of access and be immediately available for use during boarding operations.

(4) Rigging of the equipment and embarkation/debarkation of a pilot must be supervised in person by a deck officer.

(5) Both the equipment over the side and the point of access must be adequately lit during night operations.

(6) If a pilot hoist is used, a pilot ladder must be kept on deck adjacent to the hoist and available for immediate use.

[CGD 79–032, 49 FR 25455, June 21, 1984]

§ 35.01–60 Person excluded.

Masters and pilots shall exclude from the pilothouse and navigation bridge while underway, all persons not connected with the navigation of the vessel. However, licensed officers of vessels, persons regularly engaged in training, regulating, evaluating, or learning the profession of pilot, officials of the United States Coast Guard, United States Navy, United States Coast and Geodetic Survey, United States Army Corps of Engineers, Maritime Administration, and National Transportation Safety Board may be allowed in the pilothouse or upon the navigation bridge upon the responsibility of the master or pilot.

[CGD 91–023, 59 FR 16779, Apr. 8, 1994]

Subpart 35.03—Work Vests

§ 35.03–1 Application—TB/ALL.

(a) Provisions of this subpart shall apply to all tank vessels.

§ 35.03–5 Approved types of work vests—TB/ALL.

(a) Each buoyant work vest carried under the permissive authority of this section must be approved under—

(1) Subpart 160.053 of this chapter; or

(2) Subpart 160.077 of this chapter as a commerical hybrid PFD.

[CGD 78–174A, 51 FR 4350, Feb. 4, 1986]

§ 35.03–10 Use—TB/ALL.

(a) Approved buoyant work vests are considered to be items of safety apparel and may be carried aboard tank vessels to be worn by crew members when working near or over the water under favorable working conditions. They shall be used under the supervision and control of designated ship's officers. When carried, such vests shall not be accepted in lieu of any portion of the required number of approved life preservers and shall not be substituted for the approved life preservers required to be worn during drills and emergencies.

§ 35.03–15 Shipboard stowage—TB/ALL.

(a) The approved buoyant work vests shall be stowed separately from the regular stowage of approved life preservers.

(b) The locations for the stowage of work vests shall be such as not to be easily confused with that for approved life preservers.

§ 35.03–20 Shipboard inspections—TB/ALL.

(a) Each work vest shall be subject to examination by a marine inspector to determine its serviceability. If found to be satisfactory, it may be continued in service, but shall not be stamped by a marine inspector with a Coast Guard stamp. If a work vest is found not to be in a serviceable condition, then such work vest shall be removed from the vessel. If a work vest is beyond repair, it shall be destroyed or mutilated in the presence of a marine inspector so as to prevent its continued use as a work vest.

§ 35.03–25 Additional requirements for hybrid work vests.

(a) In addition to the other requirements in this subpart, commercial hybrid PFD's must be—

(1) Used, stowed, and maintained in accordance with the procedures set out in the manual required for these devices by § 160.077–29 of this chapter and any limitation(s) marked on them; and

(2) Of the same or similar design and have the same method of operation as each other hybrid PFD carried on board.

[CGD 78–174A, 51 FR 4350, Feb. 4, 1986; 51 FR 15497, Apr. 24, 1986]

Subpart 35.05—Officers and Crews

§ 35.05–1 Licensed officers and crews of tankships—T/ALL.

No tankship of the United States shall be navigated unless she shall have in her service and on board such complement of licensed officers and crew, including certificated lifeboatmen and certificated tankermen where required by the regulations in this subchapter, separately stated, as called for in her certificate of inspection.

§ 35.05–5 [Reserved]

§ 35.05–10 [Reserved]

§ 35.05–15 Tank vessel security—TB/ALL.

(a) *Manned tank vessel.* At least one member of the crew of a manned tank vessel shall be on board at all times except when the vessel is gas free or is moored at a dock or terminal at which watchman service is provided.

(b) *Unmanned barge.* (1) The owner, managing operator, master, and person in charge of a vessel towing a tank barge that need not be manned, and each of them, shall be responsible for monitoring the security and integrity of the tank barge and for ensuring adherence to proper safety precautions. These responsibilities include, but are not limited to—

(i) Ensuring that any tank barge added to the tow has all tank openings properly secured; has its freeing-ports and scuppers, if any, unobstructed; meets any loadline or freeboard requirements; and neither leaks cargo into the water, voids, or cofferdams nor leaks water into the tanks, voids, or cofferdams;

(ii) Ensuring that every tank barge in the tow is properly secured within the tow;

(iii) Ensuring that periodic checks are made of every tank barge in the tow for leakage of cargo into the

water, voids, or cofferdams and for leakage of water into the tanks, voids, or cofferdams;

(iv) Knowing the cargo of every tank barge in the tow, any hazards associated with the cargo, and what to do on discovery of a leak;

(v) Ensuring that the crew of the vessel know the cargo of every tank barge in the tow, any hazards associated with the cargo, and what to do on discovery of a leak;

(vi) Reporting to the Coast Guard any leaks from a tank barge in the tow into the water, as required by 33 CFR 151.15; and

(vii) Ensuring that the crew of the vessel and other personnel in the vicinity of the tank barges in the tow follow the proper safety precautions for tank vessels, and that no activity takes place in the vicinity of the barges that could create a hazard.

(2) When a barge is moored and contains more oil than the normal clingage and unpumpable bilge or sump residues, the barge must be kept under surveillance by a person responsible for the security of the barge and for keeping unauthorized persons off the barge.

(3) When a barge is moored and contains no oil but is not gas free:

(i) It must be maintained under surveillance as required in paragraph (b)(2) of this section; or

(ii) All cargo tank hatches must be clearly marked in not less than three inch lettering ''Danger—Keep Out,'' and all hatch covers must be closed and dogged down in such a way that the hatch cannot be opened by the use of bare hands alone.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 80–009,48 FR 36459, Aug. 11, 1983; CGD 79–116, 60 FR 17155, Apr. 4, 1995]

§ 35.05–20 Physical condition of crew—TB/ALL.

No person shall be engaged as a member of the crew on a tank vessel if he is known by the employer to be physically or mentally incapable of performing the duties assigned him.

§ 35.05–25 Illness, alcohol, drugs—TB/ALL.

(a) No person, known by the individual in charge of a tank vessel to be under the influence of liquor or other stimulant, or to be ill to such an extent as to unfit him for any particular service on the tank vessel, shall be allowed to perform such service while in such condition.

(b) When a member of the crew of a tank vessel which is loading bulk cargo of Grade A, B, or C arrives at the gangway and is observed to be in an intoxicated condition, he shall not be permitted to board the vessel without escort.

Subpart 35.07—Logbook Entries

§ 35.07–1 Application—TB/ALL.

(a) Except as specifically noted, the provisions of this subpart shall apply to all tank vessels.

§ 35.07–5 Logbooks and records—TB/ALL.

(a) The master or person in charge of a vessel that is required by 46 U.S.C. 11301 to have an official logbook shall maintain the logbook on form CG–706. The official logbook is available free to masters of U.S.-flag vessels from the officer in Charge, Marine Inspection, as form CG–706B or CG–706C, depending on the number of persons employed in the crew. When the voyage is completed, the master or person in charge shall file the logbook with the Officer in Charge, Marine Inspection.

(b) The master or person in charge of a vessel that is not required by 46 U.S.C. 11301 to have an official logbook, shall maintain, on board, an unofficial logbook or record in any form desired for the purposes of making entries therein as required by law or regulations in this subchapter. Such logs or records are not filed with the Officer in Charge, Marine Inspection, but must be kept available for review by a marine inspector for a period of 1 year after the date to which the records refer. Separate records of tests and inspections of fire fighting equipment must be maintained with the vessel's logs for the period of validity of the vessel's certificate of inspection.

[CGD 95–027, 61 FR 25999, May 23, 1996]

§ 35.07–10 Actions required to be logged—TB/ALL.

(a) *General—TB/ALL.* The actions and observations noted in this section shall be entered in the Official Logbook or in logs or records considered to take place of the Official Logbooks. This section contains no requirements which are not made in specific laws or in other regulations in this subchapter, the items being merely grouped together for convenience.

(b) *Entries—T/ALL.* Entries shall be made in the logs of tankships with respect to the following:

(1) Onboard training, musters, and drills: held in accordance with subchapter W (Lifesaving Appliances or Arrangements) of this chapter.

(2) Draft and load line marks. For tankships of 150 gross tons and over, prior to leaving port for ocean, coastwise, and Great Lakes voyages only. See 46 U.S.C., sections 85e and 88e, and § 35.20–5.

(3) Verification of vessel compliance with applicable stability requirements. After loading and prior to departure and at all other times necessary to assure the safety of the vessel. See § 35.20–7.

(4) Steering gear tests. Prior to departure, or for tank ships on voyages of less than 48 hours duration or tankships operating on lakes, bays, sounds and rivers, once every week. See § 35.20–10.

(5) Fuel oil data. Upon receipt of fuel oil on board to be used as fuel. See § 35.25–10.

(6) Inspections and tests of firefighting equipment. Once every year. See § 31.10–18 of this subchapter.

(7) Operation and inspection of the emergency lighting and power systems. Once in each week that the vessel is navigated. See § 35.10–15.

(8) Cargo gear inspections: At least once a month. See § 31.37–70 of this subchapter.

(c) *Entries—B/ALL.* Entries shall be made in the records for tank barges with respect to the following:

(1) Inspections and tests of firefighting equipment. Once every year. See § 31.10–18 of this subchapter.

(2) Draft and load line marks. For tank barges of 150 gross tons and over, prior to leaving port for ocean, coastwise, and Great Lakes voyages only. See 46 U.S.C. 85e and 88e.

(3) Cargo gear inspections: At least once a month. See § 31.37–70 of this subchapter.

(4) Verification of vessel compliance with applicable stability requirements. After loading and prior to departure and at all other times necessary to assure the safety of the vessel. See § 35.20–7.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 89–037, 57 FR 41821, Sept. 11, 1992; CGD 84–069, 61 FR 25286, May 20, 1996]

Subpart 35.08—Stability Information

§ 35.08–1 Posting of stability letter.

If a stability letter is issued under § 170.120 of this chapter, it must be posted under glass or other suitable transparent material in the pilothouse of the vessel.

[CGD 79–023, 48 FR 51006, Nov. 4, 1983]

Subpart 35.10—Fire and Emergency Requirements

§ 35.10–1 Emergency training, musters, and drills—T/ALL.

Onboard training, musters, and drills must be in accordance with subchapter W (Lifesaving Appliances and Arrangements) of this chapter.

[CGD 84–069, 61 FR 25286, May 20, 1996]

§ 35.10–3 Display of plans—TB/ALL.

(a) All self-propelled vessels of more than 100 gross tons and all barges of more than 100 gross tons with sleeping accommodations for more than six persons shall have permanently exhibited for the guidance of the officer in charge of the vessel, general arrangement plans showing for each deck the various fire retardant bulkheads together with particulars of the fire detecting, manual alarm and fire extinguishing systems, fire doors, means of ingress to the different compartments, and the ventilating systems including the positions of the dampers, the location of the remote means of stopping the fans, and the identification of the fans serving each section.

[CGFR 68–32, 33 FR 5714, Apr. 12, 1968]

§ 35.10–5 Muster lists, emergency signals, and manning—T/ALL.

The requirements for muster lists, emergency signals, and manning must be in accordance with subchapter W (Lifesaving Appliances and Arrangements) of this chapter.

[CGD 84–069, 61 FR 25287, May 20, 1996]

§ 35.10–15 Emergency lighting and power systems—T/ALL.

(a) Where fitted, it shall be the duty of the master to see that the emergency lighting and power systems are tested and inspected at least once in each week that the vessel is navigated to be assured that the system is in proper operating condition.

(b) Internal combustion engine driven emergency generators shall be tested under load for at least 2 hours, at least once in each month that the vessel is navigated.

(c) Storage batteries for emergency lighting and power systems shall be tested at least once in each 6-month period that the vessel is navigated to demonstrate the ability of the storage battery to supply the emergency loads for the period of time specified in Table 112.05–5(a) of this chapter.

(d) The date of the tests required by this section and the condition and performance of the apparatus shall be noted in the vessel's Official Logbook or in logs or records considered to take the place of the Official Logbook.

[CGFR 65–50, 30 FR 16709, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970]

Subpart 35.12—Placard of Lifesaving Signals

SOURCE: CGD 95–027, 61 FR 25999, May 23, 1996, unless otherwise noted.

§ 35.12–1 Application—T/OCLB.

The provisions of this subpart apply to all vessels on an international voyage, and all other vessels of 150 gross tons or over in oceans, coastwise, or Great Lake service.

§ 35.12–5 Availability—T/OCLB.

On all vessels to which this subpart applies there must be readily available to the deck officer of the watch a placard containing instructions for the use of the lifesaving signals set forth in regulations 16, chapter V, of the International Convention for Safety of Life at Sea, 1974. These signals must be used by vessels or persons in distress when communicating with lifesaving stations and maritime rescue units.

Subpart 35.15—Notice and Reporting of Casualty and Voyage Records

§ 35.15–1 Notice and reporting of casualty and voyage records—TB/ALL.

The requirements for providing notice and reporting of marine casualties and for retaining voyage records are contained in part 4 of this chapter.

[CGD 84–099, 52 FR 47535, Dec. 14, 1987; 53 FR 13117, Apr. 21, 1988]

Subpart 35.20—Navigation

§ 35.20–1 Notice to mariners; aids to navigation—T/OCLB.

(a) Licensed officers are required to acquaint themselves with the latest information published by the Coast Guard and the U.S. Navy regarding aids to navigation, and neglect to do so is evidence of neglect of duty. It is desirable that vessels navigating oceans and coastwise and Great Lakes water shall have available in the pilothouse for convenient reference at all times a file of the applicable Notice to Mariners.

(b) Weekly Notices to Mariners (Great Lakes Edition), published by the Commander, 9th Coast Guard District, contain announcements and information on changes in aids to navigation and other marine information affecting the safety of navigation on the Great Lakes. These notices may be obtained free of charge, by making application to Commander, 9th Coast Guard District.

(c) Weekly Notices to Mariners (worldwide coverage) are prepared jointly by the U.S. Naval Oceanographic Office, the U.S. Coast and Geodetic Survey and the U.S. Coast Guard. They include changes in aids to navigation in assembled form for the 1st, 5th, 7th, Greater Antilles Section, 8th, 11th,

13th, 14th, and 17th Coast Guard Districts. Foreign marine information is also included in these notices. These notices are available without charge from the U.S. Naval Oceanographic Office, Washington, DC 20390, Branch Oceanographic Offices, U.S. Collector of Customs of the major seaports in the United States and are also on file in the U.S. Consulates where they may be inspected.

(d) As appropriate for the intended voyage, all vessels must carry adequate and up-to-date:

(1) Charts;
(2) Sailing directions;
(3) Coast pilots;
(4) Light lists;
(5) Notices to mariners;
(6) Tide tables;
(7) Current tables; and
(8) All other nautical publications necessary.[1]

[CGFR 66–33, 31 FR 15268, Dec. 6, 1966, as amended by CGFR 68–32, 33 FR 5714, Apr. 12, 1968; CGD 75–074, 42 FR 5963, Jan. 31, 1977; CGD 88–070, 53 FR 34534, Sept. 7, 1988]

§ 35.20–5 Draft of tankships—T/OC.

The master of every tankship shall, whenever leaving port, enter the maximum draft of his vessel in the logbook.

§ 35.20–7 Verification of vessel compliance with applicable stability requirements—TB/ALL.

(a) Except as provided in paragraph (d) of this section, after loading and prior to departure and at all other times necessary to assure the safety of the vessel, the master or person in charge shall determine that the vessel complies with all applicable stability requirements in the vessels's trim and stability book, stability letter, Certificate of Inspection, and Load Line Certificate, as the case may be. The vessel may not depart until it is in compliance with these requirements..

(b) When determining compliance with applicable stability requirements the vessel's draft, trim, and stability must be determined as necessary.

(c) If a log book is required by § 35.07–5, then the master or person in charge must enter an attestation statement verifying that the vessel complies with the applicable stability requirements at the times specified in paragraph (a) and any stability calculations made in support of the determination must be retained on board the vessel for the duration of the voyage.

(d) Stability verification is not required for tank barges whose Certificate of Inspection carries draft restrictions for purposes other than stability.

