

not be construed to change or diminish in any respect the responsibility of station licensees to have and to maintain control over the stations licensed to them (including all transmitter units thereof), or for the proper functioning and operation of those stations (including all transmitter units thereof) in accordance with the terms of the licenses of those stations.

(6) Notwithstanding any other provisions of this paragraph, unless the transmitter is so designed that none of the operations necessary to be performed during the course of normal rendition of service may cause off-frequency operation or result in any unauthorized radiation, such transmitter shall be operated by a person holding a first or second class commercial radio operator license (either radiotelephone or radiotelegraph as may be appropriate for the type of emission being used) issued by the Commission.

## PART 89—PUBLIC SAFETY RADIO SERVICES

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**AUTHORITY:** §§ 89.1 to 89.559 issued under 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064-1068, 1081-1105, as amended; 47 U.S.C. Subchap. I, III-VI.

**SOURCE:** §§ 89.1 to 89.559 appear at 28 F.R. 14098, Dec. 21, 1963.

## Subpart A—General Information

### § 89.1 Basis and purpose.

(a) The basis for this part is the Communications Act of 1934, as amended, and applicable treaties and agreements to which the United States is a party. This part is issued pursuant to authority contained in Title III of the Communications Act of 1934, as amended, which vests authority in the Federal Communications Commission to regulate radio transmissions and to issue licenses for radio stations.

(b) This part is designed to provide a service of radio communication essential either to the discharge of non-Federal governmental functions or to the alleviation of an emergency endangering life or property.

### § 89.3 Definitions.

For the purpose of this part the following definitions shall be applicable. (For other definitions, refer to Part 2 of this chapter):

(a) Definitions of services:

**Fire Radio Service.** A public safety service of radio communication essential to official fire activities.

**Fixed service.** A service of radio communication between specified fixed points.

**Forestry-Conservation Radio Service.** A public safety service of radio communication essential to forestry-conservation activities.

**Highway Maintenance Radio Service.** A public safety service of radio communication essential to official highway activities.

**Land mobile service.** A mobile service between base stations and land mobile stations, or between land mobile stations.

**Local Government Radio Service.** A service of radio communication essential to official activities of states, possessions, and territories, including counties, towns, cities, and similar governmental subdivisions.

**Mobile service.** A service of radio communication between mobile and land stations, or between mobile stations.

**Police Radio Service.** A public safety service of radio communication essential to official police activities.

**Public safety radio services.** Any service of radiocommunication essential either to the discharge of non-Federal government functions or the alleviation of an emergency endangering life or property, the radio transmitting facilities

of which are defined as fixed, land, mobile, or radiolocation stations.

**Radiolocation.** Radiodetermination used for purposes other than those of radionavigation. (For the purposes of this part, radiolocation will include speed measuring devices.)

**Radio service.** An administrative subdivision of the field of radio communication. In an engineering sense the subdivisions may be made according to the method of operation; as for example, mobile service and fixed service. In a regulatory sense, the subdivisions may be descriptive of particular groups of licensees; as for example, the groups and subgroups of persons licensed under this part.

**Safety Service.** A radiocommunication service used permanently or temporarily for the safeguarding of human life and property.

**Special Emergency Radio Service.** A public safety service of radio communication essential to the alleviation of an emergency endangering life or property.

**State Guard Radio Service.** A public safety service of radio communication essential to official activities of state guards or comparable organizations of states, territories, possessions, or the District of Columbia.

(b) Definitions of stations:

**Base station.** A land station in the land mobile service carrying on a service with land mobile stations.

**Control station.** An operational fixed station, the transmissions of which are used to control, automatically, the emissions or operation of another radio station at a specified location.

**Fixed station.** A station in the fixed service.

**Fixed relay station.** An operational fixed station established for the automatic retransmission of radio communications received from either one or more fixed stations or from a combination of fixed and mobile stations and directed to a specified location.

**Interzone station.** A fixed station in the Police Radio Service using radiotelegraphy (A1 emission) for communication with zone stations within the zone and with interzone stations in other zones.

**Land station.** A station in the mobile service not intended to be used while in motion.

**Mobile station.** A station in the mobile service intended to be used while in

motion or during halts at unspecified points.

**Mobile relay station.** A base station established for the automatic retransmission of mobile service communications which originate on the transmitting frequency of the mobile stations and which are retransmitted on the receiving frequency of the mobile stations.

**Operational fixed station.** A fixed station, not open to public correspondence, operated by and for the sole use of those agencies operating their own radio communication facilities in the Public Safety, Industrial, Land Transportation, Marine, or Aviation Services.

**Radiolocation mobile station.** A station in the radiolocation service intended to be used while in motion or during halts at unspecified points.

**Repeater station.** An operational fixed station established for the automatic retransmission of radio communications received from any station in the Mobile Service.

**Zone station.** A fixed station in the Police Radio Service using radiotelegraphy (A1 emission) for communication with other similar stations in the same zone and with an interzone station.

(c) Miscellaneous definitions:

**Antenna structures.** The term "antenna structure" includes the radiating system, its supporting structures, and any surmounting appurtenances.

**Assigned frequency.** The frequency appearing on a station authorization from which the carrier frequency may deviate by an amount not to exceed that permitted by the frequency tolerance.

**Authorized bandwidth.** The maximum width of the band of frequencies, as specified in the authorizations, to be occupied by an emission.

**Bandwidth occupied by an emission.** The width of the frequency band (normally specified in kilocycles) containing those frequencies upon which a total of 99 percent of the radiated power appears, extended to include any discrete frequency upon which the power is at least 0.25 percent of the total radiated power.

**Carrier frequency.** The frequency of the carrier.

**Harmful interference.** Any emission, radiation or induction which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with this chapter.

**Landing area.** A landing area means any locality, either land or water, including airports and intermediate landing fields, which is used, or intended to be used, for the landing and take-off of aircraft whether or not facilities are provided for shelter, servicing, or repair of aircraft, or for receiving or discharging passengers or cargo.

**Station authorization.** Any construction permit, license, or special temporary authorization issued by the Commission.

#### § 89.5 Organization and applicability of rules.

The rules in this part are divided into 9 subparts of which Subparts A and C, inclusive, contain rules of a general nature which apply to every station authorized under this part. Subparts E to R, inclusive, are specific and apply only to the stations authorized under the particular subpart.

#### § 89.7 General limitation on use.

The radio facilities authorized under this part shall not be used to carry program material of any kind for use in connection with radio broadcasting and shall not be used to render a communications common carrier service except for stations in the Special Emergency Radio Service while being used to bridge gaps in common carrier wire facilities.

#### § 89.9 General citizenship restrictions.

A station license shall not be granted to or held by:

- (a) Any alien or the representative of any alien;
- (b) Any foreign government or the representative thereof;
- (c) Any corporation organized under the laws of any foreign government;
- (d) Any corporation of which any officer or director is an alien;
- (e) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by: Aliens or their representatives; a foreign government or representative thereof; or any corporation organized under the laws of a foreign country;
- (f) Any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, if the Commission finds that the public interest will be served by the refusal or revocation of such license; or
- (g) Any corporation directly or indirectly controlled by any other corpora-

tion of which more than one-fourth of the capital stock is owned of record or voted by: Aliens or their representatives; a foreign government or representative thereof; or any corporation organized under the laws of a foreign government, if the Commission finds that the public interest will be served by refusal or revocation of such license.

#### § 89.11 General restrictions on transfer and assignment of station authorization.

A station authorization; the frequencies authorized to be used by the grantee of such authorization; and the rights therein granted by such authorization shall not be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, or indirectly by transfer of control of any corporation holding such authorization to any person, unless the Commission shall, after securing full information, decide that said transfer is in the public interest, and shall give its consent in writing. Requests for authority to assign or transfer control of a station authorization may be submitted in accordance with § 89.59 (b) or (d), whichever is applicable.

#### § 89.13 Cooperative arrangements.

Arrangements may be made between two or more persons for the cooperative use of radio station facilities provided all persons sharing in the use of a station are eligible to hold licenses to operate the particular type of station shared. Such cooperative arrangements shall be governed by the following:

- (a) *Agreements relating to control.*
  - (1) A group of persons eligible for a license in the same public safety radio service may share the use of a base station or a base and mobile station licensed to one member of the group provided there is on file with the Commission, and maintained with the records of the station, a copy of the agreement under which such shared operation shall take place. Such agreement should provide that the licensee of the station shall be in control of the operation of the station and that all use of its facilities shall take place only under the direction and supervision of an employee of the licensee.
  - (2) Subscribers to such service may either obtain a separate license to cover the mobile transmitters which they use or the mobile transmitters may be included in the license of the base station

from which service is rendered. In the latter case the coordinated service agreement should specifically cover use of such mobile units and indicate that the licensee would be in control of such units.

(b) *Contributions to operating costs.* Coordinated service may be rendered without cost to subscribers or contributions to capital and operating expenses may be accepted by the licensee. Such contributions must be on a cost-sharing basis and pro-rated on an equitable basis among all persons 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 base station licensee and held available for inspection by a Commission representative.

(c) *Letter to accompany application.* Each application for a mobile station proposing to receive coordinated service shall be accompanied by a letter from the licensee of the base station concerned indicating that the proposed coordinated service will be rendered.

#### § 89.15 Frequency coordination procedures.

(a) Except for applications in the Special Emergency Radio Service and applications requesting assignment of frequencies in the band 27.23–27.28 Mc/s, and frequencies above 458.950 Mc/s, each applicant requesting assignment of a frequency not previously authorized for use by the applicant shall be accompanied by information in the form required by either paragraph (b) or (c) of this section.

(b) (1) A statement that all existing licensees located within a radius of 75 miles of the proposed station and authorized to operate on frequencies within 30 kc/s of the requested frequency or frequencies have been notified of the applicant's intention to request assignment of the particular frequency; and

(2) A report based on a field study covering the area within a radius of 75 miles of the proposed station, indicating the probable interference to existing station authorized to operate within 30 kc/s of the requested frequency or frequencies.

(c) In lieu of the statement and report described in paragraph (b) of this section, the applicant may submit a statement from a Frequency Advisory Committee commenting upon the frequency or frequencies requested and giving the opinion of the Committee regarding the

probable interference to existing stations. Where the requested frequency or frequencies are within 30 kc/s of a frequency assignable only after coordination and available to another radio service, the Committee's statement shall affirmatively show that coordination with a similar committee for the other service has been accomplished; or in lieu thereof that all licensees in the other service within 75 miles of the requested frequency have been notified of the applicant's intention to request the particular frequency involved. Committee statements should, where feasible, also include comments regarding technical factors such as power, antenna height, and characteristics which may serve to mitigate any contemplated interference situation. The Frequency Advisory Committee must be so organized as to be representative of all persons who are eligible for radio facilities in the service concerned in the area the Committee purports to serve. The functions of Frequency Advisory Committees are purely advisory in character; their comments are not binding upon either the applicant or the Commission; and must not contain statements which would imply that Frequency Advisory Committees have any authority to grant or deny applications.

(d) In addition to the provisions of paragraph (a) of this section, in order to minimize possible harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia, any applicant for a station authorization other than mobile, temporary base, or temporary fixed seeking a station license for a new station, a construction permit to construct a new station or to modify an existing station license in a manner which would change either the frequency, power, antenna height or directivity, or location of such a station within the area bounded by 39°15' N on the north, 78°30' W on the east, 37°30' N on the south, and 80°30' W on the west shall, at the time of filing such application with the Commission, simultaneously notify the Director, National Radio Astronomy Observatory, P.O. Box No. 2, Green Bank, West Virginia, 24944, in writing, of the technical particulars of the proposed station. Such notification shall include the geographical coordinates of the antenna, an-

tenna height, antenna directivity if any, proposed frequency, type of emission, and power. In addition, the applicant shall indicate in his application to the Commission the date notification was made to the Observatory. After receipt of such applications, the Commission will allow a period of 20 days for comments or objections in response to the notifications indicated. If an objection to the proposed operation is received during the 20-day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

#### § 89.17 Civil defense.

A station licensed under this part may transmit communications necessary for the implementation of civil defense activities assigned such station by the local civil defense authorities during an actual or simulated emergency, including drills and tests: *Provided*, That such communications relate to the activity or activities which form the basis of the licensee's eligibility in the radio service in which authorized.

#### APPLICATIONS, AUTHORIZATIONS, AND NOTIFICATIONS

#### § 89.51 Station authorization required.

No radio transmitter shall be operated in the Public Safety Radio Services except under and in accordance with a proper station authorization granted by the Federal Communications Commission.

#### § 89.53 Procedure for obtaining a radio station authorization and for commencement of operation.

(a) Persons desiring to install and operate radio transmitting equipment should first submit an application for a radio station authorization in accordance with § 89.59 (a).

(b) When construction permit only has been issued for a base, fixed or mobile station and installation has been completed in accordance with the terms of the construction permit and the applicable rules of the Commission, the permittee shall proceed further as follows:

(1) Notify the Engineer-in-Charge of the local radio district of the date on which the transmitter will first be tested in such manner as to produce radiation, giving name of the permittee, station id-

cation, call sign, and frequencies on which tests are to be conducted. This notification shall be made in writing at least two days in advance of the test date. FCC Form 456 may be used for this purpose. No reply from the radio district office is necessary before the tests are begun.

(2) After testing, but on or before the date the station is used for operational purposes, mail to the Commission in Washington, D.C., 20554, an application on FCC Form 400 or in the case of microwave station on FCC Form 402 for license or modification of license as appropriate in the particular case. The station may thereafter be used as though licensed, pending Commission action on the license application.

(c) When a construction permit and license for a new base, fixed or mobile station are issued simultaneously the licensee shall notify the Engineer-in-Charge of the local radio district of the date on which the transmitter will be placed in operation, giving name of licensee, station location, call sign, and operating frequencies. This notification shall be made in writing on or before the day on which operation is commenced. FCC Form 456 may be used for this purpose.

(d) When a construction permit and modification of license for a base, fixed or mobile station are issued simultaneously, operation may be commenced without notification to the Engineer-in-Charge of the local radio district, except where operation on a new or different frequency results by reason of such modification, in which event the notification procedure set forth in paragraph (c) of this section must be observed.

#### § 89.55 Filing of applications.

(a) To assure that necessary information is supplied in a consistent manner by all persons, standard forms are prescribed for use in connection with the majority of applications and reports submitted for Commission consideration. Standard numbered forms applicable to the Public Safety Radio Services are discussed in § 89.59, and may be obtained from the Washington, D.C., 20554, office of the Commission, or from any of its engineering field offices. Concerning matters where no standard form is applicable, the procedure outlined in § 89.61 should be followed.

