

(2) Communications preceded by the international radiotelegraph urgency signal.<sup>1</sup>

(3) Communications preceded by the international radiotelegraph safety signal.<sup>2</sup>

(4) Communications relative to radio direction-finding bearings.

(5) Communications relative to the navigation and safe movement of aircraft.

(6) Communications relative to the navigation, movements, and needs of ships, including weather observation messages destined for an official meteorological service.

(7) Government communications for which priority right has been claimed.

(8) Service communications relating to the working of the radiocommunication service or to communications previously transmitted.

(9) All other communications.

(b) The order of priority of radiotelephone communications in the maritime mobile service on any frequency used for this service shall be as follows:

(1) Distress calls (including the international distress signal for radiotelephony),<sup>1</sup> the international radiotelephone alarm signal,<sup>2</sup> distress messages, and distress traffic.

(2) Communications preceded by the international radiotelephone urgency signal,<sup>1</sup> or known to the station licensee or his agent to consist of one or more urgent messages concerning the safety of a ship, aircraft, or other mobile unit or of some person on board or within sight of the ship, aircraft, or mobile unit.

(3) Communications preceded by the international radiotelephone safety signal,<sup>1</sup> or known to the station licensee or his agent to consist of one or more messages concerning the safety of navigation or important meteorological warnings.

(4) Communications known by the station licensee or his agent to consist of one or more messages relative to the navigation, movements, and needs of ships; including weather observation messages destined for an official meteorological service.

(5) Government communications for which priority right has been claimed.

(6) All other communications.

#### § 81.182 Control by coast station.

When communicating with a mobile station in the maritime mobile service, coast stations may, for the sole purpose of reducing or avoiding interference, expediting communication, and rendering an efficient service, give instructions to the mobile station relative to the order and time of transmission, to the choice of authorized frequency, to the suspension of communication, and to the permissible type of message traffic that may be transmitted or received by the particular coast station. This provision, however, shall not apply in the event of distress, either actual or impending, except as provided, in respect to distress situations,

<sup>1</sup> See § 81.7 for definition of this signal.

<sup>2</sup> See § 81.188 for definition of this signal.

by § 81.187 and applicable provisions of the International Radio Regulations.

NOTE: See Article 36 of the International Radio Regulations, Geneva, 1959.

#### § 81.183 Prevention of interference.

(a) Before any signals or communications are transmitted on any frequency, the licensed operator attending a land station or a land mobile station subject to this part (or the person responsible in lieu of a licensed operator in respect to land mobile stations for which the requirement of an operator license is waived by the Commission; or in a public coast station using telephony, the landline telephone operator under the supervision of the licensed operator) shall first listen on the associated receiving frequency, and when necessary on the land or mobile station transmitting frequency, to determine insofar as is practicable whether transmission by the land or mobile station will interfere with communication already in progress, whenever the involved frequency or frequencies are assigned to other stations within the same interference area (for example, all stations in the Great Lakes region are considered, with respect to operation on frequencies below 30 Mc/s, to be in the same interference area): *Provided*, That the requirement may be waived by the Commission upon application therefor in behalf of individual land stations which employ other effective means to avoid interference.

(b) Whenever a radiocommunication in the maritime mobile service is already in progress between two stations or between a mobile station and a coast station and it appears to be interfered with by a subsequent transmission from another mobile station, the latter must cease transmitting at the first request of either of the other two, except as priority may be otherwise determined by § 81.181. The station requesting this cessation must indicate the approximate length of the wait imposed upon the mobile station whose transmission is suspended.

(c) Communications between ship stations, between ship and aircraft stations, or between land stations and land mobile stations subject to this part, must not interfere with the work of coast stations. When this work is thus interfered with, the ship, aircraft, land mobile, or land station which causes such interference must stop transmitting or change to a different authorized frequency upon the first request of the coast station concerned: *Provided*, That this requirement shall not apply to ship or aircraft stations when they are transmitting signals or communications relating to a ship or aircraft in distress.

(d) Coast stations when operating on a frequency below 3500 kilocycles or above 30 Mc/s shall not carry on, or attempt to carry on, communication with any station which, under the currently prevailing conditions of transmission or reception, is not within reliable communication range of the coast station: *Provided*, That this provision shall not apply in event of distress, either actual or impending.

**§ 81.184 Transmission of traffic lists by coast stations.**

(a) Public coast stations are authorized to transmit, on their normal working frequencies in the appropriate bands, lists of official call signs (or, alternatively in the use of telephony, the names of the respective ships), in alphabetical order so far as practicable, of all mobile stations for which they have traffic on hand. These traffic lists shall be transmitted at intervals of at least two hours and not more than four hours during the working hours of the coast station. The use of calling frequencies for this purpose is prohibited; however, coast stations may announce on a calling frequency that they are about to transmit such call lists on a specified working frequency.

(b) In operating pursuant to paragraph (a) of this section, public coast stations shall be governed by the applicable provisions of the International Radio Regulations.

NOTE: See paragraphs 1067 and 1300 of the International Radio Regulations, Geneva, 1959.

**§ 81.185 Transmission to plurality of mobile stations.**

Information for the general benefit of mariners (including storm warnings and ordinary weather and hydrographic information) and press material may be transmitted by a coast station simultaneously to a plurality of mobile stations in the maritime mobile service: *Provided*, That the times at which such transmissions (except storm warnings and urgency and safety messages) are scheduled to begin, the maximum duration of each such transmission, and the specific radio-channels and class of emission used therefor, shall, with respect to each coast station, be subject to approval by the Commission.

**§ 81.186 Hours of service of stations on land.**

(a) Each coast station or marine-utility station on shore whose hours of service are not continuous shall not suspend operation before having concluded all communication required in connection with a distress call or distress traffic.

(b) Each public coast station whose hours of service are not continuous shall not suspend operation before having concluded all communication (in addition to that designated in paragraph (a) of this section), within the scope of its normal operations, involving messages or calls originating in or destined to mobile stations or marine fixed stations which are within normal range of the coast station and which, in the case of mobile stations, have signalled their presence before the effective suspension of operation of the coast station.

(c) Unless otherwise authorized by the Commission upon adequate showing of need therefor, each class I public coast station shall maintain continuous hours of service during the entire period of validity of the station license.

(d) Unless otherwise specified by the Commission for particular stations, the hours of service of each class II and class III public coast station shall, within

the scope of its normal operations, be such as to adequately meet the requirements of the particular region served by the station.

(e) Unless otherwise specified by the Commission for particular stations, the hours of service of limited coast stations and marine-utility stations on shore shall be determined by the station licensee in accordance with the requirements of the respective ships served by each station.

(f) The Commission, as public interest, convenience, or necessity requires, may order, at any time, the licensee of a public coast station not authorized for continuous hours of service to increase the hours of service of such station as may, in the discretion of the Commission, be required to provide adequate public service: *Provided*, That such requirement shall not be prescribed without the consent of the station licensee unless, after hearing, the Commission shall determine that such requirement will promote public convenience or interest or will serve public necessity, or the provisions of the Communications Act will be more fully complied with.

(g) Unless otherwise specified by the Commission for particular stations, the hours of service of stations subject to this part which are not operating in the maritime mobile service shall be determined by the station licensee in accordance with the requirements of the service carried on by the station(s) involved, subject to such applicable conditions and limitations as are imposed by the rules of the Commission or by the International Radio Regulations.

**§ 81.187 Procedure relative to distress communication.**

(a) *Applicable regulations.* In addition to the governing provisions of the Radio Regulations, Geneva, 1959 (see Article 36 thereof) applicable to the transmission and interception of distress signals and the handling of distress traffic, land stations which are subject to this part shall, in cases of distress, be governed by the following paragraphs of this section. No provision of the International Radio Regulations shall prevent the use by a land station, in exceptional circumstances, of any means by telecommunication available to it for the purpose of assisting a mobile station in distress. A land station receiving a distress message shall, without delay, take the necessary action to advise the appropriate authorities responsible for providing for the operation of rescue facilities.

(b) *Acknowledgment of distress message.* Stations of the maritime mobile service which receive a distress message from a mobile station which is, beyond any possible doubt, in their vicinity, shall immediately acknowledge receipt. However, if it appears that the mobile station in distress is not in their vicinity, a short interval of time shall be allowed to elapse before acknowledging receipt of the message, in order to permit stations nearer to the mobile station in distress to acknowledge receipt without interference. All stations which hear a distress call shall immediately cease any transmission capable of interfering with the dis-

treass traffic and shall continue to listen on the frequency used for the emission of the distress call.

(c) *Form of acknowledgment.* (1) The acknowledgment of receipt of a distress message is transmitted, when radiotelegraphy is used, in the following form:

(i) The call sign of the station sending the distress message, sent three times;

(ii) The word DE;

(iii) The call sign of the station acknowledging receipt, sent three times;

(iv) The group RRR;

(v) The distress signal SOS.

(2) The acknowledgment of receipt of a distress message is transmitted, when radiotelephony is used, in the following form:

(i) The call sign or other identification of the station sending the distress message, spoken three times;

(ii) The words THIS IS;

(iii) The call sign or other identification of the station acknowledging receipt, spoken three times;

(iv) The word RECEIVED;

(v) The distress signal MAYDAY.

(d) *Control of distress traffic.* (1) The control of distress traffic is the responsibility of the mobile station in distress or of the station which, in accordance with the governing provisions of the International Radio Regulations, has transmitted the distress message. These stations may, however, delegate the control of the distress traffic to another station.

(2) The station in distress or the station in control of distress traffic may impose silence either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It shall address these instructions "to all stations" or to one station only, according to circumstances. In either case, it shall use:

(i) In radiotelegraphy, the abbreviation QRT followed by the distress signal SOS. The use of the signal QRT SOS shall be reserved for the mobile station in distress and for the station controlling distress traffic;

(ii) In radiotelephony, the signal SEELONCE MAYDAY. The use of this signal shall be reserved for the mobile station in distress and for the station controlling distress traffic.

(3) If it is believed to be essential, any station of the mobile service near the ship, aircraft, or other vehicle in distress, may also impose silence. It shall use for this purpose:

(i) In radiotelegraphy, the abbreviation QRT followed by the word DISTRESS and its own call sign;

(ii) In radiotelephony, the word SEELONCE followed by the word DISTRESS and its own call sign or other identification.

(4) Any station which has been notified to cease transmission in connection with a situation of distress shall not resume transmission on any frequency which may cause interference to distress signals or traffic until notified by the station in control of the distress

traffic that the distress traffic has ceased and transmission may be resumed, or until notified by the station issuing the original notice that transmission from the station in question will not interfere with the distress signals or traffic.

(e) *Transmission of a distress message by a station not itself in distress.* (1) A land station which learns that a mobile station is in distress shall transmit a distress message in any of the following cases:

(i) When the station in distress is not itself in a position to transmit the distress message;

(ii) When the person responsible for the land station considers that further help is necessary;

(iii) When, although not in a position to render assistance, it has heard a distress message which has not been acknowledged. At the same time, all necessary steps shall be taken to notify the authorities who may be able to render assistance.

(2) The transmission of a distress message under the conditions prescribed in subparagraph (1) of this paragraph shall be made on either or both of the international distress frequencies (500 kc/s radiotelegraph; 2182 kc/s radiotelephone) or on any other available frequency on which attention might be attracted.

(3) The transmission of the distress message under the conditions prescribed in subparagraph (1) of this paragraph shall always be preceded by the call indicated hereunder, which shall itself be preceded whenever possible by the radiotelegraph or radiotelephone alarm signal. (See § 81.188.) This call consists of:

(i) When radiotelegraphy is used:

(a) The signal DDD SOS SOS SOS DDD;

(b) The word DE;

(c) The call sign of the transmitting station, sent three times.

(ii) When radiotelephony is used:

(a) The signal MAYDAY RELAY, spoken three times;

(b) The words THIS IS;

(c) The call sign or other identification of the transmitting station, spoken three times.

(4) When the radiotelegraph alarm signal is used an interval of 2 minutes shall be allowed, whenever this is considered necessary, before the transmission of the call mentioned in subparagraph (3)(i) of this paragraph.

#### § 81.188 Radiotelegraph and radiotelephone alarm signals.

(a) The international radiotelegraph alarm signal consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between consecutive dashes one second. The purpose of this special signal is the actuation of automatic devices giving the alarm to attract the attention of the operator when there is no listening watch on the distress frequency.

(b) The international radiotelephone alarm signal

consists of two substantially sinusoidal audio frequency tones transmitted alternately. One tone shall have a frequency of 2200 cycles per second and the other a frequency of 1300 cycles per second, the duration of each tone being 250 milliseconds. When generated by automatic means, the radiotelephone alarm signal shall be transmitted continuously for a period of at least 30 seconds, but not exceeding one minute; when generated by other means, the signal shall be transmitted as continuously as practicable over a period of approximately one minute. The purpose of this special signal is to attract the attention of the person on watch or to actuate automatic devices giving the alarm.

#### § 81.189 Use of alarm signals.

(a) The radiotelegraph or radiotelephone alarm signal, as appropriate, shall only be used to announce:

(1) That a distress call or message is about to follow; or

(2) The transmission of an urgent cyclone warning. In this case the alarm signal may only be used by coast stations authorized by the Commission to do so; or

(3) The loss of a person or persons overboard. In this case the alarm signal may only be used when the assistance of other ships is required and cannot be satisfactorily obtained by the use of the urgency signal only, but the alarm signal shall not be repeated by other stations. The message shall be preceded by the urgency signal.

(b) In cases described in subparagraphs (2) and (3) of paragraph (a) of this section, the transmission of the warning or message by radiotelegraphy shall not begin until two minutes after the end of the radiotelegraph alarm signal.

#### § 81.190 Radiotelegraph watch by coast stations.

(a) All coast stations (public and limited) licensed to use telegraphy on frequencies within the band 405–535 kc/s shall, during their hours of service, take the necessary measures to insure an efficient safety watch by a duly licensed radiotelegraph operator on the international distress frequency 500 kc/s for three minutes twice each hour, beginning at x h. 15 and x h. 45 Greenwich mean time. For this purpose, either headphones or a loudspeaker may be used, on condition that use of the loudspeaker is not less effective than use of headphones. While maintaining this watch, the operator shall not use or operate any radio equipment (such as, for examples, broadcast receivers, or amateur transmitters or receivers) not actually required in connection with maritime mobile service.

(b) All public coast stations licensed to use frequencies in the authorized bands between 405 and 535 kc/s shall, during their hours of service, remain on watch on the calling frequency 500 kc/s, except when the operator is transmitting on 500 kc/s, operating the station transmitting or receiving equipment on any other frequency authorized for transmission or reception in the maritime mobile service (including main-

tenance of the watch on 143 kc/s if required as provided by paragraph (c) of this section) if it is not possible to maintain at the same time, by any practicable means, the watch for calls on 500 kc/s. Any practicable means of maintaining this watch would include a loudspeaker or headphones energized, if necessary, by an additional radio receiver (other than the receiver actually in use for nonwatch purposes) which is tuned to 500 kc/s. The provisions of this section, however, shall not relieve the coast station from complying with the requirements for a safety watch as prescribed in paragraph (a) of this section.

(c) On condition that compliance with the following requirement shall in no way interrupt or reduce the efficiency of the safety watch prescribed in paragraph (a) of this section, each coast station equipped and licensed for communication by means of class A1 emission on frequencies within the band 90–160 kc/s shall, during its hours of service when not engaged in communication with another station of the maritime mobile service, keep watch for calls every hour on the frequency 143 kc/s for five minutes beginning at x h. 35 Greenwich mean time.

#### § 81.191 Radiotelephone watch by coast stations.

(a) Each public coast station licensed to use telephony shall, during its hours of service, keep watch on the frequency(s) authorized for working, which are used normally by mobile stations for transmission by telephony to the particular coast station; or in lieu of such watch, the coast station shall, during its hours of service, monitor such frequency(s) by any apparatus which will automatically intercept signals from mobile stations with no less efficiency than that attainable by a watch and which automatically indicates the interception of such signals by either aural or visual means.

(b) As an alternative to keeping watch on (or monitoring) the working frequency(s) as prescribed by paragraph (a) of this section, a public coast station may, in the discretion of the station licensee, keep watch on (or monitor) the comparable frequency(s) designated for calling by telephony (authorized carrier frequency 2182 kc/s, comparable to working frequencies within the band 1605 to 3500 kc/s; authorized carrier frequency 156.8 Mc/s, comparable to working frequencies within the band 156 to 174 Mc/s).

(c) (1) Each public coast station licensed to transmit by telephony on one or more frequencies within the band 1605 to 3500 kc/s shall, during its hours of service for telephony, maintain an efficient watch for reception of A3 and A3H emissions on the carrier frequency 2182 kc/s whenever such station is not being used for transmission on that frequency: *Provided*, That the Commission may exempt any coast station from compliance with this requirement if it considers that the frequency 2182 kc/s is adequately guarded by other stations or that circumstances relative to the operation or location of the involved coast station are such as to render this requirement unreasonable or unnecessary

for the purpose of this paragraph. The watch referred to in this subparagraph will not be deemed "efficient" unless the coast station is capable of normally receiving A3 emission on 2182 kc/s from mobile stations within the associated working frequency service area of the coast station, including periods of time when the station is transmitting on any other authorized frequency.

(2) Each public coast station licensed to transmit by telephony on one or more frequencies within the band 156-174 Mc/s shall, during its hours of service for telephony, maintain an efficient watch for the reception of class F3 emission on the frequency 156.8 Mc/s whenever such station is not being used for transmission on that frequency: *Provided*, That the Commission may exempt any coast station from compliance with this requirement if it considers that the frequency 156.8 Mc/s is adequately guarded by other stations or that circumstances relative to the operation or location of the involved coast station are such as to render this requirement unreasonable or unnecessary for the purpose of this paragraph.