[CGD 88–037, 57 FR 41821, Sept. 11, 1992]

§ 35.20–10 Steering gear test—T/ALL.

On all tankships making voyages of more than 48 hours' duration, the entire steering gear, the whistle, the means of communication, and the signaling appliances between the bridge or pilothouse and engineroom shall be examined and tested by a licensed officer of the vessel within a period of not more than 12 hours before leaving port. All such vessels making voyages of less than 48 hours' duration or operating on lakes, bays, sounds, and rivers shall be so examined and tested at least once in every week. The fact and time of such examination and test shall be recorded in the ship's logbook.

§ 35.20–20 Master's and officer's responsibility—TB/ALL.

Nothing in this part shall exonerate any master or officer in command from the consequences of any neglect to keep a proper lookout or the neglect of any precaution which may be required by the ordinary practice of seamen or by the special circumstances of the case.

§ 35.20–30 Flashing the rays of a searchlight or other blinding light—T/ALL.

No person shall flash, or cause to be flashed, the rays of a search light or other blinding light onto the bridge or into the pilothouse of any vessel under way.

[CGD 95–027, 61 FR 26000, May 23, 1996]

§ 35.20–35 Whistling—T/ALL.

The unnecessary sounding of a vessel's whistle is prohibited within any harbor limits of the United States.

[CGD 95–027, 61 FR 26000, May 23, 1996]

[1] For United States vessels in or on the navigable waters of the United States, see 33 CFR 164.33.

§ 35.20–40 Maneuvering characteristics—T/OC.

For each ocean and coastwise tankship of 1,600 gross tons or over, the following apply:

(a) The following maneuvering information must be prominently displayed in the pilothouse on a fact sheet:

(1) For full and half speed, a turning circle diagram to port and starboard that shows the time and the distance of advance and transfer required to alter the course 90 degrees with maximum rudder angle and constant power settings.

(2) The time and distance to stop the vessel from full and half speed while maintaining approximately the initial heading with minimum application of rudder.

(3) For each vessel with a fixed propeller, a table of shaft revolutions per minute for a representative range of speeds.

(4) For each vessel with a controllable pitch propeller a table of control settings for a representative range of speeds.

(5) For each vessel that is fitted with an auxiliary device to assist in maneuvering, such as a bow thruster, a table of vessel speeds at which the auxiliary device is effective in maneuvering the vessel.

(b) The maneuvering information must be provided for the normal load and normal ballast condition for:

(1) Calm weather—wind 10 knots or less, calm sea;

(2) No current;

(3) Deep water conditions—water depth twice the vessel's draft or greater; and

(4) Clean hull.

(c) At the bottom of the fact sheet, the following statement must appear:

WARNING

The response of the (name of the vessel) may be different from those listed above if any of the following conditions, upon which the maneuvering information is based, are varied:

(1) Calm weather—wind 10 knots or less, calm sea;

(2) No current;

(3) Water depth twice the vessel's draft or greater;

(4) Clean hull; and

(5) Intermediate drafts or unusual trim.

(d) The information on the fact sheet must be:

(1) Verified six months after the vessel is placed in service; or

(2) Modified six months after the vessel is placed into service and verified within three months thereafter.

(e) The information that appears on the fact sheet may be obtained from:

(1) Trial trip observations;

(2) Model tests;

(3) Analytical calculations;

(4) Simulations;

(5) Information established from another vessel of similar hull form, power, rudder and propeller; or

(6) Any combination of the above.

The accuracy of the information in the fact sheet required is that attainable by ordinary shipboard navigation equipment.

(f) The requirements for information for fact sheets for specialized craft such as semi-submersibles, hydrofoils, hovercraft and other vessels of unusual design will be specified on a case by case basis.

[CGD 73–78, 40 FR 2689, Jan. 15, 1975]

§ 35.20–45 Use of Auto Pilot—T/ALL.

Except as provided in 33 CFR 164.13, when the automatic pilot is used in:

(a) Areas of high traffic density;

(b) Conditions of restricted visibility; and

(c) All other hazardous navigational situations, the master shall ensure that:

(1) It is possible to immediately establish manual control of the ship's steering;

(2) A competent person is ready at all times to take over steering control; and

(3) The changeover from automatic to manual steering and vice versa is made by, or under, the supervision of the officer of the watch.

[CGD 75–074, 42 FR 5963, Jan. 31, 1977, as amended by CGD 91–204, 58 FR 27633, May 10, 1993]

Subpart 35.25—Engine Department

§35.25–1 Examination of boilers and machinery by engineer—T/ALL.

It shall be the duty of an engineer when assuming charge of the boilers to examine the same forthwith and thoroughly. If any part thereof is found in bad condition, the engineer shall immediately report the facts to the master, owner, or agent, and to the nearest Officer in Charge, Marine Inspection.

[CGD 95–027, 61 FR 26000, May 23, 1996]

§35.25–5 Repairs of boilers and unfired pressure vessels and reports of repairs or accidents by chief engineer—TB/ALL.

(a) Before making any repairs to boilers or unfired pressure vessels, the chief engineer shall submit a report covering the nature of the repairs to the Officer in Charge, Marine Inspection, at or nearest to the port where the repairs are to be made.

(b) In the event of an accident to a boiler, unfired pressure vessel, or machinery tending to render the further use of the item itself unsafe until repairs are made, or if by ordinary wear such items become unsafe, a report shall be made by the chief engineer immediately to the Officer in Charge, Marine Inspection, or if at sea, immediately upon arrival at port.

§35.25–10 Requirements for fuel oil—T/ALL.

(a) Oil to be used as fuel to be burned under boilers on tankships shall have a flashpoint of not less than 140°F. (Pensky-Martens Closed Cup Method, ASTM D 93).

(b) It shall be the duty of the chief engineer to make an entry in the log of each supply of fuel oil received on board, stating the quantity received, the name of the vendor, the name of the oil producer, and the flashpoint (Pensky-Martens Closed Cup Method, ASTM D 93) for which it is certified by the producer.

(c) It shall be the further duty of the chief engineer to draw and seal at the time the supply is received on board, a half-pint sample of each lot of fuel oil, such sample to be preserved until that particular supply of oil is exhausted.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGFR 68–82, 33 FR 18805, Dec. 18, 1968; CGD 73–254, 40 FR 40163, Sept. 2, 1975]

§35.25–15 Carrying of excess steam—TB/ALL.

It shall be the duty of the chief engineer of any tank vessel to see that a steam pressure is not carried in excess of that allowed by the certificate of inspection, and to see that the safety valves, once set and sealed by the inspector are in no way tampered with or made inoperative except as provided in §35.25–20.

§35.25–20 Breaking of safety valve seal—TB/ALL.

If at any time it is necessary to break the seal on a safety valve for any purpose, the chief engineer shall advise the Officer in Charge, Marine Inspection, at the next port of call, giving the reason for breaking the seal and requesting that the valve be examined and adjusted by a marine inspector.

Subpart 35.30—General Safety Rules

§35.30–1 Warning signals and signs—TB/ALL.

(a) *Red warning signals.* During transfer of bulk cargo while fast to a dock, a red signal (flag by day and electric lantern at night) shall be so placed that it will be visible on all sides. While transferring bulk cargo at anchor, a red flag only shall be displayed.

(b) *Warning sign at gangway.* A sign shall be displayed to warn persons approaching the gangway, while a vessel is moored or anchored unless it is empty and gas-freed. The sign shall state in letters not less than 2 inches high substantially as follows:

WARNING

No open lights.
No smoking.
No visitors.

(c) *Warning sign in radio room.* A sign shall be placed in radio room warning against the use of radio equipment during transfer of Grade A, B, or C liquids,

except by permission of senior deck officer.

(d) [Reserved]

(e) Additional placards or signs required in connection with the movement of certain open hopper type barges are described in § 35.01–45.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGFR 70–143, 35 FR 19905, Dec. 30, 1970; CGD 73–96, 42 FR 49024, Sept. 26, 1977; CGD 73–243, 45 FR 18000, Mar. 20, 1980]

§ 35.30–5 Fires, matches, and smoking—TB/ALL.

(a) *General.* In making the determinations required under paragraphs (b), (c), and (d) of this section the senior deck officer on duty, who shall be a licensed officer or certificated tankerman, shall exercise his skill and experience with due regard to attendant conditions and circumstances, including consideration for location of shore side facilities, maintenance of mobility, provision for fire protection, state or change of winds, tides, sea, weather conditions, forces of nature and other circumstances generally beyond human control.

(b) *Boiler fires.* Boiler fires are normally permitted during cargo transfer operations: *Provided,* That prior to loading Grades A, B, and C cargoes, the senior deck officer on duty, who shall be a licensed officer or certificated tankerman, shall make an inspection to determine whether in his judgment boiler fires may be maintained with reasonable safety during the loading operation.

(c) *Smoking.* Smoking is prohibited on the weather decks of tank vessels when they are not gas free or are alongside docks. At other times and places the senior deck officer on duty, who shall be a licensed officer or certificated tankerman, shall designate when and where the crew may smoke: *Provided,* That prior to loading Grade A, B, or C cargo the master or senior deck officer on duty shall make an inspection to determine if and where, in his judgment, smoking may be permitted with reasonable safety during the loading operation.

(d) *Matches.* The use of other than safety matches is forbidden aboard tank vessels at all times.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 95–012, 60 FR 48049, Sept. 18, 1995]

§ 35.30–10 Cargo tank hatches, ullage holes, and Butterworth plates—TB/ALL.

No cargo tank hatches, ullage holes, or Butterworth plates shall be opened or shall remain open without flame screens, except under the supervision of the senior members of the crew on duty, unless the tank opened is gas free.

§ 35.30–15 Combustible gas indicator—TB/ALL.

(a) The provisions of this section shall apply only to United States flag vessels.

(b) Manned tank barges and tankships authorized to carry Grade A, B, C, or D liquids at any temperature, or Grade E liquids at elevated temperatures, shall be provided with a combustible gas indicator suitable for determining the presence of explosive concentrations of the cargo carried. An indicator which bears the label of Underwriters' Laboratories Inc., Factory Mutual Engineering Division, or other organizations acceptable to the Commandant will be accepted as meeting this requirement.

§ 35.30–20 Emergency equipment—TB/ALL

(a) Two emergency outfits, stored for use in widely separated, accessible locations, are required for the following:

(1) All tankships on international voyage.

(2) All tankships over 1,000 gross tons.

(3) All tankships having cargo tanks which exceed 15 feet in depth, measured from the deck to the lowest point at which cargo is carried.

(b) One emergency outfit is required for all manned tank barges having cargo tanks which exceed 15 feet in depth, measured from the deck to the lowest point at which cargo is carried.

(c) Each emergency outfit shall be equipped as follows:

(1) One pressure-demand, open-circuit, self-contained breathing apparatus, approved by the Mine Safety and Health Administration (MSHA) and by the National Institute for Occupational Safety and Health (NIOSH) and having at a minimum a 30-minute air supply, a full facepiece, and a spare charge.

(2) One lifeline with a belt or a suitable harness.

(3) One, Type II or Type III, flashlight constructed and marked in accordance with ASTM F1014–1986.

(4) One fire ax.

(5) Boots and gloves of rubber or other electrically nonconducting material.

(6) A rigid helmet which provides effective protection against impact.

(7) Protective clothing of material that will protect the skin from the heat of fire and burns from scalding steam. The outer surface shall be water resistant.

(d) A supplied-air respirator previously approved under part 160, subpart 160.011, of this chapter may continue in use as required equipment until November 23, 1994, if it was part of the vessel's equipment on November 23, 1992, and as long as it is maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. A self-contained compressed-air breathing apparatus previously approved by MSHA and NIOSH under part 160, subpart 160.011, of this chapter may continue in use as required equipment if it was part of the vessel's equipment on November 23, 1992, and as long as it is maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection.

(e) Lifelines shall be of steel or bronze wire rope. Steel wire rope shall be either inherently corrosion resistant or made so by galvanizing or tinning. Each end shall be fitted with a hook with keeper having a throat opening which can be readily slipped over a 5/8-inch bolt. The total length of the lifeline shall be dependent upon the size and arrangement of the vessel, and more than one line may be hooked together to achieve the necessary length. No individual length of lifeline may be less than 50 feet in length. The assembled lifeline shall have a minimum breaking strength of 1,500 pounds.

[CGD 73–11R, 38 FR 27354, Oct. 3, 1973, as amended by CGD 75–074, 42 FR 5963, Jan. 31, 1977; CGD 82–042, 53 FR 17704, May 18, 1988; CGD 86–036, 57 FR 48324, Oct. 23, 1992; 57 FR 56406, Nov. 27, 1992]

§ 35.30–25 Explosives—TB/ALL.

Fulminates or other detonating compounds in bulk in dry condition; explosive compositions that ignite spontaneously or undergo marked decomposition when subjected for forty-eight consecutive hours to a temperature of 167° F. or more; composition containing an ammonium salt and a chlorate; and other like explosives shall not be accepted, stored, stowed or transported on board tank vessels.

§ 35.30–30 Portable electric equipment—TB/ALL.

Portable electric equipment must not be used in a hazardous location described in subpart 111.105 of this chapter except:

(a) Self-contained, battery-fed, explosion-proof lamps approved by Underwriters Laboratories Inc., Factory Mutual Research Corporation, or other independent laboratory recognized by the Commandant, for use in a Class I, Division 1 location for the electrical group classification of the cargo;

(b) Intrinsically safe equipment approved by Underwriters Laboratories Inc., Factory Mutual Research Corporation, or other independent laboratory recognized by the Commandant, for use in a Class I, Division 1 location for the electrical group classification of the cargo; and

(c) Any electrical equipment, if:

(1) The hazardous location is:

(i) Enclosed; and

(ii) Gas free;

(2) The adjacent compartments are:

(i) Gas free;

(ii) Inerted;

(iii) Filled with water;

(iv) Filled with Grade E liquid; or

(v) Spaces where flammable gases are not expected to accumulate; and:

(3) Each compartment where flammable gas is expected to accumulate is:

(i) Closed; and

(ii) Secured.

[CGD 74–125A, 47 FR 15230, Apr. 8, 1982]

§ 35.30–35 Spark producing devices—TB/ALL.

(a) Where Grades A, B, C, and D liquid cargoes are involved, power driven or manually operated spark producing devices shall not be used in bulk cargo tanks, fuel oil tanks, cargo pumprooms, or enclosed spaces immediately above or adjacent to bulk cargo tanks unless all the following conditions are met:

(1) The compartment itself is gas-free;

(2) The compartments adjacent and the compartments diagonally adjacent are either (i) gas-free, (ii) inerted, (iii) filled with water, (iv) contain Grade E liquid and are closed and secured, or (v) are spaces in which flammable vapors and gases normally are not expected to accumulate; and,

(3) All other compartments of the vessel in which flammable vapors and gases may normally be expected to accumulate are closed and secured.

(b) This section does not prohibit the use of small hand tools in such locations.

§ 35.30–40 Flammable liquid and gas fuels as ship's stores—TB/ALL.

(a) Flammable liquids and gases other than diesel fuel, to be used as fuel for approved equipment must satisfy the following:

(1) Stowage must be in containers approved by DOT or A.S.M.E. for the contents carried, or in a portable safety container approved by a recognized testing laboratory for the contents carried.

(2) The contents must be marked on the containers, and the containers must be labeled in accordance with DOT requirements for flammable liquids and gases.

(3) Containers must be stowed on or above the weather deck in locations designated by the master. Containers specified in paragraph (a)(1) of this section which do not exceed a capacity of five gallons may be stowed below the weather deck in a paint or lamp locker.

(b) Diesel fuel must be stowed in locations designated by the master.

[CGD 80–009, 48 FR 36459, Aug. 11, 1983, as amended by CGD 86–033, 53 FR 36024, Sept. 16, 1988]

Subpart 35.35—Cargo Handling

§ 35.35–1 Persons on duty—TB/ALL.

(a) On each tankship required to be documented under the laws of the United States, the owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that—

(1) Enough ''Tankerman-PICs'' or restricted ''Tankerman-PICs'', and ''Tankerman-Assistants'', authorized for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a person qualified to be the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(b) On each United States tank barge subject to inspection—

(1) The owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that no transfer of liquid cargo in bulk or cleaning of a cargo tank takes place unless under the supervision of a qualified person designated as the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155; and

(2) The person designated as the person in charge of the transfer shall ensure that—

(i) Enough qualified personnel are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(ii) The approved portable extinguishers required by Table 34.50–10(a) of this chapter are aboard and readily available before any transfer of liquid cargo in bulk or any operation of barge machinery or boilers.