(b) Any application for radio station authorization and all correspondence re-

lating thereto shall be submitted to the Commission's office at Washington, D.C., 20554, directed to the attention of the Secretary. An application for commercial radio operator permit or license may be submitted to any of the Commission's engineering field offices, or to the Commission's Office at Washington, D.C., 20554.

(c) Unless otherwise specified, an application shall be filed at least sixty days prior to the date on which it is desired that Commission action thereon be completed. In particular, applications involving the installation of new equipment shall be filed at least sixty days prior to the contemplated installation.

(d) Failure on the part of the applicant to provide all the information required by the application form or to supply the necessary exhibits or supplementary statements may constitute a defect in the application.

(e) Applications involving operation at temporary locations:

(1) When one or more individual transmitters are intended to be operated as a base station or as a fixed station at unspecified or temporary locations for indeterminate periods, such transmitters may be considered to comprise a single station intended to be operated at temporary locations. An application for authority to operate a base station or a fixed station at temporary locations shall specify the general geographic area within which the operation will be confined. The area specified may be a city, a county or counties, or a state or states.

(2) When a base station or fixed station authorized to operate at temporary locations remains at a single location for more than one year, an application for modification of the station authorization to specify the permanent location shall be filed within thirty days after expiration of the one year period.

#### § 89.57 Who may sign applications.

(a) Except as provided in paragraph (b) of this section, applications, amendments thereto, and related statements of fact required by the Commission shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; or by a member who is an officer, if the applicant is an unincorporated association. Applications, amendments, and related statements of fact filed on behalf of eligible

government entities, such as states and territories of the United States and political subdivisions thereof, the District of Columbia, and units of local government, including incorporated municipalities, shall be signed by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction.

(b) Applications, amendments thereto, and related statements of fact required by the Commission may be signed by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall in that event separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

(c) Only the original of applications, amendments, or related statements of fact need be signed; copies may be conformed.

(d) Applications, amendments, and related statements of fact need not be signed under oath. Willful false statements made therein, however, are punishable by fine and imprisonment, U.S. Code, Title 18, section 1001, and by appropriate administrative sanctions, including revocation of station license pursuant to section 312(a)(1) of the Communications Act of 1934, as amended.

#### § 89.59 Standard forms to be used.

(a) Except as provided in paragraph (h) of this section, a separate application shall be submitted on FCC Form 400 for the following:

(1) New station authorization for a base or fixed station.

(2) New station authorizations for any required number of mobile units (including hand-carried or pack-carried units) or any required number of units of a base station or fixed station to be operated at temporary locations in the same service.

**NOTE:** An application for mobile units may be combined with an application for a single base station in those cases where the mobile units will operate with that base station in a single radio communication system.

(3) License for any class of station upon completion of construction or installation in accordance with the terms and conditions set forth in the construction permit.

(4) Modification of combined construction permit and station license for changes outlined in § 89.75(a).

(5) Modification of construction permit.

(6) Modification of station license.

Any of the foregoing applications will, upon approval and authentication by the Commission, be returned to the applicant as a specifically designated type of authorization.

(b) When the holder of a station authorization desires to assign to another person the privilege to construct or use a radio station, he shall submit to the Commission a letter setting forth his desire to assign all right, title, and interest in and to such authorization, stating the call sign and location of station. This letter shall also include a statement that the assignor will submit his current station authorization for cancellation upon completion of the assignment. Enclosed with this letter shall be an application for Assignment of Authorization on FCC Form 400 prepared by and in the name of the person to whom the station is being assigned.

(c) [Reserved]

(d) A separate application shall be submitted on FCC Form 703 whenever it is proposed to change, as by transfer of stock-ownership, the control of a corporate permittee or licensee.

(e) An application not submitted on a standard form prescribed by the Commission is considered to be an informal application. Each informal application shall be submitted in duplicate, normally in letter form, and with the original properly signed. Each application shall be clear and complete within itself as to the facts presented and the action desired.

(f) FCC Form 456 "Notification of Completion of Radio Station Construction" may be used to advise the Engineer-in-Charge of the local district office that construction of the station is complete and that operational tests will begin.

(g) Application for renewal of station license shall be submitted on FCC Form 405-A. Unless otherwise directed by the Commission, each application for renewal of station license shall be filed during the last 60 days of the license term. In any case in which the licensee has, in accordance with the Commission's rules made timely and sufficient application for renewal of license, no

license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

(h) Application for construction permit, license, modification or assignment thereof for an operational fixed station using frequencies above 952 Mc/s (a so-called microwave station) shall be submitted on FCC Form 402.

#### § 89.61 Request for special temporary authority.

(a) In circumstances requiring immediate or temporary use of facilities, request may be made for special temporary authority to install and operate new equipment or to operate licensed equipment in a manner different than that authorized in the station license. Any such request may be in letter form, submitted in duplicate, and signed in accordance with § 89.57: *Provided*, That in cases of emergency involving danger to life or property or due to damage to equipment, such request may be made by telephone or telegraph under the condition that written request is submitted within 10 days from the date of such request. In the event that the Commission finds that such an emergency exists, temporary authorization may be granted for the duration of the emergency. Any such request shall be clear and complete within itself as to the action desired.

(b) Special temporary authority may also be requested for the purpose of conducting a field survey to determine necessary data in connection with the filing of formal applications for installation of a radio system under this part. In this case, the authority, if issued, will be for developmental operation only and the applicable sections of Subpart C shall also apply to the grant.

(c) Request for special temporary authority shall contain the following information:

(1) Name, address, and citizenship status of applicant.

(2) Need for special action, including a description of any emergency or damage to equipment.

(3) Type of operation to be conducted.

(4) Purpose of operation.

(5) Time and date of operation desired.

(6) Class of station and nature of service.

(7) Location of station.

(8) Equipment to be used, specifying manufacturer, model number and number of units.

(9) Frequency(s) desired.

(10) Plate power input to final radio frequency stage.

(11) Type of emission.

(12) Description of antenna to be used, including height.

(d) Except in emergencies involving safety of life or property or due to damage to equipment, request for special temporary authority shall be submitted to the Commission at least ten days prior to the date of proposed operation, or it must be accompanied by a statement of reasons for the delay in submitting such request.

**§ 89.63 Supplementary information to be submitted with application.**

Each application for station authorization shall be accompanied by such supplemental information listed below as may be required:

(a) Statement with respect to frequency selection and coordination:

(1) Any statements or showings, required by the applicable subpart of these rules, in connection with the use of the frequency requested.

(2) Evidence of frequency coordination as required by § 89.15.

(b) Statements justifying the need when more frequencies are desired than are normally assigned to a single applicant under the applicable subpart of this part.

(c) Statement describing the type of emission to be used if it cannot be described as "8A3," "20F3," or "40F3" pursuant to Subpart A of this part.

(d) Description of the antenna system, on FCC Form 401-A in triplicate in all cases when:

(1) The antenna structures proposed to be erected will exceed an overall height of 170 feet above ground level, except that where the antenna is mounted on top of an existing man-made structure, other than an antenna structure, and does not increase the overall height of such man-made structure by more than 20 feet, no Form 401-A need be filed; or

(2) The antenna structures proposed to be erected will exceed an overall height of one foot above the established airport (landing area) elevation for each 200 feet of distance, or fraction thereof, from the nearest boundary of such landing area, except that where the antenna

does not exceed 20 feet above the ground or if the antenna is mounted on top of an existing man-made structure, other than an antenna structure, or natural formation and does not increase the overall height of such man-made structure or natural formation by more than 20 feet, no Form 401-A need be filed.

(e) A functional system diagram and a detailed description of the manner in which the interrelated stations will operate when the station is, or will be, part of a system involving two or more stations at different fixed locations.

(f) Copies of all agreements and statements which may be required under § 89.13 if operation is desired in connection with any cooperative use of the proposed radio communication facilities.

(g) Statements required by the rules in this part in connection with developmental operations. See §§ 89.203, 89.205, 89.213.

(h) Description of any equipment, proposed to be used, which does not appear on the Commission's List of Equipment Acceptable for Licensing and Designated for use in the Public Safety, Industrial and Land Transportation Radio Services.

(i) Any statements or other data required under special circumstances as set forth in the applicable subpart of this part, or required upon request by the Commission.

**§ 89.65 Partial grant.**

Where the Commission, without a hearing, grants an application in part, or with any privileges, terms, or conditions other than those requested, the action of the Commission shall be considered as a grant of such application unless the applicant shall, within 30 days from the date on which public announcement of such grant is made, or from its effective date if a later date is specified, file with the Commission a written request rejecting the grant as made. Upon receipt of such request, the Commission will vacate its original action and set the application for hearing in the same manner as other applications are set for hearing.

**§ 89.67 Defective applications.**

(a) Applications which are incomplete with respect to completeness of answers, supplementary statements, execution or other matters of a formal character shall be deemed to be defec-

tive and may be returned to the applicant with a brief statement as to such defects.

(b) Applications will also be deemed to be defective and may be returned to the applicant in the following cases:

(1) Statutory disqualification of applicant, e. g., aliens under section 310 of the Communications Act;

(2) Proposed use or purpose of station would be unlawful;

(3) Requested frequency is not allocated for assignment for the service proposed.

(c) Applications which are not in accordance with the provisions of this chapter, or other requirements of the Commission will be considered defective and may be dismissed unless accompanied either by (1) a petition to amend any rule or regulation with which the application is in conflict, or (2) a request of the applicant for waiver of, or exception to, any rule, regulation, or requirement with which the application is in conflict. Such request shall show the nature of the waiver or exception desired and set forth the reasons in support thereof. Applications may be dismissed, if the accompanying petition for waiver or amendment of rules does not set forth reasons which, sufficient if true, would justify a waiver or change of the rules.

(d) If an applicant is requested by the Commission to file any additional documents or information not included in the prescribed application form, failure to comply with such request will be deemed to render the application defective, and such application may be dismissed.

#### § 89.69 Amendment or dismissal of applications.

(a) Any application may be amended upon request of the applicant as a matter of right prior to the time the application is granted or designated for hearing. Each amendment to an application shall be signed and submitted in the same manner and with the same number of copies as required for original application.

(b) Any application may, upon written request signed by the applicant or his attorney, be dismissed without prejudice as a matter of right prior to the time the application is granted or designated for hearing.

#### § 89.71 Construction period.

(a) Each radio station construction permit issued by the Commission will specify the date of grant as the earliest date of commencement of construction and installation, and a maximum of eight months thereafter as the time within which construction shall be completed and the station ready for operation, unless otherwise determined by the Commission in any particular case.

(b) In cases where the station is not ready for operational use on or before the expiration date of the construction permit, application for extension of time to construct shall be filed on FCC Form 400, or on FCC Form 402, as appropriate.

#### § 89.73 License term.

(a) For all stations in the Public Safety Radio Services, except those engaged in developmental operation, the license period shall be as follows:

(1) Each station license will be issued for a term of from one to five years from the effective date of grant, the term varying as may be necessary to permit the orderly scheduling of renewal applications.

(2) Each station license normally will be renewed, upon proper application, for a term of five years from the effective date of renewal.

(b) Authorization for stations engaged in developmental operation will be made upon a temporary basis for a specific period of time, but in no event to extend beyond one year from date of grant.

#### § 89.75 Changes in authorized stations.

Authority for certain changes in authorized stations must be obtained from the Commission before these changes are made, while other changes do not require prior Commission approval. The following paragraphs describe the conditions under which prior Commission approval is or is not necessary.

(a) Proposed changes which will result in operation inconsistent with any of the terms of the current authorization require that an application for modification of construction permit and/or license be submitted to the Commission and shall be submitted on FCC Form 400, or, in the case of microwave stations, on FCC Form 402, and shall be accompanied by exhibits and supplementary statements as required by § 89.63.

(b) [Reserved]

(c) Proposed changes which will not depart from any of the terms of the outstanding authorization for the station involved may be made without prior Commission approval. Included in such changes is the substitution of various makes of transmitting equipment at any station provided the particular equipment to be installed is included in the Commission's "List of Equipment Acceptable for Licensing" and designated for use in the Public Safety, Industrial, and Land Transportation Radio Services and provided the substitute equipment employs the same type of emission and does not exceed the power limitations as set forth in the station authorization.

**§ 89.77 Discontinuance of station operation.**

In case of discontinuance of operation for a period of one year or more of a base or fixed station in these services, or in case of discontinuance for a period of one year or more of operation of all transmitter units listed in the license for a mobile station in these services, the licensee shall forward the station license to the Washington, D.C., 20554, office of the Commission for cancellation. A copy of the request for cancellation of the license shall be forwarded to the Commission's Engineer in Charge of the district in which the station is located.

**§ 89.79 International police radio communication.**

Police radio licensees which are located in close proximity to the borders of the United States may be authorized to communicate internationally. Request for such authority shall be written and signed and submitted in duplicate. The request shall include information as to the station with which communication will be conducted, and the frequency, power, emission, etc., that will be used. If authorized, such international communication must be conducted in accordance with Article 5 of the Inter-American Radio Agreement, Washington, D.C., 1949 which reads as follows:

ARTICLE 5. *Police radio stations.* When the American countries authorize their police radio stations to exchange emergency information by radio with similar stations of another country, the following rules shall be applied:

(a) Only police radio stations located close to the boundaries of contiguous countries shall be allowed to exchange this information.

(b) In general, only important police messages shall be handled, such as those which would lose their value because of slowness and time limitations if sent on other communication systems.

(c) Frequencies used for radiotelephone communications with mobile police units shall not be used for radiotelegraph communications.

(d) Radiotelephone communications shall be conducted only on frequencies assigned for radiotelephony.

(e) Radiotelegraph communications shall be conducted on the following frequencies:

2804 kc/s calling	5195 kc/s day calling
2808 kc/s working	5135 kc/s day working
2812 kc/s working	5140 kc/s day working

(f) The characteristics of police radio stations authorized to exchange information shall be notified to the International Telecommunication Union, Geneva, Switzerland.

(g) The abbreviations contained in Appendix 9 of the Atlantic City Radio Regulations shall be used to the greatest possible extent. Service indications are as follows: "P", priority, for messages that are to be sent immediately, regardless of the number of other messages on file. If no service indication is given, the messages are to be transmitted in the order of receipt.

(h) The message shall contain the preamble, address, text, and signature, as follows:

*Preamble.* The preamble of the message shall consist of the following: the serial number preceded by the letters "NR"; service indications, as appropriate; the group count according to standard cable count system; the letters "CK", followed by numerals indicating the number of words contained in the text of the message; office and country of origin (not abbreviations); day, month, and hour of filing;

*Address.* The address must be as complete as possible and shall include the name of the addressee with any supplementary particulars necessary for immediate delivery of the message;

*Text.* The text may be either in plain language or code;

*Signature.* The signature shall include the name and title of the person originating the message.

