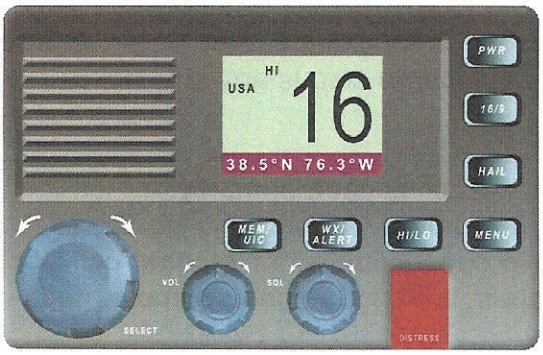
47 CFR 80 – COMMUNICATIONS ACT



§ 80.5 Definitions.

Fixed Installed Radios = Station:

Station. One or more transmitters or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on radiocommunication services.

1. Ship station. A mobile station in the maritime mobile service located on-board a vessel which is not permanently moored, other than a survival craft station.

> *a. Bridge-to-bridge station.* A radio station located on a ship's navigational bridge or main control station operating on a specified frequency which is used only for navigational communications, in the 156–162 MHz band.
>
> *b. Ship earth station.* A mobile earth station in the maritime mobile-satellite service located on board ship.

2. *Coast station.* A land station in the maritime mobile service.

> *a. Private coast station.* A coast station, not open to public correspondence, which serves the operational, maritime control and business needs of ships.
>
> *b. Public coast station.* A coast station that offers radio communication common carrier services to ship radio stations.
>
> *c. Maritime mobile repeater station.* A land station at a fixed location established for the automatic retransmission of signals to extend the range of communication of ship and coast stations.

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Categories of ships:

(1) When referenced in Part II of Title III of the Communications Act or the radio provisions of the Safety Convention, a ship is a *passenger ship* if it carries or is licensed or certificated to carry more than twelve passengers. A *cargo ship* is any ship not a passenger ship.

(2) A *commercial transport vessel* is any ship which is used primarily in commerce (i) for transporting persons or goods to or from any harbor(s) or port(s) or between places within a harbor or port area, or (ii) in connection with the construction, change in construction, servicing, maintenance, repair, loading, unloading, movement, piloting, or salvaging of any other ship or vessel.

(3) The term *passenger carrying vessel,* when used in reference to Part III, Title III of the Communications Act of the Great Lakes Radio Agreement, means any ship transporting more than six passengers for hire.

(4) *Power-driven vessel.* Any ship propelled by machinery.

(5) *Towing vessel.* Any commercial ship engaged in towing another ship astern, alongside or by pushing ahead.

(6) *Compulsory ship.* Any ship which is required to be equipped with radiotelecommunication equipment in order to comply with the radio or radio-navigation provisions of a treaty or statute to which the vessel is subject.

(7) *Voluntary ship.* Any ship which is not required by treaty or statute to be equipped with radiotelecommunication equipment.

Portable Radios:

Associated ship unit. A portable VHF transmitter for use in the vicinity of the ship station with which it is associated.

Survival craft station. A mobile station in the maritime or aeronautical mobile service intended solely for survival purposes and located on any lifeboat, liferaft or other survival equipment.

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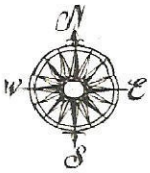

Communications Priority:

1. Distress traffic. Distress traffic consists of all messages relating to the immediate assistance required by a person, ship, aircraft, or other vehicle in distress, including search and rescue communications and on-scene communications.

a. Distress signal. The distress signal is a digital selective call using an internationally recognized distress call format in the bands used for terrestrial communication or an internationally recognized distress message format, in which case it is relayed through space stations, which indicates that a person, ship, aircraft, or other vehicle is threatened by grave and imminent danger and requests immediate assistance.

(1) In radiotelephony, the international distress signal consists of the enunciation of the word "Mayday", pronounced as the French expression "m'aider". In case of distress, transmission of this particular signal is intended to ensure recognition of a radiotelephone distress call by stations of any nationality.

(2) For GMDSS, distress alerts result in an audible alarm and visual indication that a ship or person is threatened by grave and imminent danger and requests immediate assistance. These automatic systems contain sufficient information in the distress alert message to identify the vessel, prepare to assist and begin a search. However, except when transmitted via satellite EPIRB, the distress alert is just the initial call for help. Communication between the vessel or person in distress and the Rescue Coordination Center (RCC) or ship assisting should always follow.

2. Urgency signal.

(1) The urgency signal is the international radiotelegraph or radiotelephone signal which indicates that the calling station has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or of some person on board or within sight.

(2) In radiotelegraphy, the international urgency signal consists of three repetitions of the group "XXX," sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international urgency signal consists of three oral repetitions of the group of words "PAN PAN", each word of the group pronounced as the French word "PANNE" and sent before the call.

(4) For GMDSS, urgency calls result in an audible alarm and visual indication that the station sending this signal has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or of some person on board or within sight.

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3. Safety communication. The transmission or reception of distress, alarm, urgency, or safety signals, or any communication preceded by one of these signals, or any form of radiocommunication which, if delayed in transmission or reception, may adversely affect the safety of life or property.

b. Safety signal.

(1) The safety signal is the international radiotelegraph or radiotelephone signal which indicates that the station sending this signal is preparing to transmit a message concerning the safety of navigation or giving important meteorological warnings.

(2) In radiotelegraphy, the international safety signals consists of three repetitions of the group "TTT," sent before the call, with the letters of each group and the successive groups clearly separated from each other.

(3) In radiotelephony, the international safety signal consists of three oral repetitions of "Security," pronounced as the French word "Securite," sent before the call.

(4) For GMDSS, safety calls result in an audible alarm and visual indication that the station sending this signal has a very urgent message to transmit concerning the safety of navigation or giving important meteorological warnings

4. Routine Traffic – All other communications.

Emergency Communications:

Global maritime distress and safety system (GMDSS). An International Maritime Organization (IMO) worldwide coordinated maritime distress system designed to provide the rapid transfer of distress messages from vessels in distress to units best suited for giving or coordinating assistance. The system includes standardized equipment and operational procedures, unique identifers for each station, and the integrated use of frequency bands and radio systems to ensure the transmission and reception of distress and safety calls and messages at short, medium and long ranges.

Emergency position indicating radiobeacon (EPIRB) station. A station in the maritime mobile service the emissions of which are intended to facilitate search and rescue operations.

Digital Selective Calling (DSC):

Digital selective calling (DSC). A synchronous system developed by the International Telecommunication Union Radiocommunication (ITU–R) Sector, used to establish contact with a station or group of stations automatically by means of radio.

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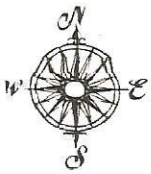

Selective calling. A means of calling in which signals are transmitted in accordance with a prearranged code to operate a particular automatic attention device at the station whose attention is sought.

Maritime mobile service identities (MMSI). An international system for the identification of radio stations in the maritime mobile service. The system is comprised of a series of nine digits which are transmitted over the radio path to uniquely identify ship stations, ship earth stations, coast stations, coast earth stations and groups of stations.

Miscellaneous:

Ship radio station license. An authorization issued by the Commission to operate a radio station onboard a vessel.

Vessel traffic service (VTS). A U.S. Coast Guard traffic control service for ships in designated water areas to prevent collisions, groundings and environmental harm.

Watch. The act of listening on a designated frequency.

Commercial communications. Communications between coast stations and ship stations aboard commercial transport vessels, or between ship stations aboard commercial transport vessels, which relate directly to the purposes for which the ship is used including the piloting of vessels, movements of vessels, obtaining vessel supplies, and scheduling of repairs.

Noncommercial communications. Communication between coast stations and ship stations other than commercial transport ships, or between ship stations aboard other than commercial transport ships which pertain to the needs of the ship.

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Subpart S - Compulsory Radiotelephone Installations for Small Passenger Boats

§ 80.901 Applicability / § 80.905 Vessel radio equipment

The provisions of Part III of Title III of the Communication Act require United States vessels which transport more than six passengers for hire while such vessels are being navigated on any tidewater within the jurisdiction of the United States adjacent or contiguous to the open sea, or in the open sea to carry a radiotelephone installation complying with this subpart. The provisions of Part III do not apply to vessels which are equipped with a radio installation for compliance with Part II of Title III of the Act, or for compliance with the Safety Convention, or to vessels navigating on the Great Lakes.

