#### § 183.540

other flammable liquids must be explosion-proof or be part of an intrinsically safe system.

(c) Explosion-proof equipment and intrinsically safe systems must meet the requirements of §111.105 in subchapter J of this chapter.

[CGD 85-080, 61 FR 997, Jan. 10, 1996; 61 FR 24465, May 15, 1996]

#### §183.540 Elevators.

Each elevator on a vessel must meet the requirements of American National Standards Institute (ANSI) A17.1, "Safety Code for Elevators, and Escalators," or other standard specified by the Commandant.

#### §183.550 General alarm systems.

All vessels with overnight accommodations must be equipped with a general alarm system. The public address system required by §184.610 of this chapter may be used to sound the general alarm signal.

# PART 184—VESSEL CONTROL AND MISCELLANEOUS SYSTEMS AND EQUIPMENT

#### **Subpart A—General Provisions**

Sec.

184.100 General requirement.

184.115 Applicability to existing vessels.

### Subpart B—Cooking and Heating

184.200 General.

184.202 Restrictions.

184.210 Heating equipment.

184.220 Cooking equipment.

184.240 Gas systems.

### Subpart C—Mooring and Towing Equipment

184.300 Ground tackle and mooring lines.

### Subpart D—Navigation Equipment

184.402 Compasses.

184.404 Radars.

184.410 Electronic position fixing devices.

184.420 Charts and nautical publications.

### Subpart E-Radio

184.502 Requirements of the Federal Communications Commission.

184.506 Emergency broadcast placard.

184.510 Recommended emergency broadcast instructions.

# Subpart F—Control and Internal Communications Systems

184.602 Internal communications systems.

184.610 Public address systems.

184.620 Propulsion engine control systems.

#### Subpart G-Miscellaneous

 $184.702\,$  Pollution prevention equipment and procedures.

184.704 Marine sanitation devices.

184.710 First-aid kits.

AUTHORITY: 46 U.S.C. 2103, 3306; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; 49 CFR 1.46.

SOURCE: CGD 85-080, 61 FR 1002, Jan. 10, 1996, unless otherwise noted.

### **Subpart A—General Provisions**

### §184.100 General requirement.

(a) Vessel control systems and other miscellaneous systems and equipment required by this part must be suitable for the purposes intended.

(b) The cognizant Officer in Charge, Marine Inspection (OCMI) may require navigation, control, or communications equipment, in excess of the equipment specifically required by this part, on a vessel that is of a novel design, operates at high speeds in restricted or high traffic areas, operates in a dynamically supported mode, or operates on extended routes or in remote locations.

# § 184.115 Applicability to existing vessels.

(a) An existing vessel need not comply with §§184.402(c), 184.404, 184.410, and 184.602 unless the cognizant OCMI specifically requires compliance due to the route or service of the vessel.

(b) An existing vessel need not comply with the requirements of §184.610 until March 11, 2001, or 10 years after its keel was laid or the vessel was at a similar stage of construction, whichever is later.

(c) An existing vessel need not comply with the requirements of §184.710 until March 11, 1997.

### Subpart B—Cooking and Heating

### §184.200 General.

Cooking and heating equipment must be suitable for marine use. Equipment designed and installed in accordance with American Boat and Yacht Council (ABYC) A-3, "Galley Stoves," and A-7, "Boat Heating Systems," or with National Fire Protection Association (NFPA) 302, "Pleasure and Commercial Motor Craft," complies with this requirement, except as restricted by \$184.202 of this part.

#### §184.202 Restrictions.

- (a) The use of gasoline for cooking, heating, or lighting is prohibited on all vessels.
- (b) Fireplaces or other space heating equipment with open flames are prohibited from being used on all vessels.
- (c) Vessels permitted to use liquefied and non-liquefied gases as cooking fuels by 46 CFR part 147 must meet the requirements in §184.240 of this part. The use of these fuels for cooking, heating, and lighting on ferry vessels is prohibited by part 147 in subchapter N of this chapter.

