

the requirements of § 113.35-3(d) of this chapter.

## PART 130—VESSEL CONTROL, AND MISCELLANEOUS EQUIPMENT AND SYSTEMS

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### Subpart A—Vessel Control

#### § 130.110 Internal communications on OSVs of less than 100 gross tons.

Each vessel of less than 100 gross tons equipped with an independent auxiliary means of steering, as required by § 130.130(b) of this subpart, must have a fixed means of communication between

the pilothouse and the place where the auxiliary means of steering is controlled.

#### § 130.120 Propulsion control.

- (a) Each vessel must have—
  - (1) A propulsion-control system operable from the pilothouse; and
  - (2) A means at each propulsion engine of readily disabling the propulsion-control system to permit local operation.
- (b) Each propulsion-control system operable from the pilothouse must enable—
  - (1) Control of the speed of each propulsion engine;
  - (2) Control of the direction of propeller-shaft rotation;
  - (3) Control of propeller pitch, if a controllable-pitch propeller is fitted; and
  - (4) Shutdown of each propulsion engine.
- (c) The propulsion-control system operable from the pilothouse may constitute the remote stopping-system required by § 129.540 of this subchapter.
- (d) Each propulsion-control system, including one operable from the pilothouse, must be designed so that no one complete or partial failure of an easily replaceable component of the system allows the propulsion engine to overspeed or the pitch of the propeller to increase.

#### § 130.130 Steering on OSVs of less than 100 gross tons.

- (a) Each OSV of less than 100 gross tons must have a steering system that complies with—
  - (1) Section 130.140 of this subpart; or
  - (2) This section.
- (b) Except as provided by paragraph (i) of this section, each vessel must have a main and an independent auxiliary means of steering.
- (c) The main means of steering (main steering gear) must be—
  - (1) Of adequate strength for, and capable of, steering the OSV at each service speed;
  - (2) Designed to operate at maximum astern speed without being damaged; and
  - (3) Capable of moving the rudder from 35 degrees on one side to 30 degrees on the other side in no more than

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28 seconds with the vessel moving ahead at maximum service speed.

(d) Control of the main steering gear must be available from the pilothouse, including control of any necessary ancillary device (motor, pump, valve, or the like). If a power-driven main steering gear is used, a pilot light must be installed in the pilothouse to indicate operation of the power units.

(e) The auxiliary means of steering (auxiliary steering gear) must be—

(1) Of adequate strength for steering the OSV at navigable speed;

(2) Capable of steering the vessel at navigable speed; and

(3) Controlled from a place that—

(i) Can communicate with the pilothouse; or

(ii) Enables the master to safely maneuver the vessel.

(f) The steering gear must be designed so that transfer from the main steering gear or its control to the auxiliary steering gear or its control can be achieved rapidly. Any tools or equipment necessary for transfer must be readily available. Instructions for transfer must be posted.

(g) Each vessel must have instantaneous protection against short circuit for electrical-power circuits and control circuits, the protection sized and located to comply with §§58.25–55 (d) and (e) of this chapter.

(h) A rudder-angle indicator independent of the control of the main steering gear must be installed at the steering-control station in the pilothouse.

(i) No auxiliary steering gear need be installed if—

(1) The main steering gear, including power systems, is installed in duplicate; or

(2) Multiple-screw propulsion—with independent control of propulsion from the pilothouse for each screw and with a means to restrain and center the rudder—is installed, and if that control is capable of steering the OSV.

(j) Each vessel with duplicate (parallel but cross-connected) power systems for the main steering gear by way of compliance with paragraph (i)(1) of this section may use one of the systems for other purposes if—

(1) Control of the subordinate parallel system is located at the steering-control station in the pilothouse;

(2) Full power is available to the main steering gear when the subordinate parallel system is not in operation;

(3) The subordinate parallel system can be isolated from the means of steering, and instructions on procedures for isolating it are posted; and

(4) The subordinate parallel system is materially equivalent to the steering system.

§ 130.140 Steering on OSVs of 100 or more gross tons.

(a) Each OSV of 100 or more gross tons must have a means of steering that meets the—

(1) Applicable requirements of subchapters F and J of this chapter; or

(2) Requirements for a hydraulic-helm steering-system in paragraph (b) of this section.

(b) Each hydraulic-helm steering-system must have the following:

(1) A main steering gear of adequate strength for, and capable of, steering the vessel at every service speed without being damaged at maximum astern speed.

(2) A hydraulic system with a maximum allowable working pressure of not more than 12,411 kPa (1,800 psi), dedicated to steering.

(3) Piping materials that comply with subchapter F of this chapter, and piping thickness of at least schedule 80.

(4) Each fore-and-aft run of piping located as far inboard as practicable.

(5) Rudder stops.

(6) Either—

(i) Two steering pumps in accordance with § 130.130(c)(3) of this part; or

(ii) A single hydraulic sump of the “cascading overflow” type with a centerline bulkhead open only at the top, if each half has enough capacity to operate the system.

(7) Control of the main steering gear from the pilothouse, including—

(i) Control from the helm;

(ii) Control of any necessary ancillary device (motor, pump, valve, or the like); and

(iii) Adequate visibility when going astern.