**§ 89.81 Payment of fees.**

(a) Each formal application for which a fee is prescribed in § 89.83 must be accompanied by a remittance in the full amount of the fee. In no case will an application for which a fee is prescribed be accepted for filing or processed prior to payment of the full amount specified. Applications for which no remittance is received, or for which an insufficient amount is received, may be returned to the applicant.

(b) Fee payments accompanying applications submitted to the Commission should be in the form of a check or money order payable to the Federal Communications Commission. The Commission will not be responsible for cash sent through the mails. All fees collected will be paid into the United States Treasury as miscellaneous receipts in accordance with the provisions of Title V of the Independent Offices Appropriation Act of 1952 (5 U.S.C. 140).

(c) Receipts will be furnished upon request in the case of payments made in person, but no receipts will be issued for payments sent through the mails.

(d) All fees will be charged irrespective of the Commission's disposition of the application. Applications returned to applicants for additional information or corrections will not require an additional fee when resubmitted. Refunds will be made only in the case of payments in excess of the fee prescribed in this subpart.

§ 89.83 Schedule of fees.

(a) *No fee services.* No fee is required for filing applications in the Police, Fire, Forestry-Conservation, Highway Maintenance, Local Government and State Guard Radio Services.

(b) *Fees in Special Emergency Radio Service.* (1) Except as provided in subparagraph (2) of this paragraph, applications filed on or after January 1, 1964, in the Special Emergency Radio Service under this part shall be accompanied by the fees prescribed below:

Applications for radio station authorizations for operational fixed radio stations for which frequencies above 952 Mc/s are requested (no fee is required for applications for license to cover construction permit)-----	\$30
Applications for renewal of license only for which FCC Form 405-A is prescribed-----	4
All other applications for radio station authorizations-----	10

(2) Fees are not required for applications filed in the Special Emergency Radio Service in the following instances:

- Applications filed by hospitals, disaster relief organizations, beach patrols, school buses, non-profit ambulance operators and rescue organizations.
- Applications filed pursuant to § 89.61 of this chapter (informal requests for special temporary authority).
- Applications filed by governmental entities.

TECHNICAL STANDARDS

§ 89.101 Frequencies.

(a) Frequencies other than those shown in the applicable subpart of this part are not available for assignment except as provided in paragraphs (b), (d), (f), (h), and (j) of this section, and except that licensees holding a valid authorization on June 30, 1958, may, upon proper application, continue to be authorized for such operation, including expansion of existing systems, until such time as harmful interference is caused to the operation of any authorized station other than those licensed in the Public Safety Radio Services. All applicants for, and licensees of, stations in the services in this part shall cooperate in the selection and use of the designated frequencies to minimize interference and to make effective use of the frequencies assigned. Frequencies listed in this part will not be assigned exclusively to any one applicant. The use of any frequency at a given geographical location may be denied when in the judgment of the Commission its use in that location is not in the public interest; the use of any frequency may be restricted to one or more geographical areas.

(b) Frequencies assigned to government radio stations under Executive Order of the President may be authorized for use of stations in these services upon appropriate showing by the applicant that such assignment is necessary for inter-communication with government stations or required for coordination with activities of Federal Government, and where the Commission finds, after consultation with the appropriate government agency or agencies, that such assignment is necessary.

(c) Frequencies in the band 72-76 Mc/s may be authorized and used only in accordance with the criteria set forth below:

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

(2) 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.

(3) Vertical polarization is used.

(4) 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 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 the Census), excluding units 70 or more miles distant from the TV antenna site, located within a circle centered at the location of the proposed fixed station. The radius shall be determined by use of the chart entitled, "Chart for Determining Radius From Fixed Station 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 available, one for channel 4, and one for channel 5. The Commission may, in a particular case, authorize the location of a fixed station within a circle, as determined under the above conditions, 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.

(5) All applications seeking authority to operate with a separation of less than 10 miles will be returned without action.

(d) The frequencies 27.235, 27.245, 27.255, 27.265, and 27.275 Mc/s may be authorized to any eligible applicant in the Public Safety Radio Services subject to the following conditions and limitations:

(1) Notwithstanding the rule provisions relating to permissible communications, points of communication and emissions in the applicable subpart of this part, the frequencies 27.235, 27.245, 27.255, 27.265, and 27.275 Mc/s may be used to accomplish any radio communication requirement which is necessary to the licensee's activity: *Provided*, That

all operations are otherwise in accordance with the rules in this chapter; that the bandwidth of emission does not exceed 8 kc/s; and that power is limited to no more than 30 watts input to the final radio frequency stage.

(2) The frequencies 27.235, 27.245, 27.255, 27.265, and 27.275 Mc/s are available for assignment in the Public Safety Radio Services for use on a shared basis with stations in other services. All fixed and mobile operations on these frequencies are subject to interference from the operation of industrial, scientific, and medical devices on the frequency 27.12 Mc/s.

(e) Frequencies below 25 megacycles listed in the various services of this part are the frequencies normally assigned to stations in those services under the indicated conditions and limitations. In individual cases it may be impracticable to authorize the normally assignable frequencies because of potential interference to existing frequency use in the area involved. In such cases substitute frequencies, which are in accordance with the Commission's table of frequency allocations and compatible with existing United States and foreign assignments made pursuant to outstanding international agreements, may be authorized even though such frequencies are not listed in this part.

(f) The frequency bands 153.7325 to 153.7475, 154.4525 to 154.460, and 159.4725 to 159.480 Mc/s may be authorized for developmental operation to any eligible applicant in the Public Safety Radio Services for narrow band systems only: *Provided*, That:

(1) The band of frequencies occupied by the emission is at all times confined within the band listed;

(2) The proposed station location is removed by at least 40 miles from the station location of each other station authorized to other than the applicant on the same or adjacent channels, at the time application is made; and

(3) The application is accompanied by a statement, under oath, that the licensees of all stations located within a radius of 75 miles of the proposed location and authorized to operate on the same or adjacent channels have concurred with such assignment, or is accompanied by a report based on a field study which indicates the probable interference to the operation of existing stations, together with a statement, under oath, that the licensees of all stations

located within a radius of 75 miles of the proposed location and authorized to operate on the same or adjacent channels have been notified of applicant's intention to request the assignment.

(g) Persons authorized pursuant to this part to operate radio stations on frequencies in the band 25–50 Mc/s must recognize that the band is shared with various services in other countries; that harmful interference may be caused by tropospheric and ionospheric propagation of signals from distant stations of all services of the United States and other countries operating on frequencies in this band; and that no protection from such harmful interference generally can be expected. Persons desiring to avoid such harmful interference should consider operation on available frequencies higher in the radio spectrum not generally subject to this type of difficulty.

(h) The following table indicates the bands of frequencies for microwave operation, the classes of stations to which they are normally available, and the specific assignment limitations which are developed in paragraph (i) of this section.

Frequency band	Class of station(s)	Limitations
<i>Mc/s</i>		
952-960	Operational fixed.....	5, 6
1850-1990	do.....	6
2110-2200	do.....	6
2450-2500	Base, mobile, operational fixed, and radiolocation.....	2, 4, 6
2500-2690	Operational fixed.....	6
6425-6575	Base and mobile.....	6
6575-6875	Operational fixed.....	6
8400-8500	Base and mobile and operational fixed.....	1
10, 500-10, 550	Radiolocation.....	3, 6
10, 550-10, 680	Base and mobile and operational fixed.....	6
11, 700-12, 200	Base and mobile.....	1
12, 200-12, 700	Operational fixed.....	6
13, 200-13, 250	Base and mobile and operational fixed.....	1
17, 700-19, 300	do.....	1, 2
19, 400-19, 700	do.....	1
27, 525-31, 300	do.....	1
38, 600-40, 000	do.....	1

(i) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (h) of this section:

(1) Limited to developmental operation only with the assigned frequency and particulars of operation specified in each authorization.

(2) Subject to no protection from interference due to the operation of industrial, scientific, and medical devices in this band.

(3) The band 10,500–10,550 Mc/s is restricted to systems using type A0 emission with a power not to exceed 40 watts into the antenna.

(4) Land radiopositioning stations and mobile radiopositioning stations, including speed measuring devices, may be authorized to use frequencies in the band 2450–2500 Mc/s on the condition that harmful interference will not be caused to the fixed and mobile services.

(5) Available for assignment in accordance with the frequency pairing plan as contained in paragraph (j) of this section.

(6) Stations authorized to operate on those frequencies above 952 Mc/s, which are not restricted to assignment for developmental operation only, shall be constructed and used in such a manner as to conform with all technical and operating requirements of Subpart A of this Part, unless deviation therefrom is specifically provided for in the station authorization.

(j) The frequencies between 952 and 960 Mc/s will be assigned as follows:

*Paired frequencies (Mc/s)*

959.9—956.3 <sup>1</sup>	958.1—954.5
959.8—956.2 <sup>1</sup>	958.0—954.4
959.7—956.1	957.9—954.3
959.6—956.0	957.8—954.2
959.5—955.9	957.7—954.1
959.4—955.8	957.6—954.0
959.3—955.7	957.5—953.9
959.2—955.6	957.4—953.8
959.1—955.5	957.0—953.7
959.6—955.4	957.2—953.6
958.9—955.3	957.1—953.5
958.8—955.2	957.0—953.4
958.7—955.1	956.9—953.3
958.6—955.0	956.8—953.2
958.5—954.9	956.7—953.1
958.4—954.8	956.6—953.0
958.3—954.7	956.5—952.9 <sup>1</sup>
958.2—954.6	956.4—952.8 <sup>1</sup>

*Unpaired frequencies (Mc/s)*

952.7 <sup>2,3</sup>	952.4 <sup>1,3</sup>	952.1 <sup>1,3</sup>
952.6 <sup>2,3</sup>	952.3 <sup>1,3</sup>	
952.5 <sup>2,3</sup>	952.2 <sup>1,3</sup>	

<sup>1</sup> Available on a developmental basis only for omnidirectional operation, and for other than the control of traffic signals.

<sup>2</sup> Available for assignment only for omnidirectional usage to control traffic signals.

<sup>3</sup> The maximum rated power output of transmitters for omnidirectional operations authorized to operate on this frequency is 100 watts.

(k) Operation on frequency pairs authorized prior to July 20, 1961, which are not in accordance with the above plan of frequency pairing may continue

provided interference is not caused to the operation of systems which are utilizing channels in accordance with that plan.

(1) The frequency bands 31.99 to 32.00 Mc/s, 33.00 to 33.01 Mc/s, 33.99 to 34.00 Mc/s, 37.99 to 38.00 Mc/s, 39.00 to 39.01 Mc/s, 39.99 to 40.00 Mc/s, and 42.00 to 42.01 Mc/s may be authorized for developmental operation to any eligible applicant in the Public Safety Radio Services.

§ 89.103 Frequency stability.

(a) A permittee or licensee in these services shall maintain the carrier frequency of each authorized transmitter within the following percentage of the assigned frequency:

Frequency range <i>Mc/s</i>	All fixed and base stations <i>Percent</i>	All mobile stations	
		Over 3 watts <i>Percent</i>	3 watts or less <i>Percent</i>
Below 25.....	0.01	0.01	0.02
25 to 50.....	.002	.002	.005
50 to 1000.....	.0005	.0005	.005
Above 1000.....	(1)	(1)	(1)

<sup>1</sup> To be specified in the station authorization.

(b) For the purpose of determining the frequency tolerance applicable to a particular transmitter in accordance with the foregoing provisions of this section, the power of a transmitter shall be the maximum rated plate power input to its final radio frequency stage, as specified by the manufacturer.

§ 89.105 Types of emission.

(a) Except as provided in paragraphs (c) and (d) of this section, stations in these services will be authorized to use only A3 or F3 emission for radiotelephony. The authorization to use A3 or F3 emission is construed to include the use of tone signals or signaling devices the function of which is limited to establishing or maintaining voice communications or to actuating emergency warning devices used solely for the purpose of advising the general public or emergency personnel of an impending emergency situation.

(b) The use of F3 emission in these services will be authorized only on frequencies above 30 Mc/s.

(c) Zone and interzone stations will be authorized to use only A1 emission.

(d) Other types of emission not described in paragraphs (a) or (c) of this section may be authorized upon a satis-

factory showing of need therefor. An application requesting such authorization shall fully describe the emission desired, shall indicate the bandwidth required for satisfactory communication, and shall state the purpose for which such emission is required. For information regarding the classification of emissions and the calculation of the bandwidth, reference should be made to Part 2 of this chapter.

§ 89.107 Emission limitations.

(a) Each authorization issued to a station operating in these services will show, as the prefix to the emission classification, a figure specifying the maximum authorized bandwidth in kilocycles to be occupied by the emission. The specified band shall contain those frequencies upon which a total of 99 percent of the radiated power appears, extended to include any discrete frequency upon which the power is at least 0.25 percent of the total radiated power. Any radiation in excess of the limits specified in paragraph (c) of this section is considered to be an unauthorized emission.

(b) The maximum authorized bandwidth of emission corresponding to the types of emission specified in § 89.105 (a) and (c), and the maximum authorized frequency deviation in the case of frequency or phase modulated emission, shall be as follows:

(1) For all type A3 emissions, the maximum authorized bandwidth shall be 8 kc/s.

(2) For all F3 emission, the maximum authorized bandwidth and maximum authorized frequency deviation shall be as follows:

Frequency band (Mc/s)	Authorized bandwidth (kc/s)	Frequency deviation (kc/s)
25 to 50.....	120	15
50 to 100.....	40	15
150 to 450.....	120	15
450 to 1000.....	40	15

<sup>1</sup> Transmitters operating with three watts or less plate power input to the final radio frequency stage may operate with an authorized bandwidth of 40 kc/s and a deviation of ±15 kc/s until not later than October 31, 1963: *Provided*, That harmful interference is not caused by such wide-band operation to any station of another licensee which is utilizing radio equipment meeting the narrow-band technical standards.

(3) For all type A1 emissions, the maximum authorized bandwidth shall be 0.25 kc/s.

(c) The mean power of emissions shall be attenuated below the mean output

power of the transmitter in accordance with the following schedule:

(1) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidths: At least 25 decibels;

(2) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 decibels;

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 plus  $10 \log_{10}$  (mean output power in watts) decibels or 80 decibels, whichever is the lesser attenuation.

(d) When an unauthorized emission results in harmful interference, the Commission may, in its discretion, require appropriate technical changes in equipment to alleviate the interference.

#### § 89.109 Modulation requirements.

(a) The maximum audio frequency required for satisfactory radiotelephone intelligibility in these services is considered to be 3000 cycles per second; in any transmitter the over-all frequency response of the audio and modulating circuits nevertheless shall correspond approximately with that required thereby.

(b) When amplitude modulation is used for telephony, the modulation percentage shall be sufficient to provide efficient communication and normally shall be maintained above 70 percent on peaks, but shall not exceed 100 percent on negative peaks.