(c) On each foreign tankship, the owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that—

(1) Enough personnel, qualified for the classification of cargo carried, are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks; and

(2) Each transfer of liquid cargo in bulk and each cleaning of a cargo tank is supervised by a qualified person designated as a person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(d) On each foreign tank barge—

(1) The owner, managing operator, master, and person in charge of the vessel, and each of them, shall ensure that no transfer of liquid cargo in bulk or cleaning of a cargo tank takes place unless under the supervision of a qualified person designated as the person in charge of the transfer or the cleaning under subpart C of 33 CFR part 155.

(2) The person designated as the person in charge of the transfer shall ensure that enough qualified personnel are on duty to safely transfer liquid cargo in bulk or safely clean cargo tanks.

(e) The person in charge of the transfer of liquid cargo in bulk on the tank vessel shall be responsible for the safe loading and discharge of the liquid cargo in bulk.

(f) The person in charge of the transfer of liquid cargo in bulk on each United States tank vessel, when lightering to or from a foreign tank vessel, shall ensure that the person in charge on the foreign tank vessel, or his or her interpreter, is capable of reading, speaking, and understanding the English language well enough to allow a safe transfer.

[CGD 79–116, 60 FR 17155, Apr. 4, 1995]

§ 35.35–5 Electric bonding—TB/ALL.

A tank vessel may be electrically connected to the shore piping, through which the cargo is to be transferred, prior to the connecting of a cargo hose. This electrical connection, if made, shall be maintained until after the cargo hose has been disconnected, and any spillage has been removed.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGFR 66–33, 31 FR 15268, Dec. 6, 1966]

§ 35.35–10 Closing of freeing-ports, scuppers, and sea valves—TB/ALL.

The person in charge of each transfer of liquid cargo in bulk shall ensure that all freeing-ports and scuppers are properly plugged during the transfer except on tank vessels using water for cooling decks. Although under no circumstances may sea valves be secured by locks, the valves must be closed, and lashed or sealed, to indicate that they should not be opened during the transfer.

[CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–15 Connecting for cargo transfer—TB/ALL.

(a) Movement of the vessel must be considered to insure safe cargo transfer. Suitable material must be used in joints and in couplings to insure that connections are tight. A bolted flanged coupling must not have less than four bolts, under any circumstances.

(b) When cargo connections are supported by ship's tackle, the person in charge of the transfer of liquid cargo in bulk shall determine the weights involved to ensure that adequate tackle is used.

(c) Pans or buckets shall be placed under cargo hose connections on the tank vessel.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 80–009, 48 FR 36459, Aug. 11, 1983; CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–20 Inspection before transfer of cargo—TB/ALL.

Before the transfer of liquid cargo in bulk, the person in charge of the transfer shall inspect the vessel to ensure the following:

(a) Warnings are displayed as required.

(b) No repair work in way of cargo spaces is being carried on without his permission.

(c) Cargo connections have been made as described in § 35.35–15 and cargo valves are set.

(d) All cargo connections have been made to the vessel's pipeline, and not through an open end hose led through a hatch.

(e) In loading Grades A, B, and C cargoes, there are no fires or open flames present on the deck, or in any compartment which is located on, facing, open, and adjacent to that part of the deck on which cargo connections have been made.

(f) The shore terminal or the other tank vessel concerned has reported itself in readiness for transfer of cargo.

(g) All sea valves connected to the cargo piping system are closed.

(h) In loading Grades A, B, and C cargoes, that an inspection has been made

to determine whether boiler fires can be maintained with reasonable safety.

(i) In loading Grades A, B, and C cargoes, that an inspection has been made to determine whether galley fires can be maintained with reasonable safety.

(j) In loading Grades A, B, or C cargoes, that an inspection has been made to determine whether smoking may be permitted with reasonable safety in areas other than the weather deck.

(k) On tankships the construction or conversion of which is started on or after July 1, 1951, which are to load or discharge Grade A cargo, all openings in the top of the tanks, except the branch vent lines and covers to ullage hole sounding pipes, are tightly closed. (See §§ 32.20–20 and 32.55–20 of this subchapter.)

(l) On tankships the construction or conversion of which is started on or after July 1, 1951, which are to load or discharge Grade A cargo, the method for determining the liquid level in the tank without opening ullage holes, cargo hatches or Butterworth plates is in proper order. (See § 32.20–20 of this subchapter.)

(m) When a transfer operation includes collection of cargo vapor from a vessel's cargo tanks through a vapor control system not located on the vessel:

(1) Each part of the vapor collection system is aligned to allow vapor to flow to a facility vapor control system, or if lightering, to the other vessel;

(2) Vapor collection hoses or arms are connected to the vessel vapor collection connection;

(3) The electrical insulation requirements of 33 CFR 154.810(g) or § 39.40–3(c) of this subchapter are provided between the vessel vapor connection and the facility or service vessel vapor connection;

(4) The maximum cargo transfer rate is determined in accordance with § 39.30–1(d) of this subchapter;

(5) The maximum and minimum operating pressures at the facility vapor connection, or vessel vapor connection if lightering, are determined;

(6) The overfill control system on a tank barge, if fitted in accordance with § 39.20–9(b) of this subchapter, is connected to the facility, tested and operating properly;

(7) Each alarm required by §§ 39.20–7, 39.20–9 and 39.40–3(a) of this subchapter has been tested not more than 24 hours prior to the start of the transfer operation and is operating properly;

(8) Each vapor recovery hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of vapors through the hose material, and no gouges, cuts, or slashes that penetrate the first layer of hose reinforcement; and

(9) The oxygen content of the vessel's cargo tanks, if inerted, is at or below 8 percent by volume.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 80–009, 48 FR 36459, Aug. 11, 1983; CGD 88–102, 55 FR 25446, June 21, 1990; CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–25 Approval to start transfer of cargo—TB/ALL.

When the person in charge of the transfer of liquid cargo in bulk has ensured that the requirements of §§ 35.35–20 and 35.35–30 have been met, he or she may give approval to start the transfer.

[CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–30 "Declaration of Inspection" for tankships—T/ALL.

(a) After an inspection under § 35.35–20 but before a transfer of cargo, the person in charge of the transfer shall prepare, in duplicate, a Declaration of Inspection. The original must be kept aboard the vessel and the duplicate provided to the terminal supervisor or that person's representative. The terminal supervisor or that person's representative may, upon demand, inspect the vessel to determine whether its condition is as stated on the Declaration of Inspection.

(b) The Declaration of Inspection must read as follows:

Declaration of Inspection Before Transfer of Liquid Cargo in Bulk

Date _____

Vessel _____

Port of _____

Product[s] being transferred—(Classification[s] and Kind[s])

_____

_____

I, _____, the person in charge of the transfer of liquid cargo in bulk about to begin, do certify that I have personally inspected this vessel with reference to the following requirements set forth in 46 CFR 35.35–20, and that opposite each of the applicable items listed below I have indicated whether the vessel complies with all pertinent regulations.

(1) Are warnings displayed as required?

(2) Is there any repair work in way of cargo spaces being carried on for which permission has not been given?

(3) Have cargo connections been made as described in 46 CFR 35.35–15 and are cargo valves set?

(4) Have all cargo connections been made to the vessel's pipeline and not through an open-end hose led through a hatch?

(5) Are there any fires or open flames present on the deck or in any compartment which is located on, open or adjacent to or facing the main deck of the vessels on which the cargo connections have been made?

(6) Has the shore terminal or other tank vessel concerned reported itself in readiness for transfer of cargo?

(7) Are sea valves connected to the cargo piping system closed?

(8) If Grades, A, B, or C cargoes are to be loaded and boiler fires are lighted, has an inspection been made to determine whether these fires may be maintained with reasonable safety?

(9) If Grades A, B, or C cargoes are to be loaded and galley fires are lighted, has an inspection been made to determine whether the galley fires may be maintained with reasonable safety?

(10) If Grades A, B, or C cargoes are to be loaded, has an inspection been made to determine whether smoking is to be permitted in areas not on the weather decks?

(11) If smoking is to be permitted in areas not on the weather decks, have those areas been designated?

(12) Is the inert gas system being operated as necessary to maintain an inert atmosphere in the cargo tanks in compliance with 46 CFR 32.53–5?

(13) Have the applicable sections of the vessel response plan been reviewed before commencing transfer, and arrangements or contingencies made for implementation of the Plan should the need arise?

(c) In addition to the requirements in paragraph (b) of this section, if a transfer operation includes the collection of cargo vapor from a vessel's cargo tanks through a vapor control system not located on the vessel, the Declaration of Inspection must include the following as an appendix:

(1) Is each part of the vapor collection system aligned to allow vapor to flow to the facility vapor connection or, if lightering, to the other vessel?

(2) Are the vapor collection hoses or arms connected to the vessel's vapor collection connection?

(3) Are the vessel and facility vapor connections electrically isolated?

(4) Have the initial transfer rate and the maximum transfer rate been determined?

(5) Have the maximum and minimum operating pressures at the facility vapor connection, or the vessel vapor connection if lightering, been determined?

(6) Have all alarms required by §§ 39.20–7, 39.20–9 and 39.40–3(a) of this subchapter been tested within 24 hours prior to the start of the transfer operation and found to be operating properly?

(7) Is each vapor recovery hose free of unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of vapors through the hose material, and gouges, cuts, or slashes that penetrate the first layer of hose reinforcement?

(8) Has the oxygen concentration of all inerted cargo tanks been verified to be 8 percent or less?

[CGD 80–009, 48 FR 36459, Aug. 11, 1983, as amended by CGD 88–102, 55 FR 25446, June 21, 1990; CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–35 Duties of person in charge of transfer—TB/ALL.

The person in charge of the transfer of liquid cargo in bulk shall control the transfer as follows:

(a) Supervise the operations of cargo-system valves.

(b) Commence transfer of cargo at slow rate of cargo flow.

(c) Observe cargo connections for leakage.

(d) Observe pressure on cargo system.

(e) If transfer is loading (rather than discharging), observe rate of loading to avoid overflow of tanks.

[CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–40 Conditions under which transfer operations shall not be commenced or if started shall be discontinued—TB/ALL.

Cargo transfer operations shall not be started or, if started, shall be discontinued under the following conditions:

(a) During severe electrical storms.

(b) If a fire occurs on the wharf or on the tanker or in the vicinity.

§ 35.35–42 Restrictions on vessels alongside a tank vessel loading or unloading cargo of Grade A, B, or C—TB/ALL.

(a) No vessel may come alongside or remain alongside a tank vessel in way of its cargo tanks while it is loading or unloading cargo of Grade A, B, or C without permission of the person in charge of the transfer on the tank vessel.

(b) No vessel may come alongside or remain alongside a tank vessel in way of its cargo tanks while it is loading or unloading cargo of Grade A, B, or C unless the conditions then prevailing are acceptable to the persons in charge of cargo-handling on both vessels.

[CGD 79–116, 60 FR 17156, Apr. 4, 1995]

§ 35.35–45 Auxiliary steam, air, or electric current—B/ALL.

When discharging cargo from one or more barges, the towing vessel may furnish steam, air, or electric current for pumps on barges or dock, but in no case shall the cargo pass through or over the towing vessel.

§ 35.35–50 Termination of transfer operations—TB/ALL.

(a) When transfer operations are completed the valves on cargo connections on the vessel shall be closed. The cargo connections shall be drained of cargo.

(b) [Reserved]

§ 35.35–55 Transfer of other cargo or stores on tank vessels—TB/ALL.

(a) No packaged goods, freight, or ship's stores may be loaded or unloaded during the loading or unloading of cargo of Grade A, B, or C except by permission of the person in charge of the transfer of liquid cargo in bulk. No explosives may be loaded, unloaded, or carried as cargo on any tank vessel containing cargo of Grade A, B, or C.

(b) Where package and general cargo is carried directly over bulk cargo tanks, it shall be properly dunnaged to prevent chafing of metal parts and securely lashed or stowed.

[CGFR 65–50, 30 FR 16704, Dec. 30, 1965, as amended by CGD 79–116, 60 FR 17157, Apr. 4, 1995]

§ 35.35–60 Transportation of other cargo or stores on tank barges—B/ALL.

(a) Tank barges may be permitted to transport deck cargoes directly over bulk cargo spaces when the nature of such deck cargoes and the methods of loading and unloading same do not create an undue hazard. Such tank barges shall have their decks properly dunnaged to prevent chafing between the steel parts of the vessel and the deck cargo.

(b) [Reserved]

§ 35.35–70 Maintenance of cargo handling equipment—TB/ALL.

The cargo handling equipment shall be maintained by the tank vessel's personnel in accordance with the regulations in this subchapter, including the following:

(a) Cargo hose shall not be used in transfer operations in which the pressures are such that leakage of cargo occurs through the body of the hose.

(b) Cargo pump relief valves shall be tested at least once each year to determine that they function satisfactorily at the pressure at which they are set to open.

(c) Cargo pump pressure gage shall be tested at least once a year for accuracy.

(d) The cargo discharge piping of all tank vessels shall be tested at least once each year for tightness, at the maximum working pressure.

§ 35.35–75 Emergencies—TB/ALL.

In case of emergencies nothing in the regulations in this subchapter shall be construed as preventing the senior officer present from pursuing the most effective action in his judgment for rectifying the conditions causing the emergency.

§ 35.35–85 Air compressors—TB/ALL.

(a) No person may operate an air compressor in a cargo area described in § 32.35–15 of this subchapter.

(b) The owner of a vessel, except a foreign flag vessel, that has an air compressor or an air compressor intake in a cargo area described in § 32.35–15 of this subchapter must have the equipment made permanently inoperative or removed from that location at the next drydocking or inspection for certification of the vessel after June 15, 1977, whichever occurs first. The equipment may not be reinstalled thereafter in a cargo area described in § 32.35–15 of this subchapter.

[CGD 75–017, 42 FR 25735, May 19, 1977, as amended by CGD 75–017, 42 FR 45677, Sept. 12, 1977]

Subpart 35.40—Posting and Marking Requirements—TB/ALL.

§ 35.40–1 General alarm contact maker—TB/ALL.

Each general alarm contact maker must be marked in accordance with requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15231, Apr. 8, 1982]

§ 35.40–5 General alarm bells—TB/ALL.

General alarm bells must be marked in accordance with requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15231, Apr. 8, 1982]

§ 35.40–6 Emergency lights—TB/ALL.

Emergency lights must be marked in accordance with requirements in subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74–125A, 47 FR 15231, Apr. 8, 1982]

§ 35.40–7 Carbon dioxide alarm—T/ALL.

Adjacent to all carbon dioxide fire extinguishing alarms installed after November 19, 1952, there shall be conspicuously marked: ''WHEN ALARM SOUNDS VACATE AT ONCE. CARBON DIOXIDE BEING RELEASED.''

§ 35.40–10 Steam, foam, or CO_2 fire smothering apparatus—TB/ALL.

Steam, foam, or CO_2 fire smothering apparatus shall be marked ''STEAM FIRE APPARATUS'' or ''FOAM FIRE APPARATUS'' or ''CO_2 FIRE APPARATUS,'' as appropriate, in not less than 2-inch red letters. The valves of all branch pipes leading to the several compartments shall be distinctly marked to indicate the compartments or parts of the vessel to which they lead.

§ 35.40–15 Fire hose stations—TB/ALL.

At each fire hose valve there shall be marked in not less than 2-inch red letters and figures: ''FIRE STATION 1,'' 2, 3, etc.

§ 35.40–17 Foam hose/monitor stations—T/ALL.

(a) At each required foam hose/monitor valve there shall be marked in not less than 2-inch red letters and figures: ''FOAM STATION 1,'' 2, 3, etc.

(b) [Reserved]

§ 35.40–18 Water spray systems—TB/ALL.

(a) Water spray system apparatus shall be marked: ''WATER SPRAY SYSTEM,'' as appropriate, in not less than 2-inch red letters.

(b) The control valve, and its control if located remotely, shall be distinctly marked to indicate the compartment protected.

§ 35.40–20 Emergency equipment—TB/ALL.

Each locker and space where emergency equipment is stowed must be marked ''EMERGENCY EQUIPMENT'' or ''SELF-CONTAINED BREATHING APPARATUS'', as appropriate.

