

**(d) Radio direction finding apparatus unreasonable or unnecessary**

Except for nuclear ships, and except for ships of five thousand gross tons and upward which are subject to the Safety Convention, the Commission may exempt from the requirements, for radio direction finding apparatus, of this part and of the Safety Convention, any ship which falls within the descriptions set forth in paragraphs (1), (2), (3), and (4) of subsection (b) of this section, if it considers that the route or conditions of the voyage or other circumstances are such as to render such apparatus unreasonable or unnecessary.

(June 19, 1934, ch. 652, title III, §352, as added May 20, 1937, ch. 229, §10(b), 50 Stat. 192; amended Sept. 26, 1950, ch. 1049, §2(a)(2), 64 Stat. 1038; Aug. 13, 1954, ch. 729, §1(b), (c), 68 Stat. 705; Pub. L. 89-121, §3, Aug. 13, 1965, 79 Stat. 512; Pub. L. 97-31, §12(151), Aug. 6, 1981, 95 Stat. 167.)

## REFERENCES IN TEXT

Panama Canal Company, referred to in subsec. (a)(2), deemed to refer to Panama Canal Commission, see section 3602(b)(5) of Title 22, Foreign Relations and Inter-course.

## AMENDMENTS

1981—Subsec. (a)(2). Pub. L. 97-31 substituted "Maritime Administration of the Department of Transportation" for "United States Maritime Commission". For prior transfers of functions, see Transfer of Functions note set out below.

1965—Pub. L. 89-121, §3(a), added pars. (6) to (8) and struck out former par. (6) which made the provisions of this part inapplicable to a vessel navigating solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States, or to a vessel leaving or attempting to leave any harbor or port of the United States for a voyage solely on the Great Lakes, or on any bays, sounds, rivers, or protected waters within the jurisdiction of the United States.

Subsec. (b). Pub. L. 89-121, §3(b), excepted nuclear ships and substituted "or, alternatively, do not go more than two hundred nautical miles" for "or more than two hundred nautical miles".

Subsec. (d). Pub. L. 89-121, §3(c), added subsec. (d). 1954—Subsec. (a)(3). Act Aug. 13, 1954, §1(b), substituted "any Safety Convention in force between the United States and that country" for "the Safety Convention and" and inserted at end "or which ship is not subject to the radio provisions of any such Convention".

Subsec. (c). Act Aug. 13, 1954, §1(c), added subsec. (c). 1950—Subsec. (a)(2). Act Sept. 26, 1950, substituted "Panama Canal Company" for "Panama Railroad Company".

## EFFECTIVE DATE

Section effective May 20, 1937, unless deferred by the Commission, see section 16 of act May 20, 1937, set out as a note under section 351 of this title.

## TRANSFER OF FUNCTIONS

For transfer of functions of United States Maritime Commission, see Reorg. Plan No. 21 of 1950 and Reorg. Plan No. 7 of 1961, set out in the Appendix to Title 5, Government Organization and Employees.

**§ 353. Radio equipment and operators****(a) Two radio officers required**

Each cargo ship which in accordance with this part is equipped with a radiotelegraph station

and which is not equipped with a radiotelegraph auto alarm, and each passenger ship required by this part to be equipped with a radiotelegraph station, shall, for safety purposes, carry at least two radio officers.

**(b) One radio officer required**

A cargo ship which in accordance with this part is equipped with a radiotelegraph station, which is equipped with a radiotelegraph auto alarm, shall, for safety purposes, carry at least one radio officer who shall have had at least six months' previous service in the aggregate as a radio officer in a station on board a ship or ships of the United States.

**(c) Required watches**

Each ship of the United States which in accordance with this part is equipped with a radiotelegraph station shall, while being navigated in the open sea outside of a harbor or port, keep a continuous watch by means of radio officers whenever the station is not being used for authorized traffic: *Provided*, That, in lieu thereof, on a cargo ship equipped with a radiotelegraph auto alarm in proper operating condition, a watch of at least eight hours per day, in the aggregate, shall be maintained by means of a radio officer.

**(d) Hours of watch**

The Commission shall, when it finds it necessary for safety purposes, have authority to prescribe the particular hours of watch on a ship of the United States which in accordance with this part is equipped with a radiotelegraph station.

**(e) Operational status of auto alarms in open sea**

On all ships of the United States equipped with a radiotelegraph auto alarm, said apparatus shall be in operation at all times while the ship is being navigated in the open sea outside of a harbor or port when the radio officer is not on watch.

(June 19, 1934, ch. 652, title III, §353, as added May 20, 1937, ch. 229, §10(b), 50 Stat. 193; amended July 8, 1941, ch. 278, 55 Stat. 579; June 22, 1943, ch. 137, 57 Stat. 161; July 25, 1947, ch. 327, §2(a), 61 Stat. 451; Aug. 13, 1954, ch. 729, §1(d), 68 Stat. 705; Pub. L. 89-121, §4, Aug. 13, 1965, 79 Stat. 513.)

## AMENDMENTS

1965—Pub. L. 89-121, among other changes, substituted wherever appearing "radiotelegraph station" for "radiotelegraph installation", "radiotelegraph auto alarm" for "auto-alarm", and "radio officer" and "radio officers" for "qualified operator" and "qualified operators", required a continuous watch to be kept when the radiotelegraph station is not being used for authorized traffic, and inserted "while being navigated in the open sea" in two places.

1954—Act Aug. 13, 1954, amended section to make clear that it applies only to ships equipped with a radiotelegraph installation, not those fitted with a radiotelephone installation.