(c) Each transmitter first authorized or installed after July 1, 1950, shall be provided with a device which automatically will prevent modulation in excess of that specified in this subpart which may be caused by greater than normal audio level: *Provided, however*, That this requirement shall not be applicable to transmitters authorized to operate as mobile stations with a maximum plate power input to the final radio frequency stage of 3 watts or less.

#### § 89.111 Power and antenna height.

(a) The power which may be used by a station in these services shall be no more than the minimum required for satisfactory technical operation commensurate with the size of the area to be served and local conditions which affect radio transmission and reception. In cases of harmful interference, the Commission

may order a change in power or antenna height, or both.

(b) Except where the maximum power that may be used on a particular frequency is specifically designated in connection with the use of such frequency, plate power input to the final radio frequency stage in excess of the following tabulation will not be authorized:

Frequency range:	Maximum plate power input to the final radio frequency stage (watts)
1.6 to 3 Mc/s.....	2,000
3 to 25 Mc/s.....	1,000
25 to 100 Mc/s.....	500
100 to 460 Mc/s.....	600
Above 460 Mc/s.....	(1)

<sup>1</sup> To be specified in the station authorization.

(c) The plate power input to the final r. f. stage under actual operation shall not exceed by more than 10 percent the plate power input shown in the Radio Equipment List, Part C, for transmitters included in this list, or the manufacturer's rated plate power input for the particular transmitter specifically listed on the authorization.

#### § 89.113 Transmitter control requirements.

(a) Each transmitter shall be so installed and protected that it is not accessible to or capable of operation by persons other than those duly authorized by the licensee.

(b) A control point is an operating position which meets all of the following conditions:

(1) The position must be under the control and supervision of the licensee;

(2) It is a position at which the monitoring facilities required by this section are installed; and

(3) It is a position at which a person immediately responsible for the operation of the transmitter is stationed.

(c) Each station which is not authorized for unattended operation shall be provided with a control point, the location of which will be specified in the license. Unattended stations may be provided with a control point if authorized by the Commission. In urban areas the location will be specified "same as transmitter" unless the control point is at a street address different from that of the transmitter. In rural areas the location will be specified "same as transmitter" unless the control point is more

than 500 feet from the transmitter, in which case the approximate location will be specified in distance and direction from the transmitter in terms of feet and geographical quadrant, respectively. It will be assumed that the location of the control point is the same as the location of the transmitter unless the application includes a request for a different location described in appropriate terms as indicated in this paragraph. Authority must be obtained from the Commission for the installation of additional control points.

(d) A dispatch point is any position from which messages may be transmitted under the supervision of the person at a control point who is responsible for the operation of the transmitter. Dispatch points may be installed without authorization.

(e) At each control point, the following facilities shall be installed:

(1) A carrier operated device which will provide continuous visual indication when the transmitter is radiating; or, in lieu thereof, a pilot lamp or meter which will provide continuous visual indication when the transmitter control circuits have been placed in a condition to produce radiation: *Provided however*, That the provisions of this subparagraph shall not apply to hand-carried or pack-carried transmitters or to transmitters installed on motorcycles.

(2) Equipment to permit the person responsible for the operation of the transmitter to aurally monitor all transmissions originating at dispatch points under his supervision;

(3) Facilities which will permit the person responsible for the operation of the transmitter either to disconnect the dispatch point circuits from the transmitter or to render the transmitter inoperative from any dispatch point under his supervision; and

(4) Facilities which will permit the person responsible for the operation of the transmitter to turn the transmitter carrier on and off at will.

#### § 89.115 Transmitter measurements.

(a) The licensee of each station shall employ a suitable procedure to determine that the carrier frequency of each transmitter, authorized to operate with a plate input power to the final radio frequency stage in excess of 3 watts, is maintained within the tolerance prescribed in this part. This determination shall be made, and the results thereof entered in the

station records, in accordance with the following:

(1) When the transmitter is initially installed;

(2) When any change is made in the transmitter which may affect the carrier frequency or the stability thereof;

(3) At intervals not to exceed one year, for transmitters employing crystal-controlled oscillators;

(4) At intervals not to exceed one month, for transmitters not employing crystal-controlled oscillators.

(b) The licensee of each station shall employ a suitable procedure to determine that the plate power input to the final radio frequency stage of each base station or fixed station transmitter, authorized to operate with a plate input power to the final radio frequency stage in excess of 3 watts, does not exceed the maximum figure specified on the current station authorization. Where the transmitter is so constructed that a direct measurement of plate current in the final radio frequency stage is not practicable, the plate input power may be determined from a measurement of the cathode current in the final radio frequency stage. When the plate input to the final radio frequency stage is determined from a measurement of the cathode current, the required entry shall indicate clearly the quantities that were measured, the measured values thereof, and the method of determining the plate power input from the measured values. This determination shall be made, and the results thereof entered in the station records, in accordance with the following:

(1) When the transmitter is initially installed;

(2) When any change is made in the transmitter which may increase the transmitter power input;

(3) At intervals not to exceed one year.

(c) The licensee of each station shall employ a suitable procedure to determine that the modulation of each transmitter, authorized to operate with a plate input power to the final radio frequency stage in excess of 3 watts, does not exceed the limits specified in this part. This determination shall be made and the results thereof entered in the station records, in accordance with the following:

(1) When the transmitter is initially installed;

(2) When any change is made in the transmitter which may affect the modulation characteristics;

(3) At intervals not to exceed one year.

(d) The determinations required by paragraphs (a), (b) and (c) of this section may, at the option of the licensee, be made by any qualified engineering measurement service, in which case, the required record entries shall show the name and address of the engineering measurement service as well as the name of the person making the measurements.

(e) In the case of mobile transmitters, the determinations required by paragraphs (a) and (c) of this section may be made at a test or service bench; provided, the measurements are made under load conditions equivalent to actual operating conditions, and provided further, that after installation the transmitter is given a routine check to determine that it is capable of being satisfactorily received by an appropriate receiver.

#### § 89.117 Acceptability of transmitters for licensing.

(a) From time to time the Commission will publish a list of equipment entitled "Radio Equipment List, Part C, List of Equipment Acceptable for Licensing." Copies of this list are available for inspection at the Commission's Offices in Washington, D. C., and at each of its field offices. This list will include type approved and type accepted equipment and equipment which was included in this list on May 16, 1955. Such equipment will continue to be included on the list unless it is removed therefrom by Commission action.

(b) Except for transmitters used at developmental stations, each transmitter utilized by a station authorized for operation under this part must be of a type which is included on the Commission's current "List of Equipment Acceptable for Licensing" and designated for use in this service or be of a type which has been type accepted by the Commission for use in this service. Until January 1, 1965, however, equipment presently in use may continue to be used by the licensee, his successors, or assigns in business provided the operation of such equipment does not result in harmful interference due to the failure of such equipment to comply with the current technical standards of the rules.

(c) All equipment sought to be utilized under a license authorizing the use of frequencies in the bands 952 to 960, 1850 to 1990, 2110 to 2200, 2450 to 2500, 2500 to 2690, 6425 to 6575, 6575 to 6875,

10500 to 10680 and 12200 to 12700 Mc/s shall be type accepted if specified in an application filed after July 20, 1962, except that equipment authorized to be used prior thereto is permitted to continue to be used provided such operation does not result in harmful interference to other stations or systems which are conforming to the interim technical standards.

#### § 89.119 Type acceptance of equipment.

(a) Any manufacturer of a transmitter to be built for use in this service may request "type acceptance" for such transmitter following the type acceptance procedure set forth in Part 2 of this chapter.

(b) Type acceptance for an individual transmitter may also be requested by an applicant for a station authorization by following the type acceptance procedures set forth in Part 2 of this chapter. Such transmitters, if accepted, will not normally be included on the Commission's "Radio Equipment List, Part C, List of Equipment Acceptable for Licensing" but will be individually enumerated on the station authorization.

(c) Additional rules with respect to type acceptance are set forth in Part 2 of this chapter. These rules include information with respect to withdrawal of type acceptance, modification of type accepted equipment and limitations on the findings upon which type acceptance is based.

#### § 89.121 Interim technical standards governing use of microwave frequencies.

The interim technical standards indicated in the table in this section shall govern, beginning July 20, 1961, the issuance of authorizations for private microwave systems using the frequency bands above 952 Mc listed in the table. However, these standards shall not be applicable to transmitting equipment (including antennas) which were authorized to be operated on these frequencies prior to July 20, 1961, or for which an authorization is issued based on an application filed with the Commission prior to July 20, 1961. Such licensees of equipment and systems not subject to these interim technical standards, including their successors or assigns in business, will be permitted to utilize such equipment provided such operation does not result in harmful interference to another station

or system which is conforming to these technical standards. In case of such harmful interference, such non-conforming licensee will be required to take whatever corrective measures are necessary to alleviate the interference.

Frequency band	Power (watts) <sup>1</sup>	Tolerance (percent)	Bandwidth <sup>2</sup>	Beamwidth <sup>3</sup>
<i>Mc/s</i>				
952-960.....	30	0.0005	100 kc/s	20°
1850-1990.....	18	.02	8 Mc/s	10°
2110-2200.....	15	.02	( <sup>4</sup> )	10°
2450-2500 <sup>4</sup> .....	12	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
2500-2700.....	12	.02	4 Mc/s	10°
6525-6575 <sup>6</sup> .....	7	.02	25 Mc/s	7°
6575-6875.....	7	.02	10 Mc/s	5°
10, 550-10, 700 <sup>6</sup> .....	5	( <sup>5</sup> )	25 Mc/s	4°
12, 200-12, 700.....	5	.05	20 Mc/s	4°
Above 16, 000.....	5	( <sup>5</sup> )	50 Mc/s	( <sup>5</sup> )

<sup>1</sup> Maximum rated power output of transmitter. Power in excess of that shown herein will be authorized only under exceptional circumstances based upon a factual showing of need. For pulsed systems average power shall be limited to the values shown, peak power shall not exceed five times this limit.

<sup>2</sup> Maximum bandwidth (necessary or occupied, whichever is greater) which will be authorized. Except for the band 210-2200 Mc/s, consideration will be given, on a case-by-case basis, to requests for additional adjacent channels based upon a complete and specific factual showing of unique or unusual circumstances, apart from economic considerations, requiring such additional channels. In the band 952-960 Mc/s, bandwidths up to 500 kc/s may be authorized.

<sup>3</sup> Maximum beamwidth of major lobe between 0.5 power points in horizontal plane. Exceptions may be granted for stations in remote areas or until harmful interference is caused to other stations operating in accordance with these provisions.

<sup>4</sup> Subject to no protection from ISM equipment on 2450 Mc/s.

<sup>5</sup> To be specified in the station authorization.

<sup>6</sup> Limited to mobile operations and temporary service between fixed points.

<sup>7</sup> See Docket No. 14712.

<sup>8</sup> See Docket No. 14744.

**OPERATING REQUIREMENTS**

**§ 89.151 Operating procedure.**

(a) All communications, regardless of their nature, shall be restricted to the minimum practical transmission time.

(b) Continuous radiation of an unmodulated carrier is prohibited except when required for test purposes.

(c) Zone and interzone stations shall employ the standard operating procedure prescribed by the Commission. Copies of such procedure are available for distribution to persons having a legitimate need therefor. Requests for copies should be addressed to the Secretary, Federal Communications Commission, Washington, D.C., 20554.

(d) The Commission expects each licensee to take reasonable precautions to prevent unnecessary interference. If harmful interference develops, the Commission may require any or all stations

to monitor the transmitting frequency prior to transmission.

(e) Tests may be conducted by any licensed station as required for proper station and system maintenance, but such tests shall be kept to a minimum and precautions shall be taken to avoid interference to other stations.

**§ 89.153 Station identification.**

(a) Except as provided in paragraph (b) of this section, the required identification for stations in these services shall be the assigned call signal.

(b) In lieu of meeting the requirements of paragraph (a) of this section, mobile units in the Police, Fire, Forestry-Conservation, Highway Maintenance, and Local Government Radio Services operating above 30 Mc/s may identify by means of an identifier other than the assigned call signal: *Provided*, That such identifier contain, as a minimum, the name of the governmental subdivision under which the unit is licensed; that the identifier is not composed of letters or letters and digits arranged in a manner which could be confused with an assigned radio station call signal: *And provided further*, That the licensee notifies, in writing, the Engineer in Charge of the District in which the unit operates concerning the specific identifiers being used by the mobile units.

(c) Nothing in this section shall be construed as prohibiting the transmission of additional station or unit identifiers which may be necessary for systems operation: *Provided, however*, Such additional identifiers shall not be composed of letters or letters and digits arranged in a manner which could be confused with an assigned radio station call signal.

(d) Except as indicated in paragraphs (e), (f), and (g) of this section, each station in these services shall transmit the required identification at the end of each transmission or exchange of transmissions, or once each thirty minutes of the operating period, as the licensee may prefer.

(e) A mobile station authorized to the licensee of the associated base station and which transmits only on the transmitting frequency of the associated base station is not required to transmit any identification.

(f) Except as indicated in paragraph (e) of this section, a mobile station shall transmit an identification at the end of

each transmission or exchange of transmissions, or once each thirty minutes of the operating period, as the licensee may prefer. Where election is made to transmit the identification at thirty-minute intervals, a single mobile unit in each general geographic area may be assigned the responsibility for such transmission and thereby eliminate any necessity for every unit of the mobile station to transmit the identification. For the purpose of this paragraph the term "each general geographic area" means an area not smaller than a single city or county and not larger than a single district of a State where the district is administratively established for the service in which the radio system operates.

(g) A station which is transmitting for telemetering purposes or for the actuation of devices, or which is retransmitting by self-actuating means a radio signal received from another radio station or stations, will be considered for exemption from the requirements of paragraph (d) of this section in specific instances, upon request.

**§ 89.155 Suspension of transmission required.**

The radiations of the transmitter shall be suspended immediately upon detection or notification of a deviation from the technical requirements of the station authorization until such deviation is corrected, except for transmissions concerning the immediate safety of life or property, in which case the transmissions shall be suspended as soon as the emergency is terminated.

**§ 89.157 Mobile installations in vehicles not under the continuous control of the licensee.**

A mobile radio station licensed in these services may not be installed or maintained in a vehicle, aircraft, or vessel, which is not at all times controlled exclusively by the licensee, unless precautions have been taken to eliminate effectively the possibility of the licensed transmitter being operated during the period that the vehicle, aircraft, or vessel is not under the control of the licensee.

**§ 89.159 Emergency operation of mobile stations at fixed locations.**

During an emergency requiring a local communication center, any authorized mobile transmitter may be operated temporarily as a base station at a fixed loca-

tion for a period not to exceed ten days. If operation for a longer period is required, such operation must be specifically authorized.