§ 80.901 Applicability

Small Passenger Vessels (<100GRT & > 6 passengers)	VHF Channels: 16 / 6 / Local Marine Operator	406 Mhz EPIRB Category 1	MF Radio Freqs (Khz) 2182, 2638, 2670, 1710-2850
Oceans: <=3nm	X		
Oceans: >3nm - 20nm	X	X	
Oceans: >20nm & <100nm	X	X	X
Oceans: >=100nm	See CFR 47 Part 80 for details		
Exempt: Less than 50GRT operating in Oceans, Bays, Sounds and Tidewater areas less that 300m (1000 ft) from land	• USCG recommends: ALL commercial vessels carry a Marine VHF radio • Voluntarily equipped: No FCC Inspection, No Station License, No Operator License		
Exempt: Inland Lakes and waterways (other than Great Lakes)			
Other Voluntary Vessels: Commercial & Recreational (Domestic Voyage)			

- **Communication Act required for United States vessels which transport more than six passengers for hire while such vessels are being navigated on any tidewater**

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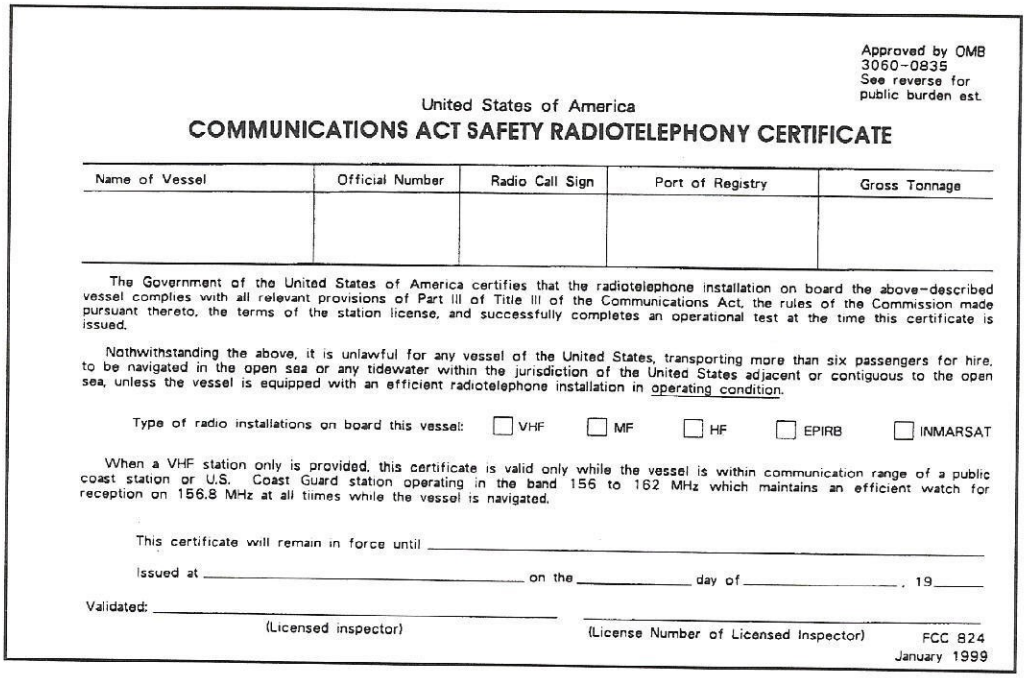
§ 80.903 Inspection radiotelephone installation.



Approved by OMB
3060-0835
See reverse for
public burden est.

United States of America

COMMUNICATIONS ACT SAFETY RADIOTELEPHONY CERTIFICATE

Name of Vessel	Official Number	Radio Call Sign	Port of Registry	Gross Tonnage

The Government of the United States of America certifies that the radiotelephone installation on board the above-described vessel complies with all relevant provisions of Part III of Title III of the Communications Act, the rules of the Commission made pursuant thereto, the terms of the station license, and successfully completes an operational test at the time this certificate is issued.

Nothwithstanding the above, it is unlawful for any vessel of the United States, transporting more than six passengers for hire, to be navigated in the open sea or any tidewater within the jurisdiction of the United States adjacent or contiguous to the open sea, unless the vessel is equipped with an efficient radiotelephone installation in operating condition.

Type of radio installations on board this vessel: ☐ VHF ☐ MF ☐ HF ☐ EPIRB ☐ INMARSAT

When a VHF station only is provided, this certificate is valid only while the vessel is within communication range of a public coast station or U.S. Coast Guard station operating in the band 156 to 162 MHz which maintains an efficient watch for reception on 156.8 MHz at all times while the vessel is navigated.

This certificate will remain in force until _____

Issued at _____ on the _____ day of _____, 19____

Validated: _____ _____
(Licensed inspector) (License Number of Licensed Inspector)

FCC 824
January 1999

Every vessel subject to Part III of Title III of the Communications Act must have a detailed inspection of the radio installation by an FCC-licensed technician in accordance with §80.59 once every five years. The FCC-licensed technician must use the latest FCC Information Bulletin, *How to Conduct an Inspection of a Small Passenger Vessel.* If the ship passes the inspection, the technician will issue a Communications Act Safety Radiotelephony Certificate. Communications Act Radiotelephony Certificates may be obtained from the Commission's National Call Center—(888) 225–5322—or from its forms contractor.

§ 80.907 Principal operating position.

The principal operating position of the radiotelephone installation on vessels over 100 gross tons must be in the room from which the vessel is normally steered while at sea. If the station can be operated from any location other than the principal operating position, a positive means must be provided at the principal operating position to take full control of the station.

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§ 80.913/143 Required frequencies

Very High Frequency: One VHF radiotelephone transmitter / receiver:

- **The distress, safety & calling freq: 156.800MHz / (Ch 16)**
- **The primary intership safety freq: 156.300 MHz/ (Ch 06)**
- **One or more working frequencies**
- **All other frequencies necessary for its service**

Medium Frequency: For safety communications

- **The distress and safety freq: 2182 khz**

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§ 80.913 Radiotelephone receivers.

(a) If a medium frequency radiotelephone installation is provided, the receiver must be capable of effective reception of J3E emissions, be connected to the antenna system specified by §80.923, and be preset to, and capable of accurate and convenient selection of, the frequencies 2182 kHz, 2638 kHz, and the receiving frequency(s) of public coast stations serving the area in which the vessel is navigated.

(c) If a very high frequency radiotelephone installation is provided, the receiver used for maintaining the watch required by §80.303 must be capable of effective reception of G3E emission, be connected to the antenna system specified by §80.923 and be preset to, and capable of selection of, the frequencies 156.300 MHz, 156.800 MHz, and the receiving frequency(s) of public coast stations serving the area in which the vessel is navigated.

(d) One or more loudspeakers must be provided to permit reception on 2182 kHz or 156.800 MHz at the principal operating position and at any other place where listening is performed.

Transmitter Power

Very High Frequency:

- 25 watts (high) - Shipboard transmitters using F3E emission (FM voice) may not exceed
- 1 watt (low) - Transmitters must have the capability of reducing carrier power

Medium Frequency:

- At least 60 watts for J3E emissions

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§ 80.909 Radiotelephone transmitter.

(a) The medium frequency transmitter must have a peak envelope output power of at least 60 watts for J3E emission on 2182 kHz and at least one ship-to-shore working frequency within the band 1605 to 2850 kHz enabling communication with a public coast station if the region in which the vessel is navigated is served by a public coast station operating in this band.

§ 80.911 VHF transmitter.

(a) The transmitter must be capable of transmission of G3E emission on 156.800 MHz, 156.300 MHz, and on the ship-to-shore working frequencies necessary to communicate with public coast stations serving the area in which the vessel is navigated.

(b) The transmitter must be adjusted so that the transmission of speech normally produces peak modulation within the limits 75 percent and 100 percent.