### §184.210 Heating equipment.

- (a) Each heater must be so constructed and installed as to prevent contact with combustible materials such as towels and clothing.
- (b) Each electric space heater must be provided with a thermal cutout to prevent overheating.
- (c) Each heater element of an electric space heater must be of an enclosed type, and the element case or jacket must be made of a corrosion resistant material.

#### §184.220 Cooking equipment.

- (a) Doors on a cooking appliance must be provided with hinges and locking devices to prevent accidental opening in heavy seas.
- (b) A cooking appliance must be installed to prevent movement in heavy seas.
- (c) For a grill or similar type of cooking appliance, means must be provided to collect grease or fat and to prevent its spillage on wiring or the deck.
- (d) Grab rails must be installed on a cooking appliance when determined by the cognizant OCMI to be necessary for safety.
- (e) Sea rails, with suitable barriers to prevent accidental movement of cook-

ing pots, must be installed on a cooking range.

(f) Electric connections for a cooking appliance must be dripproof.

[CGD 85-080, 61 FR 1002, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

### § 184.240 Gas systems.

Cooking systems using liquefied petroleum gas (LPG) and compressed natural gas (CNG) must meet the following requirements:

- (a) The design, installation and testing of each LPG system must meet ABYC A-1, "Marine Liquefied Petroleum Gas (LPG) Systems," Chapter 6 of NFPA 302, or other standard specified by the Commandant.
- (b) The design, installation and testing of each CNG system must meet ABYC A-22, "Marine Compressed Natural Gas (CNG) Systems," Chapter 6 of NFPA 302, or other standard specified by the Commandant.
- (c) Cooking systems using Chapter 6 of NFPA 302 as the standard must meet the following additional requirements:
- (1) The storage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited;
- (2) LPG or CNG must be odorized in accordance with ABYC A-1 appendix 4 or A-22 appendix 4, respectively;
- (3) The marking and mounting of LPG cylinders must be in accordance with ABYC A-1 appendix 7; and
- (4) LPG cylinders must be of the vapor withdrawal type as specified in ABYC A-1 section 1.7.
- (d) Continuous pilot lights or automatic glow plugs are prohibited for an LGP or CNG installation using ABYC A-1 or A-22 as the standard.
- (e) CNG installation using ABYC A-22 as the standard must meet the following additional requirements:
- (1) The storage or use of CNG containers within the accommodation area, machinery spaces, bilges, or other enclosed spaces is prohibited;
- (2) CNG cylinders, regulating equipment, and safety equipment must meet the installation, stowage, and testing requirements of paragraph 6-5.12 of NFPA 302.
- (3) The use or stowage of stoves with attached CNG cylinders is prohibited

#### § 184.300

as specified in paragraph 6-5.1 of NFPA

- (f) If the fuel supply line of an LPG or CNG system enters an enclosed space on the vessel, a remote shutoff valve must be installed that can be operated from a position adjacent to the appliance. The valve must be located between the fuel tank and the point where the fuel supply line enters the enclosed portion of the vessel. A power operated valve installed to meet this requirement must be of a type that will fail closed.
- (g) The following variances from ABYC A-1 section 1.12 are allowed for CNG:
- (1) The storage locker or housing access opening need not be in the top.
- (2) The locker or housing need not be above the waterline.
- (h) The following variances from NFPA 302 are allowed:
- (1) The storage locker or housing for CNG tank installations need not be above the waterline as required by paragraph 6-5.12.1.1(a);
- (2) Ignition protection need not be provided as required by paragraph 6-5.4.

### Subpart C—Mooring and Towing Equipment

# §184.300 Ground tackle and mooring lines.

A vessel must be fitted with ground tackle and mooring lines necessary for the vessel to be safely anchored or moored. The ground tackle and mooring lines provided must be satisfactory for the size of the vessel, the waters on which the vessel operates, subject to the approval of the cognizant OCMI.

### Subpart D—Navigation Equipment

### §184.402 Compasses.

- (a) Except as otherwise provided in this section every vessel must be fitted with a suitable magnetic compass designed for marine use, to be mounted at the primary operating station.
- (b) The following vessels need not be fitted with a compass:
  - (1) A vessel on a rivers route;
  - (2) A non-self propelled vessel; and

- (3) A vessel operating on short restricted routes on lakes, bays, and sounds.
- (c) Except on a vessel limited to daytime operations, the compass must be illuminated.