(d) Each limited coast station licensed to transmit telephony on one or more of the working frequencies 156.6, 156.7, or 161.6 Mc/s shall, during its hours of service, maintain an efficient watch for class F3 emission on 156.8 Mc/s, whenever such station is not being used for transmission on that frequency. In the event 156.8 Mc/s is being used for distress, urgency, or safety, each station shall keep an additional watch on each assigned working frequency except in the case of 161.6 Mc/s where watch shall be kept on the associated ship frequency 157.0 Mc/s.

(e) With respect to those provisions of paragraphs (a), (b), (c), and (d) of this section pertaining to watch, the person who keeps such watch shall, in each instance, and at all times during the hours of service of the station, be a person who is authorized by the station licensee to operate, in accordance with applicable law and regulations, the appropriate radiotelephone transmitting apparatus of the particular station.

#### 81.192 Maintenance tests.

Stations subject to this part are authorized to engage in a minimum amount of test transmissions when considered by the station licensee to be necessary for the proper maintenance of the station: *Provided*, That precautions shall be taken always to avoid, in so far as may be possible, interference to other stations: *Further provided*, That this test transmission shall conform to such test operating procedure as is prescribed elsewhere in this part for the particular class of station involved.

#### 81.193 Inspection of antenna tower lighting.

(a) The licensee of a station subject to this part which has an antenna or antenna supporting structure(s) required to be illuminated pursuant to the provisions of section 303(q) of the Communication Act shall:

(1) Make a daily check of the tower lights not later than one hour after local sunset either by visual observation of the tower lights or by observation of an automatic indicator to insure that all such lights are functioning properly as required;

(2) Report immediately by telephone or telegraph to the nearest Airways Communication Station or office of the Federal Aviation Agency any observed failure of any code and/or rotating beacon light(s) if such failure(s) is (are) not corrected within 30 minutes after observation thereof, regardless of the cause of such failure. Further notification by telephone or telegraph shall be given the above station or office immediately upon resumption of the required illumination; and

(3) Inspect at intervals of at least once each 3 months all code and rotating beacon light(s) and automatic lighting control devices to insure that such apparatus is functioning properly as required.

(b) The station licensee or his representative shall make entries in the radio station log appropriate to the requirements of paragraph (a) of this section, as follows:

(1) The date and time of each day that the tower lights are turned on and off if manually controlled;

(2) The time that the daily check of proper operation of the tower lights was made, either by visual observation of the tower lights or by observation of an automatic indicator;

(3) In the event of any observed failure of the tower lighting:

(i) Nature of such failure;

(ii) Date and time that the failure was observed;

(iii) Date, time, and nature of the adjustments, repairs, or replacements made;

(iv) Entry showing the identification of the Airways Communication Station or office of the Federal Aviation Agency which was notified of the failure of any code and/or rotating beacon light(s) not corrected within 30 minutes after observation and an entry of the date and time that such notice was given;

(v) Date and time that notice was given to the Airways Communication Station or office of the Federal Aviation Agency that the required illumination was resumed;

(4) Upon completion of the periodic inspection required by paragraph (a) (3) of this section:

(i) The date of the inspection and the condition of all required lights and associated lighting control devices, together with the measured voltage under normal load at a reference point in the lighting circuit and the computed voltage at each lamp socket.

(ii) Any adjustments, replacement, or repairs made to insure compliance with the lighting requirements and the date such adjustments, replacements, or repairs were made.

#### § 81.194 Maintenance of station log.

(a) Each station subject to this part which is required, under the provisions of this part pertaining to

the particular class of station, to keep a radio station log, shall, in addition, comply with the applicable provisions of the following paragraphs of this section; the station licensee and the licensed radio operator (when a licensed operator is required) in charge of the station shall be responsible for compliance with this section.

(b) The log shall be kept in an orderly manner, in useable form, and in such detail that the information required for the particular class of station concerned is readily available. Key letters or abbreviations may be used if their proper meaning or explanation is contained elsewhere in the same log.

(c) The station log or any portion thereof shall not be erased, obliterated, or wilfully destroyed within the period of retention required by § 81.115. However, during this period any necessary correction may be made of such log but only by the person originating the entry and that person shall strike out the erroneous portion, initial the correction made, and indicate the date of correction.

## SUBPART H—COAST STATIONS, USE OF TELEGRAPHY

### § 81.201 Supplemental eligibility requirements for public coast station authorization.

Subject to the basic eligibility requirements set forth in § 81.23, an authorization for a public coast station may be granted to any person, or State or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act, provided the applicant is legally, financially, and technically qualified to render the proposed service, and the public interest, convenience or necessity would be served by a grant thereof.

### § 81.202 Points of communication.

(a) Subject to the conditions and limitations imposed by the terms of the particular coast station license or by the applicable provisions of this part with respect to the use of particular radiochannels, public coast stations using telegraphy are authorized to communicate:

(1) With any ship station or aircraft station operating in the maritime mobile service, for the transmission or reception of safety communication;

(2) With any land station for the purpose of facilitating the transmission or reception of safety communication to or from a ship or aircraft station;

(3) With public ship stations, Government ship stations, aeronautical public service stations on board aircraft, and Government aircraft stations, for the transmission or reception of public correspondence;

(i) When the mobile station uses telegraphy on a frequency assignment available under the provisions of Part 83 of this chapter for use by ship stations

for communication by means of telegraphy with public coast stations, or;

(ii) In respect to a United States Government or foreign ship or aircraft station, when such mobile station uses telegraphy on a frequency assignment available in accordance with the International Radio Regulations for use by ship stations for communication by means of telegraphy with public coast stations.

(b) Upon application, a public coast station using telegraphy may be authorized to transmit press material, and meteorological and marine navigational information of benefit to mariners, additionally to designated fixed locations, whenever the same information is transmitted by such coast station simultaneously and primarily to ship stations: *Provided*, A sufficient need for such authorization is shown to exist.

(c) Each public coast station using telegraphy is authorized to communicate additionally with other public coast stations (includes Government stations open to public correspondence) using telegraphy when such communication is necessary to facilitate the disposal of message traffic (public correspondence or safety communication) destined to or originated at mobile stations (public ship stations or aeronautical public service stations aboard aircraft) subject to and in accordance with the express conditions hereinafter set forth in this paragraph:

(1) For the interchange of operating signals, brief service messages or safety communication;

(2) For the transmission or receipt of message traffic destined to a mobile station which, by reason of its known or reported geographic location at the time, can be communicated with more effectively or more expeditiously by the coast station which receives such message traffic for relay to the mobile station: *Provided, however*, That this procedure shall not be used for normal routing of radio traffic, but only when the coast station initially concerned is unable to communicate in an effective manner directly with such mobile station;

(3) For the transmission or receipt of message traffic, which originated at a mobile station, by a public coast station in the Great Lakes region exclusively, when the use of available point-to-point communication facilities would unduly delay the delivery of such message traffic to the addressee(s);

(4) Such communication as is permissible under subparagraphs (2) and (3) of this paragraph shall be conducted only in exceptional circumstances and with discretion, without incurring additional charges: *Provided*, Such utilization of radiotelegraphy shall not in any way replace or be used in lieu of point-to-point communication facilities which are available for the forwarding of message traffic to and from the particular coast stations involved;

(5) Only radio-channels authorized for working with ship stations (and used primarily for that purpose) shall be employed for this communication between coast stations and, in so far as may be practicable,

only authorized frequencies within the band 415 kc/s to 5000 kc/s shall be used;

(6) All communications engaged in under the provisions of this paragraph shall be confined exclusively to that which is actually required to facilitate the transmission or reception of ship-to-shore public correspondence or to enhance safety at sea;

(7) Neither harmful interference nor intolerable delay shall be caused to communication between mobile stations and land stations or to communication between mobile stations.

#### § 81.203 Supplemental eligibility requirements for limited coast station authorization.

(a) Subject to the statutory eligibility requirements set forth in § 81.23, an authorization for a limited coast station using telegraphy may be granted to any person, or State or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act: *Provided*, The applicant is:

(1) Regularly engaged in performing a service for one or more governmental agencies; or

(2) A subsidiary corporation proposing to furnish a non-profit radiocommunication service to its parent corporation or to another subsidiary of the same parent where the party to be served is regularly engaged in performing a service for one or more governmental agencies; or

(3) A non-profit corporation or association, organized for the purpose of furnishing a maritime mobile service solely to persons who are regularly engaged in performing a service for one or more governmental agencies.

(b) Each application for station authorization for a limited coast station shall be accompanied by a written statement in detail sufficient to indicate clearly the applicant's eligibility under paragraph (a) of this section.

#### § 81.204 Points of communication of limited coast stations.

(a) Limited coast stations using telegraphy are authorized to communicate normally with the categories of ship stations designated herewith, subject to the conditions and limitations imposed by the terms of their particular station licenses or by the applicable provisions of this part with respect to the use of particular radio-channels:

(1) Any ship station using telegraphy on the assigned frequency 500 kc/s;

(2) Specified limited ship stations licensed by the Commission and using telegraphy on a frequency assignment designated for this purpose;

(3) Specified public ship stations licensed by the Commission and using telegraphy on a frequency assignment designated for this purpose.

(b) With respect to the terms of paragraph (a) (2) and (3) of this section, the specific ship stations with which a limited coast station is authorized to communi-

cate shall be designated appropriately in the license of such coast station.

#### § 81.205 Nature of service of limited coast stations.

(a) Limited coast stations using telegraphy shall:

(1) Not be open to public correspondence;

(2) Not be used to render a communications common carrier service;

(3) Not be used for the transmission of press material or news items which are not required to serve a governmental purpose;

(4) Be used exclusively to serve governmental purposes including the transmission of safety communication.

(b) In areas where adequate and appropriate weather and hydrographic information is transmitted by means of telegraphy through the medium of one or more public coast stations or United States government stations, limited coast stations shall not duplicate that service. In all other respects, limited coast stations may transmit by means of telegraphy such weather and hydrographic information as is required for the ships with which they normally communicate.

#### § 81.206 Assignable frequencies.

(a) Each of the specific frequencies in kilocycles hereinafter designated in this paragraph may be licensed as an assigned frequency for use by coast stations employing telegraphy and located in Puerto Rico, the State of Hawaii or within the indicated general portion of the seacoast area of the continental United States, excluding Alaska, subject to and in accordance with the provisions of paragraph (b) (1) of this section and Subpart E of this part, and upon the express condition that interference shall not be caused to any service or station which, in the discretion of the Commission, may have priority on the frequency or frequencies involved: *Provided*, That the use of each of these frequencies may be restricted by the Commission to specific areas or locations in order to avoid or minimize interference between stations: *Provided further*, That frequencies below 150 kc/s are assignable to Class I coast stations only; frequencies above 5000 kc/s are assignable primarily to Class I coast stations, and secondarily to Class II coast stations serving inland waters of the United States (including the Great Lakes) subject to showing of need therefor and on condition that interference shall not be caused to any Class I coast station:

##### Frequencies (kc/s)

North Atlantic: 112.85, 124.05, 130.35, 132.10, 134.55, 137.00, 143.00,<sup>1</sup> 146.80, 147.50, 418, 438, 442, 460, 472, 476, 482, 500,<sup>2</sup> 2030, 2040.5, 2046.5, 2051, 2054, 2060, 4288, 4331, 4343, 4346, 4367, 6376, 6414.5, 6418, 6502, 6505.5, 6512.5, 6519.5, 8502, 8514, 8588, 8610, 8630, 8658, 8686, 12745.5, 12925.5, 12948, 12961.5, 12997.5, 13020, 13024.5, 13033.5, 13060.5, 18968.8, 18973.8, 18997.6, 17021.6, 17093.8, 17242.4, 17271.2, 22407, 22485, 22503, 22521, 22599, 22617.

<sup>1</sup> Calling frequency.

<sup>2</sup> Calling and distress frequency.

Central Atlantic: 428, 500,<sup>2</sup> 2063, 4346, 6484.5, 8502, 12885.0.

South Atlantic: 137.70, 143.00,<sup>1</sup> 434, 464, 472, 488, 500,<sup>2</sup> 2039, 2043.5, 2051, 2057, 4250, 4292, 6390, 6407.5, 6411, 8486, 8526, 8686, 8722, 12052.5, 12970.5, 13011, 13078.5, 17093.6, 17160.8, 17170.4, 17199.2, 17256.8, 22431, 22503, 22569.

North Pacific: 482, 488, 500,<sup>2</sup> 2058.5, 2063, 4349, 6411, 8582, 8658, 12907.5, 12916.5, 17007.2, 22539.

Central Pacific: 126.15, 143.00,<sup>1</sup> 147.85, 426, 436, 460, 476, 500,<sup>2</sup> 2037.5, 2045, 2081.5, 4247, 4274, 4358, 6365.5, 6477.5, 6488, 6516, 8558, 8618, 8642, 8714, 12808.5, 12844.5, 13002, 13033.5, 13114.5, 17016.8, 17026.0, 17088.8, 17184.8, 22425, 22479, 22515, 22557.

South Pacific: 418, 464, 482, 500,<sup>2</sup> 2049.5, 2055.5, 4283, 4367, 6463.5, 6523, 8590, 8606, 8642, 12912, 12993, 13033.5, 13110, 17064.8, 17088.8, 17218.4, 22413, 22467.

Gulf of Mexico: 143.00,<sup>1</sup> 416, 420, 434, 438, 478, 484, 500,<sup>2</sup> 2042, 2048, 2049.5, 2052.5, 2055.5, 2063, 4256, 4274, 4310, 4322, 6369, 6435.5, 6446, 6495, 8550, 8570, 8666, 8714, 8722, 8742, 12826.5, 12840, 13038, 13051.5, 13078.5, 13123.5, 17117.6, 17170.4, 17172.4, 17208.8, 17256.8, 22431, 22467, 22569.

Great Lakes: 482, 500,<sup>2</sup> 4316, 6474, 8534.

Hawaii: 484, 500,<sup>2</sup> 2052.5, 4295, 6407.5, 8542, 13029, 16978.4, 22509.

Puerto Rico: 143.00,<sup>1</sup> 486, 500,<sup>2</sup> 2052.5, 4244, 8726, 13119.

<sup>1</sup> Calling frequency.

<sup>2</sup> Calling and distress frequency.

(b) (1) In addition to the specific frequencies listed in paragraph (a) of this section, other frequencies within bands between 10 kc/s and 27,500 kc/s shown in the Commission's Table of Frequency Allocations contained in § 2.106 of this chapter as being allocated for use by coast stations using telegraphy may be assigned to such coast stations: *Provided, however*, That initial authorizations for such frequencies shall be limited to six months duration.

(2) In addition to the frequency assignment designated for telegraphy in the license of a coast station, such station when communicating by telegraphy with a mobile or coast station of the United States Government may, on the condition that its emission-bandwidth and frequency tolerance shall be within the respective limits thereof permitted for the government station, transmit on a radio-channel assigned to the United States Government when authorized or directed to do so by the government station responsible, or by the government department or agency for which the radio-channel is authorized. The coast station assigned frequency, the class of emission, and the permissible class of traffic on such radio-channel shall be designated by the government station, or the responsible government department or agency.

(c) Frequencies assigned to government radio stations are assignable to non-Government coast stations (public or limited) for communication with other non-Government stations by telegraphy when such communication is necessary in connection with activities performed in coordination with or in behalf of the Federal Government and where the Commission determines, after consultation with the appropriate government agency or agencies, that such assignment is necessary.

## § 81.207 Frequencies for call and reply.

(a) (1) The frequency 500 kc/s is the general international calling frequency, which shall be used by any coast station engaged in radiotelegraphy in the authorized band 405-535 kc/s.

(2) The frequency for replying to a call sent on the general calling frequency is 500 kc/s, except where the calling station requests that the reply be made on an authorized working frequency. In Region 2, and in other areas of heavy traffic, ship stations should request coast stations to answer on the normal working frequency.

(3) In order to facilitate the reception of distress calls, all transmissions on the frequency 500 kc/s shall be reduced to a minimum.

(b) The frequency 143 kc/s (class A1 emission only) is the international calling frequency used by stations of the maritime mobile service in the band 90-160 kc/s. When a ship station which uses frequencies in the band 90-160 kc/s desires to establish communication with a coast station, it shall call on the frequency 143 kc/s unless the International List of Coast Stations provides otherwise. Coast stations shall reply on their normal working frequency in this band. The frequency 143 kc/s shall be used exclusively for individual calls, replies to such calls, and the transmission of signals preparatory to traffic.

(c) All radio-channels within the band 4000 kc/s to 23000 kc/s similarly authorized for working may be used for calling also: *Provided*, Interference is not caused to any communication in progress on the particular working channel.

(d) The normal calling frequency to be used by each coast station employing telegraphy when operating in the band 2035-2065 kc/s is its normal working frequency in this band. In addition to the transmission on the authorized working frequency in this band, coast stations may transmit on any frequency within the ship station calling band 2088.5 to 2093.5 kc/s for transmission of distress traffic exclusively.

## § 81.208 Frequencies for working.

(a) Each assigned frequency listed in § 81.206(a), and which is not identified therein with a specific use or function, is authorized as an assigned frequency for "working".

(b) The calling channel of which 500 kc/s is the assigned frequency may be used for the transmission of distress, urgency, and safety messages; any other use of this channel for working is prohibited.

(c) Coast stations having frequency assignments within the band 5000 kc/s to 25000 kc/s shall conduct their operations so as to reserve, in so far as is practicable, the use of frequencies within this band for communication over the relatively long distances for which these frequencies are particularly effective.

(d) In addition to the frequency assignment designated for telegraphy in the license of a ship station, such station, when working by means of telegraphy with a coast station, may, on condition that its



emission-bandwidth and frequency tolerance shall be within the respective limits thereof permitted for the coast station, transmit:

(1) On a telegraph working channel of a coast station within the band 110 to 150 kc/s when directed to do so by the coast station for which the channel is authorized: *Provided*, Interference is not caused to the service of any land, fixed, broadcast, or radiolocation station: *And provided*, That the emission shall be class A1 only.