(c) The transmitter must be certificated to transmit between 20 watts and 25 watts, on each of the frequencies 156.300 MHz, 156.800 MHz and on ship-to-shore public correspondence channels, into 50 ohms effective resistance when operated with a primary supply voltage of 13.6 volts DC.

§ 80.915 Main power supply.

(a) There must be readily available for use under normal load conditions a main power supply sufficient to simultaneously energize the radiotelephone transmitter at its required antenna power, and the required receiver. Under this load condition the potential of the main power supply at the power input terminals of the radiotelephone installation must not deviate from its rated potential by more than 10 percent on vessels completed on or after March 1, 1957, nor by more than 15 percent on vessels completed before that date.

(b) When the main power supply consists of batteries, they must be installed as high above the bilge as practicable, secured against shifting with motion of the vessel, and accessible with not less than 26 cm (10 in.) head room.

(c) Means must be provided for adequately charging any batteries used as a main power supply. There must be a device which gives a continuous indication of the rate and polarity of the charging current during charging.

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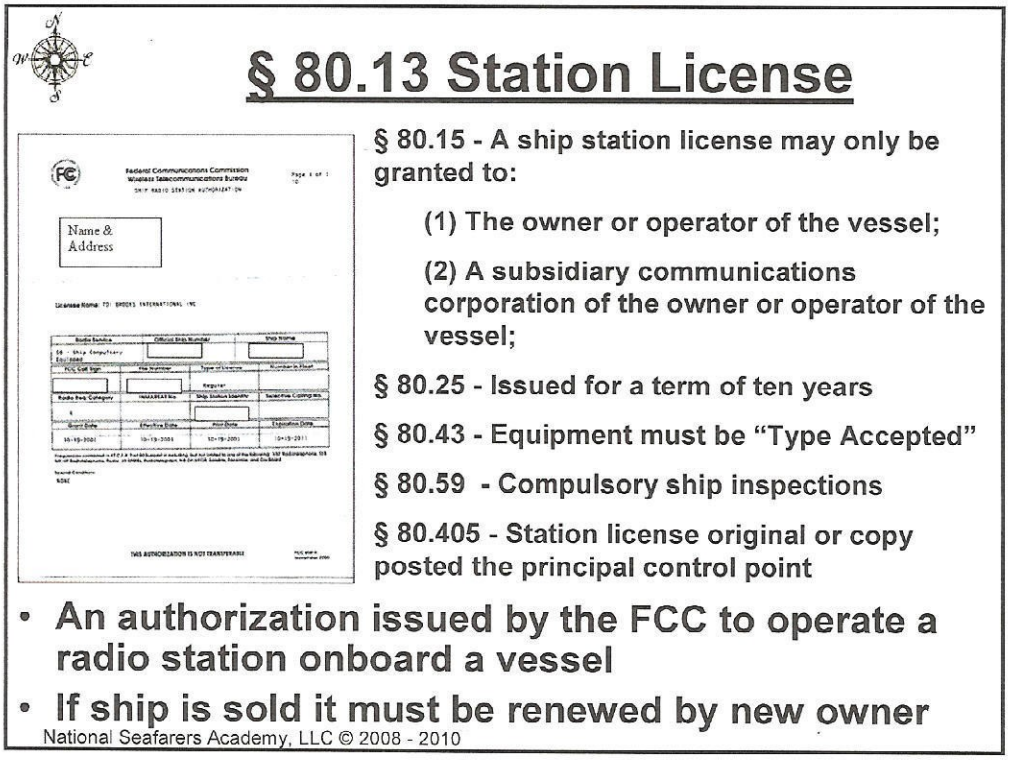
Subpart B—Applications and Licenses

§ 80.13 Station license required.



(a) Except as noted in paragraph (c) of this section, stations in the maritime service must be licensed by the FCC either individually or by fleet.

(c) A ship station is licensed by rule and does not need an individual license issued by the FCC if the ship station is not subject to the radio equipment carriage requirements of any statute, treaty or agreement to which the United States is signatory, the ship station does not travel to foreign ports, and the ship station does not make international communications. A ship station licensed by rule is authorized to transmit radio signals using a marine radio operating in the 156–162 MHz band, any type of AIS, any type of EPIRB, and any type of radar installation. All other transmissions must be authorized under a ship station license. Even though an individual license is not required, a ship station licensed by rule must be operated in accordance with all applicable operating requirements, procedures, and technical specifications found in this part.

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§ 80.15 Eligibility for station license.

(d) *Ship stations.* A ship station license may only be granted to:

(1) The owner or operator of the vessel;

(2) A subsidiary communications corporation of the owner or operator of the vessel;

(3) A State or local government subdivision; or

§ 80.25 License term.

(a) Licenses for ship stations in the maritime services will normally be issued for a term of ten years from the date of original issuance, or renewal.

§ 80.31 Cancellation of license.

Wireless telecommunications carriers subject to this part must comply with the discontinuance of service provisions of part 63 of this chapter. (Ship sold - must return license to FCC)

§ 80.43 Equipment acceptable for licensing.

Transmitters listed in §80.203 must be authorized for a particular use by the Commission based upon technical requirements contained in subparts E and F of this part, except for transmitters that are used on vessels in the Maritime Security Fleet and are deemed to satisfy all Commission equipment certification requirements pursuant to section 53108(c) of Title 46 of the United States Code. (Type accepted)

§ 80.59 Compulsory ship inspections.

(a) Inspection of ships subject to the Communications Act or the Safety Convention.

(1) The FCC will not normally conduct the required inspections of ships subject to the inspection requirements of the Communications Act or the Safety Convention.

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Subpart D – Operator Requirements

Ship Station Operator Requirements

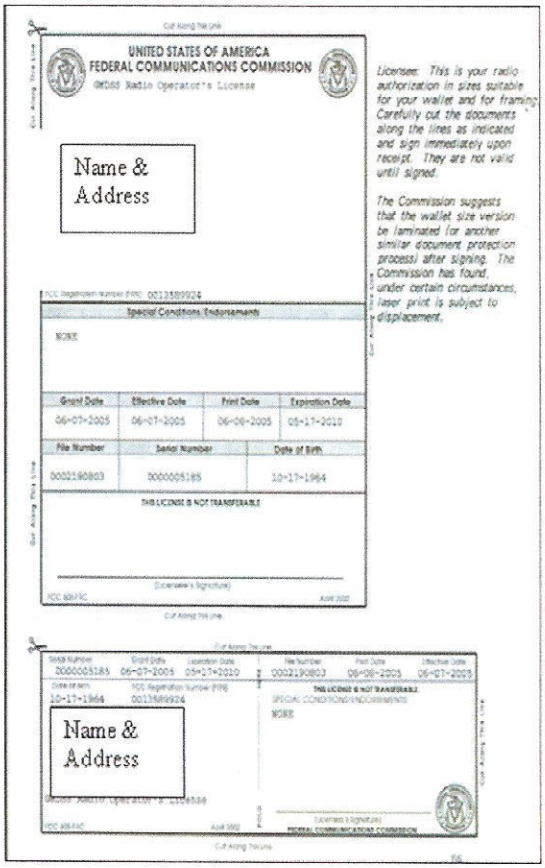
§ 80.156 Control by operator.

The operator on board ships required to have a holder of a commercial operator license or permit on board may, if authorized by the station licensee or master, permit an unlicensed person to modulate the transmitting apparatus for all modes of communication except Morse code radiotelegraphy.

§ 80.159 Operator requirements of Title III of the Communications Act and the Safety Convention.

(e) Each ship transporting more than six passengers for hire equipped with a radiotelephone station in accordance with Part III of Title III of the Communications Act must carry a radio operator who meets the following requirements:

(1) Where the station power does not exceed 250 watts carrier power or 1500 watts peak envelope power, the radio operator must hold a marine radio operator permit or higher class license.



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§ 80.169 Operators required to adjust transmitters or radar.

(a) All adjustments of radio transmitters in any radiotelephone station or coincident with the installation, servicing, or maintenance of such equipment which may affect the proper operation of the station, must be performed by or under the immediate supervision and responsibility of a person holding a first or second class radiotelegraph operator's certificate or a general radiotelephone operator license.

§ 80.177 When operator license is not required.