### §184.404 Radars.

- (a) A vessel must be fitted with a Federal Communications Commission (FCC) type accepted general marine radar system for surface navigation with a radar screen mounted at the primary operating station if:
  - (1) The vessel is self-propelled;
- (2) The vessel has an oceans, coastwise, limited coastwise, or Great Lakes route; and
- (3) The vessel carries more than 49 passengers.
- (b) A ferry that carries more than 49 passengers on a rivers route not within one mile of land must be fitted with a FCC Type Accepted general marine radar system for surface navigation with a radar screen mounted at the primary operating station.
- (c) The radar and its installation must be suitable for the intended speed and route of the vessel.
- (d) A vessel operated on a short restricted route need not be fitted with a radar if the cognizant OCMI determines that a radar is not necessary due to the vessel's route and local weather conditions.

# §184.410 Electronic position fixing devices.

A vessel on an oceans route must be equipped with an electronic position fixing device, capable of providing accurate fixes for the area in which the vessel operates, to the satisfaction of the cognizant OCMI.

[CGD 85-080, 61 FR 1002, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

# §184.420 Charts and nautical publications.

- (a) As appropriate for the intended voyage, a vessel must carry adequate and up-to-date:
- (1) Charts of large enough scale to make safe navigation possible;
- (2) U.S. Coast Pilot or similar publication:
- (3) Coast Guard Light List;
- (4) Tide tables; and

(5) Current tables, or a river current publication issued by the U.S. Army Corps of Engineers or a river authority.

(b) Extracts from the publications listed above for the areas to be transited may be provided instead of the complete publication.

[CGD 85-080, 61 FR 1002, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

### Subpart E—Radio

# §184.502 Requirements of the Federal Communications Commission.

A vessel must comply with the applicable requirements for any radio and Electronic Position Indicating Radiobeacon (EPIRB) installations, including the requirements for a station license and installation certificates to be issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

# § 184.506 Emergency broadcast placard.

A durable placard must be posted next to all radiotelephone installations with the emergency broadcast instructions and information, specific to the individual vessel.

[CGD 85-080, 61 FR 1002, Jan. 10, 1996, as amended at 62 FR 51358, Sept. 30, 1997]

# § 184.510 Recommended emergency broadcast instructions.

The following emergency broadcast instructions, when placed on a placard, will satisfy the requirement contained in §184.506 for an emergency broadcast placard:

- (a) Emergency Broadcast Instructions.
- (1) Make sure your radiotelephone is on.
- (2) Select 156.8 MHz (channel 16 VHF) or 2182 kHz. (Channel 16 VHF and 2182 kHz on SSB are for emergency and calling purposes only.)
- (3) Press microphone button and, speaking slowly—clearly—calmly, say:
- (i) "MAYDAY—MAYDAY—MAY-DAY" for situations involving Immediate Danger to Life and Property; or
- (ii) "PAN—PAN—PAN" for urgent situations where there is No Immediate Danger to Life or Property.

- (4) Say: "THIS IS (INSERT VESSEL'S NAME), (INSERT VESSEL'S NAME), (INSERT VESSEL'S NAME), (INSERT VESSEL'S CALL SIGN), OVER."
- (5) Release the microphone button briefly and listen for acknowledgment. If no one answers, repeat steps 3 & 4.
- (6) If there is no acknowledgment, or if the Coast Guard or another vessel responds, say: "MAYDAY" OR "PAN", (INSERT VESSEL'S NAME)."