(2) On a telegraph working channel of a coast station within the band 415 to 490 kc/s when directed to do so by the coast station for which the channel is authorized.

(3) Coast stations are authorized to direct ship stations to operate in accordance with the provisions of this section, whenever such means of operation is possible and appropriate.

#### § 81.209 Use of Morse Code required.

The signal code employed for telegraphy by stations in the maritime mobile service shall be the Morse Code signals specified in the Telegraph Regulations annexed to the International Telecommunication Convention, Geneva, 1959. However, for radiotelegraph communication of a special character, the use of other signals may be specifically authorized by the Commission in response to an appropriate application therefor.

#### § 81.210 Identification of stations.

All radiotelegraph emissions of a coast station shall be clearly identified by transmission therefrom of the official call letters assigned to that station for telegraphy by the Commission. These call letters shall be transmitted by telegraphy in accordance with § 81.209 and the procedure set forth in the International Radio Regulations, and by means of the class of emission normally used by the station for telegraphy: *Provided*, They shall be transmitted always upon completion of any transmission when the station resumes its watch

or suspends transmission for an indefinite time; in addition they shall be transmitted at intervals not exceeding 20 minutes whenever transmission is sustained for a period exceeding 20 minutes.

#### § 81.211 Procedure in testing.

(a) Coast stations must use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the radiotelegraph testing procedure described below shall be followed.

(1) The licensed radiotelegraph operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress.

(2) The operator shall transmit the signal "IE" (two dots, space, one dot) on the test frequency as a warning that test emissions are about to be made on that frequency. When the frequency or frequencies of the test emissions is/are within the frequency-band 405 to 535 kc/s, a listening watch shall be maintained on 500 kc/s by a licensed radiotelegraph operator at the station throughout the test period.

(3) If, as a result of transmitting the test signal "IE", any station indicates, by transmitting the signal "AS" (wait), that it anticipates harmful interference, testing shall be suspended. When transmission of "IE" is resumed and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph.

(4) Test signals composed of a series of "VVV" followed by the call sign of the testing station shall be transmitted. The call sign shall be sent clearly and at relatively slow speed.

(b) When testing is conducted on the frequency 500 kc/s, the test signals shall not continue for more than 10 seconds, and no tests shall be conducted during the 500 kc/s silence periods. Care must be exercised not to so prolong and space the dash portion of the "VVV" series as to form the alarm signal.

**§ 81.212 Radiotelegraph operating procedure.**

(a) Except for the transmission of distress or urgency signals, all transmission by coast stations must cease within the band 485 to 515 kc/s during each 500 kc/s silence period, i.e., for three minutes twice an hour beginning at x h. 15 and x h. 45, Greenwich mean time (G. M. T.).

(b) In order to facilitate radiotelegraph communication in the maritime mobile service, all coast stations transmitting by means of telegraphy shall, whenever practicable, use the service abbreviations ("Q" signals) listed in Appendix 13 to the International Radio Regulations, Geneva, 1959.

(c) In addition to compliance with all applicable sections of this part, the operation of coast stations using telegraphy for call, reply, and the transmission of message traffic shall, in particular, comply with all applicable provisions of Articles 29, 30, 31, 37, 38, and 39 of the International Radio Regulations, Geneva, 1959.

**§ 81.213 Station documents.**

(a) All public coast stations using telegraphy shall be provided with the following documents:

- (1) A valid station license, available in accordance with the provisions of § 81.102;
- (2) The necessary operator license(s), available in accordance with the provisions of § 81.159;
- (3) The station log required by this part;
- (4) The Alphabetical List of Call Signs of Stations used by the Maritime Mobile Service;
- (5) The List of Ship Stations;
- (6) The International Radio Regulations, Geneva, 1959;

(7) Parts 81 and 83 of this chapter.

(b) All limited coast stations using telegraphy shall be provided with the documents specified by subparagraphs (1), (2), (3), (6), and (7) of paragraph (a) of this section.

(c) These documents shall be continuously and readily available to the licensed operator on duty during the hours of service of the station.

**§ 81.213(a)(2) amended eff. 11-3-67; IV(64)-10**

**§ 81.214 Station records.**

(a) Public coast stations using telegraphy shall maintain an accurate radiotelegraph log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The date and time of making an entry shall be shown opposite the entry and the time shall be expressed in Greenwich mean time (GMT),<sup>1</sup> except that in the Great Lakes region, the time shall be expressed in eastern standard time (e.s.t.) (counted from 0000 to 2400 o'clock, beginning at midnight), and for coast stations which communicate exclusively with vessels on inland waters of the United States (other than the Great Lakes) the time shall be expressed in

<sup>1</sup> For example, 8:01 p.m. eastern standard time should be entered as 0101 GMT; 8:30 a.m. eastern standard time should be entered as 1330 GMT; 7:45 p.m. eastern standard time should be entered as 0045 GMT.

local standard time (e.s.t., c.s.t., etc., counted from 0000 to 2400 o'clock, beginning at midnight). The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "GMT" (e.s.t. in the Great Lakes area) (e.s.t., c.s.t., etc., for stations serving inland waters exclusively) shall be marked at the head of the column in which the time is entered.

(4) With respect to coast stations which, by reason of the provisions of Subpart G of this part, are required to maintain a watch on the radio-channel designated for radiotelegraph calling and distress (assigned frequency 500 kc/s), entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering, and exchanging operating signals and safety communications on this radio-channel. In respect to coast stations which, under applicable provisions of Subpart G of this part are required to maintain a watch on 500 kc/s during the 500 kc/s silence periods, a positive entry shall be made in respect to each such silence period, stating whether or not signals were received during that time and, if signals are received, entry shall be made of the call sign(s) of the station(s) heard and the time(s) of such reception. The use of a rubber stamp or equivalent device for making entries to show observation of the silence period is prohibited. Further, in respect to coast stations which, under applicable provisions of Subpart G of this part, are required to maintain a watch on 500 kc/s during their hours of service (i.e., not limited solely to the 500 kc/s silence periods), a positive entry shall be made at least once in each 15 minutes stating whether or not signals were received on this radio-channel (assigned frequency 500 kc/s) and, if signals are received, entry shall be made of the call sign(s) of the station(s) heard and the time(s) of such reception.

(5) All distress calls, alarm signals, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio-channels on which such signals or messages were transmitted or received, and the position of any ship or other mobile unit in need of assistance, if this can be determined.

(6) All calls transmitted from or received by the coast station, together with a brief notation of any messages transmitted or received, shall be entered, showing the respective times, official call signs of the mobile or land stations communicated with, and the assigned frequency(s) on which the operations occurred.

(7) Whenever harmful interference is experienced by or reported to the responsible operator an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(8) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(9) A daily entry shall be made regarding comparison of the time indicated by the required clock(s) with standard time, including a statement of any deviations observed and corrections made.

(10) Failure of apparatus to operate as required, failure of power supply, and incidents tending to unduly delay communication shall be entered.

(11) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the assigned frequency(s) as may be observed, and a statement of any corrective action taken.

(12) Entries shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or

performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(13) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this part.

(b) Limited coast stations using telegraphy shall maintain an accurate radiotelegraph log, during their hours of service, in the same manner and to the same extent as is required by paragraph (a) of this section for public coast stations using telegraphy: *Provided, however,* That the entries specified by subparagraphs (6) and (10) thereof shall not be required for limited coast stations.

## SUBPART I—PUBLIC COAST STATIONS, USE OF TELEPHONY

### § 81.301 Supplemental eligibility requirements.

Subject to the basic eligibility requirements set forth in § 81.23, an authorization for a public coast station may be granted to any person, or state or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act of 1934: *Provided,* The applicant is legally, financially, and technically qualified to render the proposed service, and the public interest, convenience or necessity would be served by a grant thereof.

### § 81.302 Points of communication.

(a) Subject to the conditions and limitations imposed by the terms of the particular coast station license or by the applicable provisions of this part with respect to the use of particular radiochannels, public coast stations using telephony are authorized to communicate:

(1) With any ship station or aircraft station operating in the maritime mobile service for the transmission or reception of safety communication;

(2) With any land station for the purpose of facilitating the transmission or reception of safety communication to or from a ship or aircraft station;

(3) With public ship stations, government ship stations, aeronautical public service stations on board aircraft, and government aircraft stations, for the transmission or reception of public correspondence:

(i) When the mobile station uses telephony on a frequency assignment designated in Part 83 of this chapter for ship-to-shore public correspondence by means of telephony;

(ii) In respect to a United States Government or foreign ship or aircraft station, when such mobile station uses telephony on a frequency assignment available in accordance with the International Radio Regu-

lations for use by ship stations for communication by means of telephony with public coast stations.

(4) With marine fixed stations when the coast station uses for this purpose a frequency assignment below 4000 kc/s upon the express condition that neither harmful interference nor intolerable delay is caused to communication with mobile stations.

(b) Upon application, a public coast station using telephony may be specifically authorized by the terms of its station authorization to communicate with a designated station (government or non-government) at a remote fixed location isolated from the mainland where other communication facilities are not available: *Provided,*

(1) The station with which communication is carried on is duly authorized to communicate with the particular coast station involved; and

(2) The station with which communication is carried on shall transmit by telephony to the coast station:

(i) On a frequency assignment available for ship-to-shore public correspondence in accordance with the provisions of Part 83 of this chapter for public ship stations using telephony; or

(ii) On any other frequency assignment designated for this purpose in any other section of the Commission's rules or, with respect to United States Government stations, on any government frequency assignment duly authorized by the Government for this purpose.

(3) Any communication carried on shall be confined exclusively to that absolutely necessary for public safety or the protection of life or property; and

(4) Neither harmful interference nor intolerable delay is caused to safety communication with ship stations.

(c) Upon application, a public coast station using telephony may be authorized to transmit meteorological and marine navigational information, of benefit to mariners, additionally to designated fixed locations, whenever the same information is transmitted by such coast station simultaneously and primarily to ship stations: *Provided,* A sufficient need for such authorization is shown to exist.

### § 81.303 Duplication of facilities.

A public coast station shall not be authorized to provide a very high frequency maritime mobile service by the use of any frequency assignment above 100 Mc/s solely to any geographic area in which such service is already provided, or for which a valid construction permit or permits has or have been issued for the establishment of a station or stations to provide such service in that area, unless the applicant shall make an affirmative showing that the public interest, convenience or necessity would be served by such a grant, and, among other things, that there is a need for such additional facilities in the area involved, that the authorized facilities in that area are not, or will not be, adequate to

meet the very high frequency communication needs in the area, and that the applicant's proposed facilities involving a frequency assignment above 100 Mc/s will serve the very high frequency communication needs in such area.

#### § 81.304 Frequencies available.

(a) The following frequencies (kc/s) may be licensed as authorized carrier frequencies for use by public coast stations:

(1)	2182	2490	2550	2598
	2400	2506	2558	2638
	2442	2514	2566	2738
	2450	2522	2572	2782
	2466	2530	2582	2784
	2482	2538	2590	

(2)	4072.4	8792.8
	4377.4	8799.2
	4396.6	8811.9
	4409.4	13154.5
	4422.2	13161.5
	4428.6	13175.5
	4434.9	13182.5
	6240—Mississippi River system only.	13190.5
	6455—Mississippi River system only.	17307.5
	8210.8—Mississippi River system only.	17321.5
	8754.4	17342.5
	8767.2	17356.5
	8773.6	22681.5
		22695.5
		22716.5

(3)	4069.3	8789.7
	4374.3	8796.1
	4393.5	8808.8
	4406.3	13151.2
	4419.1	13158.2
	4425.5	13172.2
	4431.8	13179.2
	6236.9—Mississippi River system only.	13193.2
	6451.9—Mississippi River system only.	17304.2
	8207.7—Mississippi River system only.	17318.2
	8751.3	17339.2
	8764.1	17353.2
	8770.5	22678.2
		22692.2
		22713.2

【§ 81.304(a) amended in IV(64)-2; (a)(1) amended eff. 8-9-66; IV(64)-7】

(b) Each of the specific frequencies in megacycles hereinafter designated in this paragraph may be licensed as an authorized carrier frequency for use by public coast stations employing telephony by means of frequency modulation, subject to and in accordance with other provisions of other applicable sections of this subpart and subpart E of this part:

Mc/s
156.8
161.8—Except in Puerto Rico and the Virgin Islands
161.85—Except in Puerto Rico and the Virgin Islands
161.9
161.95
162.0

(c) [Reserved]

(d) Assignment of the specific carrier frequencies designated in paragraph (a) of this section and use of frequency assignments of which those frequencies are the authorized carrier frequencies shall be subject to the express limitations and conditions hereinafter set forth in this paragraph.

(1) The frequency 2182 kc/s is authorized for use on a shared basis primarily by ship stations and secondarily by coast stations.

(2) The frequencies 2514, 2550 and 2582 kc/s are authorized for use in the Great Lakes area on a shared basis with coast stations of Canada upon the express condition that, except in case of distress, the frequency 2550 kc/s shall not be used for transmission to ship stations of Canada and the frequency 2582 kc/s shall not be used for transmission to ship stations of the United States.

(3) The frequencies 4069.3, 4072.4, 4374.3, 4377.4, 6236.9, 6240, 6451.9, and 6455 kc/s are authorized for use by coast stations serving vessels on the Mississippi River and connecting inland waters only (except the Great Lakes) upon the express condition that interference shall not be caused to the service of any station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused. Transmission on the frequencies in the 6 Mc/s band is prohibited during the period from 8:00 p.m. until 5:00 a.m., c.s.t. in order to avoid such interference.

(4) [Reserved]

(5) The frequencies 8207.7 and 8210.8 kc/s are authorized for use by coast stations serving vessels on the Mississippi River and connecting inland waters only (except the Great Lakes) upon the express condition that transmission on these frequencies during the period 8:00 p.m. until 5:00 a.m., c.s.t. is prohibited.

(6) [Reserved]

(7) Each carrier frequency which is not to be used prior to a specified beginning date, may be used under appropriate station authorization for test transmission during a period commencing not more than two months in advance of such specified beginning date; solely to determine whether an existing coast station is capable of proper technical operation on that particular radio-channel preparatory to rendering regular service thereon: *Provided*, That harmful interference is not caused by such test transmission to the service of any other station.

(8) Use of the frequency 2638 kc/s by coast stations in certain geographic areas as prescribed in this part is authorized upon the express condition that harmful interference shall not be caused to intership communication on this frequency, nor to the service of any station which in the discretion of the Commission, has priority on the frequency or frequencies to which interference results: *Provided*, That with respect to the stations of the maritime mobile service, this condition

shall not be construed as prohibiting the operation of a coast station on this frequency pursuant to the provisions of §§ 81.181(b), 81.182 and 81.183 (b) and (c).

(e) In addition to the specific frequencies listed in paragraph (a) of this section, other frequencies within the bands between 2000 kc/s and 27.5 Mc/s, as shown in the Commission's Table of Frequency Allocations contained in § 2.106 of this chapter as being allocated for use by coast stations using telephony, may be assigned to such coast stations: *Provided, however*, That initial authorizations for such frequencies shall be limited to 6 months duration.

(f) (1) In addition to the authorized carrier frequencies designated for telephony in the license of a public coast station, such station when communicating by telephony with a mobile or coast station of the U.S. Government may, on the condition that its emission bandwidth and frequency tolerance shall be within the respective limits thereof permitted for the government station, transmit on a frequency assigned to the U.S. Government when authorized or directed to do so by the government station responsible, or by the government department or agency for which the frequency is authorized. The coast station carrier frequency, the class of emission and the permissible class of traffic on such frequency, shall be designated by the government station or the responsible government department or agency.

(2) Frequencies assigned to government radio stations are assignable to non-Government public coast stations for communication with other non-Government stations by telephony when such communication is necessary in connection with or in behalf of the Federal Government and where the Commission determines after consultation with the appropriate government agency or agencies, that such assignment is necessary.

#### § 81.305 Frequencies for calling and distress.

(a) The frequency 2182 kc/s is the international radiotelephone distress and general calling frequency for the maritime mobile service. It may be used by public coast stations solely for transmission of:

(1) Distress signals and traffic as provided in Subpart G of this part.

(2) The international urgency signal, and very urgent messages (preceded by this signal) concerning the safety of a ship, aircraft or other vehicle, or the safety of some person on board or within sight of such ship, aircraft, or vehicle.

(3) The international safety signal and call. The safety message which follows shall, where practicable, be sent on a working frequency and a suitable announcement to this effect shall be made at the end of the call.

(4) Normal calls, replies, and brief radio operating signals but only when the use of a different carrier frequency for this function appears to be impracticable by reason of operating or equipment limitations of a

mobile station: *Provided*, That as a general rule radio-telephone stations on board foreign ships shall be called on the frequency 2182 kc/s.

(5) Brief announcements specifying the nature of a particular communication to be transmitted soon thereafter on other radio-channel(s) by the same coast station to a plurality of mobile stations, when such communication will be of general interest to mobile stations of the maritime mobile service, including ordinary weather and hydrographic information, or will consist of lists of mobile stations with which the coast station desires to communicate.

(6) Brief test signals in accordance with the provisions of § 81.311, as may be necessary to determine whether the radio transmitting equipment of the station is in good working condition on this frequency.

(b) The frequency 156.8 Mc/s is the international safety and calling frequency for the maritime mobile radio-telephone service in the band 156–174 Mc/s. This frequency may be used by public coast stations as prescribed in § 81.309.

(c) In addition to the radio-channels of which the carrier frequencies are specifically authorized herein for "calling", the radio-channels authorized in this subpart for "working" may be used for call and reply: *Provided*, Interference is not caused to any communication in progress on the particular working channel.

