of 300 GRT or over must hold an endorsement as radar observer.

(c) Each person having to hold a license or MMC officer endorsement under 46 U.S.C. 8904(a) for employment or service as master or mate onboard an uninspected towing vessel of 8 meters (26 feet) or more in length must, if the vessel is equipped with radar, hold an endorsement as radar observer.

(d) Each person who is required to hold a radar endorsement must have his or her certificate of training readily available to demonstrate that the endorsement is still valid.

(e) For this section, "readily available" means that the documentation must be provided to the Coast Guard, or other appropriate Federal agency, within 48 hours of a request by the Coast Guard or other agency. The documentation may be provided by the individual, or his or her company representative, electronically, by facsimile, or physical copy.

§ 15.816 Automatic radar plotting aids (ARPAs).

Every person in the required complement of deck officers, including the master, on seagoing vessels equipped with automatic radar plotting aids (ARPAs), except those vessels listed in §15.105(f) and (g) of this part, must hold an appropriate STCW endorsement valid for vessels equipped with ARPA.

§ 15.817 Global Maritime Distress and Safety System (GMDSS) radio operator.

Every person in the required complement of deck officers, including the master, on seagoing vessels equipped with a GMDSS, except those vessels listed in §15.105(f) and (g) of this part, must provide evidence of a valid STCW endorsement as GMDSS radio operator.

§ 15.818 Global Maritime Distress and Safety System (GMDSS) at-sea maintainer.

Every person employed or engaged to maintain GMDSS equipment at sea, when the service of a person so designated is used to meet the maintenance requirements of SOLAS Regulation 1V:15 (incorporated by reference, see §15.103 of this part), must provide documentary evidence that he or she is competent to maintain GMDSS equipment at sea.

§ 15.820 Chief engineer.

(a) There must be an individual holding an MMC or license endorsed as chief engineer or other credential authorizing service as chief engineer employed onboard the following mechanically propelled inspected vessels:

1. Seagoing or Great Lakes vessels of 200 GRT and over;
2. Offshore supply vessels of more than 200 GRT;
3. Inland (other than Great Lakes) vessels of 300 GRT or more, if the OCMI determines that an individual with a license or the appropriate MMC officer endorsement responsible for the vessel's mechanical propulsion is necessary.

(b) On vessels subject to STCW, the individual meeting the requirement of this section must also hold an STCW endorsement as chief engineer with the appropriate propulsion power for the vessel upon which he or she is operating, except as noted in §15.105(g) of this part for vessels on domestic near-coastal voyages.

(c) An individual engaged or employed to perform the duties of chief engineer on a mechanically propelled, uninspected, seagoing, documented vessel of 200 GRT or more must hold an appropriately endorsed license or MMC authorizing service as a chief engineer.

§ 15.825 Engineers.

(a) An individual in charge of an engineering watch on a mechanically propelled, seagoing, documented vessel of
§ 15.830 Radio officers.

Radio officers are required on certain merchant vessels of the United States. The determination of when a radio officer is required is based on the Federal Communications Commission requirements as found in 47 CFR part 13 and 47 CFR part 80.

§ 15.835 Staff officers.

Staff officers, when carried, must be registered as specified in part 11 of this chapter.

§ 15.840 Able seamen.

(a) With certain exceptions, 46 U.S.C. 8702 applies to all vessels of at least 100 GRT. At least 65 percent of the deck crew of these vessels, excluding individuals serving as officers, must be able seamen. For vessels permitted to maintain a two-watch system, the percentage of able seamen may be reduced to 50 percent.

(b) Able seamen are rated as: unlimited, limited, special, offshore supply vessel (OSV), sail, and fishing industry, under the provisions of part 12 of this subchapter. 46 U.S.C. 7312 specifies the categories of able seamen (i.e., unlimited, limited, etc.) necessary to meet the requirements of 46 U.S.C. 8702.

(c) On vessels subject to STCW, the individual meeting the requirement of this section must also hold an STCW endorsement as ratings forming part of a navigational watch or able seafarer-deck (according to § 15.404(a) and (b) of this part), except as noted in § 15.105(g) of this part for vessels on domestic near-coastal voyages.

(d) It is the responsibility of the master or person in charge (PIC) to ensure that the able seamen in the service of the vessel meet the requirements of 46 U.S.C. 7312 and 8702.

§ 15.845 Lifeboatmen.

(a) The number of lifeboatmen required for a vessel is specified in part 199 of this chapter; however, on vessels not equipped with lifeboats, a lifeboatman may be replaced by a lifeboatman-limited.

(b) On vessels subject to STCW, the individual meeting the requirement of this section must also hold an STCW endorsement for proficiency in survival craft, except as noted in § 15.105(g) of this part for vessels on domestic near-coastal voyages.

§ 15.850 Lookouts.

(a) The requirements for the maintenance of a proper lookout are specified in Rule 5 of the International Regulations for Preventing Collisions at Sea, 1972 (33 U.S.C. 1602(c)), and Rule 5 of the Inland Navigational Rules Act of 1980 (33 CFR part 80). Lookout is a function to be performed by a member of a navigational watch.