**§ 89.161 Communication with other stations.**

In those cases which require cooperation or coordination of activities, stations in the Public Safety Radio Services may communicate with stations in other services and with U.S. Government stations.

**§ 89.163 Operator requirements.**

(a) All transmitter adjustments or tests during or coincident with the installation, servicing, or maintenance of a radio station, which may affect the proper operation of such station, shall be made by or under the immediate supervision and responsibility of a person holding a first- or second-class commercial radio operator license, either radiotelephone or radiotelegraph, who shall be responsible for the proper functioning of the station equipment: *Provided, however,* That only persons holding a radiotelegraph first- or second-class operator license shall perform such functions at radiotelegraph stations transmitting by any type of the Morse Code.

(b) Except under the circumstances specified in paragraph (a) of this section, only a person holding a commercial radiotelegraph operator license or permit of any class issued by the Commission shall operate a station during the course of normal rendition of service when transmitting radiotelegraphy by any type of the Morse Code.

(c) Except under the circumstances specified in paragraphs (a) and (b) of this section, and except as limited by paragraphs (g) and (h) of this section, an unlicensed person, after being authorized by the station licensee to do so, may operate from a control point a mobile, base, or fixed station, or from a dispatch point a base or fixed station, during the course of normal rendition of service when transmitting on frequencies above 25 Mc/s.

(d) Except under the circumstances specified in paragraph (a) and (b) of this section, and except as limited by paragraphs (g) and (h) of this section, only a person holding a commercial radio operator license or permit of any class issued by the Commission shall operate a mobile station during the course of nor-

normal rendition of service when transmitting on frequencies below 25 Mc/s: *Provided, however,* That an unlicensed person, after being authorized to do so by the station licensee, may operate such a mobile station during the course of normal rendition of service when transmitting on frequencies below 25 Mc/s while it is associated with and under the operational control of a base station of the same station licensee.

(e) Except under the circumstances specified in paragraphs (a) and (b) of this section, and except as limited by paragraphs (g) and (h) of this section, base stations and fixed stations shall be operated in accordance with the following when transmitting during the course of normal rendition of service on frequencies below 25 Mc/s:

(1) From a control point, only a person holding a commercial radio operator license or permit of any class issued by the Commission shall operate a base station or fixed station.

(2) From a dispatch point, an unlicensed person may operate a base station or fixed station after being authorized to do so by the station licensee: *Provided, however,* That such operation shall be under the direct supervision and responsibility of a person who (i) holds a commercial radio operator license or permit of any class issued by the Commission and who (ii) is on duty at a control point meeting the requirements of Subpart C of this part.

(f) Except under the circumstances specified in paragraph (a) of this section, and except as limited by paragraphs (g) and (h) of this section, no person, whether or not a licensed operator, is required to be in attendance at a station when transmitting during the course of normal rendition of service and when either:

(1) Transmitting for telemetering purposes or

(2) Retransmitting by self-actuating means a radio signal received from another radio station or stations.

(g) The provisions of this section authorizing certain unlicensed persons to operate certain stations, or authorizing unattended operation of stations in certain circumstances, shall not be construed to change or diminish in any respect the responsibility of station licensees to have and to maintain control over the stations licensed to them (including all transmitter units thereof), or for the proper functioning and operation of

those stations (including all transmitter units thereof) in accordance with the terms of the licenses of those stations.

(h) Notwithstanding any other provisions of this section, unless the transmitter is so designed that none of the operations necessary to be performed during the course of normal rendition of service may cause off-frequency operation or result in any unauthorized radiation, and unless the transmitter is so installed that all controls which may cause improper operation or radiation are not readily accessible to the person operating the transmitter, such transmitter shall be operated by a person holding a first- or second-class commercial radio operator license, either radiotelephone or radiotelegraph as may be appropriate for the type of emission being used, issued by the Commission.

#### § 89.165 Posting of operator license.

(a) The original license of each base or fixed station operator, other than an operator exclusively performing service and maintenance duties, shall be posted or kept immediately available at the place where he is on duty as an operator: *Provided, however,* That if an operator who is on duty holds a restricted radiotelephone operator permit of the card form (as distinguished from such document of the diploma form) or holds a valid license verification card (FCC Form 758-F) attesting to the existence of any other valid commercial radio operator license, he may have such permit or verification card, as the case may be, in his personal possession.

(b) Whenever a licensed operator is required for a mobile station, the original license of each such operator, other than an operator exclusively performing service and maintenance duties, shall be kept in his personal possession whenever he performs the duties of an operator at such station: *Provided,* That in lieu of an original license of the diploma form (as distinguished from such document of the card form) he may have in his personal possession a valid verification card attesting to its existence.

(c) The original license of every station operator who exclusively performs service and maintenance duties at that station shall be posted at the transmitter involved whenever the transmitter is in actual operation while service or maintenance work is being performed by him or under his immediate supervision and responsibility: *Provided,* That in lieu of

posting his license, he may have on his person either his license or a valid verification card.

**§ 89.167 Posting station licenses and transmitter identification cards or plates.**

(a) The current authorization for each mobile station and each base or fixed station authorized to be operated at temporary locations shall be retained as a permanent part of the station records, but need not be posted. In addition, an executed Transmitter Identification Card (FCC Form 452-C) or a plate of metal or other durable substance, legibly indicating the call sign and the licensee's name and address, shall be affixed readily visible for inspection, to each of such transmitters: *Provided*, That, if the transmitter is not in view of the operating position or is not readily accessible for inspection, then such card or plate shall be affixed to the control equipment at the transmitter operating position or posted adjacent thereto.

(b) The current authorization for each base or fixed station at a fixed location shall be posted at the principal control point of the station, and a photocopy of such authorization shall be posted at all other control points listed on the authorization. In addition, an executed Transmitter Identification Card (FCC Form 452-C) or a plate of metal or other durable substance, legibly indicating the call sign and the licensee's name and address, shall be affixed, readily visible for inspection, to each transmitter operated at a fixed location, when such transmitter is not in view of, or is not readily accessible to, the operator at the principal control point.

**§ 89.169 Inspection of stations.**

All stations and records of stations in these services shall be made available for inspection at any time while the station is in operation or shall be made available for inspection upon reasonable request of an authorized representative of the Commission.

**§ 89.171 Inspection and maintenance of tower marking and associated control equipment.**

The licensee of any radio station which has an antenna structure required to be painted or illuminated pursuant to the provisions of section 303 (q) of the Communications Act of 1934, as amended, and/or Part 17 of this

chapter shall comply with the provisions of this section in the operation and maintenance of such tower marking as follows:

(a) Shall make an observation of the tower lights at least once each 24 hours either visually or by observing an automatic and properly maintained indicator designed to register any failure of such lights, to insure that all such lights are functioning properly as required; or alternatively,

(b) Shall provide and properly maintain an automatic alarm system designed to detect any failure of such lights and to provide indication of such failure to the licensee.

(c) Shall report immediately by telephone or telegraph to the nearest Flight Service Station or office of the Federal Aviation Agency any observed or otherwise known failure of a code or rotating beacon light or top light not corrected within thirty minutes, regardless of the cause of such failure. Further notification by telephone or telegraph shall be given immediately upon resumption of the required illumination.

(d) Shall inspect at intervals not to exceed three months all automatic or mechanical control devices, indicators and alarm systems associated with the tower lighting to insure that such apparatus is functioning properly.

(e) Shall exhibit all lighting from sunset to sunrise unless otherwise specified.

(f) Shall maintain a supply of spare bulbs sufficient for immediate replacement purposes at all times.

(g) Shall clean and repaint all towers as often as necessary to maintain good visibility.

**§ 89.173 Answers to a notice of violation.**

Any licensee receiving official notice of a violation of the terms of the Communications Act of 1934, as amended, any legislative act or treaty to which the United States is a party, or the rules and regulations of the Federal Communications Commission, shall, within 10 days from such receipt or such other period as may be specified, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent, or an acknowledgment made within such period, 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 reply shall set forth the steps taken to prevent a recurrence of improper operation.

§ 89.175 Contents of station records.

Each licensee of a station in these services shall maintain records in accordance with the following:

(a) For all stations, the results and dates of the transmitter measurements required by these rules and the name of the person or persons making the measurements

(b) For all stations, when service or maintenance duties are performed, the responsible operator shall sign and date an entry in the station record giving:

(1) Pertinent details of all duties performed by him or under his supervision;

(2) His name and address, and

(3) The class, serial number and expiration date of his license: *Provided*, That the information called for by subparagraphs (2) and (3) of this paragraph so long as it remains the same, need be entered only once in the station record at any station where the responsible operator is regularly employed on a full time basis and at which his license is properly posted.

(c) For all base and fixed stations except such stations which are authorized to be operated at temporary locations or for unattended operation, the name or names of persons responsible for the operation of the transmitting equipment each day, together with the period of their duty. Each such person shall sign, not initial, the record both when coming on and when going off duty.

(d) [Reserved]

(e) For stations whose antenna or antenna supporting structure is required to be illuminated, a record in accordance with the following:

(1) The time the tower lights are turned on and off each day if manually controlled.

(2) The time the daily check of proper operation of the tower lights was made.

(3) In the event of any observed or otherwise known failure of a tower light:

(i) Nature of such failure.

(ii) Date and time the failure was observed, or otherwise noted.

(iii) Date, time and nature of the adjustments, repairs, or replacements that were made.

(iv) Identification of the Flight Service Station (FAA) notified of the failure of any code or rotating beacon light or top light not corrected within thirty minutes, and the date and time such notice was given.

(v) Date and time notice was given to the Flight Service Station (FAA) that the required illumination was resumed.

(4) Upon the completion of the periodic inspection required at least once each three months:

(i) The date of the inspection and the condition of all tower lights and associated tower lighting control devices, indicators and alarm systems.

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

§ 89.177 Form of station records.

(a) The records shall be kept in an orderly manner and in such detail that the data required are readily available. Key letters or abbreviations may be used if proper meaning or explanation is set forth in the record.

(b) Each entry in the records shall be signed by a person qualified to do so having actual knowledge of the facts to be recorded.

(c) No record or portion thereof shall be erased, obliterated, or willfully destroyed within the required retention period. Any necessary correction may be made only by the persons originating the entry who shall strike out the erroneous portion, initial the correction made and indicate the date of the correction.

§ 89.179 Retention of station records.

Records required to be kept by this part shall be retained by the licensee for a period of at least one year.

Subpart B—[Reserved]

Subpart C—Developmental Operation

§ 89.201 Eligibility.

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

§ 89.203 Showing required.

(a) Except as provided in paragraph (b) of this section, each application for

developmental operation 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 radio art, or is along lines 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; and

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

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

#### § 89.205 Limitations on use.

Stations used for developmental operation shall be constructed and used in such a manner as to conform with all of the technical and operating requirements of Subpart A of this part, unless deviation therefrom is specifically provided for in the station authorization.

#### § 89.207 Frequencies available for assignment.

Stations engaged in developmental operation may be authorized to use a frequency, or frequencies, available for the service in which they propose to operate. The number of channels assigned will depend upon the specific requirements of the developmental program itself, and the number of frequencies available in the particular area where the station will be operated.

#### § 89.209 Interference.

All developmental operation shall be subject to the condition that no harmful interference is caused to the operation of stations licensed on a regular basis under any part of this chapter.

#### § 89.211 Special provisions.

(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 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.

#### § 89.213 Change or cancellation of authorization without hearing.

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.

#### § 89.215 Report of operation.

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 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:

- (a) The final objective.
- (b) Results of operation to date.
- (c) Analysis of the results obtained.
- (d) Copies of any published reports.
- (e) Need for continuation of the program.
- (f) Number of hours of operation on each frequency.

**Subpart D—[Reserved]****Subpart E—Local Government Radio Service****§ 89.251 Eligibility.**

Authorizations for stations in the local Government Radio Service will be issued only to territories, possessions, states, other governmental subdivisions including counties, cities, towns and similar governmental entities.

**NOTE:** For clarification of eligibility in the Local Government Radio Service, see announcement (FCC 60-1139), 25 F.R. 9179, Sept. 24, 1960, which reads in part:

• • • The Commission announces that for the purpose of determining eligibility in the Local Government Radio Service the phrases "other governmental subdivisions" and "similar governmental entities" will be strictly construed. Such entities as villages, boroughs and the like will be regarded as eligible while school districts, park authorities and others with similarly limited governmental powers and responsibilities will not be eligible. It should be noted that in most cases, these quasi-governmental entities may obtain authorizations through their parent entity or may apply in the Business or Citizens Radio Service. Should the frequency situation improve, the Commission will then reconsider this position.

**§ 89.253 Permissible communications.**

Stations in the Local Government Radio Service are authorized to transmit communications essential to official activities of the licensee.

**§ 89.255 Points of communication.**

(a) Local government base stations are authorized to intercommunicate with local government mobile stations. Local government mobile stations are authorized to intercommunicate with local government base stations and other local government mobile stations.

(b) Local government base and mobile stations are also authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the base-mobile operations of any authorized station.

(c) Local government fixed stations are authorized to intercommunicate with other fixed stations in the Public Safety Radio Services and to transmit to receivers at fixed locations.

**§ 89.257 Station limitations.**

(a) Mobile relay stations in the Local Government Radio Service will be authorized only on frequencies above 150 Mc/s which are, pursuant to the provisions of § 89.259(f), available for base or mobile stations. Each mobile relay station authorized pursuant to the provisions of this section which is intended to be activated by signals transmitted on a frequency below 50 Mc/s shall be so designed and installed that:

(1) Normally it will be activated only by means of the coded signal or signals or such other means as will effectively prevent its activation by undesired signals;

(2) It will be deactivated automatically when its associated receivers are not receiving the signal on the frequency or frequencies which normally activate it; and

(3) It will be deactivated upon receipt or cessation of a coded signal or signals, or shall be provided with an automatic time delay or clock device which will deactivate the station not more than three minutes after its activation.

(b) A control station associated with one or more mobile relay stations, authorized pursuant to this section, may be assigned the mobile service frequency assigned to the associated mobile station. Use of the mobile service frequency by such control station is subject to the condition that harmful interference not be caused to stations of other licensees operating in the mobile service in accordance with the table of frequency allocations as set forth in Part 2 of this chapter.

(c) Voice, tone, or impulse signalling, for the purposes enumerated in sub-paragraph (1) of this paragraph, may be used, on a secondary basis, to the extent provided in this Subpart on the mobile service frequencies above 25 Mc/s in the Local Government Radio Service, provided a showing is made that such operations will not cause harmful interference to the primary operations of any co-channel licensee, and subject to the condition that harmful interference is not caused to the primary operations of any licensee. All such secondary signalling shall be subject to the following limitations:

(1) Secondary voice, tone or impulse signalling may be used only for the following purposes:

(i) Automatic indication of equipment malfunction;

(ii) Actuation of a device to indicate the presence of an intruder or fire on property under the protection of the licensee.

