where:

- $\Delta = displacement$ in fresh water, in tons of 2,240 pounds, at the summer load water-line.
- T=tons per inch immersion, of 2,240 pounds, in fresh water at the summer load waterline.

(b) When the displacement at the summer load waterline cannot be certified, the addition in inches to the minimum freeboard in fresh water may be obtained by multiplying 0.25 by the summer draught in feet measured from the top of the keel to the center of the load line diamond.

Subpart D—Conditions of Assignment

§45.101 Purpose.

This subpart prescribes conditions that a vessel must meet to be eligible for assignment of a loadline under this part.

§45.103 Structural stress and stability.

(a) The nature and stowage of the cargo, ballast, and other variable weights must be such as to make the vessel stable and avoid unacceptable structural stress.

(b) The vessel must meet all applicable stability and subdivision requirements of this chapter.

§45.105 Information supplied to the master.

Unless otherwise authorized by the Commandant, the vessel must have onboard, in a form approved by the Commandant, sufficient information.

(a) To enable the master to load and ballast the vessel in a manner that avoids unacceptable stresses in the vessel's structure; and

(b) To guide the master as to the stability of the ship under varying conditions of service.

§45.107 Strength of hull.

The general structural strength of the hull must be sufficient for the draught corresponding to the freeboard assigned and must be approved by the Commandant. Ships built and maintained in conformity with the requirements of a classification society may be recognized by the Commandant as possessing adequate strength.

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§45.109 Strength of superstructures and deckhouses.

Each superstructure or deckhouse used for accommodations of the crew must be approved by the Commandant or the approved assigning authority with regard to general strength and weathertightness. The Commandant may use the requirements of the assigning authority as a guide.

§45.111 Strength of bulkheads at ends of superstructures.

Bulkheads at ends of enclosed superstructures must have sufficient strength to withstand impact of boarding seas.

§45.113 Access openings in bulkheads at ends of enclosed superstructures.

(a) Access openings in bulkheads at ends of enclosed superstructures must have doors of steel or material as strong as steel that are permanently attached to the bulkhead and framed, stiffened, and fitted so that the bulkhead and door are as strong as the bulkhead and weather tight when closed.

(b) The means for securing the doors weathertight must be permanently attached to the doors or bulkheads and arranged so that the doors can be secured weathertight from both sides of the bulkhead.

(c) Access openings in bulkheads at ends of enclosed superstructures must have sills that are at least 12 inches above the deck.

§45.115 Bulwarks and guardrails.

(a) The exposed parts of freeboard and superstructures decks and deckhouses on the freeboard deck must have guardrails or bulwarks that are at least 36 inches high above the deck.

(b) Guardrails must have at least three courses with no more than a 9inch opening below the lowest course and no more than 15 inches between other courses. If the sheer strake projection is at least 8 inches above the deck, a guardrail may have two courses with no more than 15 inches between courses.

(c) In way of trunks at least half the protection required by paragraph (a) of this section must be in the form of open rails.