### §58.25-15

(f) In each vessel of 70,000 gross tons or over, the main steering gear must have two or more identical power units complying with paragraph (e) of this section.

### § 58.25-15 Voice communications.

Each vessel must be provided with a sound-powered telephone system, complying with subpart 113.30 of this chapter, to communicate between the pilothouse and the steering-gear compartment, unless an alternative means of communication between them has been approved by the Commanding Officer, Marine Safety Center.

#### § 58.25–20 Piping for steering gear.

(a) Pressure piping must comply with subpart 58.30 of this part.

- (b) Relief valves must be fitted in any part of a hydraulic system that can be isolated and in which pressure can be generated from the power units or from external forces such as wave action. The valves must be of adequate size, and must be set to limit the maximum pressure to which the system may be exposed, in accordance with §56.07–10(b) of this subchapter.
- (c) Each hydraulic system must be provided with—
- (1) Arrangements to maintain the cleanliness of the hydraulic fluid, appropriate to the type and design of the hydraulic system; and
- (2) For a vessel on an ocean, coastwise, or Great Lakes voyage, a fixed storage tank having sufficient capacity to recharge at least one power actuating system including the reservoir. The storage tank must be permanently connected by piping so that the hydraulic system can be readily recharged from within the steering-gear compartment and must be fitted with a device to indicate liquid level that complies with §56.50-90 of this subchapter.
- (d) Neither a split flange nor a flareless fitting of the grip or bite type, addressed by §56.30-25 of this subchapter, may be used in hydraulic piping for steering gear.

# § 58.25–25 Indicating and alarm systems.

(a) Indication of the rudder angle must be provided both at the main

steering station in the pilothouse and in the steering-gear compartment. The rudder-angle indicator must be independent of control systems for steering gear.

- (b) Each electric-type rudder-angle indicator must comply with §113.40-10 of this chapter and, in accordance with §112.15-5(h) of this chapter, draw its power from the source of emergency power.
- (c) On each vessel of 1,600 gross tons or over, a steering-failure alarm must be provided in the pilothouse in accordance with §§113.43–3 and 113.43–5 of this chapter.
- (d) An audible and a visible alarm must activate in the pilothouse upon—
- (1) Failure of the electric power to the control system of any steering gear;
- (2) Failure of that power to the power unit of any steering gear; or
- (3) Occurrence of a low oil level in any oil reservoir of a hydraulic, power-operated steering-gear system.
- (e) An audible and a visible alarm must activate in the machinery space upon—
- (1) Failure of any phase of a three-phase power supply;
- (2) Overload of any motor described by §58.25–55(c); or
- (3) Occurrence of a low oil level in any oil reservoir of a hydraulic, power-operated steering-gear system.

Note: See  $\S62.50-30(f)$  of this subchapter regarding extension of alarms to the navigating bridge on vessels with periodically unattended machinery spaces.

(f) Each power motor for the main and auxiliary steering gear must have a "motor running" indicator light in the pilothouse, and in the machinery space, that activates when the motor is energized.

### §58.25-30 Automatic restart.

Each control system for main and auxiliary steering gear and each power actuating system must restart automatically when electrical power is restored after it has failed.

## § 58.25-35 Helm arrangements.

(a) The arrangement of each steering station, other than in the steering-gear compartment, must be such that the helmsman is abaft the wheel. The rim