#### § 81.306 Frequencies available below 27.5 Mc/s.

(a) The carrier frequencies designated herewith are assignable to class I public coast stations using telephony when the coast station and the mobile station transmit alternately on different radio-channels: *Provided*, That the designated carrier frequencies below 5000 kc/s and above 22650 kc/s are assignable only to coast stations located in the vicinity of the specific harbors, ports or places designated hereinafter opposite the respective coast station transmitting frequency: *Provided further*, That the coast station shall receive transmissions from mobile stations on the associated receiving frequency also designated herewith:

##### (1) Working frequencies below 5000 kc/s.

Coast station transmitting carrier frequency (kc/s)	Coast station located in the vicinity of—	Coast station receiving carrier frequency (kc/s)
2506.....	San Francisco, Calif.....	2406
2630.....	Hawaii.....	2134
2590.....	New York, N.Y.....	2198
4374.3 <sup>1</sup> .....	San Francisco, Calif.....	4069.3
4377.4.....	do.....	4072.4
4393.5 <sup>1</sup> .....	New York, N.Y.....	4088.5
4396.6.....	do.....	4091.6
4406.3 <sup>1</sup> .....	do.....	4101.3
4409.4.....	do.....	4104.4
4419.1.....	Hawaii.....	4114.1
4422.2.....	do.....	4117.2
4431.8 <sup>1,2</sup> .....	New York, N.Y.....	4126.8
4434.9 <sup>2</sup> .....	do.....	4129.9

<sup>1</sup> Available for single sideband emissions only.

<sup>2</sup> Available for use annually during period Dec. 15 to Mar. 15.

(2) Working frequencies between 5000 kc/s and 27.5 Mc/s.

Coast station transmitting carrier frequency (kc/s)	Coast station located in the vicinity of—	Coast station receiving carrier frequency (kc/s)
8751.3 <sup>1</sup>	San Francisco, Calif.	8201.3
8754.4	do.	8204.4
8764.1 <sup>1</sup>	Hawaii	8214.1
8767.2	do.	8217.2
8770.5 <sup>1</sup>	New York, N.Y.	8220.5
8773.6	do.	8223.6
8789.7 <sup>1,2</sup>	Miami, Fla.	8239.7
8792.8 <sup>1</sup>	do.	8242.8
8808.8 <sup>1</sup>	New York, N.Y.	8258.8
8811.9	do.	8261.9
13151.2 <sup>1,2</sup>	Miami, Fla.	12351.2
13154.5 <sup>2</sup>	do.	12354.5
13158.2 <sup>1</sup>	New York, N.Y.	12358.2
13161.5	do.	12361.5
13172.2 <sup>1</sup>	Hawaii	12372.2
13175.5	do.	12375.5
13179.2 <sup>1</sup>	San Francisco, Calif.	12379.2
13182.5	do.	12382.5
13193.2 <sup>1</sup>	New York, N.Y.	12393.2
13196.5	do.	12396.5
17304.2 <sup>1</sup>	Hawaii	16474.2
17307.5	do.	16477.5
17318.2 <sup>1</sup>	New York, N.Y.	16488.2
17321.5	do.	16491.5
17339.2 <sup>1</sup>	San Francisco, Calif.	16509.2
17342.5	do.	16512.5
17353.2 <sup>1</sup>	New York, N.Y.	16523.2
17356.5	do.	16526.5
22678.2 <sup>1</sup>	do.	22328.2
22681.5	do.	22331.5
22692.2 <sup>1</sup>	San Francisco, Calif.	22042.2
22695.5	do.	22045.5

Coast station transmitting carrier frequency (kc/s)	Coast station located in the vicinity of—	Coast station receiving carrier frequency (kc/s)
22713.2 <sup>1</sup>	New York, N.Y.	22063.2
22716.5	do.	22066.5

<sup>1</sup> Available for single sideband emissions only.

<sup>2</sup> Available for communication with ship stations in the Gulf of Mexico and the Caribbean area only. Use of the frequency is upon the express condition that interference shall not be caused to the service of any station which may have priority on the frequency or frequencies used for the service to which interference is caused.

【§ 81.306(a)(2) as amended eff. 2-24-65; IV(64)-2】

(b) Subject to the specific limitations imposed in this paragraph and in § 81.304 (d) with respect to particular frequencies, the carrier frequencies designated are assignable for working purposes to Class II public coast stations using telephony when the coast station and the mobile station transmit alternately on different radio-channels: *Provided*, That these frequencies are assignable only to coast stations located in the vicinity of the specific harbors, ports, or places designated hereinafter opposite the respective coast station transmitting frequency: *Provided further*, That each coast station shall receive transmissions from mobile stations on the associated receiving frequency also designated in this paragraph.

Coast stations located in the vicinity of—	Coast station transmitting carrier frequency		Associated coast station receiving carrier frequency	
	Frequency (kc/s)	Specific limitations imposed upon availability for use <sup>1</sup>	Frequency (kc/s)	Specific conditions relating to use of these frequencies by ship stations for transmission as shown in § 83.354(a)(1) of this chapter <sup>2</sup>
Boston, Mass.	2506	None.	2406	None.
	2450	do.	2366	Do.
New York, N.Y.	2482	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of New Orleans, La., to which this carrier frequency is assigned for transmission.	2382	Available on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of New Orleans, La., and is transmitting on this frequency to a coast station located in the vicinity of that port.
	2522	None.	2126	None.
	2558	do.	2166	Do.
	2590	do.	2198	Do.
	4393.5	do.	4088.5	Do.
	4396.6	do.	4091.6	Do.
	4406.3	do.	4101.3	Do.
	4409.4	do.	4104.4	Do.
	4431.8	Available for use annually during period Dec. 15 to Mar. 15.	4128.8	Available for use annually during period Dec. 15 to Mar. 15.
	4434.9	do.	4129.9	Do.
Wilmington, Del.	2558	None.	2166	None.
Baltimore, Md.	2558	None.	2166	None.
Norfolk-Quantico, Va.	2538	None.	2142	None.
	2450	Day only, available on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.	2366	Day only, available on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.
Charleston, S.C.-Jacksonville, Fla.	2566	None.	2390	None.
Lake Allatoona-Lake Sidney Lanier, Ga.	2450	Available on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.	2366	Available on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.
Miami, Fla.	2442	Day only.	2406	Day only.
	2490	Available on a 24-hour basis, on condition that harmful interference shall not be caused to the police radio service in southern California.	2031.5	None.

See footnotes at end of table.

Coast stations located in the vicinity of—	Coast station transmitting carrier frequency		Associated coast station receiving carrier frequency	
	Frequency (kc/s)	Specific limitations imposed upon availability for use <sup>1</sup>	Frequency (kc/s)	Specific conditions relating to use of these frequencies by ship stations for transmission as shown in § 83.354(a)(1) of this chapter <sup>2</sup>
Miami, Fla.—Continued.....	2514	Unlimited hours of use from Dec. 15 to Apr. 1 annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any coast station in the vicinity of Miami, Fla., to which the carrier frequency 2490 kc/s is assigned for transmission; and also on condition that harmful interference shall not be caused to the service of any coast station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.	2118	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any ship station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.
	2550	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Tampa, Fla., to which this carrier frequency is assigned for transmission.	2158	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of Tampa, Fla., and is transmitting on this frequency to a coast station located in the vicinity of that port.
	<sup>1</sup> 4425.5 4428.6	None..... do.....	4120.5 4123.6	None. Do.
Tampa, Fla.....	2466	None.....	2009	None.
	2550	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any coast station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.	2158	Unlimited hours of use from Dec. 15 to Apr. 1, annually, and day only from Apr. 1 to Dec. 15, annually, on condition that harmful interference shall not be caused to the service of any ship station in the Great Lakes area which in the discretion of the Commission has priority on the frequency or frequencies used for the service to which interference is caused.
Mobile, Ala.....	2572	None.....	2430	None.
New Orleans, La.....	2598	None.....	2206	None.
	2558	Day only; also on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Mobile, Ala., to which the carrier frequency 2572 kc/s is assigned for transmission.	2166	Day only.
Delcambre, La.....	2482	None.....	2382	None.
	2506	Day only; on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.	2458	Day only; on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.
Galveston, Tex.....	2530	None.....	2134	None.
	2450	Day only; on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Boston, Mass., San Francisco or Eureka, Calif., to which this carrier frequency is assigned for transmission. <sup>3</sup>	2366	Day only; on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of Boston, Mass., and is transmitting on this frequency to a coast station located in the vicinity of that port. <sup>4</sup>
Corpus Christi, Tex.....	2538	Available on condition that no harmful interference will be caused to the service of any coast station located in the vicinity of Norfolk-Quantico, Va., to which this carrier frequency is assigned for transmission.	2142	Available on condition that no harmful interference will be caused to the service of any ship station which is within 300 nautical miles of Norfolk-Quantico, Va., and is transmitting on this frequency to a coast station located in the vicinity of that port.
San Juan, P.R.....	2530	None.....	2134	None.
Great Lakes.....	2514	Subject to applicable provisions of § 81.304(d).....	2118	None.
	2550	do.....	2158	Do.
	2582	do.....	2206	Not available to U.S. ship stations for transmission.
	<sup>1</sup> 4419.1	None.....	4114.1	None.
	4422.2	do.....	4117.2	Do.
	<sup>1</sup> 4431.8	do.....	4126.8	Do.
	4434.9	do.....	4129.9	Do.
	<sup>1</sup> 8796.1	do.....	8246.1	Do.
Los Angeles-San Diego, Calif.....	8799.2	do.....	8249.2	Do.
	2566	None.....	2009	None.
	2466	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Tampa, Fla., to which this carrier frequency is assigned for transmission.	2382	Available on condition that harmful interference is not caused to the service of any ship station which is within 300 nautical miles of New Orleans, La., and is transmitting on this frequency to a coast station located in the vicinity of that port.
	2598	7 a.m. to 7 p.m., P.s.t., only.....	2206	7 a.m. to 7 p.m., P.s.t., only.
	2622	do.....	2126	Do.

See footnotes at end of table.



Coast stations located in the vicinity of—	Coast station transmitting carrier frequency		Associated coast station receiving carrier frequency	
	Frequency (kc/s)	Specific limitations imposed upon availability for use <sup>1</sup>	Frequency (kc/s)	Specific conditions relating to use of these frequencies by ship stations for transmission as shown in § 83.354(a)(1) of this chapter <sup>2</sup>
San Francisco-Eureka, Calif.....	2450	Available on condition that harmful interference is not caused to police radio service in Kansas or Wisconsin.	2003	Available on condition that harmful interference shall not be caused to the service of any ship station which is within 300 nautical miles of Los Angeles or San Diego, Calif., and is transmitting on 2009 kc/s to a coast station located in the vicinity of either of these ports.
	2506	None.....	2406	None.
	2538	7 a.m. to 7 p.m., P.s.t., only.....	2142	7 a.m. to 7 p.m., P.s.t., only.
	4374.3	None.....	4069.3	None.
	4377.4	do.....	4072.4	Do.
Astoria, Oreg.....	2442	Day only, on condition that no harmful interference will be caused to any service or station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.	2009	Day only, on condition that no harmful interference will be caused to any service or station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.
Astoria-Portland, Oreg.....	2598	None.....	2206	None.
Coos Bay, Oreg.....	2506	7 a.m. to 7 p.m., P.s.t., only.....	2031.5	7 a.m. to 7 p.m., P.s.t., only; on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.
Seattle, Wash.....	2522	None.....	2126	None.
	2482	Authorized for use during the following daily periods on condition that harmful interference is not caused to the service of any coast station located in the vicinity of New Orleans, La., nor to the service of any station in the Alaska area authorized in accordance with Part 85 of this chapter to which this carrier frequency is assigned for transmission: annually from Apr. 1 to Sept. 30, inclusive, from 5 a.m. to 9 p.m., P.s.t., only; and annually from Oct. 1 to Mar. 31, inclusive, from 6 a.m. to 11 p.m., P.s.t., only.	2430	Authorized for use south of 51 degrees north latitude and east of 142 degrees west longitude exclusively during the following daily periods on condition that harmful interference is not caused to the service of any station in the Alaska area authorized in accordance with Part 85 of this chapter to which this carrier frequency is assigned for transmission: annually from Apr. 1 to Sept. 30, inclusive, from 5 a.m. to 9 p.m., P.s.t., only; and annually from Oct. 1 to Mar. 31, inclusive, from 6 a.m. to 11 p.m., P.s.t., only.
Kahuku, Hawaii.....	2530	None.....	2134	None.
	4419.1	do.....	4114.1	Do.
	4422.2	do.....	4117.2	Do.
Hilo, Hawaii.....	2582	None.....	2198	None.
Palmyra Island, Hawaii.....	2530	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Kahuku, Hawaii, to which the carrier frequency 2530 kc/s is assigned for transmission.	2134	Available on condition that harmful interference shall not be caused to the service of any ship station which is within 300 nautical miles of Kahuku, Hawaii, and is transmitting on this frequency to a coast station located in the vicinity of that port.
St. Thomas Island, V.I.....	2506	8 a.m. to 9 p.m., A.s.t., only; on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.	2009	8 a.m. to 9 p.m., A.s.t., only; on condition that no harmful interference will be caused to any service or any station which in the discretion of the Commission may have priority on the frequency or frequencies used for the service to which interference is caused.

<sup>1</sup> Available for single sideband emissions only.

<sup>2</sup> With respect to each specific date set forth, the associated limitations or conditions imposed shall terminate or begin as applicable, at 3 a.m., eastern standard time.

<sup>3</sup> This carrier frequency is to be made available by the Commission, for use (on a 24-hour basis except where specific hours of use are designated) by the maritime mobile service for ship-shore communication in respect to the particular coast station areas designated, on a specific beginning date to be designated in future rule-making as soon as practicable after its use (or the use of its associated transmitting or receiving frequency) by other radio services is terminated or is reduced to the extent necessary to avoid harmful interference to or from the maritime mobile service.

§ 81.306 (b) table amended re Astoria, Oreg., eff. 2-8-65; IV (64)-1

(c) Subject to the specific limitations imposed in this paragraph and in § 81.304 with respect to particular frequencies, the carrier frequencies designated herein are assignable for working purposes to Class II public coast stations using telephony when the coast station and the mobile station transmit alternately on the same radio channel: *Provided*, That these frequencies are assignable only to coast stations located in the vicinity of the specific harbors, ports, or places designated hereinafter opposite the respective frequency:

Coast stations located in the vicinity of—	Carrier frequency (kc/s)	Specific limitations imposed upon availability for use
Baltimore, Md. ....	2400	Available on condition that harmful interference is not caused to the service of any coast station located in the vicinity of Boston, Mass.
Chicago, Ill.; Pittsburgh, Pa.; Louisville, Ky.; St. Louis, Mo.; Memphis, Tenn.; and other locations as required to serve vessels on the Mississippi River and connecting inland waters (other than the Great Lakes).	2782 1 4068.3 4072.4 1 4374.3 4377.4 1 6236.9 6240 1 6451.9 6455 1 8207.7 8210.8 2738	None. Subject to applicable provisions of § 81.304. Do. Do. Do. Do. Do. Do. Do. Do. Do. None.
Lake Dallas, Tex.; Lake Texoma, Tex.	2782	The use of this frequency at locations other than Lake Mead, Nev., is subject to the condition that harmful interference is not caused to the service of any other station.
Lake Mead, Nev.; and other locations as required to serve vessels on inland waters of the southwestern continental United States.	2784	The use of this frequency at locations other than The Dalles, Oreg., and Umatilla, Oreg., is subject to the condition that harmful interference is not caused to the service of any other station.

<sup>1</sup> Available for single sideband emissions only.

(d) The frequency 2638 kc/s is available for assignment as a working frequency for Class II public coast stations for the transmission of safety and operational communications under the following conditions:

(1) No other frequency in the band 1600-5000 kc/s is available for assignment to public coast stations at the proposed location;

(2) The proposed station is to be located within the continental United States (excluding Alaska) not less than 100 miles from the seacoast, the shores of navi-

gable bays and sounds adjacent to the open sea, the shores of the Great Lakes, the Saint Lawrence River, the Illinois and Ohio Rivers, and the Mississippi River south of Hastings, Minnesota;

(3) The use of the frequency shall be confined exclusively to safety and operational communications;

(4) Except for safety communications, use of the frequency shall be limited to day only: *Provided*, That operational communications may be continued beyond such time to the extent necessary for compliance with the provisions of § 81.186(b); and

(5) An affirmative showing is submitted with the original application and each renewal application evidencing the need for the desired safety and operational communications and establishing the fact that such communications cannot be provided by the use of frequencies above 156 Mc/s.

(e) Use of the working frequencies authorized in paragraphs (a), (b), (c) and (d) of this section is subject to the applicable conditions and limitations set forth in § 81.304(d). Further, and insofar as is practicable, class II coast stations shall use frequencies within the band 4000 kc/s to 30 Mc/s only when the use of frequency assignments outside this band will not provide effective communication.

【§ 81.306(c) amended eff. 8-9-66; IV(64)-7】

#### § 81.307 Availability of frequencies above 100 Mc/s.

(a) Carrier frequencies assignable to public coast stations for working are designated in this section. Frequencies will be assigned in such order as to minimize interference. Each of these frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee. These frequencies are not authorized for use in communicating with stations aboard aircraft.

Channel designator	For transmission (Mc/s)	For reception (Mc/s)
24-----	<sup>1</sup> 161.80	<sup>1</sup> 157.20
25-----	<sup>1</sup> 161.85	<sup>1</sup> 157.25
26-----	161.90	157.30
27-----	161.95	157.35
28-----	162.00	157.40

<sup>1</sup> These frequencies are not available in Puerto Rico or the Virgin Islands.