[CGD 86–036, 57 FR 43824, Oct. 23, 1992]

§ 35.40–25 Fire extinguishers—TB/ALL.

Each fire extinguisher shall be marked with a number and the location where stowed shall be marked in corresponding numbers in at least ½ inch figures.

§ 35.40–30 Instructions for changing steering gear—TB/ALL.

Instructions in at least ½ inch letters and figures shall be posted in the steering engineroom, relating in order, the different steps to be taken in changing to the emergency steering gear. Each clutch, gear wheel, lever, valve or switch which is used during the changeover shall be numbered or lettered on a brass plate or painted so that the markings can be recognized at a reasonable distance. The instructions shall indicate each clutch or pin to be ''in'' or ''out'' and each valve or switch which is to be ''opened'' or ''closed'' in shifting to any means of steering for which the vessel is equipped. Instructions shall be included to line up all steering wheels and rudder amidship before changing gears.

§ 35.40–35 Rudder orders—TB/ALL.

At all steering stations, there shall be installed a suitable notice on the wheel or device or in such other position as to be directly in the helmsman's line of vision, to indicate the direction in which the wheel or device must be turned for ''right rudder'' or ''left rudder.''

§ 35.40–40 Marking and instructions for fire and emergency equipment—TB/ALL.

Lifesaving appliances, instructions to passengers, and stowage locations for all tank vessels must be in accordance with subchapter W (Lifesaving Appliances and Arrangements) of this chapter.

[CGD 84–069, 61 FR 25287, May 20, 1996]

PART 36—ELEVATED TEMPERATURE CARGOES

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AUTHORITY: 46 U.S.C. 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 65–50, 30 FR 16716, Dec. 30, 1965, unless otherwise noted.

Subpart 36.01—General

§ 36.01–1 Scope of regulations—TB/ALL.

(a) The regulations in this part contain requirements for the transportation in bulk of materials considered to be Grade E liquids when shipped in molten form at elevated temperatures.

(b) The materials covered by this part shall meet the applicable regulations of this subchapter, except that materials having a flash point of 300° F. or above, shall be exempt from the requirements prescribed in the following sections of this subchapter:

(1) Inspection prior to making repairs—§ 35.01–1(b).

(2) Watchman for a tank vessel—§ 35.05–15.

(3) Warning sign at gangway—§ 35.30–1(b).

(4) Cargo tank hatches, ullage holes and Butterworth plates—§ 35.30–10.

(5) Men on duty—§ 35.35–1.

(6) Inspection prior to transfer of cargo—§ 35.35–20.

(7) Approval to start transfer of cargo—§ 35.35–25.

(8) ''Declaration of inspection'' for tank ships—§ 35.35–30.

(9) Transportation of other cargo or stores on tank barges—§ 35.35–60.

(c) The regulations governing the transportation in the solid state of materials referred to in § 36.01–1(a) are contained in part 146 of subchapter N (Dangerous Cargoes) of this chapter.

§ 36.01–5 Certificate of inspection—TB/ALL.

(a) The certificate of inspection shall be endorsed for the carriage of elevated temperature cargoes as follows: ''Inspected and approved for the carriage of Grade E combustible liquids when transported in molten form at elevated temperatures.''

(b) [Reserved]

Subpart 36.05—Cargo Tanks

§ 36.05–1 Installation of cargo tanks—TB/ALL.

(a) All cargo tanks carrying liquids at elevated temperatures for the purpose of maintaining the material in the molten form shall be installed with the access openings located above the weather deck.

(b) [Reserved]

§ 36.05–10 Protection of personnel—TB/ALL.

(a) Decks, bulkheads, or other structures shall be insulated with an approved incombustible material, or other suitable means of protection shall be employed where practicable and necessary for the protection of personnel.

(b) [Reserved]

Subpart 36.10—Piping, Valves, Fittings, and Accessory Equipment

§ 36.10–1 Cargo pump relief valves—TB/ALL.

(a) Cargo pump relief valves and pressure gages may be omitted, however, a suitable device shall be fitted to stop the pumping before the designed pressure of the piping is exceeded.

(b) [Reserved]

Subpart 36.20—Vents and Ventilation

§ 36.20–1 Flame screens—TB/ALL.

(a) Flame screens may be omitted in the vent lines on cargo tanks.

(b) [Reserved]

§ 36.20–5 Ventilation of pumproom—TB/ALL.

(a) Where personnel are required to enter pumprooms located below the weather deck under normal circumstances of handling cargo, such pumprooms shall be equipped with power ventilation.

(b) [Reserved]

Subpart 36.30—Periodic Inspections

§ 36.30–1 Lagged tanks—TB/ALL.

(a) Lagged tanks shall have part of the lagging removed on the lower portion of the cargo tanks as directed by the marine inspector, at least once every eight years for external examination.

(b) [Reserved]

PART 38—LIQUEFIED FLAMMABLE GASES

Subpart 38.01—General

Sec.

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38.01–2 Transportation of portable cylinders or portable tanks containing or having previously contained liquefied flammable gases in dry cargo spaces—TB/ALL.
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38.05–5 Markings—TB/ALL.
38.05–10 Installation of cargo tanks—general—TB/ALL.
38.05–20 Insulation—TB/ALL.
38.05–25 Refrigerated systems—TB/ALL.

Subpart 38.10—Piping, Valves, Fittings, and Accessory Equipment

38.10–1 Valves, fittings, and accessories—TB/ALL.
38.10–5 Filling and discharge pipes—TB/ALL.
38.10–10 Cargo piping—TB/ALL.
38.10–15 Safety relief valves—TB/ALL.
38.10–20 Liquid level gaging devices—TB/ALL.

Subpart 38.15—Special Requirements

38.15–1 Filling of tanks—TB/ALL.
38.15–5 Cargo hose—TB/ALL.

38.15–10 Leak detection systems—T/ALL.
38.15–15 Electrical installations—TB/ALL.
38.15–20 Remote shutdowns—TB/ALL.

Subpart 38.20—Venting and Ventilation

38.20–1 Venting—T/ALL.
38.20–5 Venting—T/ALL.
38.20–10 Ventilation—T/ALL.

Subpart 38.25—Periodic Tests and Inspections

38.25–1 Tests and inspections—TB/ALL.
38.25–3 Nondestructive testing—TB/ALL.
38.25–5 Removal of defective tanks—TB/ALL.
38.25–10 Safety relief valves—TB/ALL.

AUTHORITY: 46 U.S.C. 2103, 3306, 3703; 49 U.S.C. 5101, 5106; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGFR 66–33, 31 FR 15269, Dec. 6, 1966, unless otherwise noted.

Subpart 38.01—General

§ 38.01–1 Scope of regulations—TB/ALL.

(a) The regulations in this part contain requirements for the transportation of liquefied or compressed gases, whose primary hazard is one of flammability.

(b) The transportation *on deck* of liquefied flammable gases in portable cylinders and tanks and the transportation of empty cylinders and portable tanks previously used shall be in accordance with the requirements of 49 CFR parts 171–179. The transportation of such containers *under deck* shall be in accordance with the requirements of § 38.01–2.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGD 86–033, 53 FR 36024, Sept. 16, 1988]

§ 38.01–2 Transportation of portable cylinders or portable tanks containing or having previously contained liquefied flammable gases in dry cargo spaces—TB/ALL.

(a) DOT cylinders, DOT Specification portable tanks or other approved portable tanks containing liquefied flammable gases may be transported under deck, provided the following requirements are met:

(1) The cargo space shall be provided with efficient means of ventilation, be protected from artificial heat, and be readily accessible from hatches.

(2) Containers shall be stored in such a position that the safety relief device is in communication with the vapor space of the container. They shall be properly stowed, dunnaged, and secured to prevent movement in any direction.

(3) Unless a method acceptable to the Commandant is used, the containers shall not be overstowed in the same dry cargo space with other liquefied flammable gas containers, nor with other cargo.

(4) The containers shall be suitably protected against physical damage from other cargo, ship's stores, or equipment in such spaces.

(5) Cylinders shall have their valves protected at all times by one of the following methods:

(i) By metal caps securely attached to the cylinders and of sufficient strength to protect the valves from injury.

(ii) By having the valves recessed into the cylinders or otherwise protected so that they will not be subject to a blow if the cylinder is dropped on a flat surface.

(6) Portable tanks shall have their valves protected at all times by a housing in accordance with the requirements under which they were manufactured.

(7) Electrical circuits in the cargo spaces must meet the hazardous area requirements in subchapter J (Electrical Engineering Regulations) of this chapter. If an electrical circuit does not meet those requirements, it must be deenergized by a positive means and not reenergized until the cargo has been removed and the space has been tested and found free of flammable vapor.

(8) During the stowage of portable cylinders or portable tanks in a hold or compartment that is not fitted with electrical fixtures meeting the hazardous area requirements of subchapter J (Electrical Engineering Regulations) of this chapter, portable lights must not be used within the space unless the portable lights are explosion-proof. Electrical connections for portable lights must be made from outlets on the weather deck. Hand flashlights

used in the stowage area must be explosion-proof.

(9) The following dangerous cargoes shall not be stowed in the same hold or compartment with liquefied flammable gas containers:

(i) Division 1.1, 1.2, 1.3, or 1.4 (explosive) materials, as defined in 49 CFR 173.50.

(ii) Flammable solids.

(iii) Oxidizing materials.

(iv) Corrosive liquids.

(v) Poisonous articles.

(vi) Cotton and similar fibrous materials.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–32, 33 FR 5714, Apr. 12, 1968; CGD 74–125A, 47 FR 15231, Apr. 8, 1982; CGD 92–050, 59 FR 39666, Aug. 5, 1994]

§ 38.01–3 Incorporation by reference.

(a) Certain standards and specifications are incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than the ones listed in paragraph (b) of this section, notice of change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and is available from the sources indicated in paragraph (b) of this section.

(b) The standards and specifications approved for incorporation by reference in this part, and the sections affected, are:

American Society for Nondestructive Testing (ASNT)

4153 Arlingate Road, Caller #28518, Columbus, OH, 43228–0518

ASNT ''Recommended Practice No. SNT–TC–1A (1988), Personnel Qualification and Certification in Nondestructive Testing''.....38.25–3(c)(2)

American Society of Mechanical Engineers

United Engineering Center, 345 East 47th Street, New York, NY 10017

ASME Boiler and Pressure Vessel Code Section V, Nondestructive Examination (1986) .....38.25–3(a)(1)

[CGD 85–061, 54 FR 50962, Dec. 11, 1989]

§ 38.01–5 Certificate of inspection—TB/ALL.

(a) The certificate of inspection shall be endorsed for the carriage of liquefied flammable gases as follows:

Inspected and approved for the carriage of liquefied flammable gases (1) at a pressure not to exceed ——— p.s.i., and (2) at temperatures not less than ———°F.

(b) Tanks approved to carry cargoes at below ambient temperatures shall have the applicable limiting temperatures indicated on the certificate. Tanks designed to carry cargoes only at ambient temperatures should have the word ''ambient'' entered in these spaces.

Subpart 38.05—Design and Installation

§ 38.05–1 Design and construction of vessels—general—TB/ALL.

(a) Vessels designed for the carriage of liquefied gases shall comply with the applicable requirements of this subchapter.

(b) Access and ventilation intakes to the machinery, accommodation and working spaces should be so arranged as to prevent the flow of cargo vapor from the weather deck into such spaces. In this respect openings in the forward or after ends of poops, forecastles, and deckhouses adjacent the cargo area shall be at least 24 inches above the cargo handling deck.

(c) Materials used in the fabrication of cargo tanks and piping shall have adequate notch toughness at the service temperature. Where a secondary barrier is required, the material of that barrier and of contiguous hull structure shall have sufficient notch toughness at the lowest temperature which may result during the containment of leakage cargo within the secondary barrier. Materials used in the fabrication of the cargo containment and handling system shall satisfy the requirements for toughness specified in subchapter F (Marine Engineering) of this chapter.

(d) Cargo tank spaces are to be isolated from the remainder of the vessel by cofferdams in accordance with § 32.60–10 of this subchapter. In a nonpressure vessel configuration, the void

between the primary and secondary barriers shall not be acceptable as the required cofferdam between the tank spaces and the main machinery spaces.

(e) Compartments containing cargo tanks or pipes shall be accessible from the weather deck only. No openings from these compartments to other parts of the vessel are permitted.

(f) Barges utilized for the carriage of liquefied gases shall be of Type II barge hull as defined in § 32.63–5(b)(2) of this subchapter. The Commandant may, based on the properties of the liquefied gas to be carried, require a Type I barge hull, as defined in § 32.63–5(b)(1) of this subchapter, to ensure the hull is consistent with the degree and nature of the hazard of the liquefied gas to be carried.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18806, Dec. 18, 1968; CGFR 68–65, 33 FR 19985, Dec. 28, 1968; CGFR 70–10, 35 FR 3709, Feb. 25, 1970]

§ 38.05–2 Design and construction of cargo tanks—general—TB/ALL.

(a) The maximum allowable temperature of the cargo is defined as the boiling temperature of the liquid at a pressure equal to the setting of the relief valve.

(b) The service temperature is the minimum temperature at which cargo is loaded and/or transported in the cargo tank. However, the service temperature shall in no case be taken higher than given by the following formula:

$$t_s = t_w - 0.25(t_w - t_b) \quad (1)$$

where:

t_s=Service temperature.

t_w=Boiling temperature of gas at normal working pressure of tank but not higher than +32° F.

t_b=Boiling temperature of gas at atmospheric pressure.

(c) Heat transmission studies, where required, shall assume the minimum ambient temperatures of 0° F. still air and 32° F. still water, and maximum ambient temperatures of 115° F. still air and 90° F. still water.

(d) Cargo tanks in vessels in ocean; Great Lakes; lakes, bays, and sounds; or coastwise service shall be designed to withstand, simultaneously, the following dynamic loadings:

(1) Rolling 30° each side (120°) in 10 seconds.

(2) Pitching 6° half amplitude (24°) in 7 seconds.

(3) Heaving *L*/80′ half amplitude (*L*/20′) in 8 seconds.

(e) Cargo tanks on barges shall be designed in accordance with § 32.63–25 of this subchapter.

(f) Each liquefied flammable gas tank shall be provided with not less than a 15-inch by 23-inch or an 18-inch nominal diameter manhole fitted with a cover located above the maximum liquid level and as close to the top of the tank as possible. Where access trunks are fitted to the tanks, the nominal diameter of the trunks shall be not less than 30 inches.

(g) Cargo tanks vented above 10 pounds per square inch gage shall be of the pressure vessel type.

§ 38.05–3 Design and construction of pressure vessel type cargo tanks—TB/ALL.

(a) Cargo tanks of pressure vessel configuration (e.g. cylindrical, spherical, etc.) shall be designed, fabricated, inspected, and tested in accordance with the applicable requirements of part 54 of subchapter F (Marine Engineering) of this chapter, except as otherwise provided for in this part.

(b) The requirements of this section anticipate that cargo tanks constructed as pressure vessels will, by themselves, constitute the cargo containment system and usually will not require a secondary barrier.

(c) In the design of the tank, consideration shall be given to the possibility of the tank being subjected to external loads. Consideration shall also be given to excessive loads that can be imposed on the tanks by their support due to static and dynamic forces under operating conditions or during testing. The design shall show the manner in which the tanks are to be installed, supported, and secured, and shall be approved prior to tank installation.

(d) Tanks with a service temperature of minus 20° F. or lower and fabricated of ferritic materials shall be stress relieved.

(e) Unlagged cargo tanks, where the cargo is transported, at or near ambient temperatures, shall be designed for

the vapor pressure of the gas at 115° F. The design shall also be based on the minimum internal pressure (maximum vacuum), plus the maximum external static head to which the tank may be subjected. Whenever surrounding cargo is at a greater temperature than the maximum allowable temperature of the liquefied flammable gas tanks, the liquefied flammable gas cargo is to be such that the design pressure of the liquefied flammable gas tank is not exceeded.

(f) Where cargo tanks, in which the cargo is transported at or near ambient temperature, are lagged with an insulation material of a thickness to provide a thermal conductance of not more than 0.075 B.t.u. per square foot per degree Fahrenheit differential in temperature per hour, the tanks shall be designed for a pressure of not less than the vapor pressure of the gas at 105° F. The insulation material shall conform to the requirements of § 38.05–20. The design shall also be based on the minimum internal pressure (maximum vacuum) plus the maximum external static head to which the tank may be subjected.