(a) No radio operator authorization is required to operate:

(1) A shore radar, a shore radiolocation, maritime support or shore radionavigation station;

(2) A survival craft station or an emergency position indicating radio beacon;

(3) A ship radar station if:

(i) The radar frequency is determined by a nontunable, pulse type magnetron or other fixed tuned device, and

(ii) The radar is capable of being operated exclusively by external controls;

(4) An on board station; or

(5) A ship station operating in the VHF band on board a ship voluntarily equipped with radio and sailing on a domestic voyage.

(b) No radio operator license is required to install a VHF transmitter in a ship station if the installation is made by, or under the supervision of, the licensee of the ship station and if modifications to the transmitter other than front panel controls are not made.

(d) No radio operator license is required to install a radar station on a voluntarily equipped ship when a manual is included with the equipment that provides step-by-step instructions for the installation, calibration, and operation of the radar. The installation must be made by, or under the supervision of, the licensee of that ship station and no modifications or adjustments other than to the front panel controls are to be made to the equipment.

Subpart E—General Technical Standards

§ 80.215 Transmitter power.

(a) Transmitter power shown on the radio station authorization is the maximum power the licensee is authorized to use.

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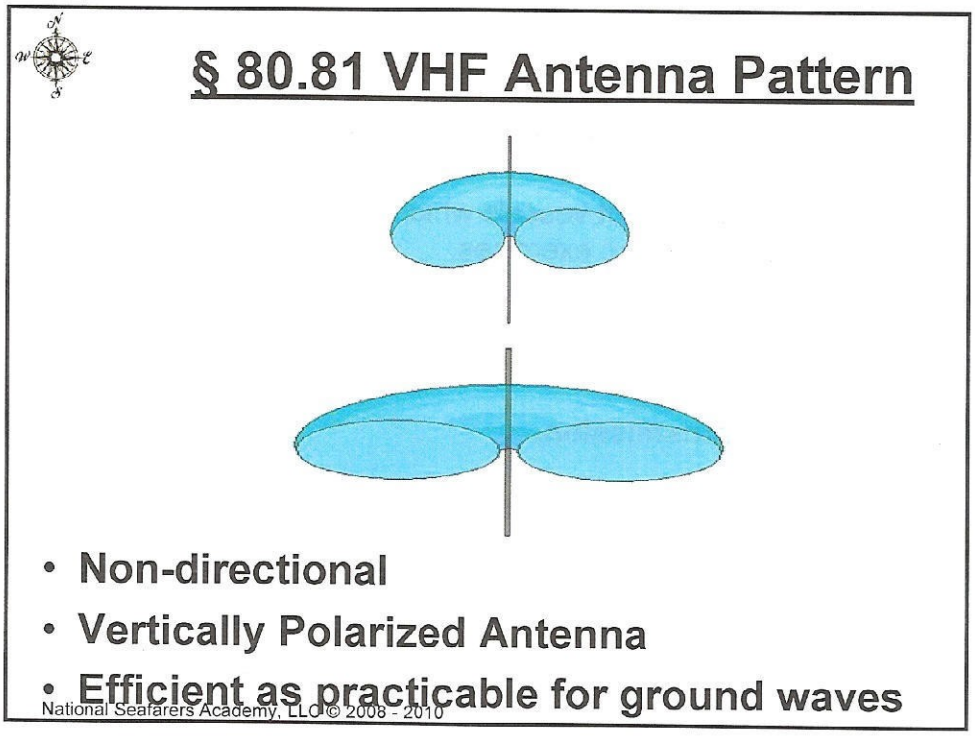
Subpart C—Operating Requirements & Procedures

§ 80.81 Antenna requirements for ship stations.

All telephony emissions of a ship station or a marine utility station on board ship within the frequency band 30–200 MHz must be vertically polarized.



§ 80.88 Secrecy of communication.

The station licensee, the master of the ship, the responsible radio operators and any person who may have knowledge of the radio communications transmitted or received by a fixed, land, or mobile station subject to this part, or of any radio communication service of such station, must observe the secrecy requirements of the Communications Act and the Radio Regulations. See sections 501, 502, and 705 of the Communications Act and Article 23 of the Radio Regulations.

§ 80.89 Unauthorized transmissions.

Stations must not:

(a) Engage in superfluous radio communications.

(b) Use telephony on 243 MHz.

(c) Use selective calling on 2182 kHz or 156.800 MHz.

(d) When using telephony, transmit signals or communications not addressed to a particular station or stations. This provision does not apply to the transmission of distress, alarm, urgency, or safety signals or messages, or to test transmissions.

(e) Transmit while on board vessels located on land unless authorized under a public coast station license. Vessels in the following situations are not considered to be on land for the purposes of this paragraph:

(1) Vessels which are aground due to a distress situation;

(2) Vessels in drydock undergoing repairs; and

(3) State or local government vessels which are involved in search and rescue operations including related training exercises.

(f) Transmit on frequencies or frequency bands not authorized on the current station license.

§ 80.90 Suspension of transmission.

Transmission must be suspended immediately upon detection of a transmitter malfunction and must remain suspended until the malfunction is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission must be suspended as soon as the emergency is terminated.

§ 80.91 Order of priority of communications.

(a) All stations in the maritime mobile service and the maritime mobile-satellite service shall be capable of offering four levels of priority in the following order:

(1) Distress calls, distress messages, and distress traffic.

(2) Urgency communications.

(3) Safety communications.

(4) Other communications.

§ 80.92 Prevention of interference.

(a) The station operator must determine that the frequency is not in use by monitoring the frequency before transmitting, except for transmission of signals of distress.

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§ 80.94 Control by coast or Government station.

When communicating with a coast station or any Government station in the maritime mobile service, ship stations must comply with the instruction given by the coast station or Government station relative to the order and time of transmission, the choice of frequency, the suspension of communication and the permissible type of message traffic that may be transmitted. This provision does not apply in the event of distress.

§ 80.95 Message charges.

(a) Except as specified in §20.15(c) of this chapter with respect to commercial mobile radio service providers, charges must not be made for service of:

(1) Any public coast station unless tariffs for the service are on file with the Commission;

(2) Any station other than a public coast station or an Alaska—public fixed station, except cooperatively shared stations covered by §80.503;

(3) Distress calls and related traffic; and

(4) Navigation hazard warnings preceded by the SAFETY signal.

(b) The licensee of each ship station is responsible for the payment of all charges accruing to any other station(s) or facilities for the handling or forwarding of messages or communications transmitted by that station.

§ 80.96 Maintenance tests.

Stations are authorized to engage in test transmissions necessary for maintenance of the station. Test transmissions must conform to appropriate test operating procedures.

§ 80.101 Radiotelephone testing procedures.

This section is applicable to all stations using telephony except where otherwise specified.

(a) Station licensees must not cause harmful interference. When radiation is necessary or unavoidable, the testing procedure described below must be followed:

(1) The operator must not interfere with transmissions in progress.

(2) The testing station's call sign, followed by the word "test", must be announced on the radio-channel being used for the test.

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(3) If any station responds "wait", the test must be suspended for a minimum of 30 seconds, then repeat the call sign followed by the word "test" and listen again for a response. To continue the test, the operator must use counts or phrases which do not conflict with normal operating signals, and must end with the station's call sign. Test signals must not exceed ten seconds, and must not be repeated until at least one minute has elapsed. On the frequency 2182 kHz or 156.800 MHz, the time between tests must be a minimum of five minutes.

(b) Testing of transmitters must be confined to single frequency channels on working frequencies.

(c) Survival craft transmitter tests must not be made within actuating range of automatic alarm receivers.

§ 80.102 Radiotelephone station identification.

This section applies to all stations using telephony which are subject to this part.

(a) Except as provided in paragraphs (d) and (e) of this section, stations must give the call sign in English. Identification must be made:

(1) At the beginning and end of each communication with any other station.

(2) At 15 minute intervals when transmission is sustained for more than 15 minutes. When public correspondence is being exchanged with a ship or aircraft station, the identification may be deferred until the completion of the communications.

(b) Private coast stations located at drawbridges and transmitting on the navigation frequency 156.650 MHz may identify by use of the name of the bridge in lieu of the call sign.

