

§ 30.30-5

(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

46 CFR Ch. I (10-1-96 Edition)

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.

31.01-20 Application for inspection of a new tank vessel or conversion of a vessel to a tank vessel—TB/ALL.

Subpart 31.05—Certificates of Inspection

31.05-1 Issuance of certificate of inspection—TB/ALL.

31.05-5 Posting the certificate of inspection—TB/ALL.

31.05-10 Period of validity of certificate of inspection—TB/ALL.

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.

31.10-17 Reinspection—TB/ALL.

31.10-18 Firefighting equipment: General—TB/ALL.

31.10-18a Liquefied gas vessels: additional firefighting equipment inspections.

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.

Coast Guard, DOT

§ 31.01-1

- 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.
- 31.10-25 Inspection covering repairs and alterations involving safety—TB/ALL.
- 31.10-30 Stability requirements—TB/ALL.
- 31.10-32 Loading information—TB/ALL.
- 31.10-33 Bulk grain cargoes—TB/ALL.
- 31.10-35 Permit to proceed to another port for repair—TB/ALL.
- 31.10-40 Inspection during trial trip—T/ALL.
- 31.10-45 Inspection of crew accommodations—TB/ALL.
- 31.10-50 Inspection of bilges—TB/ALL.

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.
- 31.37-50 Use of wire rope and chains—TB/ALL.
- 31.37-55 Annealing—TB/ALL.
- 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 re-issuance 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

§ 31.10-5

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 combus-

tible 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 above-mentioned 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.

§ 31.10-18

(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 con-

sidered 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 pass 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 speci-

fied 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..	⁹ 2.5	⁹ 5.0	⁹ 10.0	⁹ 10.0	⁹ 2.5	5.0	10.0	10.0	15.0

Notes:

- ¹Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.
- ²Applicable 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.
- ³Applicable 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.
- ⁴Applicable to single hull tankships and tank barges certificated for the carriage of Grade D and E cargoes only.
- ⁵Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of Grade D and E cargoes only.
- ⁶Applicable to single hull tank barges certificated for the carriage of asphalt only.
- ⁷Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.
- ⁹Or as specified in part 38 or 151 as applicable
- ⁹Enhanced survey requirements apply as specified in 33 CFR part 157.

§ 31.10-21

46 CFR Ch. I (10-1-96 Edition)

(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..	⁹ 5.0	⁸ 5.0	⁸ 10.0	⁸ 10.0	⁸ 2.5	5.0	10.0	10.0	15.0

Notes:

- ¹Applicable to double hull tank barges (double sides, ends, and bottoms) when the structural framing is on the internal tank surface.
- ²Applicable 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.
- ³Applicable 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.
- ⁴Applicable to single hull tankships and tank barges certificated for the carriage of Grade D and E cargoes only.
- ⁵Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of Grade D and E cargoes only.
- ⁶Applicable to single hull tank barges certificated for the carriage of asphalt only.
- ⁷Applicable to double hull tank barges (double sides, ends, and bottoms) certificated for the carriage of asphalt only.
- ⁸Or as specified in part 38 or 151 as applicable
- ⁹Enhanced 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) * * *
 (l) * * *

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 car- goes only ⁴	Double hull barge Grade D and E car- goes 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	⁸ 2.5	⁸ 10.0	⁸ 10.0	⁸ 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 bot- toms, 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 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.

§ 31.10-21

46 CFR Ch. I (10-1-96 Edition)

* * * * *

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 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.

* * * * *

§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

§ 31.10-33

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, suction 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,

46 CFR Ch. I (10-1-96 Edition)

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 Of-

ficer 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	≥2.75	.....
15 tons working load of the assembled gear	4.00	≥2.20	.....
60 tons or more working load of the assembled gear	3.75	≥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		≥3.00	.....
13 tons or more working load of assembled gear		≥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

§ 31.40-45

46 CFR Ch. I (10-1-96 Edition)

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

Subpart 32.01—General

Sec.

32.01-1 Incorporation by reference.

Subpart 32.02—Safety Requirements

Sec.

32.02-1 Means of escape—T/ALL.

32.02-5 Communication between deck-houses—TB/CLB.

32.02-10 Rails—TB/ALL.

32.02-15 Guards at dangerous places—TB/ALL.

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.

32.15-10 Sounding machines—T/OCL.

32.15-15 Anchors, Chains, and Hawsers—TB/ALL.

32.15-30 Radar—T/OC.

32.15-35 Magnetic Compass and Gyro-compass—T/OC.

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.

32.20-10 Flame arresters—TB/ALL.

32.20-20 Liquid level gaging—T/ALL.

Subpart 32.25—General Alarm Systems

32.25-1 General alarm systems for tankships and manned tank barges.