(g) Cargo tanks in which the temperature is maintained below the normal atmospheric temperature by refrigeration or other acceptable means shall be designed for a pressure of not less than 110 percent of the vapor pressure corresponding to the temperature of the liquid at which the system is maintained, or the pressure corresponding to the greatest dynamic and static loads expected to be encountered either in service or during testing. For mechanically stress relieved cargo tanks, additional factors relating design pressure and maximum allowable pressure shall be as specified by the Commandant. The material of the tank shall satisfy the requirements of subchapter F (Marine Engineering) of this chapter for the service temperature, and this temperature shall be permanently marked on the tank as prescribed in § 38.05–5.

(h) Where applicable, the design shall investigate the thermal stresses induced in the cargo tank at the service temperature.

(i) The shell and head thickness of liquefied gas cargo tanks shall not be less than five-sixteenths inch.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18806, Dec. 18, 1968]

§ 38.05–4 Design and construction of nonpressure vessel type cargo tanks—TB/ALL.

(a) The requirements in this section anticipate a cargo containment system consisting of a primary tank which is structurally self-supporting and, where required, a secondary barrier. Other vessel or cargo tank configurations, such as membrane type liners externally supported, will be considered upon submission of substantiating data, and based upon such additional tests as the Commandant may direct.

(b) A secondary barrier is an arrangement or structure designed to contain the cargo temporarily if leakage develops in the primary container. A secondary barrier shall be provided where leakage from the primary container may cause lowering of the temperature of the ship's structure to an unsafe level. The secondary barrier shall be constructed of material suitable to contain the cargo at the service temperature.

(c) The design of the cargo containment systems shall be such that under normal service conditions, or upon failure of the primary tank, the hull structure shall not be cooled down to a temperature which is unsafe for the materials involved. Structural members not suitable for the service temperatures of the cargo shall be protected by a secondary barrier consisting of suitable structural containment together with necessary associated insulation. Heat transmission studies and tests may be required to demonstrate that the arrangement is feasible and that the final material temperatures are acceptable.

(d) The design and construction of the cargo tanks shall be at least equivalent to the standards established by the American Bureau of Shipping or other recognized classification society. For special tanks, or designs not contemplated by standards of the classification society, a detailed analysis of the entire tank, or designated parts

thereof, shall be made and submitted to the Commandant for approval.

(e) The cargo tank shall be designed for a head of cargo at least equal to the highest level the liquid cargo may attain plus the maximum venting pressure. In no case shall a head of cargo less than 4 feet above the cargo hatch or expansion trunk be used.

(f) The design shall investigate the thermal stresses induced in the cargo tank during loading. Where necessary, devices for spray loading or other methods of precooling or cooling during loading shall be included in the design.

(g) All weld intersections or crossings in joints of primary tank shells shall be radiographed for a distance of 10 thicknesses from the intersection. All other welding in the primary tank and in the secondary barrier shall be spot radiographed in accordance with the requirements of part 54 of subchapter F (Marine Engineering) of this chapter.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18807, Dec. 18, 1968]

§ 38.05–5 Markings—TB/ALL.

(a)(1) Upon satisfactory completion of tests and inspection, pressure vessel and nonpressure vessel type cargo tanks, shall have markings as required by § 54.10–20 of subchapter F (Marine Engineering) of this chapter except that for nonpressure vessel type tanks, the Coast Guard number and pressure vessel class shall be omitted.

(2) Hydrostatic test for pressure vessel type tanks shall be that specified in § 38.25–1(b). In the case of nonpressure vessel type tanks, the hydrostatic test pressure shall mean the pressure specified in § 38.25–1(d), while the maximum allowable pressure shall mean the maximum venting pressure as used in § 38.05–4(e). Where it is not feasible to attach the nameplate to the tank, it shall be conspicuously displayed nearby.

(b) All tank inlet and outlet connections, except safety relief valves, liquid level gaging devices, and pressure gages, shall be labeled to designate whether they terminate in the vapor or liquid space. Labels of corrosion-resistant material may be attached to valves.

(c) All tank markings shall be permanently and legibly stamped in a readily visible position, and shall not be obscured by painting. If the tanks are lagged, the markings attached to the tank proper shall be duplicated on a corrosion-resistant plate secured to the outside jacket of the lagging.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18807, Dec. 18, 1968]

§ 38.05–10 Installation of cargo tanks—general—TB/ALL.

(a)(1) Cargo tanks shall be supported on foundations of steel or other suitable material and securely anchored in place to prevent the tanks from shifting when subjected to external forces. Each tank shall be so supported as to prevent the concentration of excessive loads on the supporting portions of the shell or head as prescribed under § 38.05–2(d).

(2) Cargo tanks installed in barges shall comply with the requirements of § 32.63–25 of this subchapter.

(b) Foundations, and stays where required, shall be designed for support and constraint of the weight of the full tank, and the dynamic loads imposed thereon. Thermal movement shall also be considered.

(c) Foundations and stays which may be exposed to the cargo shall be suitable for the temperatures involved and be impervious to the cargo.

(d) The design of the foundations and stays shall consider the resonance of the cargo tank, or parts thereof, and the vibratory forces, found in the tank vessel. If necessary, effective damping arrangements shall be provided.

(e) Independent containment systems shall be so arranged as to provide a minimum clearance of not less than 24 inches from the vessel's side and not less than 15 inches from the vessel's bottom to provide access for inspection of the hull. Clearances for collision protection, where required by other parts of the regulations in this subchapter, may increase the clearances specified here.

(1) For pressure vessel type tanks the distance between adjacent tanks and between tanks and vessel's structure shall be adequate to permit access for inspection and maintenance of all tank

surfaces and hull structure as approved by the Commandant. Alternate provisions may be made for inspection and maintenance of the vessel's structure and tanks by moving such tanks or by providing equivalent acceptable means for remote inspection.

(2) For nonpressure vessel type containment systems, access shall be arranged to permit inspection of one side each of the primary tank and secondary barrier, under normal shipyard conditions. Containment systems which, because of their peculiar design, cannot be visually inspected to this degree, may be specially considered provided an equivalent degree of safety is attained.

(f) Cargo tanks may be installed *on deck, under deck,* or with the tanks protruding through the deck. All tanks shall be installed with the manhole openings located in the open above the weather deck. Provided an equivalent degree of safety is attained, the Commandant may approve cargo tanks installed with manhole openings located below the weather deck.

(g) For pressure vessel type cargo tanks, the following conditions apply:

(1) Liquefied flammable gas cargo tanks may be located in cargo tanks or in spaces which meet the requirements for cofferdams as defined in § 30.10–13 of this subchapter. When liquefied flammable gas cargo tanks are installed in cargo tanks, such cargo tanks may be used simultaneously or separately for the carriage of flammable or combustible liquids up to and including the grade for which the cargo tanks are otherwise certified in accordance with the requirements of this subchapter.

(2) Where the liquefied flammable gas tanks are installed in cargo tanks and a portion of the liquefied flammable gas tanks extend above the weather deck, the penetration shall be made gastight and watertight, and shall be such as to provide full compliance with the structural requirements including testing for the hull and integral tanks. In the application of the requirements for the hydrostatic test of the cargo tanks, the hydrostatic test shall in no case be less severe than the worst anticipated service condition of the cargo loading. In the design and testing of independent cargo tanks and integral cargo tanks consideration shall be given to the possibility of the independent tanks being subjected to external loads.

(3) Where the liquefied flammable gas tanks are installed in nontank hull spaces and a portion of the tank extends above the weather deck, provision shall be made to maintain the weathertightness of the deck, except that the weathertightness of the upper deck need not be maintained on:

(i) Vessels operating on restricted routes which are sufficiently protected; or,

(ii) Open hopper type barges of acceptable design.

(h) No strength welding employed in the attachment of supports, lugs, fittings, etc., shall be done on tanks that require and have been stress relieved, unless authorized by the Commandant.

§ 38.05–20 Insulation—TB/ALL.

(a) Where used, tank insulation shall satisfy the following requirements for combustibility, installation, and arrangement:

(1) Insulation in a location exposed to possible high temperature or source of ignition shall be either:

(i) Incombustible, complying with the requirements of subpart 164.009 of subchapter Q (Specifications) of this chapter; or,

(ii) Self-extinguishing, as determined by American Society for Testing and Materials Specification D–1692, ''Flammability of Plastics, Foam and Sheeting,'' and covered by a suitable steel cover.

(2) Insulation in a location protected against possible ignition by enclosure in a tight steel envelope in which inert conditions are maintained need satisfy no requirement for combustibility except chemical stability.

(3) Insulation in a location protected against possible high temperature or source of ignition by continuous surrounding structural voids or ballast tanks need satisfy no requirement for combustibility except chemical stability.

(b) All insulation shall be of a vaporproof construction, or have a vaporproof coating of a fire-retardant material acceptable to the Commandant. Unless the vapor barrier is inherently

weather resistant, tanks exposed to the weather shall be fitted with a removable sheet metal jacket of not less than 0.083-inch thick over the vapor-proof coating and flashed around all openings so as to be weathertight. Weather resistant coatings shall have sheet metal over areas subject to mechanical damage.

(c) The insulation shall be adequately protected in areas of probable mechanical damage.

(d) Insulation which forms an integral part of the secondary barrier shall meet the following additional requirements:

(1) When the secondary barrier is called upon to contain the cargo, insulating material which is contacted shall not be affected by the cargo. Samples of the insulating material shall be tested in the cargo for solubility, absorption and shrinkage. The samples shall be checked for the above effects at intervals not exceeding 1 week, for a total test period of 6 weeks.

(2) Any adhesives, sealers, coatings, or vapor barrier compounds used in conjunction with the insulating material shall be similarly tested to insure suitable cargo resistive properties.

(3) The insulation shall have sufficient mechanical strength for the proposed design. Additionally, the thermal expansion of the insulation relative to the material to which it is affixed shall be considered in the design.

(e) The insulation for the piping systems shall be at least of the ''self-extinguishing'' type described in paragraph (a) of this section, and comply with the requirements contained in paragraphs (b) and (c) of this section.

§ 38.05–25 Refrigerated systems—TB/ALL.

(a) When a liquefied flammable gas is carried below atmospheric temperature under the requirements of § 38.05–3(f) or § 38.05–4, maintenance of the tank pressure below the maximum allowable pressure shall be provided by one or more of the following means:

(1) A refrigeration or liquefication system which regulates the pressure in the tanks. A standby compressor or equivalent equipment, of a capacity equal to one of the working units shall be provided.

(2) A system whereby the vapors are utilized as fuel for shipboard use.

(3) A system allowing the liquefied flammable gas to warm up and increase in pressure. The insulation and tank design pressure shall be adequate to provide for a suitable margin for the operating time and temperatures involved.

(4) Other systems acceptable to the Commandant.

(b) A system whereby the vapors are vented to the atmosphere at sea only may be employed in conjunction with paragraph (a)(1) of this section. The pressure control valves shall be independent of the safety relief valves. See § 38.20–1(j).

Subpart 38.10—Piping, Valves, Fittings, and Accessory Equipment

§ 38.10–1 Valves, fittings, and accessories—TB/ALL.

(a) All valves, flanges, fittings, and accessory equipment shall be of a type suitable for use with liquefied flammable gases, and shall be made of steel or grade A malleable iron, acceptable for the service temperature and pressure according to the requirements of part 56 of subchapter F (Marine Engineering) of this chapter. Other materials may be specially considered and approved by the Commandant.

(b) All valves, flanges, fittings, and accessory equipment shall have a pressure rating at operating temperatures not less than the maximum allowable pressure to which they may be subjected. Piping which is not protected by a relief valve or which can be isolated from its relief valve by other valves shall be designed for the greatest of the cargo vapor pressure at 115° F., or the maximum allowable pressure of the cargo tank, or the requirements of § 38.10–10(a). Cargo liquid piping which may be subject to liquid full conditions shall be fitted with relief valves. The escape from piping systems relief valves shall be piped to a venting system or to a suitable vapor recovery system. Provision shall be made for the proper venting of all valves, fittings, etc., in which pressure buildup may occur, especially in refrigerated systems, because of an increase in product temperature.

(c) Welded connections shall be used wherever possible with the number of flanged joints kept to the minimum necessary for assembly and cleaning. Sockets in sizes 3 inches and smaller and slipon flanges in sizes 4 inches and smaller may be used. Threaded joints may be used in sizes of 1 inch and smaller. Where threaded joints are used, they shall be visible and accessible for inspection under all service conditions, and limited to instrument and control lines properly valved from the main lines. Where threaded joints are sealed by brazing or welding, they need not be exposed.

(d) Valve seat material, packing, gaskets, etc., shall be resistant to the action of the liquefied flammable gas. All flange and manhole cover gaskets shall be compressed asbestos, spiral-wound metal asbestos, metal jacketed asbestos, solid aluminum, corrugated steel, solid steel, or iron, or other materials with equal or better resistance to fire exposure.

(e) Provisions shall be made by the use of offsets, loops, bands, expansion joints, etc., to protect the piping and tank from excessive stress due to thermal movement and/or movements of the tank and hull structure. Expansion joints shall be held to a minimum and where used shall be of the bellows type and subject to special approval by the Commandant.

(f) Low temperature piping shall be thermally isolated from the hull structure. Arrangements should provide for the protection of the hull structure from leaks in way of pumps, flanges, joints, etc.

(g) Each tank shall be provided with the necessary fill and discharge liquid and vapor shutoff valves, safety relief valve connections, refrigeration connections where necessary, liquid level gaging devices, thermometer well and pressure gage, and shall be provided with suitable access for convenient operation. Piping shall enter the cargo tanks above weather deck and as close to the top of the tank or dome as possible, except as otherwise permitted in this section. Connections to the tanks shall be protected against mechanical damage and tampering. No underdeck cargo piping shall be installed between the outboard side of the cargo containment system and the shell of the vessel, unless provision is made to maintain the minimum inspection and collision protection clearances of §38.05–10(e) between the piping and the shell. Other openings in the tanks, except as specifically permitted by the Commandant, are prohibited.

(h) Cargo loading and discharge piping may be connected to the tanks below the weather deck or below the liquid level subject to approval by the Commandant, provided:

(1) A remotely controlled quick-closing shutoff valve is flanged to the tank outlet connection. The control mechanism for this valve shall meet the requirements of §38.10–5.

(2) The piping which is below the weather deck or liquid level shall be joined by welding except for a flanged connection to the quick-closing shutoff valve and a flanged connection to the cargo pump.

(3) The design and arrangement of this piping, including the flange bolting shall be such that excessive stresses will not be transmitted to the cargo tank outlet connection or the quick-closing valve, even in the event of abnormal displacement of the piping.

(4) Except for those vessels, the design of which permits the exclusion of a weathertight deck over the tanks, the space in which such piping is located shall be accessible only from the weather deck and shall be vented to a safe location above the weather deck.

(i) All connections to tanks, except safety relief valves and liquid level gaging devices, shall have manually operated shutoff valves located as close to the tank as possible. In addition, all liquid and vapor connections on pressure vessel type tanks except safety relief valves, liquid level gaging devices, and filling and discharge lines, shall be equipped with either an automatic excess flow valve or a remotely controlled quick-closing shutoff valve of the fail closed type. These valves, except when necessary for the operation of the system, shall remain closed. For pressure vessel type tanks operating at low pressure and with service temperature near the cargo atmospheric boiling point, the Commandant may approve individual installations where

the liquid and vapor connections normally requiring automatic excess flow valves or remotely controlled quick-closing shutoff valves are fitted with manually operated shutoff valves only.

(j) The control system for quick-closing shutoff valves shall be provided with a remote control in at least two locations and be of a type acceptable to the Commandant. The control system shall also be provided with a fusible element designed to melt between 208° F. and 220° F., which will cause the quick-closing shutoff valves to close in case of fire. The quick-closing shutoff valves shall be capable of local manual operation.

(k) Excess flow valves, where required by this subchapter, shall close automatically at the rated flow of vapor or liquid as specified by the manufacturer. The piping, including valves, fittings, and appurtenances protected by an excess flow valve, shall have a greater capacity than the rated flow of the excess flow valve.

(l) Liquid level gaging devices which are so constructed that outward flow of tank contents shall not exceed that passed by a No. 54 drill size (0.055-inch diameter) opening, need not be equipped with excess flow valves.