(2) Any one alarm or warning shall be limited to not more than five transmissions, not to exceed six seconds each.

(3) The bandwidth shall not exceed that authorized to the licensee for its primary operations on the frequency concerned.

(4) Frequency loading resulting from the use of secondary voice, tone or impulse signalling will not be considered in whole or in part as a justification for authorizing additional frequencies in the licensee's mobile service system.

(5) A mobile service frequency may not be used exclusively for secondary voice, tone or impulse signalling.

(6) The plate power input to the final radio frequency stage shall not exceed 5C watts.

(7) Only A1, A2, A3, F1, F2, or F3 emissions will be authorized.

(8) Automatic means shall be provided to de-activate the transmitted in the event the carrier remains on for a period in excess of three minutes.

**§ 89.259 Frequencies available to the Local Government Radio Service.**

(a) The frequencies or bands of frequencies listed in this section are available for assignment to stations in the Local Government Radio Service subject to the conditions and limitations of this section.

(b) The frequencies shown in paragraph (f) of this section as being available for assignment to mobile stations only may be authorized for use by base stations only after coordination with affected licensees in the area and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(c) The amount of separation between assignable frequencies listed in paragraph (f) of this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly, grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(d) Normally, no more than two frequencies will be assigned unless a re-

quest therefor is adequately supported by a satisfactory showing of need, provided that request for operation on the frequency 39.06 Mc/s will be approved upon satisfactory showing of a need even though the licensee already has been assigned two other frequencies or provided that an applicant who obtains authorization to operate on the frequency 39.06 Mc/s shall still be allowed to request and obtain two other frequency assignments in this service.

(e) Control and repeater stations, except as provided for by § 89.257(b), in the Local Government Radio Service will be authorized only on frequencies allocated to operational fixed stations.

(f) The following tabulation indicates the frequencies or bands of frequencies, class of stations to which they are normally available, and the specific assignment limitations, which are developed in paragraph (g) of this section:

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
37.10	Base and mobile	8
37.18	do	8
37.26	do	8
39.06	Mobile	6, 8, 9
39.10	Base and mobile	8
39.18	do	8
39.50	do	8
39.58	do	8
39.82	do	8
39.90	do	8
39.98	do	8
45.08	do	8
45.12	do	8
45.16	do	8
45.20	do	8
45.24	do	8
45.28	do	8
45.32	do	8
45.36	do	8
45.40	do	8
45.44	do	8
45.48	do	8
45.52	do	8
45.56	do	8
45.60	do	8
45.64	do	8
46.52	do	8
46.54	do	8
46.56	do	8
46.58	do	8
72.02 to 74.58	Operational fixed	3
75.42 to 75.98	do	3
153.755	Mobile	5
153.785	do	5
153.800	do	5
153.815	do	5
153.845	do	5
153.860	do	5
153.875	do	5
153.905	do	5
153.920	do	5
153.935	do	5
153.965	do	5
153.980	do	5
153.995	do	5
154.025	Base and mobile	5
154.040	do	5
154.055	do	5
154.085	do	5

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
154.100	Base and mobile	5
154.115	do	5
154.965	do	
154.980	do	
154.995	do	
155.025	do	
155.040	do	
155.055	do	
155.085	do	
155.100	do	
155.115	do	
155.145	do	
155.715	do	
155.745	do	
155.760	do	
155.775	do	
155.805	do	
155.820	do	
155.835	do	
155.865	do	
155.880	do	5
155.895	do	5
155.925	do	5
155.940	do	5
155.955	do	5
155.985	Mobile	5
156.000	do	5
156.015	do	5
158.745	Base and mobile	
158.760	do	
158.775	do	
158.805	do	
158.820	do	
158.835	do	
158.865	Mobile	5
158.880	do	5
158.895	do	5
158.925	do	5
158.940	do	5
158.955	do	5
453.050	Base and mobile	
453.100	do	
453.150	do	
453.200	do	
453.250	do	
453.300	do	
453.350	do	
453.400	do	
453.450	do	
453.500	do	
453.550	do	
453.600	do	
453.650	do	
453.700	do	
453.750	do	
453.800	do	
453.850	do	
453.900	do	
453.950	do	
458.050	Mobile	
458.100	do	
458.150	do	
458.200	do	
458.250	do	
458.300	do	
458.350	do	
458.400	do	
458.450	do	
458.500	do	
458.550	do	
458.600	do	
458.650	do	
458.700	do	
458.750	do	
458.800	do	
458.850	do	
458.900	do	
458.950	do	

(For frequencies 952 Mc/s and above, see § 89.101.)

(g) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (f) of this section:

(1) [Reserved]

(2) [Reserved]

(3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).

(4) [Reserved]

(5) The power which may be used for operation on these frequencies may not exceed 180 watts plate input power to the final radio frequency stage and the antenna height may not exceed 50 feet above ground level at the antenna location.

(6) Available for assignment: *Provided*, That the maximum plate input power to the final radio frequency stage of any transmitter authorized to operate on this frequency shall not exceed 3 watts.

(7) [Reserved]

(8) This frequency is shared with the Police Radio Service.

(9) Applicants for this frequency need not demonstrate compliance with the provisions of § 89.15.

(h) Frequencies offset by 7.5 kc/s or less from those in the 152 to 162 Mc/s band listed in paragraph (f) of this section may be assigned for developmental operation upon an adequate showing of the need for such irregular assignment together with an acceptable engineering report indicating that harmful interference to the operation of existing stations will not be caused.

**Subpart F—[Reserved]**

**Subpart G—Police Radio Service**

**§ 89.301 Eligibility.**

(a) Authorizations for stations in the Police Radio Service will be issued only to states, territories, possessions and other governmental subdivisions including counties, cities, towns and similar governmental entities.

(b) The eligibility set forth in paragraph (a) of this section includes governmental institutions in those cases where such institution is authorized by law to provide its own police protection.

### § 89.303 Permissible communications.

(a) Stations in the Police Radio Service are authorized to transmit communications essential to official police activities of the licensee.

### § 89.305 Points of communications.

(a) Police base stations are authorized to intercommunicate with police mobile stations. Police mobile stations are authorized to intercommunicate with police base stations and other police mobile stations.

(b) Police base and mobile stations are also authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the base-mobile operations of any authorized station.

(c) Police fixed stations are authorized to intercommunicate with other fixed stations in the Public Safety Radio Services and to transmit to receivers at fixed locations.

(d) Police zone and interzone stations are authorized to intercommunicate in accordance with the operating procedure prescribed by the Commission. Copies of such procedure are available for distribution to persons having a legitimate need therefor. Requests for copies should be addressed to the Secretary, Federal Communications Commission, Washington, D.C., 20554.

### § 89.307 Station limitations.

(a) Mobile relay stations in the Police Radio Service will be authorized only on frequencies above 150 Mc/s which are, pursuant to the provisions of § 89.309(g), available for base or mobile stations. Each mobile relay station authorized pursuant to the provisions of this section which is intended to be activated by signals transmitted on a frequency below 50 Mc/s shall be so designed and installed that:

(1) Normally it will be activated only by means of the coded signal or signals or such other means as will effectively prevent its activation by undesired signals;

(2) It will be deactivated automatically when its associated receivers are not receiving the signal on the frequency or frequencies which normally activate it; and

(3) It will be deactivated upon receipt or cessation of a coded signal or signals, or shall be provided with an automatic

time delay or clock device which will deactivate the station not more than three minutes after its activation.

(b) Subject to the provisions of § 89.157, communication units of a licensed police mobile station may be installed in any vehicle which in an emergency would require cooperation or coordination with police activities. This provision includes fire department vehicles, ambulances, emergency units of public utilities, lifeguard emergency units and rural school buses.

(c) Authorizations for interzone stations in the Police Radio Service will not be issued for more than one station within a zone. A zone is normally considered to be a single state. Any request for the rezoning of any state for the purpose of providing more than one interzone station shall be accompanied by a showing of need based either upon the volume of traffic or upon the necessity for more expeditious handling of traffic. In either event such a request shall be accompanied by comments thereon from all zone stations affected.

(d) A control station associated with one or more mobile relay stations, authorized pursuant to this section, may be assigned the mobile service frequency assigned to the associated mobile station. Use of the mobile service frequency by such control station is subject to the condition that harmful interference not be caused to stations of other licensees operating in the mobile service in accordance with the table of frequency allocations as set forth in Part 2 of this chapter.

(e) Voice, tone, or impulse signalling, for the purposes enumerated in subparagraph (1) of this paragraph, may be used, on a secondary basis, to the extent provided in this Subpart on the mobile service frequencies above 25 Mc/s in the Police Radio Service, provided a showing is made that such operations will not cause harmful interference to the primary operations of any co-channel licensee, and subject to the condition that harmful interference is not caused to the primary operations of any licensee. All such secondary signalling shall be subject to the following limitations:

(1) Secondary voice, tone or impulse signalling may be used only for the following purposes:

(i) Automatic indication of equipment malfunction;

(ii) Actuation of a device to indicate the presence of an intruder on property under the protection of the licensee.

(2) Any one alarm or warning shall be limited to not more than five transmissions, not to exceed six seconds each.

(3) The bandwidth shall not exceed that authorized to the licensee for its primary operations on the frequency concerned.

(4) Frequency loading resulting from the use of secondary voice, tone or impulse signalling will not be considered in whole or in part as a justification for authorizing additional frequencies in the licensee's mobile service system.

(5) A mobile service frequency may not be used exclusively for secondary voice, tone or impulse signalling.

(6) The plate power input to the final radio frequency stage shall not exceed 50 watts.

(7) Only A1, A2, A3, F1, F2, or F3 emissions will be authorized.

(8) Automatic means shall be provided to de-activate the transmitter in the event the carrier remains on for a period in excess of three minutes.

**§ 89.309 Frequencies available to the Police Radio Service.**

(a) The frequencies or bands of frequencies listed herein are available for assignment to stations in the Police Radio Service subject to the conditions and limitations of this section.

(b) The frequencies listed in this section for mobile stations may be authorized for use at base stations only after coordination with other licensees in the area is effected and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(c) Normally only one base and one mobile station frequency will be assigned to a licensee for mobile service operations. Additional frequencies may be assigned provided the request therefor is adequately supported by a satisfactory showing of need.

(d) The amount of separation between assignable frequencies listed in this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly, grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(e) In addition to the frequencies assigned for mobile service operation, one base station frequency above 152 Mc/s may be assigned as a common frequency to all licensees in a particular area to permit intersystem communication between base stations or mobile stations or both. This frequency use will not be authorized in any area where all available frequencies are required for independent systems.

(f) Control and repeater stations, except as provided for by § 89.307(d), in the Police Radio Service may be authorized on a temporary basis to operate on frequencies available for base and mobile stations above 152 Mc/s, provided an adequate showing is made why such operations cannot be conducted on frequencies allocated to the Operational Fixed Service. Such operation on base or mobile frequencies will not be authorized initially nor renewed for periods in excess of one year. Any such authorization shall be subject to immediate termination if harmful interference is caused to the Mobile Service, or if the particular frequency is required for mobile service operations in the area concerned.

(g) The following tabulation indicates the frequency or bands of frequencies, the class of station(s) to which they are normally available and the specific assignment limitations, which are developed in paragraph (h) of this section.

Frequency or band	Class of station(s)	Limitations
1610	Base and mobile	6, 7, 13
1618	do	6, 7, 13
1626	do	6, 7, 13
1634	do	6, 7, 13
1642	do	6, 7, 13
1650	do	7, 13
1658	do	7, 13
1666	do	7, 13
1674	do	7, 13
1682	do	7, 13
1690	do	6, 7, 13
1698	do	6, 7, 13
1706	do	6, 7, 13
1714	do	7, 13
1722	do	7, 13
1730	do	7, 13
2326	do	6, 7
2366	do	6, 7
2382	do	7
2390	do	6, 7
2406	do	7
2414	do	7
2422	do	7
2430	do	7
2442	do	7
2450	do	7
2458	do	7
2466	do	7
2474	do	7
2482	do	7
2490	do	7, 13
2804	Zone and interzone	9

Frequency or band	Class of station(s)	Limitations	Frequency or band	Class of station(s)	Limitations
<i>kc/s</i>			<i>Mc/s</i>		
2808	Zone and interzone	9	42.08	Base and mobile	7, 8, 13
2812	do	9	42.10	do	7, 8, 13
5135	do	9, 15	42.12	do	7, 8, 13
5140	do	9	42.14	do	7, 8, 13
5195	do	9, 10	42.16	do	7, 8, 13
7480	do	9, 11, 14	42.18	Mobile	7, 8
7805	do	9, 11	42.20	do	7, 8
7935	do	9, 11	42.22	do	7, 8
			42.24	do	7, 8
			42.26	do	7, 8
<i>Mc/s</i>			42.28	do	7, 8
37.02	Mobile		42.30	do	7, 8
37.04	Base and mobile		42.32	Base and mobile	7, 8, 13
37.06	do		42.34	do	7, 8, 13
37.08	do		42.36	do	7, 8, 13
37.10	do	18	42.38	do	7, 8, 13
37.12	do		42.40	do	7, 8, 13
37.14	do		42.42	do	7, 8, 13
37.16	do		42.44	do	7, 8, 13
37.18	do	18	42.46	do	7, 8, 13
37.20	do		42.48	do	7, 8, 13
37.22	do		42.50	do	7, 8, 13
37.24	do		42.52	do	7, 8, 13
37.26	do	18	42.54	do	7, 8, 13
37.28	do		42.56	do	7, 8, 13
37.30	do		42.58	do	7, 8, 13
37.32	do		42.60	do	7, 8, 13
37.34	Mobile		42.62	do	7, 8, 13
37.36	Base and mobile		42.64	do	7, 8, 13
37.38	Mobile		42.66	Mobile	7, 8
37.40	Base and mobile		42.68	do	7, 8
37.42	Mobile		42.70	do	7, 8
39.02	Base and mobile		42.72	do	7, 8
39.04	do		42.74	do	7, 8
39.06	do	17, 18	42.76	do	7, 8
39.08	do		42.78	do	7, 8
39.10	do	18	42.80	Base and mobile	7, 8, 13
39.12	do		42.82	do	7, 8, 13
39.14	do		42.84	do	7, 8, 13
39.16	do		42.86	do	7, 8, 13
39.18	do	18	42.88	do	7, 8, 13
39.20	do		42.90	do	7, 8, 13
39.22	do		42.92	do	7, 8, 13
39.24	do		42.94	do	7, 8, 13
39.26	Mobile		44.62	do	7, 8, 13
39.28	Base and mobile		44.66	do	7, 8, 13
39.30	Mobile		44.70	do	7, 8, 13
39.32	Base and mobile		44.74	do	7, 8, 13
39.34	Mobile		44.78	Mobile	7, 8
39.36	Base and mobile		44.82	do	7, 8
39.38	Mobile		44.86	do	7, 8
39.40	Base and inobile		44.90	do	7, 8
39.42	do		44.94	Base and mobile	7, 8, 13
39.44	do		44.98	do	7, 8, 13
39.46	do	16	45.02	do	7, 8, 13
39.48	do		45.06	do	7, 8, 13
39.50	do	18	45.10	do	7, 8, 13
39.52	do		45.14	do	
39.54	do		45.18	do	
39.56	do		45.22	do	
39.58	do	18	45.26	Mobile	
39.60	do		45.30	do	
39.62	do		45.34	do	
39.64	do		45.38	do	
39.66	Mobile		45.42	Base and mobile	
39.68	Base and mobile		45.46	do	
39.70	Mobile		45.50	do	
39.72	Base and mobile		45.54	do	
39.74	Mobile		45.58	do	
39.76	Base and mobile		45.62	do	
39.78	Mobile		45.66	do	
39.80	Base and mobile		45.70	do	
39.82	do	18	45.74	Mobile	
39.84	do		45.78	do	
39.86	do		45.82	do	
39.88	Base and mobile		45.86	Base and mobile	16
39.90	do	18	45.90	do	
39.92	do		45.94	do	
39.94	do		45.98	do	
39.96	do		46.02	do	
39.98	do	18	72.02 to 74.58	Operational fixed	3
42.02	do	7, 8, 13	75.42 to 75.98	do	3
42.04	do	7, 8, 13	154.650	Mobile	
42.06	do	7, 8, 13			

