

means of escape is acceptable provided that—

(1) There is no source of fire in the space, such as a galley stove, heater, etc., and the vertical escape is remote from the engine or fuel tank space, and

(2) The arrangement is such that the installation of two means of escape does not materially improve the safety of the vessel or those on board.

(g) Dead end corridors or the equivalent, more than 40 feet in length are prohibited.

(h) Each means of escape must be of adequate size to accommodate rapid evacuation.

(i) Each vertical ladder must have rungs that are:

(1) At least 16 inches in length;

(2) Not more than 12 inches apart, uniform for the length of the ladder;

(3) At least 3 inches from the nearest permanent object in back of the ladder; and

(4) Except when unavoidable obstructions are encountered, there must be at least 4½ inches clearance above each rung.

§ 169.315 Ventilation (other than machinery spaces).

(a) All enclosed spaces within the vessel must be properly ventilated in a manner suitable for the purpose of the space.

(b) A means must be provided to close off all vents and ventilators.

(c) Living spaces must be ventilated by a mechanical system unless it can be shown that a natural system will provide adequate ventilation in all ordinary weather conditions. Provided that paragraph (a) of this section is satisfied, a vessel having only a natural ventilation system must satisfy the following: $V/A \geq 1.4$ where V is the total area of the vents in square inches and A is the product in square feet of the vessel's design waterline length times its maximum beam.

LIVING SPACES

§ 169.317 Accommodations.

(a) Quarters must have sufficient fresh air, light and heat. Quarters must not be located forward of the collision bulkhead or farther forward in the vessel than a vertical plane located at 5

percent of the vessel's loadline length abaft the forward side of the stem. The space must not be located totally below the deepest load waterline.

(b) Bulkheads separating accommodations from machinery spaces, paint lockers, storerooms, washrooms, and toilet facilities are to be odorproof.

(c) All quarters are to be properly drained, odorproof and protected from heat and noise.

(d) Each person on board must have a separate berth which is of sufficient size and generally clear of all pipes, ventilation ducts and other installations.

(e) Each bunk must be constructed of wood, fiberglass or metal. If fitted with a mattress, the mattress must be covered with material which has been treated to give it fire resistant properties and which will provide the mattress with a reasonably smooth surface. There must be a minimum vertical distance between bunks of 24 inches.

(f) A means of access must be provided for each berthing arrangement where the upper berth is more than 60 inches above the deck.

(g) The construction and arrangement must allow free and unobstructed access to each berth. Each berth must be immediately adjacent to an aisle leading to a means of escape from the living area.

(h) A properly arranged hammock may be used as a berth.

§ 169.319 Washrooms and toilets.

(a) Sailing school vessels must have one toilet and one washbasin for every 20 persons. Each toilet and washbasin must have adequate plumbing.

(b) Each washroom and toilet room must properly drain and the scupper to the washroom must be of sufficient size and situated in the lowest part of the space.

(c) Each sailing school vessel must meet the applicable requirements of Title 33, Code of Federal Regulations, part 159.

§ 169.323 Furniture and furnishings.

Each sailing school vessel certificated to carry 100 persons or less or having overnight accommodations for

§ 169.327

less than 50 persons must meet the following requirements:

- (a) Except as provided by paragraph (b) of this section, all free-standing furniture must be constructed of non-combustible material. Upholstery and padding used in furniture must be of fire resistant materials.
- (b) Existing solid wooden furniture may be retained on existing vessels.
- (c) Draperies must be fabricated of fire resistant fabrics.
- (d) Rugs and carpets must be of wool or other material having equivalent fire resistant qualities.
- (e) Trash receptacles must be constructed of non-combustible materials with solid sides and bottoms and have solid noncombustible covers.

RAILS AND GUARDS

§ 169.327 Deck rails.

- (a) All rails or lifelines must be at least 30 inches high and permanently supported by stanchions at intervals of not more than 7 feet. Stanchions must be through bolted or welded to the deck.
- (b) Rails or lifelines must consist of evenly spaced courses. The spacing between courses must not be greater than 12 inches. The opening below the lowest course must not be more than 9 inches. Lower rail courses are not required where all or part of the space below the upper rail is fitted with a bulwark, chain link fencing, wire mesh, or an equivalent.
- (c) Small vessels of the open type and vessels of unusual construction must have rails or equivalent protection as considered necessary by the Officer in Charge, Marine Inspection.

§ 169.329 Storm rails.

Suitable storm rails or hand grabs must be installed where necessary in all passageways, at deckhouse sides, and at ladders and hatches where persons might have normal access.

§ 169.331 Guards in hazardous locations.

Each exposed hazard, such as gears or machinery, must be properly protected with covers, guards, or rails.

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

Subpart 169.400—Watertight Integrity, Subdivision, and Stability

§ 169.401 Applicability.

Each vessel must meet the applicable requirements in Subchapter S, parts 170-174, of this chapter.

Subpart 169.500—Lifesaving and Firefighting Equipment

LIFESAVING EQUIPMENT—GENERAL

§ 169.505 Equipment installed but not required.

Each item of lifesaving equipment installed on board a vessel must be of an approved type.

§ 169.507 Responsibility of master.

The master or operator shall ensure that the lifeboats, liferafts, davits, falls, personal flotation devices, and other lifesaving appliances are at all times ready for use, and that all equipment required by the regulations in this subchapter is provided, maintained, serviced, and replaced as indicated.

§ 169.509 Approval for repairs and alterations.

No extensive repairs or alterations, except in an emergency, may be made to any item of lifesaving equipment without advance notice to the Officer in Charge, Marine Inspection. Repairs and alterations must be made to the original standard of construction and tested in the manner specified in this subpart and applicable requirements in Subchapter Q of this chapter. Emergency repairs or alterations must be reported as soon as practicable to the nearest Officer in Charge, Marine Inspection.

PRIMARY LIFESAVING EQUIPMENT

§ 169.513 Types of primary equipment.

- (a) *Lifeboats.* Each lifeboat must be of a type approved under subpart 160.035 of this chapter. Installation and arrangement of each lifeboat including davits and winches must meet the requirements of part 94 of this chapter.
- (b) *Inflatable liferafts.* (1) Each inflatable liferaft must be a SOLAS A inflatable liferaft approved under part 160,