(b) The frequencies specified in paragraph (a) of this section are assignable in the sequence 161.9, 161.95, 161.85, 161.80, and 162.00 Mc/s primarily to public coast stations which provide service to one or more principal harbors or ports.

(c) Public coast stations which provide service to other than a principal harbor or port may be assigned the frequencies for transmission specified in paragraph (a) of this section in the sequence 161.90, 161.95, 161.85, 161.80, and 162.00 Mc/s upon the express condition that (1) such assignment shall be on a secondary basis with respect to use of the assigned frequencies by a station or stations providing service (existing or in the future) to one or more principal harbors or ports, and (2) subject to the provisions of §§ 81.180 and 81.181, interference shall not be caused to the service rendered any principal harbor or port.

#### § 81.309 Use of assigned frequency 156.8 Mc/s.

(a) The frequency 156.8 Mc/s is authorized for call, reply, and safety purposes. It may be used for messages preceded by the urgency and safety signals and, if necessary, for distress messages. It may also be used to announce transmission on another frequency of traffic lists and important maritime information, including ordinary weather and hydrographic reports.

(b) The use of this frequency by public coast stations for transmission of any other category is not authorized.

(c) In general, calling and replying by public coast stations shall be conducted on a frequency authorized primarily for working.

#### § 81.310 Identification of station.

(a) All radiotelephone emissions of a public coast station shall be clearly identified by voice transmission therefrom in the English language of either the official call sign assigned to that station by the Commission or the approximate geographic location of the station as approved<sup>1</sup> in each case by the Commission upon request made by the station licensee or permittee: *Provided*, That in lieu of identification of the station by voice, the official call sign may be clearly transmitted by tone-modulated telegraphy in the

<sup>1</sup> Such voice identification as "Washington marine operator" to indicate that the station is located at or near Washington, D.C., may be approved if there will be no conflict with identification of any other station.

International Morse Code either by a duly licensed radiotelegraph operator or by means of an automatic device approved<sup>2</sup> for this purpose by the Commission. Identification as herein prescribed shall be made:

(1) Upon completion of each communication with any other station;

(2) At the beginning and upon conclusion of each transmission made for any other purpose.

#### § 81.311 Procedure in testing.

(a) Public coast stations using telephony are authorized to carry on such routine tests as may be required for the proper maintenance of the station provided each such station shall use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the testing procedure described below shall be followed:

(1) The licensed radio operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The official call sign and the geographic location of the testing station, followed by the word "test", shall be announced by voice on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in subparagraph (2), any station transmits by voice the word "wait", testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph;

(4) The operator shall announce the word "testing" followed in the case of a voice transmission test by the

<sup>2</sup> The conditions to be met by such a device in order to obtain the approval of the Commission will be determined and will be incorporated in proposed rule making.

count "1, 2, 3, 4 \* \* \* etc." or by test phrases or sentences not in conflict with normal operating signals; or followed, in the case of other emission, by appropriate test signals not in conflict with normal operating signals. At the conclusion of the test, there shall be voice announcement of the official call sign of the testing station and its approximate geographic location.

(b) When testing is conducted on any frequency assignment within the band 2170 kc/s to 2194 kc/s or within the band 156.75 Mc/s to 156.85 Mc/s, the test transmission shall not continue for more than 15 seconds in any 15-minute period.

GENERAL RADIOTELEPHONE OPERATING  
PROCEDURE

**§ 81.312 General radiotelephone operating procedure.**

(a) *Limitations on calling.* (1) Except when transmitting a general call to all stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a public coast station shall call the particular station(s) with which it intends to communicate.

(2) Public coast stations shall call ship stations by voice unless it is known that the attention of a particular ship station with which communication is intended may be secured by other means (such as automatic actuation of a selective ringing device).

(3) Public coast stations may use authorized classes of emission for selective calling on each frequency authorized for working. The use of selective calling on either 2182 kc/s or 156.8 Mc/s is prohibited.

(4) Calling a particular station, either by voice or by other means, shall not continue for a period of more than one minute in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of two minutes. When a station called does not reply to a call sent three times at intervals of two minutes, the calling shall cease and shall not be renewed until after an interval of fifteen 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 two minutes may be repeated after a pause of not less than three minutes. In event of an emergency involving safety, the provisions of this subparagraph shall not apply.

(5) Each public coast station, when using selective calling to secure the attention of a ship station with which it intends to communicate, shall transmit the type of signal and the particular signal code necessary to actuate the automatic attention device (selective ringer) known to be installed in the particular ship station and normally used for monitoring the coast station frequency which is used for transmitting such calls.

(6) Except in the event of an emergency involving safety, a public coast station, with respect to operation on any frequency which is used also by other coast stations within the same communication area, shall not answer, or attempt to answer, a ship station until the latter has transmitted the call sign or name of the particular coast station with which it desires to communicate.

(7) A public coast station shall not attempt to communicate with a ship station that has specifically called another coast station until it becomes evident that the called station does not answer, or that communication between the ship station and the called station cannot be carried on because of unsatisfactory operating conditions.

(b) *Time limitation on calling frequency.* Transmission by coast stations on the calling channel of which 2182 kc/s or 156.8 Mc/s is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed three minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(c) *Change to working frequency.* After establishing communication with another station by call and

reply on the calling channel of which 2182 kc/s or 156.8 Mc/s is the authorized carrier frequency, coast stations shall change to an authorized working channel for the transmission of messages which, under the provisions of this subpart, cannot be transmitted on the respective calling channel.

(d) *Use of busy signal.* A public coast station, when communicating with a ship station which transmits to the coast station on a radio-channel which is a different channel from that used by the coast station for transmission, may transmit a "busy" signal whenever transmission from the ship station is being received and during such other periods of time, pending completion of any one exchange of communications with a particular ship station, as may be considered necessary by the coast station to avoid or minimize interference from other stations.

#### § 81.313 Station documents.

(a) Class I public coast stations, and class II public coast stations that provide communication with ocean-going vessels, shall be provided with the following documents:

- (1) A valid station license, available in accordance with the provisions of § 81.102;
  - (2) The necessary operator license(s), available in accordance with the provisions of § 81.159;
  - (3) The station log required by this part;
  - (4) Parts 81 and 83 of this chapter;
  - (5) The Alphabetical List of Call Signs of Stations used in the Maritime Mobile Service;
  - (6) The List of Ship Stations;
  - (7) The International Radio Regulations, Geneva, 1959.
- (b) Class II public coast stations that do not provide communication with oceangoing vessels, and class III public coast stations, shall be provided with the documents specified by subparagraphs (1), (2), (3), and (4) of paragraph (a) of this section.

(c) These documents shall be continuously and readily available to the licensed operator on duty during the hours of service of the station.

【§ 81.313(a) (2) amended eff. 11-3-67; IV(64)-10】

#### § 81.314 Station records.

(a) Public coast stations using telephony shall maintain an accurate radio-telephone log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in sequence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved of or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The time of making an entry shall be shown opposite the entry and shall be expressed in Greenwich mean time (GMT), except that, in the Great Lakes region, the time shall be expressed in eastern standard time (e. s. t.) (counted from 0000 to 2400 o'clock, beginning at midnight) and for public coast stations which communicate exclusively with vessels on inland waters of the United States (other than the Great Lakes) the time shall be expressed in local standard time (e.s.t., c.s.t., etc., counted from 0000 to 2400 o'clock, beginning at midnight). The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "GMT" (e.s.t. in the Great Lakes area) (e.s.t., c.s.t., etc., for stations serving inland waters exclusively) shall be marked at the head of the column in which the time is entered.

(4) With respect to public coast stations which, by reason of the provisions of Subpart G of this part, are required to maintain a watch on the frequencies 2182 kc/s or 156.8 Mc/s, entries shall be made showing each time this watch is begun, suspended, or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during the hours of service for calling, answering, and exchanging operating signals and safety communications on this frequency. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries and the operator(s) who actually maintains such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(5) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observations or occurrence, identification of the radio-channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries shall appear in the log and shall be properly related to each particular entry of this category.

(6) All calls transmitted from or received by a coast station shall be entered, showing the call signs or names of vessels; the time, and the assigned frequencies involved: *Provided, however,* That when the manual operations of switching and handling of telephone calls directly between a ship telephone station

and landline telephone facilities are not normally performed by a licensed radio operator, the entries prescribed by this paragraph may be omitted from the station log upon the express condition that equivalent records shall be currently maintained by the station licensee. Such records shall be made available upon request of an authorized Commission representative. The equivalent records shall include the time and such other notations as are necessary to identify the frequency(s) employed and the station(s) communicated with or heard. In addition, for each communication handled, a notation shall be made of the points of origin and destination of the communication. Local standard time may be used to record the occurrence in the equivalent record in lieu of Greenwich mean time or eastern standard time prescribed by subparagraph (3) of this paragraph: *Provided,* That the licensee may be required, upon request of an authorized Commission representative, to convert the standard time recorded to that specified in subparagraph (3) of this paragraph.

(7) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(8) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(9) A daily entry shall be made regarding comparison of the time indicated by the required clock(s) with standard time, including a statement of any deviations observed and corrections made.

(10) Failure of apparatus to operate as required, failure of power supply, and incidents tending to unduly delay communication shall be entered.

(11) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the authorized carrier frequency(s) as may be

observed, and a statement of any corrective action taken.

(12) An entry shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed, and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator licensed properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(13) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this part.

## **SUBPART J—LIMITED COAST STATIONS AND MARINE UTILITY STATIONS, USE OF TELEPHONY**

### **§ 81.351 Supplemental eligibility requirements.**

(a) Subject to the statutory eligibility requirements set forth in § 81.23, an authorization for a limited coast station or a marine-utility station may be granted to any person, or state or local government subdivision, or any agency of the Federal Government which is subject to the provisions of section 301 of the Communications Act provided the applicant is:

(1) Regularly engaged in the operation of one or more commercial transport vessels, or one or more vessels of a municipal or state government; or is

(2) Legally responsible for the operation, control, maintenance, or development of a harbor, port, or waterway used by commercial transport vessels; or is

(3) Engaged in furnishing a ship arrival and departure service, and will employ the station only for the purpose of obtaining the information essential to that service; or is

(4) A subsidiary corporation proposing to furnish a non-profit radiocommunication service to its parent corporation or to another subsidiary of the same parent where the party to be served is regularly engaged in one or more activities set forth in the subparagraphs (1), (2), and (3) of this paragraph; or is

(5) A non-profit corporation or association, organized for the purpose of furnishing a maritime mobile service solely to persons who are engaged in the operation of one or more commercial transport vessels.

(b) An authorization for a limited coast station for operation on 156.45 Mc/s may be granted to a person controlling public moorage facilities and otherwise serving the needs of vessels, or to a yacht club having moorage facilities.

(c) Each application for station authorization for a limited coast station or a marine utility station shall be accompanied by a written statement in detail sufficient to indicate clearly the applicant's eligibility under paragraph (a) or (b) of this section.

### **§ 81.352 Cooperative use of facilities.**

(a) A persons, state or local government subdivision, or any agency of the Federal Government subject to the provisions of section 301 of the Communications Act, engaged in the operation of one or more commercial transport vessels or government vessels may receive maritime mobile service from a limited coast station or a marine-utility station used on shore even though not the licensee of the limited coast station or the marine-utility station. The rendition of such service, however, will not be required of the licensee of the limited coast station or the marine-utility station without his consent, except as may be necessary in the enforcement of paragraph (c) of this section. The necessary cooperative arrangements for this purpose will be governed by the following provisions:

(1) Such persons, state or local government subdivisions, or Federal agencies may, and in the case of foreign persons shall, themselves be the licensees of the radio stations installed on board their respective vessels: *Provided*, That prior to receiving an authorization to render service to the involved ship station(s), the licensee of the coast station or the marine utility station from whom the service is to be received files a request for authority to render such maritime mobile service to the person or government agency who is to receive the service. The request must be signed but may be in letter form, submitted in duplicate. Upon approval of the request, the Commission will designate, on the coast station or marine utility station authorization, the persons or government agencies to whom service may be rendered.

(2) The licensee of a limited coast station or marine-utility station used on shore may install licensed ship radio stations on board United States commercial transport vessels of other persons or on board vessels of appropriate government agencies: *Provided*, That in each case such persons or government agencies shall enter into a written agreement verifying that the ship station licensee has the sole right of control of the involved ship stations, that the vessel operators shall use the ship stations subject to the orders and instructions of the licensee of the coast station or marine-utility station on shore, and that the said licensee shall have, at all times, such access to and control of the ship station equipment as will enable him to carry out his responsibilities under the ship station license. A copy of the agreement with vessel owners required hereby shall be kept with the coast station or marine-utility station records and held available for inspection by Commission representatives.

(3) All provisions of this section applicable to ship stations are applicable also to marine-utility stations while the latter are used on board vessels, and to stations on board commercial transport vessels of any foreign country.

(b) All cooperative arrangements entered into under the provisions of this section shall be governed by the following requirements as to costs and charges:

(1) The arrangement must be established on a

non-profit, cost-sharing basis by written contract between the parties and a copy of the contract must be kept with the records of the coast station or the marine-utility station and held available for inspection by Commission representatives.

(2) Contributions to capital and operating expenses may be accepted only on a cost-sharing, non-profit basis, said costs to be prorated on an equitable basis among all persons or government agencies who are parties to the cooperative arrangement. Records which reflect the cost of the service and its non-profit, cost-sharing nature shall be maintained by the licensee of the coast station or the marine-utility station and held available for inspection by Commission representatives. A financial statement reflecting the non-profit, cost-sharing nature of the arrangement shall be submitted by the licensee of the coast station or the marine-utility station annually to the Commission's Washington office no later than three months after the close of the licensee's fiscal year.

(c) If, in a particular geographic area, the use and operation of limited coast stations and (or) marine-utility stations by a plurality of station licensees using the same frequency assignment(s) causes intolerable interference, even though all provisions of this subpart relative to the reduction of interference have been fully complied with, the Commission may, in accordance with the provisions of the Communications Act, require the involved station licensees to join in a single cooperative organization for rendition of the necessary maritime mobile service within the affected area by a single station licensee.

#### § 81.354 Points of communication.

(a) Subject to the conditions and limitations imposed by the terms of the particular coast station license or by the applicable provisions of this part with respect to the use of particular radio-channels, limited coast stations and marine-utility stations are authorized to communicate:

(1) With any mobile station in the maritime mobile service for the transmission or reception of safety communication;

(2) With any land station for the purpose of facilitating the transmission or reception of safety communication;

(3) With the following categories of ship stations for the transmission or reception of communication essential to the business or operational needs of ships:

(i) Limited ship stations and marine-utility stations on board ship, licensed by the Commission and using telephony on a frequency assignment designated by the Commission for communication with limited coast stations or with marine-utility stations on shore;

(ii) Public ship stations licensed by the Commission and using telephony on a frequency assignment designated by the Commission for communication with limited coast stations or marine-utility stations on shore;

(iii) Ship stations of a foreign country using te-

lephony except on the frequencies 156.35, 156.9, and 156.95 Mc/s.

(b) Upon application and satisfactory showing of a need therefor, two or more limited coast stations of the same station licensee may be specifically authorized by the terms of their respective station licenses to communicate on a secondary basis between themselves: *Provided,*

(1) Any communication carried on shall be confined exclusively to that absolutely necessary for the business or operational needs of the ship(s) with which at least one of the involved coast stations is authorized to communicate; and

(2) Other point-to-point communication facilities between the particular coast station locations are inadequate, inoperative, economically impracticable, or unavailable; and

(3) Any two coast stations of this category which communicate with each other are separated by not more than 100 miles; and

(4) Neither harmful interference nor intolerable delay is caused to communication with or between mobile stations; and

(5) Such communication shall occur only on the frequencies 156.35, 156.45, 156.55, 156.9, and 156.95 Mc/s.

#### § 81.355 Nature of service.

(a) Limited coast stations and marine-utility stations using telephony shall:

(1) Not be open to public correspondence;

(2) Not be used to render a communications common carrier service;

(3) Not be used to transmit program material of any kind for use in connection with radio broadcasting;

(4) Not be used for the transmission of press material or news items which are not required to serve the business or operational needs of ships;

(5) Be used exclusively to serve the operational and business needs of ships, including the transmission of safety communication.

(b) In areas where adequate and appropriate weather and hydrographic information is transmitted by means of telephony through the medium of one or more public coast stations or United States Government stations, limited coast stations and marine-utility stations on shore shall not duplicate that service. In all other respects, limited coast stations and marine-utility stations on shore may transmit by means of telephony such weather and hydrographic information as is required for the business and operational needs of the ships with which they normally communicate.

(c) Each marine-utility station on shore shall be used and operated exclusively within the limits of the geographic area specified in the particular station license. Except as specifically provided otherwise in this part, each marine-utility station on shore shall be used and operated as a limited coast station and in accordance with all rules and regulations applicable to such coast stations.



**§ 81.356 Assignable frequencies above 30 Mc/s.**

(a) The frequencies above 156 Mc/s listed in the following table may be authorized to limited coast stations for communication with ship stations as indicated in this section (these frequencies are not authorized for use in communicating with stations aboard aircraft):

Channel designator	Frequency (Mc/s)		Authorized communications
	Coast	Ship	
7A.....	156.35	156.35	Business and operational.
9.....	156.45	156.45	Do.
10.....	156.50	156.50	Do.
11.....	156.55	156.55	Do.
12.....	156.60	156.60	Port operations. <sup>1</sup>
13.....	156.65	156.65	(1).
14.....	156.70	156.70	Port operations. <sup>1</sup>
16.....	156.80	156.80	Safety and calling.
18A.....	156.90	156.90	Business and operational.
19A.....	156.95	156.95	Do.
20.....	<sup>2</sup> 161.60	<sup>3</sup> 157.00	Port operations.