1943—Subsec. (b). Act June 22, 1943, substituted "the termination of such emergency or such earlier date as Congress by concurrent resolution may designate" for "June 30, 1943".

1941—Subsec. (b). Act July 8, 1941, inserted exception respecting national emergency.

## PARTIAL REPEAL EFFECTIVE JULY 1, 1948

Acts July 8, 1941, and June 22, 1943, which amended subsec. (b) of this section by adding the clause author-

izing suspension or modification of the service requirement during the emergency, were repealed, effective July 1, 1948, by act July 25, 1947, which provided that such acts should remain in full force and effect until such date.

#### EFFECTIVE DATE

Section effective May 20, 1937, unless deferred by the Commission, see section 16 of act May 20, 1937, set out as a note under section 351 of this title.

#### APPROVAL OF OPERATORS BY SECRETARY OF NAVY DURING WAR

Act Dec. 17, 1941, ch. 588, 55 Stat. 808, as amended June 28, 1943, ch. 174, 57 Stat. 244; June 13, 1945, ch. 190, 59 Stat. 259; 1946 Reorg. Plan No. 3, § 101, eff. July 16, 1946, 11 F.R. 7875, 60 Stat. 1097, prohibiting employment of radio operators who were disapproved by the Secretary of the Navy during World War II, was repealed by act July 25, 1947, ch. 327, § 1, 61 Stat. 449.

#### § 353a. Operators and watches on radiotelephone equipped ships

(a) Each cargo ship which in accordance with this part is equipped with a radiotelephone station shall, for safety purposes, carry at least one operator who may be the master, an officer, or a member of the crew.

(b) Each cargo ship of the United States which in accordance with this part is equipped with a radiotelephone station shall, while being navigated in the open sea outside of a harbor or port, maintain continuous watch whenever the station is not being used for authorized traffic.

(June 19, 1934, ch. 652, title III, § 354, as added Aug. 13, 1954, ch. 729, § 2(b), 68 Stat. 706; amended Pub. L. 89-121, § 5, Aug. 13, 1965, 79 Stat. 514.)

#### AMENDMENTS

1965—Pub. L. 89-121 substituted “radiotelephone station” for “radiotelephone installation” in two places, and “one operator who may be the master, an officer, or a member of the crew” for “one qualified operator who may be a member of the crew holding only a certificate for radio telephony”, inserted “in the open sea” before “outside of a harbor”, and required a continuous watch whenever the station is not being used for authorized traffic.

#### § 354. Technical requirements of equipment on radiotelegraph equipped ships

The radiotelegraph station and the radio direction finding apparatus required by section 351 of this title shall comply with the following requirements:

(a) The radiotelegraph station shall include a main installation and a reserve installation, electrically separate and electrically independent of each other: *Provided*, That, in installations on cargo ships of three hundred gross tons and upward but less than one thousand six hundred gross tons, and in installations on cargo ships of one thousand six hundred gross tons and upward installed prior to November 19, 1952, if the main transmitter complies with all the requirements for the reserve transmitter, the latter may be omitted.

(b) The radiotelegraph station shall be so located that no harmful interference from extraneous mechanical or other noise will be caused to the proper reception of radio signals, and shall be placed in the upper part of the ship in a position of the greatest possible safety and

as high as practicable above the deepest load waterline. The location of the radiotelegraph operating room or rooms shall be approved by the Commandant of the Coast Guard. The radiotelegraph installation shall be installed in such a position that it will be protected against the harmful effects of water or extremes of temperature, and shall be readily accessible both for immediate use in case of distress and for repair.

(c) The radiotelegraph operating room shall be of sufficient size and of adequate ventilation to enable the main and reserve radiotelegraph installations to be operated efficiently, and shall not be used for any purpose which will interfere with the operation of the radiotelegraph station. The sleeping accommodation of at least one radio officer shall be situated as near as practicable to the radiotelegraph operating room. In ships the keels of which are laid on or after May 26, 1965, this sleeping accommodation shall not be within the radiotelegraph operating room.

(d) The main and reserve installations shall be capable of transmitting and receiving on the frequencies, and using the classes of emission, designated by the Commission pursuant to law for the purposes of distress and safety of navigation.

(e) The main and reserve installations shall, when connected to the main antenna, have a minimum normal range of two hundred nautical miles and one hundred nautical miles, respectively; that is, they must be capable of transmitting and receiving clearly perceptible signals from ship to ship by day and under normal conditions and circumstances over the specified ranges.

(f) Sufficient electrical energy shall be available at all times to operate the main installation over the normal range required by subsection (e) of this section as well as for the purpose of charging any batteries forming part of the radiotelegraph station.

(g) The reserve installation shall include a source of electrical energy independent of the propelling power of the ship and of any other electrical system and shall be capable of being put into operation rapidly and of working for at least six continuous hours. The reserve source of energy and its switchboard shall be as high as practicable in the ship and readily accessible to the radio officer.

(h) There shall be provided between the bridge of the ship and the radiotelegraph operating room, and between the bridge and the location of the radio direction finding apparatus, when such apparatus is not located on the bridge, an efficient two-way system for calling and voice communication which shall be independent of any other communication system in the ship.

(i) The radio direction finding apparatus shall be efficient and capable of receiving signals with the minimum of receiver noise and of taking bearings from which the true bearing and direction may be determined. It shall be capable of receiving signals on the radiotelegraph frequencies assigned by the radio regulations annexed to the International Telecommunication Convention in force for the