§ 113.30–20 General requirements.

(a) The communications stations listed in §113.30–5(a) through (d), (f), (g), and (i) and other communications stations for the operation of the vessel, such as the captain’s and chief engineer’s offices and staterooms, emergency power room, carbon dioxide (or other extinguishing agent) control room, and firepump room, must not be on the same circuit as communications stations installed to meet the requirements of §§113.30–5(e) and 113.30–5(h).

(b) If a communications station is in the weather and on the same circuit as other required stations, there must be a cut-out switch on the navigating bridge that can isolate this station from the rest of the stations, unless the system possesses other effective means of station isolation during a fault condition.

(c) No jack-box or headset may be on a communication system that includes any station required by this subpart, except for a station installed to meet 46 CFR 112.05–5(h) or 46 CFR 113.30–25(f).

§ 113.30–25 Detailed requirements.

(a) Multiple stations must be able to communicate at the same time.

(b) The loss of one component of the system must not disable the rest of the system.

(c) The system must be able to operate under full load for the same period of operation as required for the emergency generator. See 46 CFR 112.05–5, Table 112.05–5(a).

(d) Each voice-communication station device in the weather must be in a proper enclosure as required in 46 CFR 111.01–9. The audible-signal device must be outside the station enclosure.

(e) Each station in a navigating bridge or a machinery space must be in an enclosure meeting at least Type 2 of NEMA 250 or IP 22 of IEC 60529 (both incorporated by reference; see 46 CFR 110.10–1).

(f) In a noisy location, such as an engine room, there must be a booth or other equipment to permit reliable voice communication while the vessel is operating.

(g) In a space throughout which the voice communication station audible-signal device cannot be heard, there must be another audible-signal device or a visual-device, such as a light, either of which is energized from the final emergency bus.

(h) If two or more voice communication stations are near each other, there must be a means that indicates the station called.

(i) Each connection box must meet at least Type 4 or 4X of NEMA 250 or IP 56 of IEC 60529.

(j) Voice communication cables must run as close to the fore-and-aft center-line of the vessel as practicable.

(l) No cable for voice communication may run through any space at high risk of fire such as machinery rooms and galleys, unless it is technically impracticable to route it otherwise or it must serve circuits within those spaces.

(2) Each cable running through any space at high risk of fire must meet IEC 60331–11 and IEC 60331–21 (both incorporated by reference; see 46 CFR 110.10–1).

(k) If the communications system uses a sound-powered telephone, the following requirements also apply:

(1) Each station except one regulated by paragraph (d) of this section must include a permanently wired handset with a push-to-talk button and a hanger for the handset.

(2) The hanger must be constructed so that it holds the handset away from the bulkhead and so that the motion of the vessel will not dislodge the handset.
(3) Each talking circuit must be electrically independent of each calling circuit.

(4) No short circuit, open circuit, or ground on either side of a calling circuit may affect a talking circuit.

(5) Each circuit must be insulated from ground.


Subpart 113.35—Engine Order Telegraph Systems

§ 113.35–1 Definitions.

As used in this subpart:

(a) Indicator means an instrument in the engine room to receive and acknowledge engine orders; and

(b) Transmitter means an instrument to send engine orders to the engine room and receive acknowledgement from the engine room.

§ 113.35–3 General requirements.

(a) Each self-propelled vessel, except as provided in paragraph (d) of this section, must have an electric or mechanical engine order telegraph system from the navigating bridge to the engine room.

(b) On a vessel with more than one propulsion engine, each engine must have this system.

(c) On a double-ended vessel that has two navigating bridges, this system must be between the engine room and each navigating bridge.

(d) If a small vessel has no engine order telegraph system between the navigating bridge and the engine room, the propulsion plant must be controlled entirely from the navigating bridge, with no means of normal engine control from the engine room.

(e) On vessels equipped with pilot-house control, each local control station in the engine room must have an indicator if:

(1) Manual operation from the local control station is an alternative means of control; and

(2) The local control station is not immediately adjacent to the engine room control station; and

(3) Reliable voice communication and calling that meets the requirements of §113.30–5(h) is not provided.

(f) Engine order telegraph and remote propulsion control systems must be electrically separate and independent, except that a single mechanical operator control device with separate transmitters and connections for each system may be used.


§ 113.35–5 Electric engine order telegraph systems.

(a) Each electric engine order telegraph system must have transmitters and indicators that are electrically connected to each other.

(b) Each engine room indicator must be capable of acknowledgment of orders.

(c) There must be an audible signal at each instrument. The signal at both locations must sound continuously when the transmitter and the indicator do not show the same order.

(d) Each telegraph instrument must meet the protection requirements of §111.01–9 of this chapter.

(e) Each system must have an alarm which—

(1) Automatically sounds and visually signals a loss of power to the system;

(2) Is on the navigating bridge; and

(3) Has a means to reduce the audible signal from 100 percent to not less than 50 percent.


§ 113.35–7 Electric engine order telegraph systems; operations.

(a) Where two or more transmitters, located on or on top of or on the wings of the navigating bridge, are electrically interlocked to effect synchronous