<sup>1</sup> Business and operational in the Great Lakes area only. In other areas, limited to communication with ship stations for the exchange of information concerning shore radar stations or for communication essential for the current passage of a ship or ships through locks, bridge areas, and Government controlled waterways.

<sup>2</sup> The frequencies 156.6 and 156.7 Mc/s are normally assignable in that sequence.

<sup>3</sup> These frequencies are not available in Puerto Rico or the Virgin Islands.

**NOTE:** Limited coast stations in the Great Lakes area authorized to use 156.4 Mc/s prior to October 1, 1962, may continue to use the frequency pursuant to their authorization until January 1, 1963.

**§ 81.358 Conditions imposed upon assignments in the 156-174 Mc/s band.**

Normally a limited coast station shall be authorized to use only one working frequency within the band 156.325-161.625 Mc/s in accordance with the table contained in § 81.356(a). Application for authority to use more than one frequency for working shall include a satisfactory showing of need for such additional frequency.

**§ 81.359 Use of assigned frequency 156.8 Mc/s.**

The frequency 156.8 Mc/s is authorized for call, reply, and safety purposes. It may also be used for messages preceded by the urgency and safety signals, announcing the transmission on another frequency in the 156-174 Mc/s band of important maritime information, and, if necessary, for distress messages. The use of this frequency by limited coast stations for transmissions of any other category is not authorized.

**§ 81.360 Call and reply on working channels.**

Although use of the assigned frequency 156.8 Mc/s by limited coast stations and marine-utility stations on shore for call and reply is authorized, calling and replying by these stations shall, in general, be conducted on a radio-channel authorized primarily for working.

**§ 81.361 Frequencies available between 4 and 27.5 Mc/s.**

(a) The following carrier frequencies (kc/s) may be authorized to limited coast stations (A3J emission) for communication with ship stations operating on the same carrier frequency (these frequencies are not authorized for use in communicating with stations aboard aircraft):

4133.0	8276.5	16540.5	22078.0
4136.5	12407.0	16544.0	22081.5
6200.5	12410.5	16547.5	22085.0
6204.0	12414.0	16551.0	22088.5
6207.5	12417.5	16554.5	22092.0
8273.0	16537.0	16558.0	22095.5

(b) Assignment of the frequencies specified in paragraph (a) of this section is subject to the following conditions:

(1) The applicant must show that the desired communications are primarily over distances for which frequencies above 27.5 Mc/s would not be suitable;

(2) Each of the frequencies is available on a shared basis only and shall not be construed as available for the exclusive use of any one station licensee;

(3) One or more of the frequencies may be authorized to a limited coast station provided that normally no more than one frequency from each of the frequency bands will be authorized;

(4) Use of the frequencies by limited coast stations is on the express condition that harmful interference shall not be caused to services carried on by ship stations of other administrations operating in accordance with Appendix 15 to the International Radio Regulations, Geneva, 1959.

**§ 81.362 Limitations on use of marine-utility stations.**

(a) Marine-utility stations on shore shall be used and operated solely within the local geographic area specified in the particular station license.

(b) The antenna structures of a marine-utility station on shore shall meet all applicable requirements of Part 17 of this chapter.

(c) Marine-utility stations on shore shall not be used or operated in the immediate vicinity of any radio transmitting or receiving installation of a coast station, a base station in any land mobile service, or a U.S. Government station, which transmits or receives on any radio-channel(s) above 30 Mc/s unless the fact has been established, by actual tests in cooperation with the involved station(s), that interference is not caused by such operation to the service of the coast, base, or government station(s) concerned.

**§ 81.363 Use of working frequencies for calling.**

In addition to any radio-channel of which the carrier frequency is specifically authorized herein for "calling", the radio-channels authorized in this subpart for "working" may be used for call and reply also, provided interference is not caused to any communication in progress on the particular working channel.

**§ 81.364 Time limitation on communication.**

All communication engaged in by limited coast stations and marine-utility stations shall be limited to the minimum practicable transmission time, and each station licensee shall employ standardized operating practices and procedures to this effect.

**§ 81.365 Availability of 2738, 2830, and 2214 kc/s for limited coast stations.**

(a) The frequencies 2738 kc/s and 2830 kc/s are available for assignment on a shared basis to limited coast stations in the areas where they are available for intership use upon showing that exceptional circumstances warrant the use of such frequencies to serve the safety, operational or business needs of commercial transport or government vessels. Communications between such coast stations and ships shall be conducted on the same working frequency. The frequency 2214 kc/s is available for assignment under like conditions to limited coast stations. Applicants for the frequencies must show that:

(1) The desired communications are primarily over distances for which frequencies above 30 Mc/s would not be suitable;

(2) Public coast station facilities would not provide the desired communications;

(3) Harmful interference would not be caused to the service of any United States Government station by the use of 2214 kc/s;

(4) Harmful interference would not be caused to the intership use of 2738 kc/s and 2830 kc/s;

(5) The transmitter power for such communication shall not exceed 150 watts.

(b) The frequencies 2738 and 2830 kc/s are available for assignment on a shared basis to limited coast stations in the areas where they are available for intership use upon a showing that the use of such frequencies is necessary to fulfill the need for communications with ships relating to safety of navigation at bridges, waterways, causeways and similar locations. Communications between such coast stations and ships shall be conducted on the same working frequency. On an adequate showing of need, both frequencies may be assigned. The transmitter power for such communications shall not exceed 50 watts.

NOTE: Commission Order (FCC 62-724) adopted July 13, 1962, appearing at 27 F.R. 6883, July 19, 1962, waived regulations contained in § 81.365 to permit the use of 2003 kc/s at a limited coast station licensed to Michigan State Highway Department.

**§ 81.366 Availability of 2182 kc/s for limited coast stations.**

(a) The frequency 2182 kc/s is the international radiotelephone distress and general calling frequency for the maritime mobile service. It may be used by limited coast stations solely for transmission of:

(1) Distress signals and traffic as provided in Subpart G of this part.

(2) The international urgency signal, and very ur-

gent messages (preceded by this signal) concerning the safety of a ship, aircraft or other vehicle, or the safety of some person on board or within sight of such ship, aircraft, or vehicle.

(3) The international safety signal and call. The safety message which follows shall, where practicable, be sent on a working frequency and a suitable announcement to this effect shall be made at the end of the call.

(4) Normal calls, replies, and brief radio operating signals but only when the use of a different carrier frequency for this function appears to be impracticable by reason of operating or equipment limitations of a mobile station.

(5) Brief test signals in accordance with the provisions of § 81.311, as may be necessary to determine whether the radio transmitting equipment of the station is in good working condition on this frequency.

**§ 81.367 Procedure in testing.**

(a) Limited coast stations and marine-utility stations using telephony are authorized to carry on such routine tests as may be required for the proper maintenance of the station provided each such station shall use every precaution to insure that, when conducting operational transmitter tests, the emissions of the station will not cause harmful interference. Radiation must be reduced to the lowest practicable value and if feasible shall be entirely suppressed. When radiation is necessary or unavoidable, the testing procedure described below shall be followed:

(1) The licensed radio operator responsible for operation of the transmitting apparatus shall ascertain by careful listening that the test emissions will not be likely to interfere with transmissions in progress;

(2) The official call sign and the geographic location of the testing station, followed by the word "test", shall be announced by voice on the radio-channel being used for the test, as a warning that test emissions are about to be made on that frequency;

(3) If, as a result of the announcement prescribed in subparagraph (2) of this paragraph, any station transmits by voice the word "wait", testing shall be suspended. When, after an appropriate interval of time, such announcement is repeated and no response is observed, and careful listening indicates that harmful interference should not be caused, the operator shall proceed as set forth in subparagraph (4) of this paragraph;

(4) The operator shall announce the word "testing" followed in the case of a voice transmission test by the count "1, 2, 3, 4, \* \* \* etc." or by test phrases or sentences not in conflict with normal operating signals; or followed, in the case of other emission, by appropriate test signals not in conflict with normal operating signals. At the conclusion of the test, there shall be voice announcement of the official call sign of the testing station and its approximate geographic location.

(b) When testing is conducted on any frequency assignment within the band 2170 kc/s to 2194 kc/s or within the band 156.75 to 156.85 Mc/s, the test transmission shall not continue for more than 15 seconds in any 15 minute period.

**§ 81.368 General radiotelephone operating procedure.**

(a) *Limitations on calling.* (1) Except when transmitting a general call to several stations within range for announcing or preceding the transmission of distress, urgency, or safety messages, a limited coast station or a marine utility station shall call the particular station(s) with which it intends to communicate.

(2) Limited coast stations shall call ship stations by voice unless it is known that the attention of a particular ship station with which communication is intended may be secured by other means (such as automatic actuation of a selective ringing device).

(3) Limited coast stations may use authorized classes of emission for selective calling on each frequency authorized for working. The use of selective calling on either 2182 kc/s or 156.8 Mc/s is prohibited.

(4) Calling a particular station, either by voice or by other means, shall not continue for a period of more than thirty seconds in each instance. If the called station is not heard to reply, that station shall not again be called until after an interval of three minutes. In event of an emergency involving safety, the provisions of this subparagraph shall not apply.

(5) Each limited coast station, when using selective calling to secure the attention of a ship station with which it intends to communicate, shall transmit the type of signal and the particular signal code necessary to actuate the automatic attention device (selective ringer) known to be installed in the particular ship station and normally used for monitoring the coast station frequency which is used for transmitting such calls.

(6) Except in the event of an emergency involving safety, a limited coast station or a marine utility station with respect to operation on any frequency which is used also by other stations within the same communication area, shall not answer, or attempt to answer, a station on board ship until the latter has transmitted the call sign or name of the particular coast station with which it desires to communicate.

(7) A limited coast station or a marine utility station shall not attempt to communicate with a ship station that has specifically called another station until it becomes evident that the called station does not answer or that communication between the ship station and the called station cannot be carried on because of unsatisfactory operating conditions.

(b) *Time limitation on calling frequency.* Transmission on the calling channel of which 2182 kc/s or 156.8 Mc/s is the authorized carrier frequency (including calls, answers, operating signals, and conversation pertaining to safety) shall be kept to a minimum and in general any one exchange of communications shall not exceed three minutes in duration. In the event of distress or other emergency, this time limitation shall not apply.

(c) *Change to working frequency.* After establishing communication with another station by call and reply on the calling channel of which 2182 kc/s or 156.8 Mc/s is the authorized carrier frequency, land stations shall change to an authorized working channel for the transmission of messages which, under the provisions of this subpart, cannot be transmitted on the respective calling channel.

**§ 81.369 Station documents.**

(a) Limited coast stations using telephony shall be provided with and have readily available to the responsible operator (except as otherwise permitted by §§ 81.102 and 81.155) during their hours of service, the following documents:

(1) A valid station license available in accordance with § 81.102;

(2) The necessary operator license(s), available in accordance with the provisions of § 81.159.

(3) The station log required by this part for stations of this category;

(4) Parts 81 and 83 of this chapter.

【§ 81.369(a)(2) amended eff. 11-3-67; IV(64)-10】

**§ 81.370 Station records.**

(a) Limited coast stations using telephony shall maintain an accurate radiotelephone log during their hours of service, as hereinafter specified:

(1) Each sheet of the log shall be numbered in se-

quence and dated and shall include the official call sign of the coast station and also the signature(s) of the licensed operator(s) performing operating duties.

(2) The entry "on duty" shall be made by the operator beginning a duty period, followed by his signature. The entry "off duty" shall be made by the operator being relieved of or terminating a duty period, followed by his signature. All log entries shall be currently completed and all entries shall, unless otherwise stated, be made by a licensed operator on duty. The use of initials or signs is not authorized in lieu of any operator's signature required by this section.

(3) The time of making an entry shall be shown opposite the entry and shall be expressed in local standard time (EST, CST, etc.) counted from 0000 to 2400 o'clock, beginning at midnight. The first entry in each hour shall consist of 4 figures; additional entries in the same hour may be expressed in 2 figures by omitting the hour designation. The abbreviation "e.s.t.", "c.s.t.", etc., shall be marked at the head of the column in which the time is entered.

(4) With respect to limited coast stations which, by reason of the provisions of Subpart G of this part, are required to maintain a watch on 156.8 Mc/s, entries shall be made showing each time this watch is begun, suspended or concluded; without any requirement, however, of making such entries during interruption of this watch as may be necessary during hours of service for calling, answering, and exchanging operating signals and safety communications on this frequency. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries and the operator(s) who actually maintains such watch shall appear in the log and shall be properly related to each particular entry for this purpose.

(5) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification

of the radio channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined. These entries shall be made by the licensed operator(s) on duty who is (are) designated and authorized by the station licensee to do so; the name and signature of the operator(s) making these entries shall appear in the log and shall be properly related to each particular entry of this category.

(6) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(7) All test transmissions shall be entered, together with the time of such transmissions, without regard to whether two-way communication with any other station is established.

(8) All measurements of the transmitter frequency(s) shall be entered, including such deviations from the authorized carrier frequency(s) as may be observed, and a statement of any corrective action taken.

(9) An entry shall be made giving pertinent details of all installation, service, or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full-time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(10) Entries shall be made also in reference to operation of the antenna tower lights when such entries are required by reason of applicable provisions of Subpart G of this part.

(b) Marine-utility stations on shore shall maintain an accurate radiotelephone log during their hours of service as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include notation of the geographic area(s) in which the station is operated; the date and

**§ 81.402 Assignable frequencies.**

(a) The following frequency bands are authorized for use by shore radionavigation stations (including shore radar stations):

2900 to 3100 Mc/s

9300 to 9500 Mc/s

(b) The following frequency bands are authorized for use by shore radiolocation stations:

(1) 2450 to 2500 Mc/s on condition that harmful interference shall not be caused to the fixed and mobile services, and on the condition that no protection shall be given from interference caused by emissions from industrial, scientific, or medical equipment.

(2)

2900 to 3100 Mc/s

5400 to 5650 Mc/s

9300 to 9500 Mc/s

The use of frequencies within these bands for radiolocation shall not cause harmful interference to the radionavigation service and to the Government radiolocation service. Each shore radiolocation station in the maritime radiolocation service (used for purposes other than navigation of ships or aircraft or warning of obstructions to navigation) authorized to operate in the band 3000-3246 Mc/s as of April 16, 1953, and which operates on frequencies between 3100 and 3246 Mc/s may continue to operate in the band 3100-3246 Mc/s for the duration of the term of its authorization in effect as of that date. Renewals of such authorizations, however, shall be contingent upon the condition that each such station shall not cause harmful interference to United States Government services.

**§ 81.403 Special conditions imposed.**

(a) An authorization granted for the construction and/or operation of a shore radionavigation station shall be subject to the express condition that in so far as the station may be operated to provide information to be used for the purpose of aiding in the movement of any ship, the station shall be treated as a private aid to navigation for which permission must be obtained by the station permittee or licensee from the Commandant, United States Coast Guard, as provided in section 759, Title 33, U.S. Code.

(b) Upon the grant of an authorization for the construction and/or operation of a shore radionavigation station, the Commission will forward to the Commandant, U.S. Coast Guard, Washington, D.C., notification thereof together with a copy of the authorization.

**SUBPART L—FIXED STATIONS ASSOCIATED WITH THE MARITIME MOBILE SERVICE**

**MARINE FIXED STATIONS**

**§ 81.451 Supplemental eligibility requirements.**

(a) Subject to the basic eligibility requirements set forth in § 81.23, the following persons are eligible for authorizations for marine fixed stations:

(1) Persons engaged in prospecting for, producing, collecting, refining, or transporting petroleum or petroleum products in the immediate vicinity of the marine fixed station requested;

(2) Persons engaged in an activity in the immediate vicinity of the marine fixed station requested which activity is necessary to a construction project of a public character; or

(3) A subsidiary corporation proposing to furnish a non-profit radiocommunication service to its parent corporation or to another subsidiary of the same parent where the party to be served is engaged in one or more of the activities set forth in subparagraphs (1) and (2) of this paragraph.

(b) Additionally, and subject to the basic eligibility requirements set forth in § 81.23, authorizations for marine fixed stations may be granted to any nonprofit corporation or association, organized for the purpose of furnishing a radiocommunication service solely to persons who are actually engaged, in the immediate vicinity of the marine fixed station, in one or more of the activities designated in paragraphs (a)(1) and (a)(2) of this section. Such a corporation or association shall render service only on a non-profit cost-sharing basis, said costs to be prorated on an equitable basis among all persons to whom service is rendered. Records which reflect the cost-sharing non-profit basis shall be maintained and held available for inspection by Commission representatives.

**§ 81.452 Points of communication.**

Marine fixed stations are authorized to communicate by means of telephony solely with class II public coast stations in the United States when these stations render a communication service of telephony in direct connection with the general public service land-line telephone system, provided the marine fixed station, in each instance, is located not more than 300 statute miles from each coast station of this class with which it communicates.

**§ 81.453 Showing of need.**

Applicants for authority to establish and operate marine fixed stations must satisfy the Commission, through information contained in the application or as otherwise determined by the Commission, that a need for the desired communication exists primarily in respect to the safety of life or property, and that the use of any communication facility to satisfy such need, other than a marine fixed station, is impossible or impracticable for the purpose involved.

**§ 81.454 Frequencies available.**

(a) Carrier frequencies within the band 2000 to 2450 kc/s, which are authorized by Part 83 of this chapter for use by public ship stations employing telephony for the transmission of public correspondence to public coast stations (normally providing direct connection with public service land-line telephone systems), are assignable to marine fixed stations for the same purpose; upon the condition that neither harm-

ful interference nor intolerable delay is caused to communication between coast stations and mobile stations.

(b) In addition to the carrier frequencies designated in paragraph (a) of this section, the carrier frequency 2182 kc/s is assignable to marine fixed stations solely for use in transmitting distress calls and distress traffic, and urgency and safety signals and messages. The use of the frequency by marine fixed stations for ordinary calls and replies is prohibited.