  (7) DESCRIBE YOUR POSITION
- (7) DESCRIBE YOUR POSITION using latitude and longitude coordinates, LORAN coordinates, or range and bearing from a known point.
- (8) STATE THE NATURE OF THE DISTRESS.
- (9) GIVE NUMBER OF PERSONS ABOARD AND THE NATURE OF ANY INJURIES.
- (10) ESTIMATE THE PRESENT SEA-WORTHINESS OF YOUR VESSEL.
- (11) BRIEFLY DESCRIBE YOUR VESSEL: (INSERT LENGTH, COLOR, HULL TYPE, TRIM, MASTS, POWER, ANY ADDITIONAL DISTINGUISHING FEATURES).
- (12) Say: ''I WILL BE LISTENING ON CHANNEL 16/2182.''
- (13) End message by saying: "THIS IS (INSERT VESSEL'S NAME & CALL SIGN)."
- (14) If your situation permits, stand by the radio to await further communications with the Coast Guard or another vessel. If no answer, repeat, then try another channel.
  - (b) [Reserved]

# Subpart F—Control and Internal Communications Systems

# § 184.602 Internal communications systems.

- (a) A vessel equipped with pilothouse control must have a fixed means of two-way communications from the operating station to the location where the means of controlling the propulsion machinery, required by §184.620(a) of this part, is located. Twin screw vessels with pilothouse control for both engines are not required to have a fixed communications system.
- (b) A vessel equipped with auxiliary means of steering, required by §182.620 of this subchapter, must have a fixed means of two-way communications

#### § 184.610

from the operating station to the location where the auxiliary means of steering is controlled.

(c) When the propulsion machinery of a vessel cannot be controlled from the operating station, an efficient communications system must be provided between the operating station and the propulsion machinery space.

(d) When the locations addressed in paragraphs (a), (b), and (c) of this section are sufficiently close together, direct voice communications satisfactory to the cognizant OCMI is acceptable instead of the required fixed means of communications.

(e) The OCMI may accept hand held portable radios as satisfying the communications system requirement of this section.

### §184.610 Public address systems.

(a) Except as noted in paragraphs (d) and (e) below, each vessel must be equipped with a public address system.

(b) On a vessel of more than 19.8 meters (65 feet) in length, the public address system must be a fixed installation and be audible during normal operating conditions throughout the accommodation spaces and all other spaces normally manned by crew members.

(c) A vessel with more than one passenger deck and a vessel with overnight accommodations must have the public address system operable from the operating station.

(d) On a vessel of not more than 19.8 meters (65 feet) in length, a battery powered bullhorn may serve as the public address system if audible throughout the accommodation spaces of the vessel during normal operating conditions. The bullhorn's batteries are to be continually maintained at a fully charged level by use of a battery charger or other means acceptable to the cognizant OCMI.

(e) On a vessel of not more than 19.8 meters (65 feet) in length carrying not more than 49 passengers, a public address system is not required if a public announcement made from operating station without amplification can be heard throughout the accommodation spaces of the vessel during normal operating conditions, to the satisfaction of the cognizant OCMI.

# §184.620 Propulsion engine control systems.

- (a) A vessel must have two independent means of controlling each propulsion engine. Control must be provided for the engine speed, direction of shaft rotation, and engine shutdown.
- (1) One of the means may be the ability to readily disconnect the remote engine control linkage to permit local operation.
- (2) A multiple engine vessel with independent remote propulsion control for each engine need not have a second means of controlling each engine.
- (b) In addition to the requirements of paragraph (a), a vessel must have a reliable means for shutting down a propulsion engine, at the main pilothouse control station, which is independent of the engine's speed control.
- (c) A propulsion engine control system, including pilothouse control, must be designed so that a loss of power to the control system does not result in an increase in shaft speed or propeller pitch.

### Subpart G-Miscellaneous

# §184.702 Pollution prevention equipment and procedures.

A vessel must comply with the applicable design, equipment, personnel, procedures, and record requirements of 33 CFR parts 151, 155, and 156.

#### §184.704 Marine sanitation devices.

A vessel with installed toilet facilities must have a marine sanitation device that complies with 33 CFR part 159

#### §184.710 First-aid kits.

A vessel must carry either a first-aid kit approved under approval series 160.041 or a kit with equivalent contents and instructions. For equivalent kits, the contents must be stowed in a suitable, watertight container that is marked "First-Aid Kit". A first-aid kit must be easily visible and readily available to the crew.

[CGD 85-080, 62 FR 51359, Sept. 30, 1997]