(m) Pressure gage connections need not be equipped with excess flow valves if the openings are not larger than No. 54 drill size (0.055-inch diameter).

(n) Excess flow valves may be designed with a bypass not to exceed a No. 60 drill size (0.040-inch diameter) opening to allow equalization of pressure.

(o) Suitable valves shall be installed on the cargo headers to relieve the pressure on the liquid and vapor lines to a safe location prior to disconnecting shore lines.

(p) A pressure gage shall be located at the highest practicable point. A thermometer well where installed on the tank proper shall be attached to the tank by welding.

(q) For nonpressure vessel type tanks, the following additional fittings are required:

(1) A liquid level gaging device shall be provided to determine the level of the liquid cargo without opening the tank. The gage shall be readable from the open deck, or from a control room or station when the loading or discharging is controlled from such a room or station. Tables shall be readily available for direct determination of volume of liquid in the tanks, with necessary corrections for trim, temperature, and density.

(2) An independent high level alarm shall be provided for each tank. The alarm indication shall register at the station where loading is controlled.

(3) Each tank shall be provided with remote reading temperature sensors located near both the cargo liquid level and the bottom of the tank. The temperature shall be read at the control station for loading and unloading cargo, if provided, otherwise near the cargo control valves.

(4) Each tank shall be fitted with a pressure and a vacuum gage which shall be read at the control station for loading and unloading cargo, is provided, otherwise near the cargo control valves. In addition, the liquid loading and discharge headers at the ship's shore connection station shall be fitted with pressure gages.

(r) Spaces surrounding cargo tanks shall be provided with suitable means for pumping out.

(1) Where pressure vessel type tanks are installed or in other cases where no secondary containment is required, this may consist of a bilge system independent of the bilge system for the rest of the vessel, and having no pipe connections between the cargo tank spaces and the engineroom or boilerroom, except that eductors may be supplied from engineroom pumps.

(2) Secondary containment spaces of structurally self-supporting tanks shall be provided with suitable means for pumping out leaked cargo. These should be arranged so as to provide the following alternatives:

(i) Return of the cargo to the same primary tank or other tank.

(ii) Pumping the cargo off the ship either in port through a regular shore unloading connection or at sea overboard in a safe manner.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18807, Dec. 18, 1968]

§ 38.10–5 Filling and discharge pipes—TB/ALL.

(a) Filling and discharge connections shall be provided with the manually operated valve required by § 38.10–1(i) and with a positive acting remote controlled quick-closing valve. The remote controlled quick-closing valve shall satisfy the requirements of § 38.10–1(j).

(b) For pressure vessel type tanks the remote controlled quick-closing valves shall be located on the inside of the tank or on the outside where the piping enters the tank. For pressure vessel type tanks operating at low pressure and with service temperature near the cargo atmospheric boiling point, the Commandant may approve individual installations where these valves are located at the loading and discharge headers.

(c) For nonpressure vessel type tanks the remote controlled quick-closing valves may be located at the loading and discharge headers.

§ 38.10–10 Cargo piping—TB/ALL.

(a) The piping shall be designed for a working pressure of not less than the maximum pressure to which it may be subjected but in no case less than the design pressure of the cargo tanks. In the case of piping on the discharge side of the liquid pumps or vapor compressors, the design pressure shall not be less than the pump or compressor discharge relief valve setting; or, provided the piping is not protected by relief valves, the design pressure shall not be less than the total discharge head of the pump or compressor.

(b) Piping subject to tank pressure shall be seamless drawn steel or electric resistance welded steel. Pipe used in refrigerated tank systems shall be of a material which is suitable for the minimum service temperature to which it may be subjected, according to the requirements of part 56 of subchapter F (Marine Engineering) of this chapter.

(c) Piping shall be provided with adequate support to take the weight of the piping off valves and fittings and to prevent excessive vibration and stresses on tank connections.

(d) For nonpressure vessel type tanks, the cargo handling arrangements and piping shall provide for emptying of a damaged tank, including cargo contained by a secondary barrier.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–82, 33 FR 18807, Dec. 18, 1968]

§ 38.10–15 Safety relief valves—TB/ALL.

(a) Each tank shall be fitted with or (subject to approval by the Commandant) connected to one or more safety relief valves designed, constructed and flow tested for capacity in conformance with subpart 162.017 or 162.018 of subchapter Q (Specifications) of this chapter.

(b) Safety relief valves conforming to subpart 162.017 of subchapter Q (Specifications) of this chapter may be used on tanks for a maximum pressure of 10 pounds per square inch gage. Safety relief valves conforming to subpart 162.018 of subchapter Q (Specifications) of this chapter may be used for any pressure.

(c) The safety relief valves shall have a combined relieving capacity to discharge the greater of the following with not more than 20 percent rise in pressure (in the tank) above the maximum allowable pressure:

(1) The vapors evaporated by an embient air temperature of 115° F. plus the maximum flow rate of the cargo filling pipes or,

(2) The vapors generated under fire exposure computed using the formulas of § 54.15–25(c) of subchapter F (Marine Engineering) of this chapter.

(d) The safety relief valves shall meet the arrangement and inspection requirements of § 54.15–25 of subchapter F (Marine Engineering) of this chapter.

(e) Means shall be provided to protect nonpressure vessel tanks from excessive external pressure.

(f) Void spaces between the primary and secondary barriers of nonpressure vessel type tanks shall be protected by relief devices. The relief setting shall not be higher than the void test pressure, and shall not exceed 90 percent of the setting of the safety relief valve protecting the primary tank.

[CGFR 68–82, 33 FR 18807, Dec. 18, 1968]

§ 38.10–20 Liquid level gaging devices—TB/ALL.

(a) Each tank shall be fitted with a liquid level gaging device of approved design to indicate the maximum level to which the tank may be filled with liquid:

(1) Between −20° F. and 130° F. for unrefrigerated service; or,

(2) Within the operating temperature range for tanks operating below atmospheric temperature.

(b) Liquid level gaging devices may be of the following types: Rotary tube, slip tube, magnetic, automatic float, or similar types approved by the Commandant. Except as otherwise provided in this section, fixed tube devices are not acceptable as the primary gaging device.

(c) All gaging devices shall be arranged so that the maximum liquid level for product being carried, to which the tank may be filled is readily determinable. The maximum gallonage capacity as required by § 38.15–1 shall be:

(1) Marked on the tank system nameplate or gaging device; or,

(2) Shown in the ullage tables.

(d) Gaging devices that require bleeding of the product to the atmosphere, such as the rotary tube, fixed tube, and slip tube, shall be so designed that the bleed valve maximum opening is not larger than a No. 54 drill size (0.055-inch diameter), unless provided with an excess flow valve.

(e) For pressure vessel type tanks each automatic float, continuous reading tape or similar type gage not mounted directly on the tank or dome shall be fitted with a shutoff device located as close to the tank as practicable. When an automatic float gaging device, which gages the entire height of the tank is used, a fixed tube gage set in the range of 85 percent to 90 percent of the water capacity of the tank shall be provided in addition as a means of checking the accuracy of the automatic float, gage, or other alternate means acceptable to the Commandant may be used.

(f) A gaging device shall be designed for a pressure at least equal to the maximum allowable pressure of the tank on which it is installed.

(g) Gage glasses of the columnar type are prohibited.

(h) Flat sight glasses may be used in the design of automatic float continuous reading tape gages: *Provided,* That such glasses shall be made of high strength material suitable for the operating temperatures of not less than one-half inch in thickness and adequately protected by a metal cover.

Subpart 38.15—Special Requirements

§ 38.15–1 Filling of tanks—TB/ALL.

(a) Refrigerated and semirefrigerated tanks shall be filled so that there is an outage of at least 2 percent of the volume of the tank at the temperature corresponding to the vapor pressure of the cargo at the safety relief valve setting. A reduction in the required outage may be permitted by the Commandant when warranted by special design considerations. Normally then, the maximum volume to which a tank may be loaded is:

$$V_L = 0.98 d_r \; V / d_L$$

where:

V_L=maximum volume to which tank may be loaded.

V=volume of tank.

d_r=density of cargo at the temperature required for a cargo vapor pressure equal to the relief valve setting.

d_L=density of cargo at the loading temperature and pressure.

(b) Nonrefrigerated tanks shall be filled so that their filling densities shall not exceed the ratios indicated in Table 38.15–1(b).

(c) The ''filling density'' is defined as the percent ratio of the weight of the gas in a tank to the weight of water the tank will hold at 60° F.

TABLE 38.15–1(b)—MAXIMUM PERMISSIBLE FILLING DENSITIES FOR TANKS OPERATING AT OR NEAR AMBIENT TEMPERATURE

Specific gravity at 60° F.	Maximum permitted filling density		
	Unlagged tanks—water capacity		Lagged tanks—all capacities
	1,200 gal. and under	Over 1,200 gal.	
0.473–0.480	38	41	42
0.481–0.488	39	42	43

TABLE 38.15–1(b)—MAXIMUM PERMISSIBLE FILLING DENSITIES FOR TANKS OPERATING AT OR NEAR AMBIENT TEMPERATURE—Continued

Specific gravity at 60° F.	Maximum permitted filling density		
	Unlagged tanks—water capacity		Lagged tanks—all capacities
	1,200 gal. and under	Over 1,200 gal.	
0.489–0.495	40	43	44
0.496–0.503	41	44	45
0.504–0.510	42	45	46
0.511–0.519	43	46	47
0.520–0.527	44	47	48
0.528–0.536	45	48	49
0.537–0.544	46	49	50
0.545–0.552	47	50	51
0.553–0.560	48	51	52
0.561–0.568	49	52	53
0.569–0.576	50	53	54
0.577–0.584	51	54	55
0.585–0.592	52	55	56
0.593–0.600	53	56	57
0.601–0.608	54	57	58
0.609–0.617	55	58	59
0.618–0.626	56	59	60
0.627–0.634	57	60	61

NOTE: Increase in filling densities to provide for seasonal changes may be considered by the Commandant upon presentation of factual evidence that safe operation can be effected.

§ 38.15–5 Cargo hose—TB/ALL.

(a) When the liquid and vapor line hoses used for loading and discharging the cargo are carried on board the vessel, they shall be of flexible metal and fabricated of seamless steel pipe and flexible joints of steel or bronze, or of other suitable material resistant to the action of the cargo. Hose used in refrigerated systems shall be suitable for the minimum temperature to which it may be subjected and shall be acceptable to the Commandant.

(b) Hose subject to tank pressure, or the discharge pressure of pumps or vapor compressors, shall be designed for a bursting pressure of not less than five times the maximum safety relief valve setting of the tank, pump, or compressor.

(c) Before being placed in service each new cargo hose, with all necessary fittings attached, shall be hydrostatically tested by its manufacturer to a pressure not less than twice its maximum working pressure nor more than two-fifth its bursting pressure. The hose shall be marked with its maximum working pressure, and if used in refrigerated service, its minimum temperature.

§ 38.15–10 Leak detection systems— T/ALL.

(a) A detection system shall be permanently installed to sense cargo leaks. The detectors shall be located within the space so as to permit the sensing of an initial leak and prevent an undetected gas accumulation. The sensitivity shall be in accordance with paragraph (b) of this section. The detectors shall be fitted in the following compartments:

(1) Between the primary and secondary barriers for nonpressure vessel type tanks.

(2) Cargo handling rooms and spaces containing cargo piping or cargo handling systems.

(3) All enclosed spaces, except tanks and cofferdams, which are separated from the cargo tanks by only the secondary barrier.

(4) Other spaces where gas concentrations might be expected.

(5) Cargo holds, containing pressure vessel type tanks and no cargo piping, are exempt from the requirements of this paragraph.

(b) The indicating instruments for the detection system shall be located on the bridge or at the cargo control station. An audio and visual warning shall be given before any gas concentration reaches 30 percent of the lower explosive limit. The alarm shall indicate both on the bridge and at the cargo control station. Sampling of each detector shall be at least once every half hour.

(c) Means shall be provided to measure the full range of cargo gas concentration in the spaces.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–65, 33 FR 19985, Dec. 28, 1968]

§ 38.15–15 Electrical installations—TB/ALL.

(a) All electrical installations shall comply with the requirements contained in this subchapter and in subchapter J (Electrical Engineering) of this chapter for tank vessels, except as otherwise specified in this part.

(b) Spaces containing cargo pumps, compressors, and piping are considered

as equivalent to a tank vessel pumproom, and no electrical devices, except Coast Guard approved intrinsically safe devices, shall be installed in these spaces. Electric motors shall be segregated from these spaces by a gastight bulkhead. Electric lighting of the explosion-proof type may be installed in these spaces provided all switching is done from outside the space.

(c) All cargo tanks, piping, valves, etc., shall be effectively grounded to the vessel's hull. Tanks with an insulated inner shell (primary barrier) shall have an effective grounding bond to the outer shell (secondary barrier) or to the vessel's hull.

(d) Electric submerged motor cargo pumps may be used, when in compliance with the following requirements and subject to approval by the Commandant.

(1) Design details of the submerged motor pump, with an evaluation of the cooling efficiency of the product being pumped, shall be submitted.

(2) Provisions shall be made to exclude air from the tanks containing cargo in either vapor or liquid phase. The pump motor shall be deenergized when this condition is not satisfied.

(3) A liquid level sensing device shall automatically shut down the motor and sound an alarm at a predetermined low liquid level. The alarm location may be the station from which cargo handling is controlled or such other location outside the cargo area as is acceptable to the Commandant.

(4) Details of the power cable, tank penetrations and pump connections shall be submitted.

(5) An auxiliary means of emptying the cargo tanks shall be provided in accordance with § 38.10–10(d).

(6) Means for positively disconnecting the power supply between the switchboard and the pump power panel shall be provided, i.e., disconnect links, lockable breakers, etc.

(7) All materials used in the fabrication of the submerged motor cargo pumps shall be suitable for use with the liquid cargo at the design pressures and temperatures.

§ 38.15–20 Remote shutdowns—TB/ALL.

(a) All machinery associated with cargo loading, unloading, or cooling shall be capable of being shut down from a remote location. This location may be the station from which the cargo handling is controlled or such other location outside the cargo area as is acceptable to the Commandant.

(b) [Reserved]

Subpart 38.20—Venting and Ventilation

§ 38.20–1 Venting—T/ALL.

(a) Each safety relief valve installed on a cargo tank shall be connected to a branch vent of a venting system which shall be constructed so that the discharge of gas will be directed vertically upward to a point which shall extend to a height above the weather deck equal to at least one-third the beam of the vessel and to a minimum of at least 10 feet, and shall terminate at a comparable distance from any other living or working space, ventilator inlet, or source of vapor ignition. When special conditions will prevent the vent line header outlets being permanently installed at a height above the deck of one-third the beam of the vessel, then an adjustable system shall be provided which, when extended vertically, shall be capable of reaching a height of one-third the beam of the vessel.

(b) The capacity of branch vents or vent headers shall depend upon the number of cargo tanks connected to such branch or header as provided for in the Table 38.20–1(b), and upon the total safety relief valve discharge capacity.

TABLE 38.20–1(b)—CAPACITY OF BRANCH VENTS OR VENT HEADERS

Number of cargo tanks	Percent of total valve discharge
1 or 2	100
3	90
4	80
5	70
6 or more	60

(c) In addition to the requirements specified in paragraphs (a) and (b) of this section, the size of the branch vents or vent headers, shall be such that the back pressure in the relief valve discharge lines shall not be more than 10 percent of the safety relief valve setting. In nonpressure vessel vent systems, however, where the maximum back pressure of 10 percent of the relief valve setting is insufficient to move the gases through any but an extremely large diameter vent pipe, the back pressure may exceed 10 percent provided:

(1) The pressure in the tank during venting does not exceed 120 percent of the tank maximum allowable pressure; and,

(2) The safety relief valve is sized to discharge the required capacity with the tank pressure and vent back pressure actually used.

(d) Return bends and restrictive pipe fittings are not permitted.

(e) Vents and headers shall be so installed as to prevent excessive stresses on safety relief valve mountings.

(f) The vent discharge riser shall be so located as to provide protection against mechanical injury and such discharge pipes shall be fitted with loose raincaps or other suitable means to prevent entrance of rain or snow.

(g) No valve of any type shall be fitted in the vent pipe between the safety relief valve and the vent outlets.

(h) Provisions shall be made to drain condensate from the vent header piping. Special precautions shall insure that condensate does not accumulate at or near the relief valves.