#### § 81.455 Technical requirements.

The authorized frequency tolerance, authorized class of emission, authorized emission-bandwidth, and authorized transmitter-power for marine fixed stations are set forth in Subpart E of this part.

#### § 81.456 Scope of communication.

Marine fixed stations shall be used primarily for safety communication, as defined in § 81.7(a): *Provided, however*, That other than safety communication may be carried on, by these stations, with discretion and to the extent required in behalf of the specific activities set forth in § 81.451: *Provided, That*, in this respect priority at all times shall be given to use of the assigned radio channel(s) for ship to shore transmission.

#### § 81.457 Station documents.

(a) Each marine fixed station shall be provided with the following documents:

- (1) A valid station license.
- (2) The necessary operator license or licenses.
- (3) The station log required by § 81.458.
- (4) Parts 81 and 83 of this chapter.

#### § 81.458 Station records.

(a) Marine fixed stations shall maintain an accurate radiotelephone log during their hours of service as follows: all entries shall be made by the licensed operator on duty at the station, except as otherwise provided in subparagraph (2) of this paragraph:

(1) Each sheet of the log shall be numbered in sequence and shall include the date(s) and time(s) of operation of the station; official call sign of the station, the name and signature of the licensed operator who is responsible for operation of the station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly employed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(3) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered,

together with the time of such observation or occurrence, identification of the radio-channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined.

(4) Whenever harmful interference is experienced by or reported to the responsible operator, an entry shall be made by such operator to that effect, stating the source of the interference, if known.

(5) All test transmissions shall be entered, including the date, time, and purpose thereof.

(6) The date and time of making each entry shall be shown opposite the entry and the time shall be expressed in local standard time as follows: the first entry in each hour shall consist of four figures; additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation, e.s.t., c.s.t., etc., shall be marked at the head of the column in which time is entered.

#### § 81.459 Station identification.

For the purpose of station identification, the provisions of § 83.364(a) of this chapter shall apply to marine fixed stations.

#### § 81.460 Procedure in testing.

For the purpose of conducting operational or maintenance tests, the provisions of § 83.365(a) of this chapter shall apply to marine fixed stations.

#### § 81.461 Operating procedure.

In the use and operation of marine fixed stations, these stations shall be governed by the provisions of § 83.366 (a) and (b) of this chapter.

### MARINE RECEIVER-TEST STATIONS

#### § 81.471 Eligibility requirements.

An authorization for a marine receiver-test station may be granted to the licensee of a public coast station using telephony and having a frequency assignment for this purpose within the band 2000-3500 kc/s or 156-174 Mc/s.

#### § 81.472 Scope of service.

A marine receiver-test station shall be used solely for brief transmissions intended for interception by the regularly used radiotelephone receiving apparatus of an associated public coast station of the same station licensee; the purpose of such transmissions shall be limited to necessary determinations of the technical performance of such receiving apparatus. No other signals or communications shall be transmitted by marine receiver-test stations.

#### § 81.473 Assignable frequencies.

The carrier frequency or frequencies assignable to a marine receiver-test station is (are) the specific carrier frequency or frequencies within the band 2000-3500 kc/s or 156-174 Mc/s used by public ship stations in transmitting by means of telephony to the particular public coast station with which the marine receiver-test station is associated; these frequencies with re-

spect to ship stations of the United States are designated in §§ 83.354 and 83.359 of this chapter.

**§ 81.474 Technical requirements.**

The authorized frequency tolerance, class of emission, bandwidth, and transmitter power for marine receiver-test stations are set forth in Subpart E of this part.

**§ 81.475 Station identification.**

The official call sign and the general geographic location of the marine receiver-test station shall be announced at the conclusion of each completed test transmission.

**§ 81.476 Operating limitations.**

The station licensee shall exercise such control over the transmissions of a marine receiver-test station as is necessary to avoid interference to calls from ship stations and to the exchange of public correspondence between ship and shore. The maximum amount of transmission time permitted on any one radio-channel authorized for use by a particular marine receiver-test station in a region of heavy radio traffic on the involved radio-channel shall not exceed 24 minutes in each 24-hour period.

**§ 81.477 Station records.**

(a) An accurate log shall be maintained with respect to the operation of each marine receiver-test station. The station licensee shall be responsible for compliance with this requirement. This log may be maintained and located at an authorized control point associated with the station.

(b) All log entries shall be made by the licensed operator responsible for operation of the station or by a person authorized and directed by the station licensee to make such entries.

(c) The log shall be maintained and entries made therein as follows:

(1) Each sheet of the log shall be numbered in sequence and shall include the date(s) and time(s) of operation of the station; official call sign of the station, the name and signature of the licensed operator who is responsible for operation of the station. (The use of initials or signs in lieu of signatures is not authorized.)

(2) An entry shall be made giving pertinent details of all installation, service or maintenance work performed which may affect the proper operation of the station. The entry shall be made, signed and dated by the responsible licensed operator who supervised or performed the work, and unless he is regularly em-

ployed on a full time basis at the station and has his operator license properly posted, shall also include his mail address and the class, serial number, and expiration date of his license.

(3) All radiotelephone distress, urgency or safety signals and communications made or intercepted; the complete text, if possible, of such communications; and any information which may appear to be of importance to safety of life or property shall be entered, together with the time of such observation or occurrence, identification of the radio-channel(s) on which such signals or messages were transmitted or received, and the position of any ship, or other mobile unit in need of assistance, if this can be determined.

(4) Whenever interference to other stations is reported to the station licensee or to the responsible operator, an entry shall be made by the latter to that effect, stating the source of the interference report and the station(s) to which interference has been caused, if known.

(5) All test transmissions shall be entered, including the date, time, duration of the transmission, the class of emission and particular radio-channel used.

(6) The date and time of making each entry shall be shown opposite the entry and the time shall be

expressed in local standard time as follows: the first entry in each hour shall consist of four figures (from 0000 to 2400 beginning at midnight local standard time); additional entries in the same hour may be expressed in two figures by omitting the hour designation. The abbreviation e.s.t., c.s.t., etc., shall be marked at the head of the column in which time is entered.

§§ 81.481—81.486 [Deleted]

【§§ 81.481—81.486 deleted eff. 6-5-67; IV(64)-9】

## SUBPART M—DEVELOPMENTAL STATIONS

### § 81.501 Supplemental eligibility.

An authorization for developmental operation of a station in any of the services under this part will be issued only to those persons who are eligible to operate such stations on a regular basis.

### § 81.502 Showing and statement required.

(a) Except as provided in paragraph (c) of this section, each application for authorization for a developmental station shall be accompanied by a showing that:

(1) The applicant has an organized plan of development leading to a specific objective;



(2) A point has been reached in the program where actual transmission by radio is essential to the further progress thereof;

(3) The program has reasonable promise of substantial contribution to the expansion or extension of the use of radio for a maritime purpose, or is in a field of maritime operation not already investigated.

(4) The program will be conducted by qualified personnel:

(5) The applicant is legally and financially qualified, and possesses adequate technical facilities for conduct of the program as proposed;

(6) The public interest, convenience, or necessity will be served by the proposed operation.

(b) Every application for authority to engage in developmental operation shall be accompanied by a statement signed by the applicant in which it is agreed that any authorization issued pursuant thereto will be accepted with the express understanding of the applicant that it is subject to change in any of its terms or to cancellation in its entirety at any time, upon reasonable notice but without a hearing, if, in the opinion of the Commission, circumstances should so require.

(c) The provisions of paragraph (a) of this section do not apply when an application is made for a developmental station solely for the reason that the frequency requested is restricted to such developmental use.

#### § 81.503 Assignable frequencies.

(a) Stations engaged in developmental operation may be authorized to use a frequency or frequencies, available for the service and class of station which they propose to operate. The number of frequencies assignable to a particular station shall depend upon the specific requirements of the developmental program and the number of frequencies available for such use in the particular area where the station is to be operated.

(b) In addition to the specific frequencies and frequency-bands designated in this part as available for a particular service and class of station, each of the following frequencies and frequency-bands may be licensed as an assigned frequency or as an authorized frequency-band, respectively, for use by developmental stations subject to the applicable provisions of this part as follows:

(1) Available for coast stations:

6425-6575 Mc/s	11700-12200 Mc/s
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(2) Available for coast stations and fixed stations:

2450-2500 Mc/s	13200-13250 Mc/s
8400-8500 Mc/s	16000-18000 Mc/s
10550-10700 Mc/s	23000-30000 Mc/s

NOTE 1: Stations operating within the bands 2450-2500 Mc/s or 17850-18000 Mc/s must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

NOTE 2: With respect to marine fixed stations operating in the frequency bands listed in this subparagraph, the provisions of § 81.453 requiring a showing that the use of any

common carrier communication facility is impossible or impracticable for the purpose involved shall not apply.

(3) Available for operational fixed stations:

952-960 Mc/s	2500-2700 Mc/s
1850-1990 Mc/s	6575-6875 Mc/s
2110-2200 Mc/s	12200-12700 Mc/s

The class of emission, the frequency tolerance, the emission-bandwidth, and the maximum transmitter-power for use on the frequencies listed in this subparagraph shall be designated in each station authorization. With respect to operational fixed stations operating in the frequency bands listed in this subparagraph, the provision of § 81.482 requiring that applicants show that common carrier facilities are not available or, if available, would not provide effective results, shall not apply.

(c) In addition to the specific frequency bands designated by § 81.402 for shore radiolocation stations, the frequency bands 5350-5460 Mc/s and 9000-9200 Mc/s are authorized for use by developmental shore radiolocation stations. Use of frequencies within these bands shall not cause harmful interference to the aeronautical radionavigation service or the Government radiolocation service.

#### § 81.504 Use of developmental stations.

(a) Developmental stations shall be constructed and used in such manner as to conform with all applicable technical and operating requirements contained in this part, unless deviation therefrom is specifically provided in the station authorization or in other sections of this subpart.

NOTE: Such requirements are those applicable to the corresponding established class of station including provisions relating to operator requirements, station records, station documents, and assignments of call signs.

(b) Communication with any station of a country other than the United States is prohibited unless specifically authorized by the terms of the station authorization or by other sections of this subpart.

(c) The operation of a developmental station is subject to the condition that harmful interference is not caused to the operation of stations regularly licensed in an established service under any part of the Commission's rules, nor to the service of any United States Government station or any foreign station which, in the discretion of the Commission, may have priority on the frequency or frequencies used for the service to which interference is caused.

#### § 81.505 Developmental program.

(a) The developmental program as described by the applicant in the application for authorization shall be substantially followed unless the Commission shall otherwise direct.

(b) Where some phases of the developmental program are not covered by the general rules of the Commission and the rules in this part, the Commission may specify supplemental or additional requirements or conditions in each case as deemed necessary in the public interest, convenience or necessity.

(c) The Commission may, from time to time, require a station engaged in developmental work to conduct special tests which are reasonable and desirable to the authorized developmental program.

#### **§ 81.506 Report of operation required.**

(a) A report on the results of the developmental program shall be filed with and made a part of each application for renewal of authorization, or in cases where no renewal of authorization is requested, such report shall be filed within 60 days of the expiration of such authorization. Matters which the applicant does not wish to disclose publicly may be so labeled; they will be used solely for the Commission's information and will not be publicly disclosed without permission of the applicant. The report shall include comprehensive and detailed information on the following:

(1) The final objective of the developmental operation.

(2) Pertinent results of operation to date.

(3) Analysis of the results obtained.

(4) Copies of any published reports.

(5) Need for continuation of the program if such need exists.

(6) Number of hours of operation on each authorized frequency during the term of the license to the date of the report.

#### **§ 81.507 Identification of station.**

(a) The radiotelegraph and radiotelephone emissions of a developmental station shall be clearly identified in the manner provided for the corresponding established class of station.

(b) The facsimile emissions of a developmental station shall be identified either by telegraphy or by telephony as provided in paragraph (a) of this section.

(c) All other classes of emission of a developmental station shall be identified as prescribed in the respective station authorization.

### **SUBPART N—STATIONS OPERATED IN THE LAND MOBILE SERVICE FOR MARITIME PURPOSES**

#### **§ 81.521 Eligibility for shipyard base stations.**

Under the provisions of this part, a station authorization will not be issued solely for a shipyard base station in the land mobile service. Subject to the provisions of § 81.523 only a land station authorized to operate as a limited coast station in the maritime mobile service may be authorized, upon proper application therefor, to be used additionally, and on a secondary basis, as a shipyard base station in the land mobile service.

#### **§ 81.522 Eligibility for shipyard mobile stations.**

Under the provisions of this part, a station license will not be issued solely for one or more shipyard mobile stations in the land mobile service. Subject to the provisions of §§ 81.524 and 81.525, authority to

construct, or to use and operate, one or more shipyard mobile stations in the land mobile service may be granted, upon proper application therefor, exclusively to the licensee or permittee of a limited coast station when that station is authorized to be used additionally and on a secondary basis as a shipyard base station in the land mobile service.

#### **§ 81.523 Showing precedent to shipyard base station authorization.**

(a) Prior to a grant by the Commission of any shipyard base station authorization pursuant to the provisions of § 81.521, the applicant therefor must establish, in connection with each related application, that:

(1) Such applicant controls and operates a shipyard, in commerce, which is regularly engaged in the construction, change in construction, or repair of commercial transport vessels and/or Government vessels;

(2) Each limited coast station to be used additionally as a shipyard base station will be operated primarily as a coast station for communication with one or more commercial transport vessels operated and controlled by the applicant, which are used in connection with the construction, change in construction, or repair of commercial transport vessels and/or Government vessels by the shipyard to which reference is made in subparagraph (1) of this paragraph.

#### **§ 81.524 Showing precedent to shipyard mobile station authorization.**

(a) Prior to a grant by the Commission of any shipyard mobile station authorization pursuant to the provisions of § 81.522, the applicant therefor must establish, in connection with each related application, that each shipyard mobile unit on which a shipyard mobile station is to be installed and operated is:

(1) Controlled and operated by the applicant;

(2) To be used for the expeditious transportation of shipyard personnel, material, or supplies within the local geographic area to which reference is made in § 81.523 (a) (1) in connection with the construction, change in construction, or repair of commercial transport vessels or Government vessels by that shipyard.

#### **§ 81.525 Limitation on number of shipyard mobile stations.**

(a) The number of shipyard mobile stations which may be authorized for each land station permittee or licensee pursuant to the provisions of §§ 81.522 and 81.524 shall be limited to a maximum of one shipyard mobile station for each three ship stations (for example, the licensee of up to and including 5 ship stations is entitled to one shipyard mobile station; the licensee of 6, 7, or 8 ship stations is entitled to two shipyard mobile stations, etc.) when each ship station included for this purpose is:

(1) Licensed in the name of the particular land station permittee or licensee;

(2) Located on board a commercial transport vessel

operated and controlled by the particular land station permittee or licensee;

(3) Used for communication with one or more limited coast stations of the same station licensee, in connection with the construction, change in construction, or repair of commercial transport vessels and/or Government vessels.

**§ 81.526 Points of communication.**

(a) Subject to the provisions of § 81.527, a land station, when operating as a shipyard base station, is authorized to communicate exclusively with shipyard mobile stations of the same licensee.

(b) Subject to the provisions of § 81.527, each shipyard mobile station is authorized to communicate exclusively with any land station of the same licensee which is licensed to operate as a shipyard base station.

**§ 81.527 Limitations on use.**

(a) Communication between a land station, operating as a shipyard base station, and any shipyard mobile station may be transmitted only when:

(1) The involved facilities of the land station are not required at the same time for any maritime mobile service; and

(2) Both the land station and the shipyard mobile station are within a geographic area designated by the Commission in reference to those stations.

(b) Each shipyard mobile station shall be operated exclusively within the local geographic area specified in the applicable station authorization: *Provided*, That such stations shall not be operated in the immediate vicinity of any transmitting or receiving radio installation of any land station (other than a land station of the same licensee) or any U.S. Government station, which transmits or receives on any radio channel(s) above 100 Mc/s unless the fact has been established, by actual tests in cooperation with the involved station(s), that interference is not caused by such operation to the service of the land station or Government station concerned.

(c) Under no circumstances shall the operation of a shipyard mobile station or a land station being used as a shipyard base station interfere with any maritime mobile service.

**§ 81.528 Scope of communication.**

(a) Each land station, when operating as a shipyard base station, and each shipyard mobile station is authorized to transmit:

(1) Communication concerning the use of shipyard mobile units for expediting the construction, change in construction, repair, servicing, or maintenance of commercial transport vessels or government vessels by the shipyard which controls and operates such mobile units;

(2) In an emergency, communication concerning the immediate safety of life or property when the use of other communication facilities might be less effective.

(b) Transmission of any other class of communication

by shipyard base stations or shipyard mobile stations is not authorized.

**§ 81.529 Assignable frequencies.**

(a) Provided one of the following designated carrier frequencies in megacycles is authorized for use by a particular limited coast station in the maritime service in accordance with the applicable provisions of Subpart J of this part, such carrier frequency may be authorized for additional use by that land station for operation (on a secondary basis in reference to maritime mobile service) as a shipyard base station in a supplemental land mobile service:

156.35	156.45	156.55
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(b) The carrier frequency which may be authorized for use (on a secondary basis in reference to maritime mobile service) by one or more shipyard mobile stations is the same as that authorized, in accordance with the provisions of paragraph (a) of this section, for use by a land station of the same permittee or licensee with which such mobile stations are to communicate: *Provided*, That the same carrier frequency is licensed also for use by ship stations of that permittee or licensee which regularly communicate with that land station.