(c) Ship stations transmitting on any authorized VHF bridge-to-bridge channel may be identified by the name of the ship in lieu of the call sign.

(d) Ship stations operating in a vessel traffic service system or on a waterway under the control of a U.S. Government agency or a foreign authoriy, when communicating with such an agency or authority may be identified by the name of the ship in lieu of the call sign, or as directed by the agency or foreign authority.

§ 80.103 Digital selective calling (DSC) operating procedures.

(a) Operating procedures for the use of DSC equipment in the maritime mobile service are as contained in ITU–R M.541–9, "Operational Procedures for the Use of Digital Selective-Calling Equipment in the Maritime Mobile Service," with Annexes 1 through 5, 2004, and subpart W of this part.

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(b) When using DSC techniques, coast stations and ship stations must use maritime mobile service identities (MMSI) assigned by the Commission or its designees.

(c) DSC acknowledgment of DSC distress and safety calls must be made by designated coast stations and such acknowledgment must be in accordance with procedures contained in ITU–R M.541–9, "Operational Procedures for the Use of Digital Selective-Calling Equipment in the Maritime Mobile Service," with Annexes 1 through 5, 2004. Nondesignated public and private coast stations must follow the guidance provided for ship stations in ITU–R M.541–9, "Operational Procedures for the Use of Digital Selective-Calling Equipment in the Maritime Mobile Service," with Annexes 1 through 5, 2004, with respect to DSC "Acknowledgment of distress calls" and "Distress relays." (*See* subpart W of this part.)

(d) Group calls to vessels under the common control of a single entity are authorized. A group call identity may be created from an MMSI ending in a zero, assigned to this single entity, by deleting the trailing zero and adding a leading zero to the identity.

Operating Procedures—Land Stations

§ 80.105 General obligations of coast stations.

Each coast station or marine-utility station must acknowledge and receive all calls directed to it by ship or aircraft stations. Such stations are permitted to transmit safety communication to any ship or aircraft station. VHF (156–162 MHz) and AMTS (216–220 MHz) public coast stations may provide fixed or hybrid services on a co-primary basis with mobile operations.

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Operating Procedures—Ship Stations

§ 80.114 Authority of the master.

(a) The service of each ship station must at all times be under the ultimate control of the master, who must require that each operator or such station comply with the Radio Regulations in force and that the ship station is used in accordance with those regulations.

(b) These rules are waived when the vessel is under the control of the U.S. Government.

§ 80.115 Operational conditions for use of associated ship units.

(a) Associated ship units may be operated under a ship station authorization. Use of an associated ship unit is restricted as follows;

(1) It must only be operated on the safety and calling frequency 156.800 MHz or on commercial or noncommercial VHF intership frequencies appropriate to the class of ship station with which it is associated.

(2) Except for safety purposes, it must only be used to communicate with the ship station with which it is associated or with associated ship units of the same ship station. Such associated ship units may not be used from shore.

(3) It must be equipped to transmit on the frequency 156.800 MHz and at least one appropriate intership frequency.

(4) Calling must occur on the frequency 156.800 MHz unless calling and working on an intership frequency has been prearranged.

(5) Power is limited to one watt.

(6) The station must be identified by the call sign of the ship station with which it is associated and an appropriate unit designator.

(b) State or local government vehicles used to tow vessels involved in search and rescue operations are authorized to operate on maritime mobile frequencies as associated ship units. Such operations must be in accordance with paragraph (a) of this section, except that the associated ship unit: May be operated from shore; may use Distress, Safety and Calling, Intership Safety, Liaison, U.S. Coast Guard, or Maritime Control VHF intership frequencies; and may have a transmitter power of 25 watts.

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§ 80.116 Radiotelephone operating procedures for ship stations.

(a) *Calling coast stations.*

(1) Use by ship stations of the frequency 2182 kHz for calling coast stations and for replying to calls from coast stations is authorized. However, such calls and replies should be on the appropriate ship-shore working frequency.

(2) Use by ship stations and marine utility stations of the frequency 156.800 MHz for calling coast stations and marine utility stations on shore, and for replying to calls from such stations, is authorized. However, such calls and replies should be made on the appropriate ship-shore working frequency.

(b) *Calling ship stations.*

(1) Except when other operating procedure is used to expedite safety communication, ship stations, before transmitting on the intership working frequencies 2003, 2142, 2638, 2738, or 2830 kHz, must first establish communications with other ship stations by call and reply on 2182 kHz. Calls may be initiated on an intership working frequency when it is known that the called vessel maintains a simultaneous watch on the working frequency and on 2182 kHz.

(2) Except when other operating procedures are used to expedite safety communications, the frequency 156.800 MHz must be used for call and reply by ship stations and marine utility stations before establishing communication on one of the intership working frequencies. Calls may be initiated on an intership working frequency when it is known that the called vessel maintains a simultaneous watch on the working frequency and on 156.800 MHz.

(c) *Change to working frequency.* After establishing communication with another station by call and reply on 2182 kHz or 156.800 MHz stations on board ship must change to an authorized working frequency for the transmission of messages.

(d) *Limitations on calling.* Calling a particular station must not continue for more than 30 seconds in each instance. If the called station does not reply, the station must not again be called until after an interval of 2 minutes. When a called station called does not reply to a call sent three times at intervals of 2 minutes, the calling must cease and must not be renewed until after an interval of 15 minutes; however, if there is no reason to believe that harmful interference will be caused to other communications in progress, the call sent three times at intervals of 2 minutes may be repeated after a pause of not less than 3 minutes. In event of an emergency involving safety, the provisions of this paragraph do not apply.

(e) *Limitations on working.* Any one exchange of communications between any two ship stations on 2003, 2142, 2638, 2738, or 2830 kHz or between a ship station and a private coast station on 2738 or 2830 kHz must not exceed 3 minutes after the stations

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have established contact. Subsequent to such exchange of communications, the same two stations must not again use 2003, 2142, 2638, 2738, or 2830 kHz for communication with each other until 10 minutes have elapsed.

(f) *Transmission limitation on 2182 kHz and 156.800 MHz.* To facilitate the reception of distress calls, all transmissions on 2182 kHz and 156.800 MHz (channel 16) must be minimized and transmissions on 156.800 MHz must not exceed 1 minute.

(g) *Limitations on commercial communication.* On frequencies in the band 156–162 MHz, the exchange of commercial communication must be limited to the minimum practicable transmission time. In the conduct of ship-shore communication other than distress, stations on board ship must comply with instructions given by the private coast station or marine utility station on shore with which they are communicating.

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Special Procedures—Ship Stations

§ 80.141 General provisions for ship stations.

(a) *Points of communication.* Ship stations and marine utility stations on board ships are authorized to communicate with any station in the maritime mobile service.

(b) *Service requirements for all ship stations.*

(1) Each ship station must receive and acknowledge all communications which are addressed to the ship or to any person on board.

(2) Every ship, on meeting with any direct danger to the navigation of other ships such as ice, a derelict vessel, a tropical storm, subfreezing air temperatures associated with gale force winds causing severe icing on superstructures, or winds of force 10 or above on the Beaufort scale for which no storm warning has been received, must transmit related information to ships in the vicinity and to the authorities on land unless such action has already been taken by another station. All such radio messages must be preceded by the safety signal.

Shipboard General Purpose Watches

§ 80.143 Required frequencies for radiotelephony.

(a) Except for compulsory vessels, each ship radiotelephone station licensed to operate in the band 1605–3500 kHz must be able to receive and transmit J3E emission on the frequency 2182 kHz. Ship stations are additionally authorized to receive and transmit H3E emission for communications with foreign coast stations and with vessels of foreign registry. If the station is used for other than safety communications, it must be capable also of receiving and transmitting the J3E emission on at least two other frequencies in that band. However, ship stations which operate exclusively on the Mississippi River and its connecting waterways, and on high frequency bands above 3500 kHz, need be equipped with 2182 kHz and one other frequency within the band 1605–3500 kHz.

(b) Except as provided in paragraph (c) of this section, at least one VHF radiotelephone transmitter/receiver must be able to transmit and receive on the following frequencies:

(1) The distress, safety and calling frequency 156.800 MHz; (Ch 16)
(2) The primary intership safety frequency 156.300 MHz; (Ch 06)
(3) One or more working frequencies; and
(4) All other frequencies necessary for its service.

