(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 §62.50–30(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 of the wheel must be plainly marked with arrows and lettering for right and left rudder, or a suitable notice indicating these directions must be posted directly in the helmsman’s line of sight.

(b) Each steering wheel must turn clockwise for “right rudder” and counterclockwise for “left rudder.” When the vessel is running ahead, after clockwise movement of the wheel the vessel’s heading must change to the right.

(c) If a lever-type control is provided, it must be installed and marked so that its movement clearly indicates both the direction of the rudder’s movement and, if follow-up control is also provided, the amount of the rudder’s movement.

(d) Markings in the pilothouse must not interfere with the helmsman’s vision, but must be clearly visible at night.

NOTE: See §113.40–10 of this chapter for the arrangement of rudder-angle indicators at steering stations.

§ 58.25–40 Arrangement of the steering-gear compartment.

(a) The steering-gear compartment must—

(1) Be readily accessible and, as far as practicable, separated from any machinery space;
(2) Ensure working access to machinery and controls in the compartment; and
(3) Include handrails and either gratings or other non-slip surfaces to ensure a safe working environment if hydraulic fluid leaks.

NOTE: Where practicable, all steering gear should be located in the steering-gear compartment.

(b) [Reserved]

§ 58.25–45 Buffers.

For each vessel on an ocean, coastwise, or Great Lakes voyage, steering gear other than hydraulic must be designed with suitable buffering arrangements to relieve the gear from shocks to the rudder.

§ 58.25–50 Rudder stops.

(a) Power-operated steering gear must have arrangements for cutting off power to the gear before the rudder reaches the stops. These arrangements must be synchronized with the rudder stock or with the gear itself rather than be within the control system for the steering gear, and must work by limit switches that interrupt output of the control system or by other means acceptable to the Commanding Officer, Marine Safety Center.

(b) Strong and effective structural rudder stops must be fitted; except that, where adequate positive stops are provided within the steering gear, such structural stops need not be fitted.

§ 58.25–55 Overcurrent protection for steering-gear systems.

(a) Each feeder circuit for steering must be protected by a circuit breaker on the switchboard that supplies it and