cargo tanks and the work to be performed is not less than twenty-five (25) feet; or,

- (3) Within or on the boundaries of fuel tanks; or,
- (4) To pipe lines, heating coils, pumps, fittings, or other appurtenances connected to such cargo or fuel tanks.
- (c) Such inspections shall be made and evidenced as follows:
- (1) In ports or places in the United States or its territories and possessions, the inspection shall be made by a marine chemist certificated by the National Fire Protection Association; however, if the services of such certified marine chemist are not reasonably available, the Officer in Charge, Marine Inspection, upon the recommendation of the vessel owner and his contractor or their representative, shall select a person who, in the case of an individual vessel, shall be authorized to make such inspection. If the inspection indicates that such operations can be undertaken with safety, a certificate setting forth the fact in writing and qualified as may be required, shall be issued by the certified marine chemist or the authorized person before the work is started. Such qualifications shall include any requirements, as may be deemed necessary to maintain, insofar as can reasonably be done, the safe conditions in the spaces certified throughout the operation and shall include such additional tests and certifications as considered required. Such qualifications and requirements shall include precautions necessary to eliminate or minimize hazards that may be present from protective coatings or residues from cargoes.
- (2) When not in such a port or place, and a marine chemist or such person authorized by the Officer in Charge, Marine Inspection, is not reasonably available, the inspection shall be made by the senior officer present and a proper entry shall be made in the vessel's logbook.
- (d) It shall be the responsibility of the senior officer present to secure copies of certificates issued by the certified marine chemist or such person authorized by the Officer in Charge, Marine Inspection. It shall be the responsibility of the senior officer present, insofar as the persons under

his control are concerned, to maintain a safe condition on the vessel by full observance of all qualifications and requirements listed by the marine chemist in the certificate.

[CGFR 64–19, 29 FR 7361, June 5, 1964, as amended by CGD 95–072, 60 FR 50468, Sept. 29, 1995]

Subpart 167.35—Lifesaving Equipment

§167.35-1 General.

Lifesaving appliances and arrangements on nautical school ships must be in accordance with the requirements for special purpose vessels in subchapter W (Lifesaving Appliances and Arrangements) of this chapter.

[CGD 84-069, 61 FR 25311, May 20, 1996]

Subpart 167.40—Certain Equipment Requirements

§ 167.40-1 Electrical installations.

- (a) Except as otherwise provided by law or regulation in this part, the electrical equipment may be considered acceptable if it complies with the requirements covered by any one of the following:
- (1) U.S. Navy Standard Construction Specifications currently in effect.
- (2) U. S. Coast Guard electrical engineering requirements in Subchapter J (Electrical Engineering) of this chapter.
- (3) Institute of Electrical and Electronic Engineers, Inc. (IEEE) Standard No. 45, 1945 or 1948 Revision. These standards may be purchased from the Institute of Electrical and Electronic Engineers, Inc. (IEEE), IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08855.
- (b) Changes or alterations in the electrical installations of vessels now in service shall be in accordance with standards set forth in paragraph (a) of this section.
- (c) Special attention shall be given by the inspectors in the examination of present installation to see that it is of such nature as to preclude any danger of fire, giving particular attention to

§ 167.40-5

wiring which is carried through wooden bulkheads, partitions, etc.

[CGFR 51-11, 16 FR 3218, Apr. 12, 1951, as amended by CGFR 52-43, 17 FR 9543, Oct. 18, 1952; USCG-1999-6216, 64 FR 53228, Oct. 1, 1999]

§ 167.40-5 Alarm bells.

All nautical school ships over 100 gross tons shall have all sleeping accommodations, public spaces, and machinery spaces equipped with a sufficient number of alarm bells so located as to warn all occupants. The system shall operate from a continuous source of electric energy capable of supplying the system for a period of at least 8 hours without being dependent upon the main, auxiliary or emergency generating plants. Each bell shall produce a signal of a tone distinct from that of other bell signals in the vicinity and shall be independently fused, with each of these fuses located above the bulkhead deck. The bells shall be controlled by a manually-operated contact maker located in the pilothouse. The characteristics of the contact maker shall be such that it possesses:

- (a) Positive contact;
- (b) Watertightness (when located in open spaces subject to weather);
- (c) Means whereby its electrically open or closed position can be determined by sense of touch;
- (d) Means to affect a make-or-break circuit for signaling; and
 - (e) Self-maintaining contacts.

§ 167.40-7 Voice tubes, telephone, and telegraph systems.

- (a) Each nautical school ship shall be fitted with an efficient means of communication between the pilothouse and engine room. This may be by bell signals with voice tubes, telephone, or telegraph systems.
- (b) A voice tube or telephone system between the radio room and the navigating bridge shall be provided when the nautical school ship is equipped with a radio installation.
- (c) A voice tube or telephone system between the pilothouse and emergency steering station shall be provided when the nautical school ship is equipped with an emergency steering station.

§ 167.40-20 Deep-sea sounding apparatus.

Nautical school ships shall be equipped with an efficient or electronic deep-sea sounding apparatus. The electronic deep-sea sounding apparatus required shall be installed, kept in working order, and ready for immediate use.

[CGFR 58-10, 23 FR 4686, June 26, 1958, as amended by CGD 75-074, 42 FR 5964, Jan. 31, 1977; CGD 95-027, 61 FR 26010, May 23, 1996]

§ 167.40-25 Signaling lamp.

Nautical school ships of over 150 gross tons shall be equipped with an efficient signaling lamp. This lamp shall be permanently fixed above the bridge and equipped with a Fresnel lens and high-speed bulb, operated by a weatherproof key, fitted with a suitable condenser. The lamp shall be so connected that it can be operated from the normal source of the nautical school ship's current, the emergency source, and other emergency batteries if provided.

§167.40-30 Guards and rails.

On nautical school ships all exposed and dangerous places, such as gears and machinery shall be properly protected with covers, guards, or rails, in order that the danger of accidents may be minimized. On nautical school ships equipped with radio (wireless) the leadins shall be efficiently incased or insulated to insure the protection of persons from accidental shock. Such leadins shall be located so as not to interfere with the launching of lifeboats and life rafts.

§ 167.40-40 Radar.

All mechanically propelled vessels of 1,600 gross tons and over in ocean or coastwise service must be fitted with a marine radar system for surface navigation. Facilities for plotting radar readings must be provided on the bridge.

[CGFR 75-074, 42 FR 5964, Jan. 31, 1977]

§ 167.40–45 Magnetic compass and gyrocompass.

- (a) All mechanically propelled vessels in ocean or coastwise service must be fitted with a magnetic compass.
- (b) All mechanically propelled vessels of 1,600 gross tons and over in ocean or