(c) Where a ship ordinarily has no requirement for VHF communications, handheld VHF equipment may be used solely to comply with the bridge-to-bridge navigational communication requirements contained in subpart U of this part.

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§ 80.147 Watch on 2182 kHz.

Ship stations must maintain a watch on 2182 kHz as prescribed by §80.304.

§ 80.148 Watch on 156.8 MHz (Channel 16).

Each compulsory vessel, while underway, must maintain a watch for radiotelephone distress calls on 156.800 MHz whenever such station is not being used for exchanging communications. For GMDSS ships, 156.525 MHz is the calling frequency for distress, safety, and general communications using digital selective calling and the watch on 156.800 MHz is provided so that ships not fitted with DSC will be able to call GMDSS ships, thus providing a link between GMDSS and non-GMDSS compliant ships. The watch on 156.800 MHz is not required:

(a) Where a ship station is operating only with handheld bridge-to-bridge VHF radio equipment under §80.143(c) of this part;

(b) For vessels subject to the Bridge-to-Bridge Act and participating in a Vessel Traffic Service (VTS) system when the watch is maintained on both the bridge-to-bridge frequency and a separately assigned VTS frequency; or

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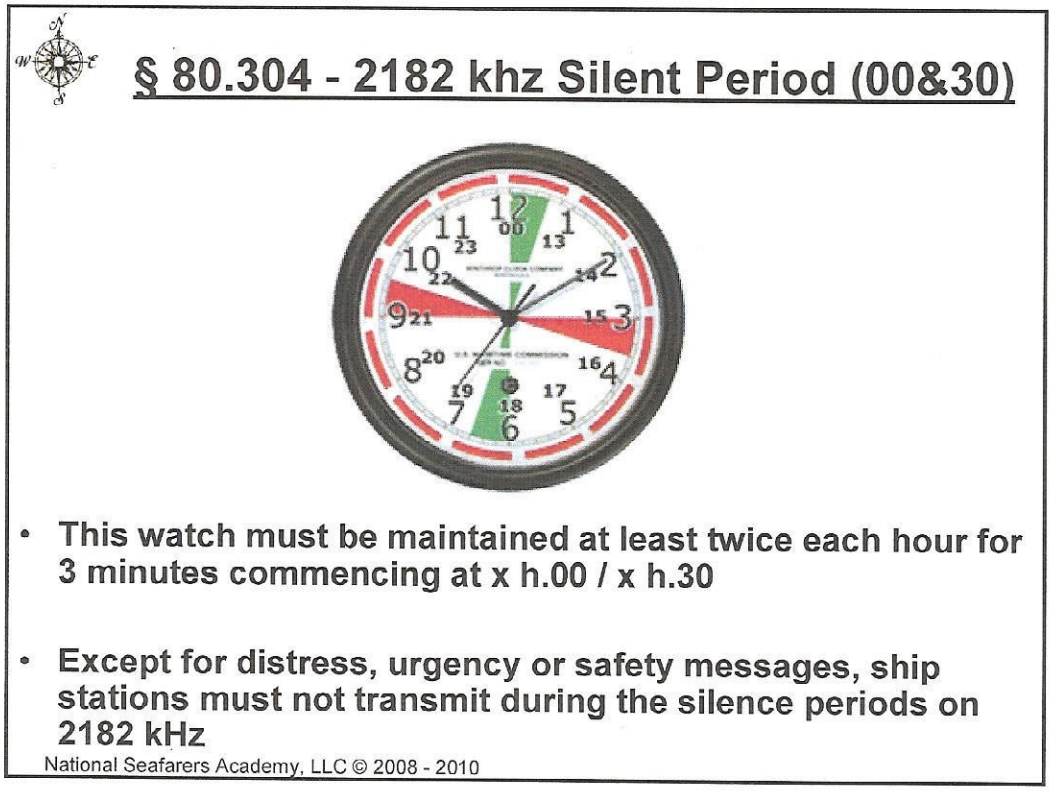
Subpart G—Safety Watch Requirements and Procedures

Ship Station Safety Watches

§ 80.304 Watch requirement during silence periods.



Each ship station operating on telephony on frequencies in the band 1605–3500 kHz must maintain a watch on the frequency 2182 kHz. This watch must be maintained at least twice each hour for 3 minutes commencing at x h.00 and x h.30 Coordinated Universal Time (UTC) using either a loudspeaker or headphone. Except for distress, urgency or safety messages, ship stations must not transmit during the silence periods on 2182 kHz.

§ 80.305 Watch requirements of the Communications Act and the Safety Convention.

(c) Each vessel of the United States transporting more than six passengers for hire, which is equipped with a radiotelephone station for compliance with 47 U.S.C. 381–386 but which is not carrying MF-DSC radio equipment, must, while being navigated in the open sea or any tidewater within the jurisdiction of the United States adjacent or contiguous to the open sea, keep a continuous watch on 2182 kHz while the vessel is beyond VHF communication range of the nearest VHF coast station, whenever the radiotelephone station is not being used for authorized traffic. A VHF watch must be kept on 156.800 MHz whenever such station is not being used for authorized traffic. The

VHF watch must be maintained at the vessel's steering station actually in use by the qualified operator as defined by §80.157 or by a crewmember who may perform other duties relating to the operation or navigation of the vessel, provided such other duties do not interfere with the watch. The use of a properly adjusted squelch is not considered to adversely affect the watch. The VHF watch need not be maintained by vessels subject to the Bridge-to-Bridge Act and participating in a Vessel Traffic Services (VTS) system when an efficient listening watch is maintained on both the bridge-to-bridge frequency and a VTS frequency.

§ 80.310 Watch required by voluntary vessels.

Voluntary vessels not equipped with DSC must maintain a watch on 2182 kHz and on 156.800 MHz (Channel 16) whenever the vessel is underway and the radio is not being used to communicate. Noncommercial vessels, such as recreational boats, may alternatively maintain a watch on 156.450 MHz (Channel 9) in lieu of VHF Channel 16 for call and reply purposes. Voluntary vessels equipped with VHF-DSC equipment must maintain a watch on 2182 kHz and on either 156.525 MHz (Channel 70) or VHF Channel 16 aurally whenever the vessel is underway and the radio is not being used to communicate. Voluntary vessels equipped with MF-HF DSC equipment must have the radio turned on and set to an appropriate DSC distress calling channel or one of the radiotelephone distress channels whenever the vessel is underway and the radio is not being used to communicate. Voluntary vessels equipped with Inmarsat A, B, C, M or Fleet F77 systems must have the unit turned on and set to receive calls whenever the vessel is underway and the radio is not being used to communicate.

§ 80.311 Authority for distress transmission.

A mobile station in distress may use any means at its disposal to attract attention, make known its position, and obtain help. A distress call and message, however, must be transmitted only on the authority of the master or person responsible for the mobile station. No person shall knowingly transmit, or cause to be transmitted, any false or fraudulent signal of distress or related communication.

§ 80.312 Priority of distress transmissions.

The distress call has absolute priority over all other transmissions. All stations which hear it must immediately cease any transmission capable of interfering with the distress traffic and must continue to listen on the frequency used for the emission of the distress call. This call must not be addressed to a particular station. Acknowledgement of receipt must not be given before the distress message which follows it is sent.

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§ 80.320 Radiotelephone distress call and message transmission procedure.

(a) The radiotelephone distress procedure consists of:

(1) The radiotelephone alarm signal (whenever possible);

(2) The distress call;

(3) The distress message.

(b) The DSC distress procedure consists of:

(1) Transmission by a mobile unit in distress;

(2) Reception;

(3) Acknowledgement of distress calls;

(4) Distress relays.

(c) Radiotelephone distress transmissions must be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

(d) After the transmission by radiotelephony of its distress message, the mobile station may be requested to transmit suitable signals followed by its call sign or name, to permit direction-finding stations to determine its position. This request may be repeated at frequent intervals if necessary.

(e) The distress message, preceded by the distress call, must be repeated at intervals until an answer is received. This repetition must be preceded by the radiotelephone alarm signal whenever possible.