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
154.665	Base and mobile	8
154.680	do	8
154.695	do	8
154.710	Mobile	
154.725	Base and mobile	
154.740	do	
154.755	do	
154.770	Mobile	
154.785	Base and mobile	
154.800	do	
154.815	do	
154.830	Mobile	
151.845	Base and mobile	
154.860	do	
154.875	Base and mobile	
154.890	Mobile	
154.905	Base and mobile	8
154.920	do	8
154.935	do	8
154.950	Mobile	
155.01	Base and mobile	
155.07	do	
155.13	do	
155.19	do	
155.25	do	
155.31	do	
155.370	do	
155.415	do	
155.430	do	
155.445	do	8
155.460	do	8
155.475	do	8
155.490	do	8
155.505	do	8
155.520	do	8
155.535	do	
155.550	do	
155.565	do	
155.580	do	
155.595	do	
155.610	do	
155.625	do	
155.640	do	
155.655	do	
155.670	do	
155.685	do	
155.700	do	
155.730	do	
155.79	do	
155.85	Mobile	
155.91	do	
155.97	do	
156.03	do	
156.09	do	
156.15	do	
156.210	Base and mobile	
158.730	do	
158.790	do	
158.850	do	
158.910	Mobile	
158.970	do	
159.030	do	
159.090	Base and mobile	
159.150	do	
159.210	do	
453.050	do	
453.100	do	
453.150	do	
453.200	do	
453.250	do	
453.300	do	
453.350	do	
453.400	do	
453.450	do	
453.500	do	
453.550	do	
453.600	do	
453.650	do	
453.700	do	
453.750	do	
453.800	do	
453.850	do	

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
453.900	Base and mobile	
453.950	do	
458.050	Mobile	
458.100	do	
458.150	do	
458.200	do	
458.250	do	
458.300	do	
458.350	do	
458.400	do	
458.450	do	
458.500	do	
458.550	do	
458.600	do	
458.650	do	
458.700	do	
458.750	do	
458.800	do	
458.850	do	
458.900	do	
458.950	do	
(For frequencies 952 Mc/s and above, see § 89.101.)		

(h) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (g) of this section:

- (1) [Reserved]
- (2) [Reserved]
- (3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s, and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).
- (4) [Reserved]
- (5) [Reserved]
- (6) The use of this frequency is subject to the condition that no harmful interference will be caused to the service of any Canadian station.
- (7) This frequency is available for assignment only in accordance with a geographical assignment plan.
- (8) This frequency is reserved primarily for assignment to state police licensees. Assignment to other police licensees will be made only where the frequency is required for coordinated operation with the state police system to which the frequency is assigned. Any request for such assignment must be supported by a statement from the state police system concerned indicating that the assignment is necessary for coordination of police activities.
- (9) This frequency is available for assignment to zone and interzone stations in the Police Radio Service for use with type A1 emission only and a maximum plate input power of 1000 watts to the

final radio frequency stage of the transmitter.

(10) This frequency is authorized for use as a calling frequency; however, the transmission of operating signals or a single short radio telegram is permissible provided no harmful interference will be caused to any calling signals.

(11) This frequency may be used only during that period of time between 2 hours after local sunrise and 2 hours before local sunset.

(12) [Reserved]

(13) Subject to the restrictions contained in § 89.111(a), base stations operating on this frequency and rendering service to state police mobile units may be authorized to use a maximum plate input power to the final radio frequency stage in excess of the maximum indicated in § 89.111(b), but not in excess of 10,000 watts: *Provided*, That such operation will cause no harmful interference to the service of other stations.

(14) This frequency may be assigned to fixed stations in the Police Radio Service in Alaska for point to point radiotelephone communication, using type A3 emission and a maximum plate input power of 1000 watts to the final radio frequency stage of the transmitter.

(15) This frequency may be assigned to fixed stations in the Police Radio Service in Alaska for point-to-point radiotelephone communications, using type A3 emission with a maximum plate input power of 1,000 watts to the final radio frequency stage of the transmitter, subject to the condition that no harmful interference is caused to the service of any police station employing type A1 emission on this frequency including any operations conducted in accordance with outstanding regional agreements and further subject to the condition that no harmful interference is caused to the service of any station, which in the discretion of the Commission may have priority on the frequency with which interference results.

(16) This frequency is reserved for assignment to stations in the Police Radio Service for intersystem operations only: *Provided, however*, That licensees holding a valid authorization to use this frequency for local base or mobile operations as of June 1, 1956, may continue to be authorized for such use.

(17) The maximum plate input power to the final radio frequency stage of any transmitter authorized to operate on this frequency, after June 1, 1956, shall

not exceed three watts. Licensees holding a valid authorization as of June 1, 1956, for base or mobile station operation on this frequency, with a power in excess of three watts, may continue to be authorized for such operation without regard to this power limitation.

(18) This frequency is shared with the Local Government Radio Service.

(i) Frequencies offset by 7.5 kc/s or less from those in the 152 to 162 Mc/s band listed in paragraph (g) of this section may be assigned for developmental operation upon an adequate showing of the need for such irregular assignment together with an acceptable engineering report indicating that harmful interference to the operation of existing stations will not be caused.

### Subparts H and I—[Reserved]

#### Subpart J—Fire Radio Service

##### § 89.351 Eligibility.

(a) Authorizations for stations in the Fire Radio Service will be issued only to states, territories, possessions and other governmental subdivisions including counties, cities, towns and similar governmental entities, and persons or organizations charged with specific fire protection activities.

(b) Applications from persons or organizations other than governmental subdivisions must be accompanied by a statement from the governmental subdivision having legal jurisdiction over the area to be served, supporting the request.

##### § 89.353 Permissible communications.

Stations in the Fire Radio Service are authorized to transmit communications essential to official fire activities of the licensee.

##### § 89.355 Points of communication.

(a) Fire base stations are authorized to intercommunicate with fire mobile stations. Fire mobile stations are authorized to intercommunicate with fire base stations and other fire mobile stations.

(b) Fire base and mobile stations are also authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the base-mobile operations of any authorized station.

(c) Fire fixed stations are authorized to intercommunicate with other fixed stations in the Public Safety Radio Serv-

ices and to transmit to receivers at fixed locations.

§ 89.357 Station limitations.

(a) Mobile relay stations in the Fire Radio Service will be authorized only on frequencies above 150 Mc/s which are, pursuant to the provisions of § 89.359(f), available for base or mobile stations. Each mobile relay station authorized pursuant to the provisions of this section which is intended to be activated by signals transmitted on a frequency below 50 Mc/s shall be so designed and installed that:

(1) Normally it will be activated only by means of the coded signal or signals or such other means as will effectively prevent its activation by undesired signals;

(2) It will be deactivated automatically when its associated receivers are not receiving the signal on the frequency or frequencies which normally activate it; and

(3) It will be deactivated upon receipt or cessation of a coded signal or signals, or shall be provided with an automatic time delay or clock device which will deactivate the station not more than three minutes after its activation.

(b) Subject to the provisions of § 89.157, communication units of a licensed fire mobile station may be installed in emergency vehicles, other than fire department vehicles, which may be alerted during a fire emergency. This provision includes emergency units of public utilities and water departments.

(c) A control station associated with one or more mobile relay stations, authorized pursuant to this section, may be assigned the mobile service frequency assigned to the associated mobile station. Use of the mobile service frequency by such control station is subject to the condition that harmful interference not be caused to stations of other licensees operating in the mobile service in accordance with the table of frequency allocations as set forth in Part 2 of this chapter.

(d) Voice, tone, or impulse signalling, for the purposes enumerated in subparagraph (1) of this paragraph, may be used, on a secondary basis, to the extent provided in this Subpart on the mobile service frequencies above 25 Mc/s in the Fire Radio Service, provided a showing is made that such operations will not cause harmful interference to the primary operations of any co-channel li-

censee, and subject to the condition that harmful interference is not caused to the primary operations of any licensee. All such secondary signalling shall be subject to the following limitations:

(1) Secondary voice, tone or impulse signalling may be used only for the following purposes:

(i) Automatic indication of equipment malfunction;

(ii) Actuation of a device to indicate the presence of a fire on property under the protection of the licensee.

(2) Any one alarm or warning shall be limited to not more than five transmissions, not to exceed 6 seconds each.

(3) The bandwidth shall not exceed that authorized to the licensee for its primary operations on the frequency concerned.

(4) Frequency loading resulting from the use of secondary voice, tone or impulse signalling will not be considered in whole or in part as a justification for authorizing additional frequencies in the licensee's mobile service system.

(5) A mobile service frequency may not be used exclusively for secondary voice, tone or impulse signalling.

(6) The plate power input to the final radio frequency stage shall not exceed 50 watts.

(7) Only A1, A2, A3, F1, F2, or F3 emissions will be authorized.

(8) Automatic means shall be provided to de-activate the transmitter in the event the carrier remains on for a period in excess of 3 minutes.

§ 89.359 Frequencies available to the Fire Radio Service.

(a) The frequencies or bands of frequencies listed in this section are available for assignment to stations in the Fire Radio Service subject to the conditions and limitations of this section.

(b) The frequencies listed in this section for mobile stations may be authorized for use at base stations only after coordination with other licensees in the area is effected and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(c) Normally no more than two frequencies will be assigned to a licensee for mobile service operations. Additional frequencies may be assigned provided the request therefor is adequately supported

by a satisfactory showing of need. One such need specifically contemplated herein is for the assignment of an additional frequency or frequencies for common intra-county, intra-fire district, or intra-state fire coordination operations; the frequency or frequencies requested must be in accord with an approved frequency utilization plan, for the area involved, on file with the Commission.

(d) The amount of separation between assignable frequencies listed in this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly, grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(e) Control and repeater stations, except as provided for by § 89.357(c), in the Fire Radio Service may be authorized on a temporary basis to operate on frequencies available for base and mobile stations above 152 Mc/s, provided an adequate showing is made why such operation cannot be conducted on frequencies allocated to the Operational Fixed Service. Such operation on base or mobile frequencies will not be authorized initially nor renewed for periods in excess of one year. Any such authorization shall be subject to immediate termination if harmful interference is caused to the Mobile Service or if the particular frequency is required for mobile service operations in the area concerned.

(f) The following tabulation indicates the frequency or bands of frequencies, the class of station(s) to which they are normally available, and the specific assignment limitations, which are developed in paragraph (g) of this section:

Frequency or band	Class of station(s)	Limitations
<i>kc/s</i>		
1630	Base and mobile	
<i>Mc/s</i>		
33.42	Mobile and fixed	6
33.44	Base and mobile	
33.46	Mobile	
33.48	Base and mobile	
33.50	Mobile	
33.52	Base and mobile	
33.54	Mobile	
33.56	Base and mobile	
33.58	Mobile	
33.60	Base and mobile	
33.62	Mobile	
33.64	Base and mobile	
33.66	Mobile	
33.68	Base and mobile	
33.70	do	
33.72	do	
33.74	do	
33.76	do	

Frequency of band	Class of station(s)	Limitations
<i>Mc/s</i>		
33.78	Base and mobile	
33.80	do	
33.82	do	
33.84	do	
33.86	do	
33.88	do	
33.90	do	
33.92	do	
33.94	do	
33.96	do	
33.98	do	
45.88	do	13
46.06	do	
46.08	do	
46.10	do	
46.12	do	
46.14	do	
46.16	do	
46.18	do	
46.20	do	
46.22	Mobile	
46.24	do	
46.26	do	
46.28	do	
46.30	Mobile and fixed	6
46.32	Mobile	
46.34	do	
46.36	Base and mobile	
46.38	do	
46.40	do	
46.42	do	
46.44	do	
46.46	do	
46.48	do	
46.50	do	
72.02 to 74.58	Operational fixed	3
75.42 to 75.98	do	3
153.77	Mobile	
153.83	Mobile and fixed	6
153.890	Mobile	
153.950	do	
154.010	Mobile	
154.070	do	8
154.130	Base and mobile	8
154.145	do	8
154.160	do	8
154.175	do	8
154.190	do	8
154.205	do	8
154.220	do	8
154.235	do	8
154.250	do	8
154.265	do	8, 13
154.280	do	8, 13
154.295	do	8, 13
154.310	do	8
154.325	do	8
154.340	do	8
154.355	do	8
154.370	do	8
154.385	do	8
154.400	do	8
154.415	do	8
154.430	do	8
154.445	do	8
166.250	do	5
170.150	do	5
453.050	do	
453.100	do	
453.150	do	
453.200	do	
453.250	do	
453.300	do	
453.350	do	
453.400	do	
453.450	do	
453.500	do	
453.550	do	
453.600	do	
453.650	do	
453.700	do	
453.750	do	

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
453, 800.....	Base and mobile.....	.....
453, 850.....	do.....	.....
453, 900.....	do.....	.....
453, 950.....	do.....	.....
458, 050.....	do.....	.....
458, 100.....	do.....	.....
458, 150.....	do.....	.....
458, 200.....	do.....	.....
458, 250.....	do.....	.....
458, 300.....	do.....	.....
458, 350.....	do.....	.....
458, 400.....	do.....	.....
458, 450.....	do.....	.....
458, 500.....	do.....	.....
458, 550.....	do.....	.....
458, 600.....	do.....	.....
458, 650.....	do.....	.....
458, 700.....	do.....	.....
458, 750.....	do.....	.....
458, 800.....	do.....	.....
458, 850.....	do.....	.....
458, 900.....	do.....	.....
458, 950.....	do.....	.....
(For frequencies 952 Mc/s and above, see § 89.101.)		