(i) Relief valves discharging liquid cargo shall not be connected to the branch vent or vent header lines from the cargo tanks. They may, however, be connected to an accumulator, the vapor space of which, may in turn, be connected to the vent header system. Relief valves in the cargo piping system may discharge back to the cargo tanks.

(j) Vapor discharged to the atmosphere in accordance with § 38.05–25(b) shall utilize valves separate from the safety relief valves.

§ 38.20–5 Venting—T/ALL.

(a) Safety relief valves on cargo tanks in barges may be connected to individual or common risers which shall extend to a reasonable height above the deck. An alternate arrangement consisting of a branch vent header system as required by § 38.20–1 may be installed. In any case, the provisions of § 38.20–1 (d) through (j) shall apply.

(b) Arrangements providing for venting cargo tanks at sea on unmanned barges will be considered by the Commandant upon presentation of plans.

§ 38.20–10 Ventilation—T/ALL.

(a) A power ventilation system shall be provided for compartments containing pumps, compressors, pipes, control spaces, etc. connected with the cargo handling facilities. These compartments shall be ventilated in such a way as to remove vapors from points near the floor level or bilges, or other areas where vapor concentrations may be expected. The compartments shall be equipped with power ventilation of the exhaust type having capacity sufficient to effect a complete change of air in not more than 3 minutes equal to the volume of the compartment and associated trunks.

(b) The power ventilation units shall not produce a source of vapor ignition in either the compartment or the ventilation system associated with the compartment. Inlets to exhaust ducts shall be provided and located at points where concentrations of vapors may be expected. Ventilation from the weather deck shall be provided. Ventilation outlets shall terminate away from any openings to the interior part of the vessel a lateral distance at least equal to that specified in § 38.20–1(a). These outlets shall be so located as to minimize the possibility of recirculating contaminated air through the compartment.

(c) Means shall be provided for purging the following spaces of cargo vapors:

(1) The space surrounding nonpressure vessel type tanks, i.e., within the secondary barrier.

(2) The space surrounding pressure-vessel type tanks whose piping connections are below the weather deck in accordance with § 38.10–1(h).

(3) The space surrounding tanks whose manhole openings are below the weather deck in accordance with § 38.05–10(f).

(d) Power ventilation shall be provided for each auxiliary machinery or working space located on and accessible from the cargo handling deck. Such ventilation systems shall be designed to preclude the entry of cargo vapors into the space via the open access or the ventilation system itself.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGFR 68–65, 33 FR 19985, Dec. 28, 1968]

Subpart 38.25—Periodic Tests and Inspections

§ 38.25–1 Tests and inspections—TB/ALL.

(a) Each tank shall be subjected to the tests and inspections described in this section in the presence of a marine inspector, except as otherwise provided in this part.

(1) An internal inspection of the tank is conducted within—

(i) Ten years after the last internal inspection if the tank is a pressure vessel type cargo tank on an unmanned barge carrying cargo at temperatures of −67 °F (−55 °C) or warmer; or

(ii) Eight years after the last internal inspection if the tank is of a type other than that described in paragraph (a)(1)(i) of this section.

(2) An external examination of unlagged tanks and the visible parts of lagged tanks shall be made at each inspection for certification and at such other times as considered necessary.

(3) The owner shall ensure that the amount of insulation deemed necessary by the marine inspector is removed from insulated tanks during each internal inspection to allow spot external examination of the tanks and insulation, or the thickness of the tanks may be gauged by a nondestructive means accepted by the marine inspector without the removal of insulation.

(4) If required by the Officer in Charge, Marine Inspection, the owner shall conduct nondestructive testing of each tank in accordance with § 38.25–3.

(5) If the tank is a pressure vessel type cargo tank with an internal inspection interval of 10 years, is 30 years old or older, determined from the date it was built, the owner shall conduct nondestructive testing of that tank, in accordance with § 38.25–3, during each internal inspection.

(b) If the marine inspector considers a hydrostatic test necessary to determine the condition of the tank, the owner shall perform the test at a pressure of 1½ times the tanks's—

(1) Maximum allowable pressure, as determined by the safety relief valve setting; or

(2) Design pressure, when cargo tanks operate at maximum allowable pressures reduced below the design pressure in order to satisfy special mechanical stress relief requirements.

NOTE: See the ASME Code, Section VIII, Appendix 3 for information on design pressure.

(c) For pressure vessels designed and/or supported such that they cannot safely be filled with water, the Commandant will consider a pneumatic test in lieu of the hydrostatic test. A leak test shall be performed in conjunction with the pneumatic test. Pneumatic testing shall be in accordance with subchapter F (Marine Engineering) of this chapter.

(d) Nonpressure vessel type tanks shall be tested to a pressure equal to the pressure on the bottom of the tank under the design conditions listed in § 38.05–4(e).

(e) In the application of the requirements for testing of the cargo tanks, the test shall in no case be less severe than the worst anticipated service condition of the cargo loading.

(f) In the design and testing of the independent cargo tanks, consideration shall be given to the possibility of the independent tanks being subjected to external loads.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGD 85–061, 54 FR 50962, Dec. 11, 1989]

§ 38.25–3 Nondestructive testing—TB/ALL.

(a) Before nondestructive testing may be conducted to meet § 38.25–1 (a)(4) and (a)(5), the owner shall submit a proposal to the Officer in Charge, Marine Inspection for acceptance that includes—

(1) The test methods and procedures to be used, all of which must meet section V of the ASME Boiler and Pressure Vessel Code (1986);

(2) Each location on the tank to be tested; and

(3) The test method and procedure to be conducted at each location on the tank.

(b) If the Officer in Charge, Marine Inspection rejects the proposal, the Officer in Charge, Marine Inspection informs the owner of the reasons why the proposal is rejected.

(c) If the Officer in Charge, Marine Inspection accepts the proposal, then the owner shall ensure that—

(1) The proposal is followed; and

(2) Nondestructive testing is performed by personnel meeting ASNT ''Recommended Practice No. SNT–TC–1A (1988), Personnel Qualification and Certification in Nondestructive Testing.''

(d) Within 30 days after completing the nondestructive test, the owner shall submit a written report of the results to the Officer in Charge, Marine Inspection.

[CGD 85–061, 54 FR 50963, Dec. 11, 1989]

§ 38.25–5 Removal of defective tanks—TB/ALL.

If a tank fails to pass the tests prescribed in this subpart, it shall be removed from service unless otherwise authorized by the Commandant.

§ 38.25–10 Safety relief valves—TB/ALL.

(a) The cargo tank safety relief valves shall be inspected at least once in every 2 years.

(b) The safety relief valve discs must be lifted from their seats in the presence of a marine inspector by either liquid, gas, or vapor pressure at least once every 5 years to determine the accuracy of adjustment and, if necessary, must be reset.

[CGFR 66–33, 31 FR 15269, Dec. 6, 1966, as amended by CGD 95–027, 61 FR 26000, May 23, 1996]

PART 39—VAPOR CONTROL SYSTEMS

Subpart 39.10—General

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Subpart 39.20—Design and Equipment

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Subpart 39.40—Lightering and Topping-Off Operations with Vapor Balancing

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AUTHORITY: 33 U.S.C. 1231; 46 U.S.C. 3306, 3703, 3715(b); 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGD 88–102, 55 FR 25446, June 21, 1990, unless otherwise noted.

Subpart 39.10—General

§ 39.10–1 Applicability—TB/ALL.

(a) Except as specified by paragraph (c) of this section, this part applies to each tank vessel operating in the navigable waters of the United States, when collecting vapors of crude oil, gasoline blends, or benzene emitted from a vessel's cargo tanks through a vapor control system.

(b) A tank vessel which transfers vapors of flammable or combustible cargoes other than crude oil, gasoline blends, or benzene, to a facility covered

by 33 CFR part 154 must meet the requirements prescribed by the Commandant (G–MSO).

(c) A tank vessel with an existing vapor collection system specifically approved by the Coast Guard for the collection of cargo vapor which was operating prior to July 23, 1990, is subject only to § 39.30–1 and § 39.40–5 of this part as long as it transfers cargo vapor only to the specific facilities for which it was approved.

(d) This part does not apply to the collection of vapors of liquefied flammable gases as defined in § 30.10–39 of this subchapter.

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.10–3 Definitions—TB/ALL.

As used in this part:

Cargo deck area means that part of the weather deck that is directly over the cargo tanks.

Existing vapor collection system means a vapor collection system which was operating prior to July 23, 1990.

Facility vapor connection means the point in a facility's fixed vapor collection system where it connects with the vapor collection hose or the base of the vapor collection arm.

Independent as applied to two systems means that one system will operate with a failure of any part of the other system except power sources and electrical feeder panels.

Inerted means the oxygen content of the vapor space in a cargo tank is reduced to 8 percent by volume or less in accordance with the inert gas requirements of § 32.53 or § 153.500 of this chapter.

Lightering or *lightering operation* means the transfer of a bulk liquid cargo from a tank vessel to a service vessel.

Marine Safety Center means the Commanding Officer, U.S. Coast Guard Marine Safety Center, 400 Seventh Street, SW., Washington, DC 20590–0001.

Maximum allowable transfer rate means the maximum volumetric rate at which a vessel may receive cargo or ballast.

New vapor collection system means a vapor collection system which is not an existing vapor collection system.

Service vessel means a vessel which transports bulk liquid cargo between a facility and another vessel.

Topping-off operation means the transfer of a bulk liquid cargo from a service vessel to another vessel in order to load the receiving vessel to a deeper draft.

Vapor balancing means the transfer of vapor displaced by incoming cargo from the tank of a vessel receiving cargo into a tank of the vessel or facility delivering cargo via a vapor collection system.

Vapor collection system means an arrangement of piping and hoses used to collect vapor emitted from a vessel's cargo tanks and to transport the vapor to a vapor processing unit.

Vapor control system means an arrangement of piping and equipment used to control vapor emissions collected from a vessel. It includes the vapor collection system and vapor processing unit.

Vapor processing unit means the components of a vapor control system that recovers, destroys, or disperses vapor collected from a vessel.

Vessel vapor connection means the point in a vessel's fixed vapor collection system where it connects with the vapor collection hose or arm.

§ 39.10–5 Incorporation by reference—TB/ALL.

(a) Certain materials are incorporated by reference into this part with the approval of the Director of the FEDERAL REGISTER in accordance with 5 U.S.C. 552(a). To enforce any edition other than the one listed in paragraph (b) of this section, notice of change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC and at the U.S. Coast Guard, Office of Operating and Environmental Standards (G–MSO), 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:

American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005
- API Standard 2000, Venting Atmospheric and Low-Pressure Storage Tanks (Nonrefrigerated and Refrigerated), Third Edition, January 1982 (reaffirmed December 1987) 39.20–11

American National Standards Institute (ANSI), 11 West 42nd Street, New York, NY 10036
- ANSI B16.5, Steel Pipe Flanges and Flanged Fittings, 1981 ... 39.20–1

American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103
- ASTM F1271—Standard Specification for Spill Valves for Use in Marine Tank Liquid Overpressure Protection Applications, December 29, 1989 39.20–9

International Electrotechnical Commission (IEC), Bureau Central de la Commission Electrotechnique Internationale, 1 rue de Varembe′, Geneva, Switzerland
- IEC 309–1—Plugs, Socket-Outlets and Couplers for Industrial Purposes: Part 1, General Requirements, 1979 ..... 39.20–9
- IEC 309–2—Plugs, Socket-Outlets and Couplers for Industrial Purposes: Part 2, Dimensional Interchangeability Requirements for Pin and Contact-tube Accessories, 1981 ..... 39.20–9

National Electrical Manufacturers Association (NEMA), 2101 L St. NW., Washington, DC 20036
- ANSI/NEMA WD6—Wiring Devices, Dimensional Requirements, 1988 ..... 39.20–9

National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269
- NFPA 70—National Electrical Code, 1987 ..... 39.20–9

Oil Companies International Marine Forum (OCIMF), 15th Floor, 96 Victoria Street, London SWIE 5JW, England
- International Safety Guide for Oil Tankers and Terminals, Third Edition, 1988 ..... 39.30–1

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.10–9 Vessel vapor processing unit—TB/ALL.

Each vessel which has a vapor processing unit located on board must meet the requirements of 33 CFR part 154, subpart E to the satisfaction of the Commandant (G–MSO) in addition to complying with the requirements of this part.

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.10–11 Personnel training—TB/ALL.

(a) A person in charge of a transfer operation utilizing a vapor collection system must have completed a training program covering the particular system installed on the vessel. Training must include drills or demonstrations using the installed vapor control system covering normal operations and emergency procedures.

(b) The training program required by paragraph (a) of this section must cover the following subjects:

(1) Purpose of a vapor control system;

(2) Principles of the vapor control system;

(3) Components of the vapor control system;

(4) Hazards associated with the vapor control system;

(5) Coast Guard regulations in this part;

(6) Operating procedures, including:

(i) Testing and inspection requirements,

(ii) Pre-transfer procedures,

(iii) Connection sequence,

(iv) Start-up procedures, and

(v) Normal operations; and

(7) Emergency procedures.

[CGD 88–102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

§ 39.10–13 Submission of vapor control system designs—TB/ALL.

(a) Plans, calculations, and specifications for a new vessel vapor collection system must be submitted to the Marine Safety Center for approval prior to installation.

(b) An existing vapor collection system installation not exempted by § 39.10–1(c) of this part must have plans, calculations, and specifications submitted to the Marine Safety Center for approval by January 23, 1991. Modifications required to bring the installation

into compliance with this part must be completed July 23, 1992.

(c) An existing vapor collection system installation that has been Coast Guard approved to transfer cargo vapor to specific facilities must be reviewed and approved by the Marine Safety Center prior to transferring vapors to other facilities.

(d) The owners/operators of a foreign flag vessel may submit certification by the classification society which classes the vessel that the vessel meets the requirements of this part as an alternative to meeting the requirements in paragraphs (a) and (b) of this section.

(e) Upon satisfactory completion of plan review and inspection of the vapor collection system or receipt of the certification provided for in paragraph (d) of this section, the Officer in Charge, Marine Inspection, shall endorse the Certificate of Inspection for U.S. flag vessels, or the Certificate of Compliance for foreign flag vessels, that the vessel is acceptable for collecting the vapor from crude oil, gasoline blends, and benzene, or any other vapor it is found acceptable to collect.

Subpart 39.20—Design and Equipment

§ 39.20–1 Vapor collection system—TB/ALL.

(a) Each vapor collection system must meet the following requirements:

(1) Except as allowed by paragraph (a)(3) of this section or the Commandant (G–MSO), vapor collection piping must be permanently installed, with the vessel's vapor connection located as close as practical to the loading manifold;

(2) If the vessel collects vapors from incompatible cargoes simultaneously, it must keep the incompatible vapors separate throughout the entire vapor collection system;

(3) A vessel certified to carry cargo listed in Table 151.05 of part 151 or Table 1 of part 153 of this chapter may have vapor connections located in the vicinity of each tank in order to preserve segregation of cargo systems, in lieu of common header piping;

(4) A means must be provided to eliminate liquid condensate which may collect in the system, such as draining and collecting liquid from each low point in the line;

(5) Vapor collection piping must be electrically bonded to the hull and must be electrically continuous; and

(6) An inerted tankship must have a means to isolate the inert gas supply from the vapor collection system. The inert gas main isolation valve required by SOLAS 74, as amended, chapter II–2, Regulation 62.10.8 may be used to satisfy this requirement.

(b) The vapor collection system must not interfere with the proper operation of the cargo tank venting system.

(c) An isolation valve capable of manual operation must be provided at the vessel vapor connection. The valve must have an indicator to show clearly whether the valve is in the open or closed position, unless the valve position can be readily determined from the valve handle or valve stem.

(d) The last 1.0 meter (3.3 feet) of vapor piping before the vessel vapor connection must be:

(1) Painted red/yellow/red with:

(i) The red bands 0.1 meter (0.33 feet) wide, and

(ii) The middle yellow band 0.8 meter (2.64 feet) wide; and

(2) Labeled ''VAPOR'' in black letters at least 50 millimeters (2 inches) high.

(e) Each vessel vapor connection flange must have a permanently attached 0.5 inch diameter stud at least 1.0 inch long projecting outward from the flange face. The stud must be located at the top of the flange, midway between bolt holes, and in line with the bolt hole pattern.