(f) When the mobile station in distress receives no answer to a distress message transmitted on the distress frequency, the message may be repeated on any other available frequency on which attention might be attracted.

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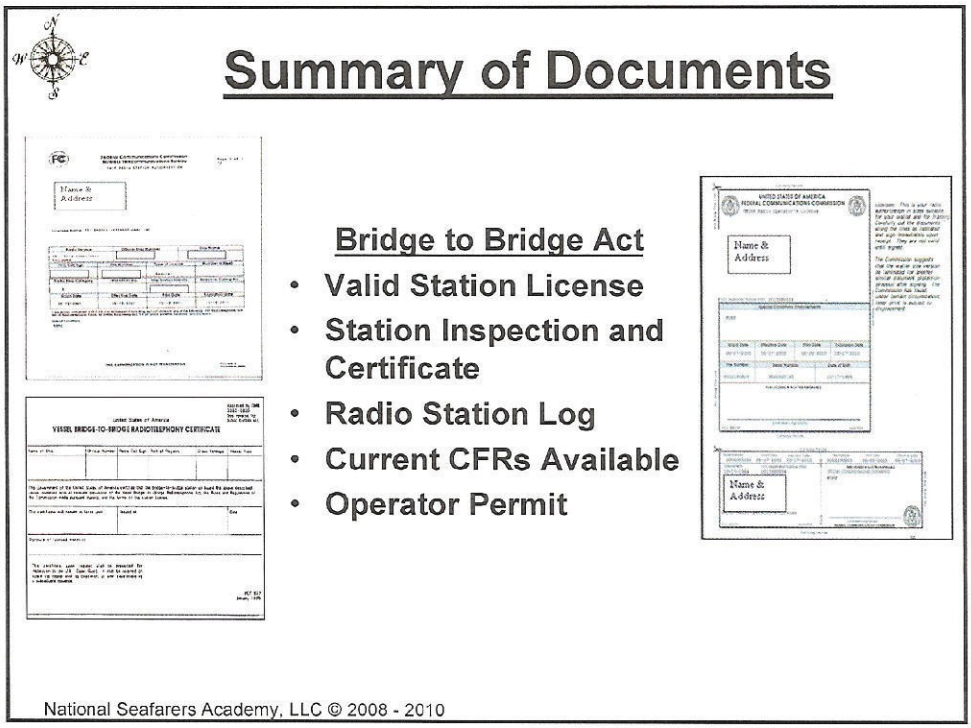
Subpart I—Station Documents



§ 80.405 Station license.

(a) Requirement. Except as provided in §80.13(c), stations must have an authorization granted by the Federal Communications Commission.

(b) Application. Application for authorizations in the maritime services must be submitted on the prescribed forms in accordance with subpart B of this part.

(c) Posting.

(1) The current station authorization for a station other than a public coast station, or a clearly legible copy, must be posted at the principal control point of each station. If a copy is posted, it must indicate the location of the original. When the station license cannot be posted as in the case of a marine utility station operating at temporary unspecified locations or the ship or recreational boat does not have an enclosed wheelhouse, it must be kept where it will be readily available for inspection. The licensee of a station on board a ship subject to Part II or III or Title III of the Communications Act or the Safety Convention must retain the most recently expired ship station license in the station records until the first Commission inspection after the expiration date.

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§ 80.409 Station logs.

(a) *General requirements.* Logs must be established and properly maintained as follows:

(1) The log must be kept in an orderly manner. The log may be kept electronically or in writing. The required information for the particular class or category of station must be readily available. Key letters or abbreviations may be used if their proper meaning or explanation is contained elsewhere in the same log.

(2) Erasures, obliterations, or willful destruction of written logs, or deletions of data or willful destruction of computer files or computer hardware containing electronic logs, is prohibited during the retention period. Corrections may be made only by the person originating the entry by striking out the error, initialing the correction and indicating the date of correction. With respect to electronic logs, striking out the error is to be accomplished using a strike-through formatting effect or a similar software function, and the correction is to be acknowledged through a dated electronic signature at the location of the strike-through.

(3) Ship station logs must identify the vessel name, country of registry, and official number of the vessel.

(4) The station licensee and the radio operator in charge of the station are responsible for the maintenance of station logs.

(b) *Availability and retention.* Station logs must be made available to authorized Commission employees upon request and retained as follows:

(1) Logs must be retained by the licensee for a period of two years from the date of entry, and, when applicable, for such additional periods as required by the following paragraphs:

(i) Logs relating to a distress situation or disaster must be retained for three years from the date of entry.

(ii) If the Commission has notified the licensee of an investigation, the related logs must be retained until the licensee is specifically authorized in writing to destroy them.

(iii) Logs relating to any claim or complaint of which the station licensee has notice must be retained until the claim or complaint has been satisfied or barred by statute limiting the time for filing suits upon such claims.

(2) Logs containing entries required by paragraph (c) of this section must be kept either at the principal control point of the station or electronically filed at the station licensee's primary office or available to the Commission via secured access to the

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licensee's Internet web site. Logs containing entries required by paragraphs (e) and (f) of this section must be kept at the principal radiotelephone operating location while the vessel is being navigated. All entries in their original form must be retained on board the vessel for at least 30 days from the date of entry. Additionally, logs required by paragraph (f) of this section must be retained on board the vessel for a period of 2 years from the date of the last inspection of the ship radio station.

(3) Ship radiotelegraph logs must be kept in the principal radiotelegraph operating room during the voyage.

(e) *Ship radiotelephone logs.* Logs of ship stations which are compulsorily equipped for radiotelephony must contain the following applicable log entries and the time of their occurrence:

(1) A summary of all distress and urgency communications affecting the station's own ship, all distress alerts relayed by the station's own ship, and all distress call acknowledgements and other communications received from search and rescue authorities.

(2) A summary of safety communications on other than VHF channels affecting the station's own ship.

(3) An entry that pre-departure equipment checks were satisfactory and that required publications are on hand. Daily entries of satisfactory tests to ensure the continued proper functioning of GMDSS equipment shall be made.

(4) An entry describing any malfunctioning GMDSS equipment and another entry when the equipment is restored to normal operation.

(5) A weekly entry that:

(i) The proper functioning of digital selective calling (DSC) equipment has been verified by actual communications or a test call;

(ii) The portable survival craft radio gear and radar transponders have been tested; and

(iii) The EPIRBs have been inspected.

(6) An entry at least once every thirty days that the batteries or other reserve power sources have been checked and are functioning properly.

(7) The time of any inadvertent transmissions of distress, urgency and safety signals including the time and method of cancellation.

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(8) At the beginning of each watch, the Officer of the Navigational Watch, or GMDSS Operator on watch, if one is provided, shall ensure that the navigation receiver is functioning properly and is interconnected to all GMDSS alerting devices which do not have integral navigation receivers, including: VHF DSC, MF DSC, satellite EPIRB and HF DSC or INMARSAT SES. On a ship without integral or directly connected navigation receiver input to GMDSS equipment, the Officer of the Navigational Watch, or GMDSS Operator on watch, shall update the embedded position in each equipment. An appropriate log entry of these actions shall be made.

(9) A GMDSS radio log entry shall be made whenever GMDSS equipment is exchanged or replaced (ensuring that ship MMSI identifiers are properly updated in the replacement equipment), when major repairs to GMDSS equipment are accomplished, and when annual GMDSS inspections are conducted.

(10) Results of required equipment tests, including specific gravity of lead-acid storage batteries and voltage reading of other types of batteries provided as a part of the compulsory installation;

(11) Results of inspections and tests of compulsorily fitted lifeboat radio equipment;

(12) A daily statement about the condition of the required radiotelephone equipment, as determined by either normal communication or test communication;

(13) When the master is notified about improperly operating radiotelephone equipment.

(f) *Applicable radiotelephone log entries*. The log entries listed in paragraph (e) of this section are applicable as follows:

(1) Radiotelephony stations subject to the Communications Act, the Safety Convention, or the Bridge-to-Bridge Act must record entries indicated by paragraphs (e)(1) through (e)(12) of this section. Additionally, the radiotelephone log must provide an easily identifiable, separate section relating to the required inspection of the ship's radio station. Entries must be made in this section giving at least the following information.

