difficult to hear, a flashing red light must also be installed.

(d) Each general alarm bell and flashing red light must be identified with red lettering at least $\frac{1}{2}$ inch (13 millimeters) high as follows:

Attention

General Alarm—When Alarm Sounds Go to Your Station.

- (e) A general alarm system must be tested prior to operation of the vessel and at least once each week thereafter.
- (f) A public address system or other means of alerting all individuals on board may be used in lieu of a general alarm system provided it complies with paragraphs (b), (c), and (e) of this section and can be activated from the operating station.

[CGD 88-079, 56 FR 40393, Aug. 14, 1991, as amended by CGD 95-012, 60 FR 48048, Sept. 18, 1995]

§28.245 Communication equipment.

- (a) Except as provided in paragraphs (b) through (e) of this section, each vessel must be equipped as follows.
- (1) Each vessel must be equipped with a VHF radiotelephone capable of transmitting and receiving on the frequency or frequencies within the 156-162 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.
- (2) Each vessel that operates more than 20 miles from the coastline, in addition to the VHF radiotelephone required by paragraph (a)(1) of this section, must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in the 2-4 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.
- (3) Each vessel that operates more than 100 miles from the coastline, in addition to the communication equipment required by paragraph (a)(1) of this section must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in the 2–27.5 MHz band necessary to communicate with a public coast station or U.S. Coast Guard station serving the area in which the vessel is operating.

- (4) Each vessel that operates in waters contiguous to Alaska where no public coast station or U.S. Coast Guard station is within communications range of a VHF radio transceiver operating on the 156-162 MHz band or the 2-4 MHz band, in addition to the VHF radio communication equipment required by paragraph (a)(1) of this section, must be equipped with a radiotelephone transceiver capable of transmitting and receiving on frequencies in the 2-27.5 MHz band necessary to communicate with a public coast station or a U.S. Coast Guard station serving the area in which the vessel is operating.
- (b) A single radio transceiver capable of meeting the requirements of paragraphs (a) (2) and (3), or paragraphs (a) (2), (3), and (4) of this section, is acceptable.
- (c) Satellite communication capability with the system servicing the area in which the vessel is operating is acceptable as an alternative to the requirements of paragraphs (a)(2), (a)(3), or (a)(4) of this section.
- (d) A cellular telephone capable of communicating with a public coast station or a U.S. Coast Guard station serving the area in which the vessel is operating is acceptable as an alternative to the requirements of paragraphs (a)(2), (a)(3), or (a)(4) of this section.
- (e) A radiotelephone transceiver installed on board a vessel before September 15, 1991, capable of transmitting and receiving on frequencies on the 4–20 MHz band may continue to be used to satisfy the requirements of paragraphs (a)(3) and (a)(4) of this section.
- (f) The principle operating position of the communication equipment must be at the operating station.
- (g) Communication equipment must be installed to ensure safe operation of the equipment and to facilitate repair. It must be protected against vibration, moisture, temperature, and excessive currents and voltages. It must be located so as to minimize the possibility of water intrusion from windows broken by heavy seas.
- (h) Communication equipment must comply with the technical standards and operating requirements issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

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NOTE: Each vessel which uses radio equipment to meet the communication requirements of this section must have a Ship Radio Station License issued by the Federal Communications Commission, as set forth in 47 CFR part 80.

(i) All communication equipment must be provided with an emergency source of power that complies with §28.375.

§28.250 High water alarms.

On a vessel 36 feet (11.8 meters) or more in length, a visual and audible alarm must be provided at the operating station to indicate high water level in each of the following normally unmanned spaces:

- (a) A space with a through-hull fitting below the deepest load waterline, such as the lazarette;
- (b) A machinery space bilge, bilge well, shaft alley bilge, or other space subject to flooding from sea water piping within the space; and
- (c) A space with a non-watertight closure, such as a space with a non-watertight hatch on the main deck.

§28.255 Bilge pumps, bilge piping, and dewatering systems.

- (a) Each vessel must be equipped with a bilge pump and bilge piping capable of draining any watertight compartment, other than tanks and small buoyancy compartments, under all service conditions. Large spaces, such as enginerooms must be fitted with more than one suction line.
- (b) In addition to the requirements of paragraph (a) of this section, a space used in the sorting or processing of fish in which water is used must be fitted with dewatering system capable of dewatering the space under normal conditions of list and trim at the same rate as water is introduced. Pumps used as part of the processing of fish do not count for meeting this requirement. The dewatering system must be interlocked with the pump(s) supplying water to the space, so that in the event of failure of the dewatering system, the water supply is inactivated.
- (c) Except as provided by paragraph (f) of this section, each vessel 79 feet (24 meters) or more in length must be equipped with a fixed, self-priming,

powered, bilge pump connected to a bilge manifold.

- (d) If a bilge pump required by paragraph (a) of this section is portable, it must be provided with a suitable suction hose of adequate length to reach the bilges of each watertight compartment it must serve and with a discharge hose of adequate length to ensure overboard discharge. A portable pump must be capable of dewatering each space it serves at a rate of at least 2 inches (51 millimeters) of water depth per minute.
- (e) Except for a fire pump required by \$28.315, a bilge pump may be used for other purposes.
- (f) Except where an individual pump is provided for a separate space or for a portable pump, each individual bilge suction line must be led to a manifold. Each bilge suction line must be provided with a stop valve at the manifold and a check valve at some accessible point in the bilge line to prevent unintended flooding of a space.
- (g) Each bilge suction line and dewatering system suction must be fitted with a suitable strainer to prevent clogging of the suction line. Strainers must have an open area of not less than three times the open area of the suction line.
- (h) Each vessel must comply with the oil pollution prevention requirements of 33 CFR parts 151 and 155.

§ 28.260 Electronic position fixing devices.

Each vessel 79 feet (24 meters) or more in length must be equipped with an electronic position fixing device capable of providing accurate fixes for the area in which the vessel operates.

§ 28.265 Emergency instructions.

- (a) Except as provided in paragraphs (b) and (c) of this section, each vessel must have emergency instructions posted in conspicuous locations accessible to the crew.
- (b) The instructions identified in paragraphs (d)(6), (d)(7), (d)(8), and (d)(9) of this section, may be kept readily available as an alternative to posting.
- (c) On a vessel which operates with less than 4 individuals on board, the emergency instructions may be kept