**§ 81.530 Technical requirements.**

The authorized frequency tolerance, authorized class of emission, authorized emission-bandwidth, and authorized transmitter power for shipyard base stations and shipyard mobile stations shall be the same as is designated for coast stations in Subpart E of this part.

**§ 81.531 Cooperative use of facilities.**

If, in a particular geographic area, the use and operation of shipyard mobile stations and shipyard base stations by a plurality of station licensees using the same frequency assignment(s) causes intolerable interference, even though all provisions of this part relative to the reduction of interference have been fully complied with, the Commission may, in accordance with the provisions of the Communications Act, require the involved station licensees to join in a single cooperative organization for rendition of the necessary land mobile service within the affected area by a single station licensee.

**§ 81.532 General operating procedure.**

(a) All communication engaged in by shipyard base and mobile stations shall be limited to the minimum practicable transmission time, and each station licensee shall employ standardized operating practices and procedures to this effect.

(b) Each licensee of shipyard mobile stations shall exercise such control over the transmissions of those stations as is necessary to avoid interference to calls from ship stations which may be transmitted on the radio-channel used by the shipyard mobile stations.

(c) Calling a particular station, either by voice or by other means, shall not continue for a period of more than 30 seconds in each instance. If the called station

is not heard to reply, that station shall not again be called until after an interval of three minutes. In event of an emergency involving safety, these time limitations shall not apply.

(d) Shipyard base stations may use authorized classes of emission for the selective calling of shipyard mobile stations on each radio-channel authorized for communication between such base and mobile stations.

**§ 81.533 Identification of stations.**

(a) All emissions of a shipyard base station shall be clearly identified by voice transmission therefrom in the English language of either (1) the official call sign assigned to that station (the official call sign assigned to the same station as a coast station in accordance with § 81.72) by the Commission, or (2) the name of the station licensee (in abbreviated form if practicable) as formally reported to and approved by the Commission; if the licensee operates more than one shipyard base station within mutual interference range, the name of the licensee shall be followed by a digit indicating distinctly the respective land station, as formally reported to the Commission.

(b) All emissions of a shipyard mobile station shall be clearly identified by voice transmission in the English language of either (1) the single official call sign assigned by the Commission to the shipyard mobile station(s) of that licensee in the particular geographic area, followed by two digits indicating distinctly the respective shipyard land mobile unit as reported to the Commission, or (2) the name of the station licensee

(in abbreviated form if practicable) as formally reported to and approved by the Commission, followed by two digits indicating distinctly the respective shipyard land mobile unit as reported to the Commission.

(c) Identification of stations as prescribed in this section shall be made:

(1) Whenever another station is called;

(2) Upon completion of each communication with any other station;

(3) At the beginning and upon completion of each transmission made for any other purpose.

**§ 81.534 Procedure in testing.**

With respect to test transmission, the provisions of § 81.367 which apply to limited coast stations and marine-utility stations shall apply also to shipyard base stations and shipyard mobile stations: *Provided*, That the term "licensed radio operation" as used in paragraph (a)(1) of that section shall, with respect to test operation of shipyard mobile stations pursuant to this section, be construed in each instance to mean the operator licensee on duty at the control point of the associated shipyard base station as provided in § 81.156(a)(1).

**§ 81.535 Station documents.**

(a) With respect to documents required to be available at a shipyard base station, the provisions of § 81.369 which apply to limited coast stations using telephony shall apply also to shipyard base stations.

(b) Each shipyard mobile station shall be provided with the following documents during its hours of service:

(1) A valid station authorization, available in accordance with § 81.102.

(2) The necessary operator license(s), available in accordance with the provisions of § 81.159 (this requirement is not applicable when the station is operated under the provision of § 81.158).

【§ 81.535(b)(2) amended eff. 11-3-67; IV(64)-10】

**§ 81.536 Station records.**

(a) (1) With respect to station records required to be maintained by a shipyard base station, the provisions of § 81.370 which apply to limited coast stations using telephony shall apply also to shipyard base stations.

(2) Each licensee of a land station operated as a shipyard base station shall, upon specific request made by the Commission, be responsible for the submission of such reports as are requested by the Commission to show the value and practical performance of that station and the associated shipyard mobile station(s) in the land mobile service in relation to the maritime mobile service for which the same land station is licensed.

(b) Unless otherwise determined by the Commission subsequent to pertinent developments in the use and operation of shipyard mobile stations, no station records need be maintained by those stations upon the

express condition that (1) such station records as are required by other applicable sections of this part (including §§ 81.109, 81.110, and 81.111) are maintained as part of the required records of the associated shipyard base station, and (2) the records of the latter station with respect to the log entries required by § 81.370(a) (7), (8) and (9) shall include the specified information concerning the involved shipyard mobile station(s).

**SUBPART O—VIOLATIONS**

**§ 81.551 Answers to notice of violation.**

Any person receiving official notice of a violation of the terms of the Communications Act, any legislative act, Executive order, treaty to which the United States is a party, terms of a station or operator license, or the rules and regulations of the Federal Communications Commission, shall, within ten days from such receipt, send a written answer, in duplicate, to the office of the Commission originating the official notice. If an answer cannot be sent, or an acknowledgment made within such ten-day period by reason of illness or other unavoidable circumstances, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. The answer shall contain



a full explanation of the incident involved and shall set forth the action taken to prevent a continuation or recurrence thereof. If the notice relates to lack of attention to, or improper operation of the station, or to log or watch discrepancies, the answer shall give the name and license number of the licensed operator on duty.

**§ 81.552 Reports of infringements of the International Radio Regulations.**

In the event that infringement of the International Radio Regulations by a foreign station is detected, report thereof may be made by the submission to the Commission of a form similar to that set forth in the International Radio Regulations.

**SUBPART P—CERTAIN OPERATIONAL FIXED STATIONS ASSOCIATED WITH THE MARITIME MOBILE SERVICE**

**[Subpart P (§§ 81.601–81.604) adopted eff. 6–5–67; IV(64)–9]**

**§ 81.601 Service authorized.**

Operational fixed stations associated with the maritime mobile service consist of marine control stations, marine repeater stations, and marine relay stations which are authorized for service as follows:

(a) Marine control stations: to transmit exclusively to the particular coast station whose operation or emission is being controlled.

(b) Marine repeater stations: to transmit exclusively to other authorized marine repeater stations, or to designated radio receiving locations to which the respective transmitted communication is addressed, or to an authorized message center at a designated fixed location.

(c) Marine relay stations: to transmit to and re-

ceive from other authorized marine relay stations as specified in the station authorization.

**§ 81.602 Eligibility requirements.**

An applicant for an operational fixed station using frequencies in the 72–76 Mc/s band must submit the following showings:

- (a) That he is the licensee of a coast station;
- (b) The specific need for the station; and
- (c) That other telecommunications facilities either are not available or will not provide effective results.

**§ 81.603 Frequencies available to operational fixed stations.**

(a) The following frequencies in the 72–76 Mc/s band may be assigned to operational fixed stations:

Mc/s	Mc/s	Mc/s	Mc/s
72.02 <sup>1</sup>	72.36 <sup>1</sup>	72.80	75.66
72.04 <sup>1</sup>	72.38 <sup>1</sup>	72.82	75.68
72.06 <sup>1</sup>	72.40 <sup>1</sup>	72.84	75.70
72.08 <sup>1</sup>	72.42	72.86	75.72
72.10 <sup>1</sup>	72.46	72.88	75.74
72.12 <sup>1</sup>	72.50	72.90	75.76
72.14 <sup>1</sup>	72.54	72.92	75.78
72.16 <sup>1</sup>	72.58	72.94	75.80
72.18 <sup>1</sup>	72.62	72.96	75.82
72.20 <sup>1</sup>	72.64	72.98	75.84
72.22 <sup>1</sup>	72.66	75.42	75.86
72.24 <sup>1</sup>	72.68	75.46	75.88
72.26 <sup>1</sup>	72.70	75.50	75.90
72.28 <sup>1</sup>	72.72	75.54	75.92
72.30 <sup>1</sup>	72.74	75.58	75.94
72.32 <sup>1</sup>	72.76	75.62	75.96
72.34 <sup>1</sup>	72.78	75.64	75.98

<sup>1</sup> These frequencies are available on a shared basis with the Manufacturers Radio Service.

(b) The frequencies listed in paragraph (a) of this section are assignable under the following conditions:

- (1) In any area in the United States (including Alaska) a maximum of four frequencies may be assigned to operational fixed stations.

(2) All authorizations are subject to the condition that no harmful interference shall be caused to the service of existing and previously authorized operational fixed stations.

(3) If the Commission finds that the public interest, convenience, or necessity would be served thereby, licensees of operational fixed stations authorized to operate on one or more of the frequencies specified in paragraph (a) of this section shall be required to share, on a coordinated noninterference basis, the use of their respective frequency assignments with other licensees using the same frequencies.

(4) All authorizations are subject to the condition that no harmful interference will be caused to television reception on Channels 4 and 5.

(5) The applicant agrees to eliminate any harmful interference caused by his operation to TV reception on either Channel 4 or 5, that might develop, by whatever means are found necessary, within 90 days of the time knowledge of said interference is first brought to his attention by the Commission. If said interference is not cleared up within the 90-day period, operation of the fixed station will be discontinued.

(6) Vertical polarization must be used.

(7) Whenever it is proposed to locate a 72-76 Mc/s fixed station less than 80, but more than 10 miles from the site of a TV transmitter operating on either Channel 4 or 5, or from the post office of a community in which such channels are assigned but are not in operation, the fixed station shall be authorized only if there are fewer than 100 family dwelling units (as defined by the U.S. Bureau of Census) located within a circle centered at the location of the proposed fixed station (family dwelling units 70 or more miles distant from the TV antenna site are not to be counted) the radius of which shall be determined by use of the chart entitled, "Chart for Determining Radius From Fixed Sta-

tion in 72-76 Mc/s Band to Interference Contour Along Which 10 Percent of Service From Adjacent Channel Television Station Would Be Destroyed." Two charts are provided, one for Channel 4 and one for Channel 5. The Commission may, however, in a particular case, authorize the location of a fixed station within a circle as determined above containing 100 or more family dwelling units upon a showing that:

(i) The proposed site is the only suitable location.

(ii) It is not feasible, technically or otherwise, to use other available frequencies.

(iii) The applicant has a plan to control any interference that might develop to TV reception from his operations.

(iv) The applicant is financially able and agrees to make such adjustments in the TV receivers affected as may be necessary to eliminate interference caused by his operations.

(8) All applications for authority to operate with a separation of less than 10 miles from the site of a TV transmitter operating on either Channel 4 or 5, or from the post office of a community in which such channels are assigned but are not in operation, will be returned without action. (See charts.)

(e) The frequency band 73.0-74.6 Mc/s may continue to be licensed to operational fixed stations which were authorized for operation on December 1, 1961, in accordance with the applicable technical specifications contained in this part.

#### § 81.604 Technical requirements.

The authorized frequency tolerance, class of emission, bandwidth, frequency deviation, and transmitter power for operational fixed stations are set forth in Subpart E of this part. Modulation requirements for such stations are set forth in Subpart D of this part.

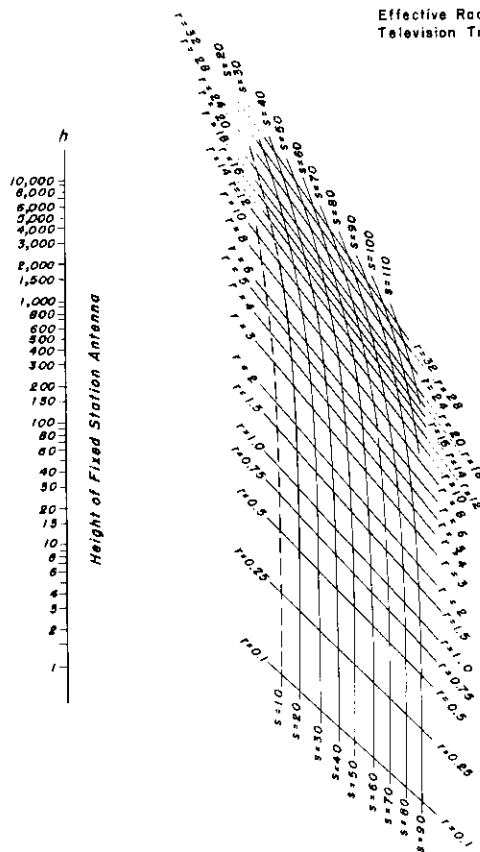
**【Subpart P (§§ 81.601-81.604) adopted eff. 6-5-67; IV (64)-9】**



# FOR CHANNEL 4

## CHART FOR DETERMINING RADIUS FROM FIXED STATION IN 72-76 Mc/s BAND TO INTERFERENCE CONTOUR ALONG WHICH 10% OF SERVICE FROM ADJACENT TELEVISION STATION WOULD BE DESTROYED

Effective Radiated Power of TV Station.....100 kw.  
Television Transmitting Antenna Height.....500 ft.



### EXPLANATION OF SCALE HEADINGS:

- P - effective radiated power of fixed 72-76 Mc/s station in watts and equals the power output of the transmitter adjusted for transmission line loss and antenna gain. In symbols  $P = P_o L G$  where  $P_o$  = output of transmitter in watts,  $L$  = transmission line efficiency,  $G$  = power gain of the antenna with respect to a half wave dipole in free space. For a directional antenna use the power in the main lobe.
  - h - height in feet of the center of the transmitting antenna array of the fixed 72-76 Mc/s station with respect to the average level of the terrain between 2 and 10 miles from such antenna in the direction of the TV station. (The method for determining this height is explained in detail in the TV Broadcast Rules.)
  - s - separation in miles between the television station antenna and the 72-76 Mc/s fixed station antenna.
  - r - distance in miles from the 72-76 Mc/s fixed station antenna to the contour at which the TV service area is reduced by 10%. This distance is measured from the 72-76 Mc/s antenna in the direction of the TV antenna.
  - f - frequency in Mc/s of 72-76 Mc/s fixed stations.
- NOTE: Frequencies included in cross hatched area are not available for assignment.

### DIRECTIONS FOR USING THIS CHART:

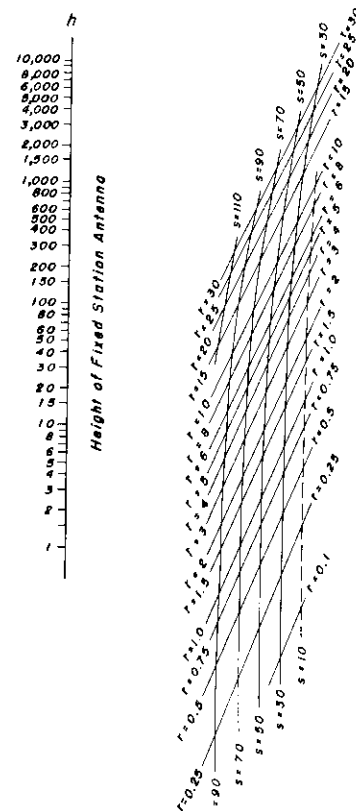
1. Draw a straight line connecting P and h for the 72-76 Mc/s fixed station and continue to the Q axis.
2. From the intersection of the P-h line and the Q axis, draw another straight line to f.
3. Where the second line intersects the S-r curves, read the value of r for the appropriate value of S.

REVISED JANUARY 1963

## FOR CHANNEL 5

CHART FOR DETERMINING RADIUS FROM FIXED STATION IN  
72-76 Mc/s BAND TO INTERFERENCE CONTOUR ALONG WHICH 10% OF  
SERVICE FROM ADJACENT TELEVISION STATION WOULD BE DESTROYED

Effective Radiated Power of TV Station.....100 kw.  
Television Transmitting Antenna Height.....500 ft.



## EXPLANATION OF SCALE HEADINGS:

P - effective radiated power of fixed 72-76 Mc/s station in watts and equals the power output of the transmitter adjusted for transmission line loss and antenna gain. In symbols

$$P = P_o L G$$

where  $P_o$  - output of transmitter in watts

$L$  = transmission line efficiency, %

$G$  = power gain of the antenna with respect to a half wave dipole in free space.

For a directional antenna use the power in the main lobe.

h - height in feet of the center of the transmitting antenna array of the fixed 72-76 Mc/s station with respect to the average level of the terrain between 2 and 10 miles from such antenna in the direction of the TV station. (The method for determining this height is explained in detail in the TV Broadcast Rules.)

S - separation in miles between the television station antenna and the 72-76 Mc/s fixed station antenna.

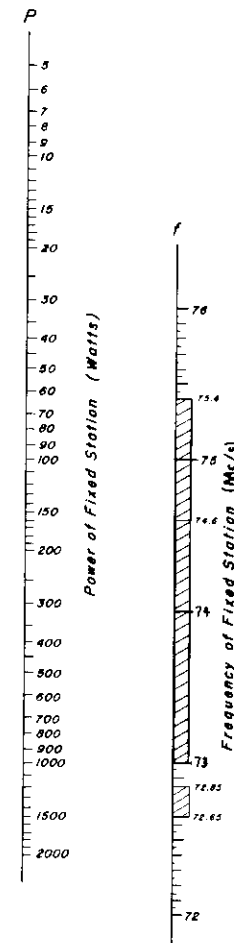
r - distance in miles from the 72-76 Mc/s fixed station antenna to the contour at which the TV service area is reduced by 10%. This distance is measured from the 72-76 Mc/s antenna in the direction of the TV antenna.

f - frequency in Mc/s of 72-76 Mc/s fixed stations.

NOTE: frequencies included in cross hatched area are not available for assignment.

## DIRECTIONS FOR USING THIS CHART:

1. Draw a straight line connecting P and h for the 72-76 Mc/s fixed station and continue to the Q axis.
2. From the intersection of the P-h line and the Q axis, draw another straight line to f.
3. Where the second line intersects the S-r curves, read the value of r for the appropriate value of S.



REVISED JANUARY 1963