(i) For ships that pass the inspection:

(A) The date the inspection was conducted.

(B) The date by which the next inspection needs to completed.

(C) The inspector's printed name, address and class of FCC license (including the serial number).

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(D) The results of the inspection, including any repairs made.

(E) The inspector's signed and dated certification that the vessel meets the requirements of the Communications Act and, if applicable, the Safety Convention and the Bridge-to-Bridge Act contained in subparts Q, R, S, U, or W of this part and has successfully passed the inspection.

(F) The vessel owner, operator, or ship's master's certification that the inspection was satisfactory.

(ii) For ships that fail the inspection:

(A) The date the inspection was conducted.

(B) The inspector's printed name, address and class of FCC license (including the serial number).

(C) The reason that the ship did not pass the inspection.

(D) The date and time that the ship's owner, operator or master was notified that the ship failed the inspection.

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Subpart U—Radiotelephone Installations Required by the Bridge-to-Bridge Act

§ 80.1001 Applicability.

The following vessels in the navigable waters of the United States and while navigating:	VHF Channels: 13 / 22A / Possibly 67
(a) **Every power-driven** vessel >= 20 meters	X
(b) Every vessel of >=100 gross tons and carrying one or more passengers	X
(c) Every **towing vessel** of 7.8 meters (26 feet) or over in length	X
(d) Every dredge and floating plant engaged, in or near a channel or fairway, in operations likely to restrict or affect navigation of other vessels.	X
Voluntary Vessels: All other vessels i.e. <20m Commercial & Recreation, Sailing vessels	• USCG recommends: ALL commercial vessels carry a Marine VHF radio • Voluntarily Equipped, No FCC Inspection, No Station License, No Operators License

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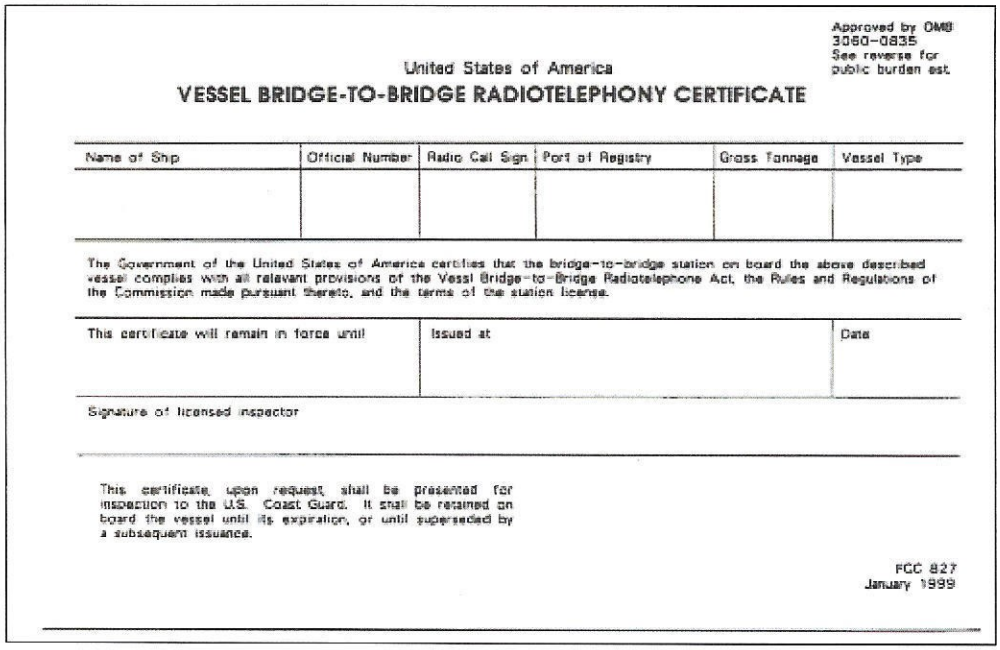
§ 80.1005 Inspection of station.



Approved by OMB
3060-0835
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public burden est.

United States of America

VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONY CERTIFICATE

Name of Ship	Official Number	Radio Call Sign	Port of Registry	Gross Tonnage	Vessel Type

The Government of the United States of America certifies that the bridge-to-bridge station on board the above described vessel complies with all relevant provisions of the Vessel Bridge-to-Bridge Radiotelephone Act, the Rules and Regulations of the Commission made pursuant thereto, and the terms of the station license.

This certificate will remain in force until	Issued at	Date

Signature of licensed inspector

This certificate, upon request, shall be presented for inspection to the U.S. Coast Guard. It shall be retained on board the vessel until its expiration, or until superseded by a subsequent issuance.

FCC 827
January 1999

The bridge-to-bridge radiotelephone station will be inspected on vessels subject to regular inspections pursuant to the requirements of Parts II and III of Title III of the Communications Act, the Safety Convention or the Great Lakes Agreement at the time of the regular inspection. If after such inspection, the Commission determines that the Bridge-to-Bridge Act, the rules of the Commission and the station license are met, an endorsement will be made on the appropriate document. The validity of the endorsement will run concurrently with the period of the regular inspection. Each vessel must carry a certificate with a valid endorsement while subject to the Bridge-to-Bridge Act. All other bridge-to-bridge stations will be inspected from time to time. An inspection of the bridge-to-bridge station on a Great Lakes Agreement vessel must normally be made at the same time as the Great Lakes Agreement inspection is conducted by a technician holding one of the following: a General Radiotelephone Operator License, a GMDSS Radio Maintainer's License, a Second Class Radiotelegraph Operator's Certificate, or a First Class Radiotelegraph Operator's Certificate. Additionally, the technician must not be the vessel's owner, operator, master, or an employee of any of them. Ships subject to the Bridge-to-Bridge Act may, in lieu of an endorsed certificate, certify compliance in the station log required by section 80.409(f).

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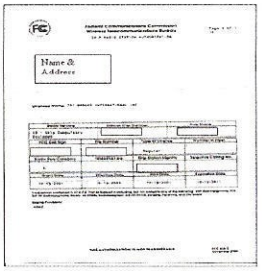
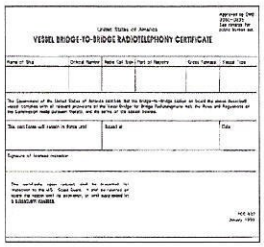
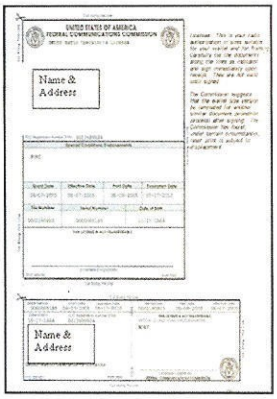
Summary of Documents





Bridge to Bridge Act

- Valid Station License
- Station Inspection and Certificate / Log Entry
- Radio Station Log
- Current CFRs Available
- Operator Permit



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§ 80.163 Operator requirements of the Bridge-to-Bridge Act.

Each ship subject to the Bridge-to-Bridge Act must have on board a radio operator who holds a restricted radiotelephone operator permit or higher class license.

§ 80.331 Bridge-to-bridge communication procedure.

(a) Vessels subject to the Bridge-to-Bridge Act transmitting on the designated navigational frequency must conduct communications in a format similar to those given below:

(1) This is the (name of vessel). My position is (give readily identifiable position, course and speed) about to (describe contemplated action). Out.

(2) Vessel off (give a readily identifiable position). This is (name of vessel) off (give a readily identifiable position). I plan to (give proposed course of action). Over.

(3) (Coast station), this is (vessel's name) off (give readily identifiable position). I plan to (give proposed course of action). Over.

(b) Vessels acknowledging receipt must answer "(Name of vessel calling). This is (Name of vessel answering). Received your call," and follow with an indication of their intentions. Communications must terminate when each ship is satisfied that the other no longer poses a threat to its safety and is ended with "Out".

(c) Use of power greater than 1 watt in a bridge-to-bridge station shall be limited to the following three situations:

(1) Emergency.

(2) Failure of the vessel being called to respond to a second call at low power.

(3) A broadcast call as in paragraph (a)(1) of this section in a blind situation, e.g., rounding a bend in a river.

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