(f) Each hose used for transferring vapors must:

(1) Have a design burst pressure of at least 25 psig;

(2) Have a maximum allowable working pressure of at least 5 psig;

(3) Be capable of withstanding at least 2.0 psi vacuum without collapsing or constricting;

(4) Be electrically continuous with a maximum resistance of ten thousand (10,000) ohms;

(5) Have flanges with:

(i) A bolt hole arrangement complying with the requirements for 150 pound class ANSI B16.5 flanges, and

(ii) One or more 0.625 inch diameter holes in the flange located midway between bolt holes and in line with the bolt hole pattern;

(6) Be abrasion resistant and resistant to kinking; and

(7) Have the last 1.0 meter (3.3 feet) of each end of the vapor hose marked in accordance with paragraph (d) of this section.

(g) Vapor hose handling equipment must be provided with hose saddles which provide adequate support to prevent kinking or collapse of hoses.

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§39.20–3 Cargo gauging system—TB/ALL.

(a) Each cargo tank of a tank vessel that is connected to a vapor collection system must be equipped with a cargo gauging device which:

(1) Provides a closed gauging arrangement as defined in §151.15.10 of this chapter that does not require opening the tank to the atmosphere during cargo transfer;

(2) Allows the operator to determine the liquid level in the tank for the full range of liquid levels in the tank;

(3) Indicates the liquid level in the tank at the location where cargo transfer is controlled; and

(4) If portable, is installed on the tank during the entire transfer operation.

(b) Except when a tank barge complies with §39.20–9(a) of this part, each cargo tank of a barge must have a high level indicating device that:

(1) Provides a visual indication of the liquid level in the cargo tank when the cargo level is within 1.0 meter (3.28 feet) of the tank top;

(2) Has the maximum liquid level permitted under §39.30–1(e) of this part at even keel conditions conspicuously and permanently marked on the indicating device; and

(3) Is visible from all cargo control areas on the tank barge.

§39.20–7 Tankship liquid overfill protection—T/ALL.

(a) Each cargo tank of a tankship must be equipped with an intrinsically safe high level alarm and a tank overfill alarm.

(b) The high level alarm and tank overfill alarm required by paragraph (a) of this section, if installed after July 23, 1990 must:

(1) Be independent of each other;

(2) Alarm in the event of loss of power to the alarm system or failure of electrical circuitry to the tank level sensor; and

(3) Be able to be checked at the tank for proper operation prior to each transfer or contain an electronic self-testing feature which monitors the condition of the alarm circuitry and sensor.

(c) The high level alarm required by paragraph (a) of this section must:

(1) Alarm before the tank overfill alarm, but no lower than 95 percent of tank capacity;

(2) Be identified with the legend ''High Level Alarm'' in black letters at least 50 millimeters (2 inches) high on a white background; and

(3) Have audible and visible alarm indications that can be seen and heard on the vessel where cargo transfer is controlled.

(d) The tank overfill alarm required by paragraph (a) of this section must:

(1) Be independent of the cargo gauging system;

(2) Have audible and visible alarm indications that can be seen and heard on the vessel where cargo transfer is controlled and in the cargo deck area;

(3) Be identified with the legend ''TANK OVERFILL ALARM'' in black letters at least 50 millimeters (2 inches) high on a white background; and

(4) Alarm early enough to allow the person in charge of transfer operations to stop the transfer operation before the cargo tank overflows.

(e) If a spill valve is installed on a cargo tank fitted with a vapor collection system, it must meet the requirements of §39.20–9(c) of this part.

(f) If a rupture disk is installed on a cargo tank fitted with a vapor collection system, it must meet the requirements of §39.20–9(d) of this part.

§ 39.20–9 Tank barge liquid overfill protection—B/ALL.

Each cargo tank of a tank barge must have one of the following liquid overfill protection arrangements.

(a) A system meeting the requirements of § 39.20–7 of this part which:

(1) Includes a self-contained power supply;

(2) Is powered by generators installed on the barge; or

(3) Receives power from a facility and is fitted with a shore tie cable and a 120 volt 20 amp explosion-proof plug which meets:

(i) ANSI/NEMA WD6;

(ii) NFPA 70, Articles 410–57 and 501–12; and

(iii) § 111.105–9 of this chapter.

(b) An intrinsically safe overfill control system which:

(1) Is independent of the cargo gauging device required by § 39.20–3(a) of this part;

(2) Actuates an alarm and automatic shutdown system at the facility overfill control panel, or on the vessel to be lightered if a lightering operation, 60 seconds before the tank becomes 100 percent liquid full;

(3) Is able to be checked at the tank for proper operation prior to each loading;

(4) Consists of components which, individually or in series, will not generate or store a total of more than 1.2 V, 0.1 A, 25 mW, or 20 microjoules;

(5) Has at least one tank overfill sensor switch with normally closed contacts per cargo tank;

(6) Has all tank overfill sensor switches connected in series;

(7) Has interconnecting cabling that meets § 111.105–15(b) of this chapter; and

(8) Has a male plug with a 5 wire, 16 amp connector body meeting IEC 309–1/309–2 which is:

(i) Configured with pins S2 and R1 for the tank overfill sensor circuit, pin G connected to the cabling shield, and pins N and T3 reserved for an optional high level alarm circuit meeting the requirements of this paragraph; and

(ii) Labeled ''Connector for Barge Overflow Control System'' and with the total inductance and capacitance of the connected switches and cabling.

(c) A spill valve which:

(1) Meets ASTM F1271;

(2) Relieves at a pressure higher than the pressure at which the pressure relief valves meeting the requirements of § 39.20–11 operate;

(3) Limits the maximum pressure at the cargo tank top during liquid overfill, at the maximum loading rate for the tank, to not more than the maximum design working pressure for the tank; and

(4) If the vessel is in ocean or coastwise service, has provisions to prevent opening due to cargo sloshing.

(d) A rupture disk arrangement which meets paragraphs (c)(2), (c)(3) and (c)(4) of this section and is approved by the Commandant (G–MSO).

[CGD 88–102, 55 FR 25446, June 21, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.20–11 Vapor overpressure and vacuum protection—TB/ALL.

(a) The cargo tank venting system required by § 32.55 of this chapter must:

(1) Be capable of discharging cargo vapor at 1.25 times the maximum transfer rate such that the pressure in the vapor space of each tank connected to the vapor collection system does not exceed:

(i) The maximum design working pressure for the tank, or

(ii) If a spill valve or rupture disk is fitted, the pressure at which the device operates;

(2) Not relieve at a pressure corresponding to a pressure in the cargo tank vapor space of less than 1.0 psig;

(3) Prevent a vacuum in the cargo tank vapor space, whether generated by withdrawal of cargo or vapor at maximum rates, that exceeds the maximum design vacuum for any tank connected to the vapor collection system; and

(4) Not relieve at a vacuum corresponding to a vacuum in the cargo tank vapor space of less than 0.5 psi below atmospheric pressure.

(b) Each pressure-vacuum relief valve must:

(1) Be tested for venting capacity in accordance with paragraph 1.5.1.3 of API 2000; and

(2) Have a means to check that the device operates freely and does not remain in the open position, if installed after July 23, 1991.

(c) The relieving capacity test required by paragraph (b)(1) of this section must be carried out with a flame screen fitted at the vacuum relief opening and at the discharge opening if the pressure-vacuum relief valve is not designed to ensure a minimum vapor discharge velocity of 30 meters (98.4 ft.) per second.

§39.20–13 High and low vapor pressure protection for tankships—T/ALL.

Each tankship vapor collection system must be fitted with a pressure sensing device that senses the pressure in the main vapor collection line, which:

(a) Has a pressure indicator located on the vessel where the cargo transfer is controlled; and

(b) Has a high pressure and a low pressure alarm that:

(1) Is audible and visible on the vessel where cargo transfer is controlled;

(2) Alarms at a high pressure of not more than 90 percent of the lowest pressure relief valve setting in the cargo tank venting system; and

(3) Alarms at a low pressure of not less than four inches water gauge (0.144 psig) for an inerted tankship, or the lowest vacuum relief valve setting in the cargo tank venting system for a non-inerted tankship.

Subpart 39.30—Operations

§39.30–1 Operational requirements—TB/ALL.

(a) Vapor from a tank vessel may not be transferred to:

(1) A facility in the United States which does not have its letter of adequacy endorsed as meeting the requirements of 33 CFR part 154, subpart E; or

(2) In the case of a lightering or topping off operation, a vessel which does not have its certificate of inspection or certificate of compliance endorsed as meeting the requirements of this part.

(b) The pressure drop through the vapor collection system from the most remote cargo tank to the vessel vapor connection must be:

(1) Determined for each cargo handled by the vapor collection system at the maximum transfer rate and at lessor transfer rates;

(2) Based on a 50 percent cargo vapor and air mixture, and a vapor growth rate appropriate for the cargo being loaded; and

(3) Included in the vessel's oil transfer procedures as a table or graph showing the liquid transfer rate versus the pressure drop.

(c) If a vessel carries vapor hoses, the pressure drop through the hoses must be included in the pressure drop calculations required by paragraph (b) of this section.

(d) The rate of cargo transfer must not exceed the maximum allowable transfer rate as determined by the lesser of the following:

(1) Eighty (80) percent of the total venting capacity of the pressure relief valves in the cargo tank venting system when relieving at the set pressure required by §39.20–11(a) of this part;

(2) The total vacuum relieving capacity of the vacuum relief valves in the cargo tank venting system when relieving at the set pressure required by §39.20–11(a) of this part;

(3) The rate based on pressure drop calculations at which, for a given pressure at the facility vapor connection, or if lightering at the vapor connection of the vessel receiving cargo, the pressure in any cargo tank connected to the vapor collection system exceeds 80 percent of the setting of any pressure relief valve in the cargo tank venting system.

(e) A cargo tank must not be filled higher than:

(1) 98.5 percent of the cargo tank volume; or

(2) The level at which an overfill alarm complying with §39.20–7 or §39.20–9(b)(2) of this part is set.

(f) A cargo tank must not be opened to the atmosphere during cargo transfer operations except as provided in paragraph (g) of this section.

(g) A cargo tank may be opened to the atmosphere for gauging or sampling while a tank vessel is connected to a vapor control system if the following conditions are met:

(1) The cargo tank is not being filled;

(2) Except when the tank is inerted, any pressure in the cargo tank vapor space is first reduced to atmospheric pressure by the vapor control system;

(3) The cargo is not required to be closed or restricted gauged by Table 151.05 of part 151 or Table 1 in part 153 of this chapter; and

(4) For static accumulating cargo, all metallic equipment used in sampling or gauging is electrically bonded to the vessel before it is put into the tank, remains bonded to the vessel until it is removed from the tank, and if the tank is not inerted, a period of 30 minutes has elapsed since loading of the tank was completed.

(h) For static accumulating cargo the initial transfer rate must be controlled in accordance with Section 7.4 of the OCIMF, International Safety Guide for Oil Tankers and Terminals, in order to minimize the development of a static electrical charge.

(i) If cargo vapor is collected by a facility that requires the vapor from the vessel to be inerted in accordance with 33 CFR 154.820(a) or (b), the oxygen content in the vapor space of each cargo tank connected to the vapor collection system must not exceed 8 percent by volume at the start of cargo transfer. The oxygen content of each tank must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage. Where tanks have partial bulkheads, the oxygen content of each area of that tank formed by each partial bulkhead must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage.

(j) If the vessel is equipped with an inert gas system, the isolation valve required by § 39.20–1(a)(6) of this part must remain closed during vapor transfer.

(k) Unless equipped with an automatic self-test and circuit monitoring feature, each high level alarm and tank overfill alarm required by § 39.20–7 or § 39.20–9 of this part, on a cargo tank being loaded, must be tested at the tank for proper operation within 24 hours prior to the start of cargo transfer.

[CGD 88–102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

Subpart 39.40—Lightering and Topping-Off Operations with Vapor Balancing

§ 39.40–1 General requirements for vapor balancing–TB/ALL.

(a) Except as provided in paragraph (b) of this section, each vessel which uses vapor balancing while conducting a lightering or topping-off operation must meet the requirements of this subpart in addition to the requirements of subparts 39.10, 39.20, and 39.30 of this part.

(b) An arrangement to control vapor emissions during a lightering or topping-off operation which does not use vapor balancing must receive approval from the Commandant (G–MSO).

(c) A vapor balancing operation must not use a compressor or blower to assist vapor transfer without approval from the Commandant (G–MSO).

(d) Vapor balancing is prohibited when the cargo tanks on a vessel discharging cargo are inerted and the cargo tanks on a vessel receiving cargo are not inerted.

(e) A vessel which intends to engage in a lightering or topping-off operation while collecting cargo vapor from other than crude oil, gasoline, or benzene must receive specific approval from the Commandant (G–MSO).

[CGD 88–102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990, as amended by CGD 95–072, 60 FR 50462, Sept. 29, 1995; CGD 96–041, 61 FR 50727, Sept. 27, 1996]

§ 39.40–3 Design and equipment for vapor balancing—TB/ALL.

(a) If the cargo tanks on a vessel discharging cargo and a vessel receiving cargo are inerted, the service vessel must:

(1) Have a means to inert the vapor transfer hose prior to transferring cargo vapor; and

(2) Have an oxygen analyzer with a sensor or sampling connection fitted within 3 meters (9.74 ft.) of the vessel vapor connection which:

(i) Activates an audible and visible alarm at a location on the service vessel where cargo transfer is controlled when the oxygen content in the vapor

collection system exceeds 8 percent by volume;

(ii) Has an oxygen concentration indicator located on the service vessel where the cargo transfer is controlled; and

(iii) Has a connection for injecting a span gas of known concentration for calibration and testing of the oxygen analyzer.

(b) If the cargo tanks on a vessel discharging cargo are not inerted, the vapor collection line on the service vessel must be fitted with a detonation arrester that meets the requirements of 33 CFR 154.822(a) located within 3 meters (9.74 ft.) of the vessel vapor connection.

(c) An electrical insulating flange or one length of non-conductive hose must be provided between the vessel vapor connection on the service vessel and the vapor connection on the vessel being lightered or topped-off.

§ 39.40–5 Operational requirements for vapor balancing—TB/ALL.

(a) During a lightering or topping-off operation each cargo tank being loaded must be connected by the vapor collection system to a cargo tank which is being discharged.

(b) If the cargo tanks on both the vessel discharging cargo and the vessel receiving cargo are inerted, the following requirements must be met:

(1) Each tank on a vessel receiving cargo which is connected to the vapor collection system must be tested prior to cargo transfer to ensure that the oxygen content in the vapor space does not exceed 8 percent by volume. The oxygen content of each tank must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage. Where tanks have partial bulkheads, the oxygen content of each area of that tank formed by each partial bulkhead must be measured at a point one meter (3.28 feet) below the tanktop and at a point equal to one-half of the ullage;

(2) The oxygen analyzer required by § 39.40–3(a) must be tested for proper operation prior to the start of each transfer operation;

(3) The oxygen content of vapors being transferred must be continuously monitored during the transfer operation;

(4) Cargo transfer must be terminated if the oxygen content exceeds 8 percent by volume and must not be restarted until the oxygen content in the tanks of the vessel receiving cargo is reduced to 8 percent by volume or less; and

(5) The vapor transfer hose must be purged of air and inerted prior to starting vapor transfer.

(c) The isolation valve, required by § 39.20–1(c) of this part, located on the service vessel must not be opened until the pressure in the vapor collection system on the vessel receiving cargo exceeds the pressure in the vapor collection system on the vessel discharging cargo.

(d) The cargo transfer rate must be controlled from the vessel discharging cargo, and must not exceed the maximum allowable transfer rate for the vessel receiving cargo.

(e) The pressure in the vapor space of any cargo tank connected to the vapor collection line on either the vessel receiving cargo or the vessel discharging cargo must not exceed 80 percent of the lowest setting of any pressure relief valve during ballasting or cargo transfer.

(f) All impressed current cathodic protection systems must be deenergized during cargo transfer operations.

(g) Tank washing is prohibited unless the cargo tanks on both the vessel discharging cargo and the vessel receiving cargo are inerted or the tank is isolated from the vapor collection line.

[CGD 88–102, 55 FR 25446, June 21, 1990; 55 FR 39270, Sept. 26, 1990]

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SUBCHAPTER D—TANK VESSELS

EDITORIAL NOTE: This listing is provided for informational purposes only. It is compiled and kept current by the Coast Guard, Department of Transportation.

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