(g) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (f) of this section:

- (1) [Reserved]
- (2) [Reserved]
- (3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s, and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).
- (4) [Reserved]
- (5) This frequency may be assigned to stations in the Fire Radio Service, only at points within 150 miles of New York, N. Y.
- (6) The maximum plate power input to the final radio frequency stage of any transmitter authorized to operate on this frequency shall not exceed 3 watts.
- (7) [Reserved]
- (8) This frequency is not available for assignment to stations in the Fire Radio Service at any location in Puerto Rico or the Virgin Islands.
- (9) [Reserved]
- (10) [Reserved]
- (11) [Reserved]
- (12) [Reserved]
- (13) This frequency is reserved for assignment to stations in the Fire Radio Service for inter-system operations only and these operations must be primarily base-mobile communications.

(h) Frequencies offset by 7.5 kc/s or less from those in the 152 to 162 Mc/s band listed in paragraph (f) of this section

may be assigned for developmental operation upon an adequate showing of the need for such irregular assignment together with an acceptable engineering report indicating that harmful interference to the operation of existing stations will not be caused.

**Subpart K—[Reserved]**

**Subpart L—Highway Maintenance Radio Service**

**§ 89.401 Eligibility.**

Authorizations for stations in the Highway Maintenance Radio Service will be issued only to states, territories, possessions, and other governmental subdivisions including counties, cities, towns and similar governmental entities.

**§ 89.403 Permissible communications.**

Stations in the Highway Maintenance Radio Service are authorized to transmit communications essential to official highway activities of the licensee.

**§ 89.405 Points of communication.**

(a) Highway maintenance base stations are authorized to intercommunicate with highway maintenance mobile stations. Highway maintenance mobile stations are authorized to intercommunicate with highway maintenance base stations and other highway maintenance mobile stations.

(b) Highway maintenance base and mobile stations are also authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the base-mobile operations of any authorized station.

(c) Highway Maintenance fixed stations are authorized to intercommunicate with other fixed stations in the Public Safety Radio Services and to transmit to receivers at fixed locations.

**§ 89.407 Station limitations.**

(a) Mobile relay stations in the Highway Maintenance Radio Service will be authorized only on frequencies above 150 Mc/s which are, pursuant to the provisions of § 89.409(e), available for base or mobile stations. Each mobile relay station authorized pursuant to the provisions of this section which is intended to be activated by signals transmitted on a frequency below 50 Mc/s shall be so designed and installed that:

(1) Normally it will be activated only by means of the coded signal or signals or such other means as will effectively prevent its activation by undesired signals;

(2) It will be deactivated automatically when its associated receivers are not receiving the signal on the frequency or frequencies which normally activate it; and

(3) It will be deactivated upon receipt or cessation of a coded signal or signals, or shall be provided with an automatic time delay or clock device which will deactivate the station not more than three minutes after its activation.

(b) Subject to the provisions of § 89.157, communication units of a licensed highway maintenance mobile station may be installed in vehicles of contractors or other persons having a direct responsibility for official highway activities.

(c) Each operator of a station in the Highway Maintenance Radio Service when employing a frequency shared with the Special Emergency Radio Service and designated by limitation note 6 in § 89.409(e) shall listen on the licensed frequency of the station prior to transmitting and shall not transmit until it has been reasonably determined that harmful interference will not be caused to any authorized communication in progress on the frequency.

(d) A control station associated with one or more mobile relay stations, authorized pursuant to this section, may be assigned the mobile service frequency assigned to the associated mobile station. Use of the mobile service frequency by such control station is subject to the condition that harmful interference not be caused to stations of other licensees operating in the mobile service in accordance with the table of frequency allocations as set forth in Part 2 of this chapter.

**§ 89.409 Frequencies available to the Highway Maintenance Radio Service.**

(a) The frequencies or bands of frequencies listed in this section are available for assignment to stations in the Highway Maintenance Radio Service subject to the conditions and limitations of this section.

(b) The amount of separation between assignable frequencies listed in this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly,

grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(c) Normally, not more than two frequencies will be assigned to a licensee for mobile service operations. Additional frequencies may be assigned provided the request therefor is adequately supported by a satisfactory showing of need.

(d) Control and repeater stations, except as provided for by § 89.407(d), in the Highway Maintenance Radio Service may be authorized on a temporary basis to operate on frequencies available for base and mobile stations above 150.8 Mc/s, provided an adequate showing is made why such operation cannot be conducted on frequencies allocated to the Operational Fixed Service. Such operation on base or mobile frequencies will not be authorized initially nor renewed for periods in excess of one year. Any such authorization shall be subject to immediate termination if harmful interference is caused to the mobile service or if the particular frequency is required for mobile service operations in the area concerned.

(e) The following tabulation indicates the frequency or bands of frequencies, the class of station(s) to which they are normally available, and the specific assignment limitations, which are developed in paragraph (f) of this section:

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
33.02	Base and mobile	6
33.06	do.	6
33.10	do.	6
37.90	do.	6
37.92	do.	6
37.94	do.	6
37.96	do.	6
37.98	do.	6
45.68	do.	6
45.72	do.	6
45.76	do.	6
45.80	do.	6
45.84	do.	6
47.02	do.	7, 8
47.04	do.	7, 8
47.06	do.	7, 8
47.08	do.	7, 8
47.10	do.	7, 8
47.12	do.	7, 8
47.14	do.	7, 8
47.16	do.	7, 8
47.18	do.	7, 8
47.20	do.	7, 8
47.22	do.	7, 8
47.24	do.	7, 8
47.26	do.	7, 8
47.28	do.	7, 8
47.30	do.	7, 8
47.32	do.	7, 8
47.34	do.	7, 8
47.36	do.	7, 8
47.38	do.	7, 8
47.40	do.	7, 8

Frequency or band	Class of station (s)	Limitations
<i>Mc/s</i>		
72.02 to 74.58	Operational fixed	3
75.42 to 75.98	do	3
150.995	Base and mobile	
151.010	do	
151.025	do	
151.040	do	
151.055	do	
151.070	do	
151.085	do	
151.100	do	
151.115	do	
151.130	do	
156.045	Mobile	
156.060	do	
156.075	do	
156.105	Base and mobile	
156.120	do	
156.135	do	
156.165	do	10
156.180	do	10
156.195	do	10
156.225	do	10
156.240	do	10
157.050	do	9
157.110	do	9
158.985	Mobile	10
159.000	do	10
159.015	do	10
159.045	do	10
159.060	do	10
159.075	do	10
159.105	Base and mobile	10
159.120	do	10
159.135	do	10
159.165	do	10
159.180	do	
159.195	do	
453.050	do	
453.100	do	
453.150	do	
453.200	do	
453.250	do	
453.300	do	
453.350	do	
453.400	do	
453.450	do	
453.500	do	
453.550	do	
453.600	do	
453.650	do	
453.700	do	
453.750	do	
453.800	do	
453.850	do	
453.900	do	
453.950	do	
458.050	Mobile	
458.100	do	
458.150	do	
458.200	do	
458.250	do	
458.300	do	
458.350	do	
458.400	do	
458.450	do	
458.500	do	
458.550	do	
458.600	do	
458.650	do	
458.700	do	
458.750	do	
458.800	do	
458.850	do	
458.900	do	
458.950	do	

(For frequencies 952 Mc/s and above, see § 89.101.)

(f) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (e) of this section:

- (1) [Reserved]
- (2) [Reserved]
- (3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s, and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).

- (4) [Reserved]
- (5) [Reserved]
- (6) This frequency is shared with the Special Emergency Radio Service.

(7) This frequency will be assigned only in accordance with a geographical assignment plan.

(8) This frequency is reserved primarily for assignment to Highway Maintenance systems operated by states. The use of this frequency by other Highway Maintenance licensees will be authorized only where such use is necessary to coordinate activities with the particular state to which the frequency is assigned. Any request for such use must be supported by a statement from the state concerned.

(9) This frequency will not be assigned to stations in the Highway Maintenance Radio Service after April 28, 1952. Highway Maintenance stations licensed to use this frequency prior to April 28, 1952, may continue such use provided that no harmful interference is caused to any government or non-government radio operation.

(10) This frequency is reserved for assignment for use in highway maintenance systems operated by licensees other than states.

(g) The frequencies shown in paragraph (e) of this section as being available for assignment to mobile stations only may be authorized for use by base stations only after coordination with affected licensees in the area and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(h) Frequencies offset by 7.5 kc/s or less from those in the 152 to 162 Mc/s band listed in paragraph (e) of this section may be assigned for developmental operation upon an adequate showing of the need for such irregular assignment

together with an acceptable engineering report indicating that harmful interference to the operation of existing stations will not be caused.

### Subpart M—[Reserved]

### Subpart N—Forestry-Conservation Radio Service

#### § 89.451 Eligibility.

(a) Authorizations for stations in the Forestry-Conservation Radio Service will be issued only to states, territories, possessions and other governmental subdivisions including counties, cities, towns and similar governmental entities and persons or organizations charged with specific forestry-conservation activities.

(b) Applications from persons or organizations other than governmental subdivisions must be accompanied by a statement from the governmental subdivision having legal jurisdiction over the area to be served, supporting the request.

#### § 89.453 Permissible communications.

Stations in the Forestry-Conservation Radio Service are authorized to transmit communications essential to official forestry-conservation activities of the licensee.

#### § 89.455 Points of communication.

(a) Forestry-conservation base stations are authorized to intercommunicate with forestry-conservation mobile stations. Forestry-conservation mobile stations are authorized to intercommunicate with forestry-conservation base stations and other forestry-conservation mobile stations.

(b) Forestry-conservation base and mobile stations are also authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the base-mobile operations of any authorized station.

(c) Forestry-Conservation fixed stations are authorized to intercommunicate with other fixed stations in the Public Safety Radio Services and to transmit to receivers at fixed locations.

#### § 89.457 Station limitations.

(a) Mobile relay stations in the Forestry-Conservation Radio Service will be authorized only on frequencies above 150 Mc/s which are, pursuant to the provisions of § 89.459(d), available for base or mobile stations. Each mobile relay station authorized pursuant to the provisions of this section which is intended to be activated by signals transmitted on a frequency below 50 Mc/s shall be so designed and installed that:

(1) Normally it will be activated only by means of the coded signal or signals or such other means as will effectively prevent its activation by undesired signals;

(2) It will be deactivated automatically when its associated receivers are not receiving the signal on the frequency or frequencies which normally activate it; and

(3) It will be deactivated upon receipt or cessation of a coded signal or signals, or shall be provided with an automatic time delay or clock device which will deactivate the station not more than three minutes after its activation.

(b) Subject to the provisions of § 89.157 communications units of a licensed forestry-conservation mobile station may be installed in vehicles of forestry cooperators, or other persons having a direct responsibility in the prevention, detection and suppression of forest fires.

(c) A control station associated with one or more mobile relay stations, authorized pursuant to this section, may be assigned the mobile service frequency assigned to the associated mobile station. Use of the mobile service frequency by such control station is subject to the condition that harmful interference not be caused to stations of other licensees operating in the mobile service in accordance with the table of frequency allocations as set forth in Part 2 of this chapter.

#### § 89.459 Frequencies available to the Forestry-Conservation Radio Service.

(a) The frequencies or bands of frequencies listed in this section are available for assignment to stations in the Forestry-Conservation Radio Service subject to the conditions and limitations of this section.

(b) The amount of separation between assignable frequencies listed in this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly, grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(c) Control and repeater stations, except as provided for by §89.457(c), in the Forestry-Conservation Radio Service may be authorized on a temporary basis to operate on frequencies available for base and mobile stations above 150.8 Mc/s, provided an adequate showing is made why such operation cannot be conducted on frequencies allocated to the Operational Fixed Service. Such operation on base or mobile frequencies will not be authorized initially nor renewed for periods in excess of one year. Any such authorization shall be subject to immediate termination if harmful interference is caused to the Mobile Service or if the particular frequency is required for mobile service operations in the area concerned.

(d) The following tabulation indicates the frequency or bands of frequencies, the class of stations to which they are normally available, and the specific assignment limitations, which are developed in paragraph (e) of this section:

Frequency or band	Class of station(s)	Limitations
<i>kc/s</i>		
2212	Base and mobile	6
2226	do	6
2236	do	6
2244	do	6
<i>Mc/s</i>		
30.86	do	11
30.90	do	11
30.94	do	11
30.98	do	11
31.02	do	11
31.06	do	7, 9, 10, 11
31.10	do	7, 9, 10, 11
31.14	do	7, 9, 10, 11
31.18	do	7, 9, 10
31.22	do	7, 9, 10
31.26	do	7, 9, 10
31.30	do	7, 9, 10
31.34	do	7, 9, 10
31.38	do	7, 9, 10
31.42	do	7, 9, 10
31.46	do	7, 9, 10
31.50	do	7, 9, 10
31.54	do	7, 9, 10
31.58	do	7, 9, 10
31.62	do	7, 9, 10
31.66	do	7, 9, 10
31.70	do	7, 9, 10
31.74	do	7, 9, 10
31.78	do	7, 9, 10
31.82	do	7, 9, 10
31.86	do	7, 9, 10
31.90	do	7, 9, 10
31.94	do	7, 9, 11
31.98	do	7, 9, 00
44.64	do	
44.68	do	
44.72	do	
44.76	do	
44.80	do	
44.84	do	
44.88	do	

Frequency or band	Class of station(s)	Limitations
<i>Mc/s</i>		
44.92	Base and mobile	
44.96	do	
45.00	do	
45.04	do	
72.02 to 74.58	Operational fixed	3
75.42 to 75.98	do	3
151.145	Base and mobile	
151.160	do	
151.175	do	
151.190	do	
151.205	do	
151.220	do	
151.235	do	
151.250	do	
151.265	do	
151.280	do	
151.295	do	
151.310	do	
151.325	do	
151.340	do	
151.355	do	
151.370	do	
151.385	do	
151.400	do	
151.415	do	
151.430	do	
151.445	do	
151.460	do	
151.475	do	
159.225	do	
159.240	do	
159.255	do	
159.270	do	
159.285	do	
159.300	do	
159.315	do	
159.330	do	
159.345	do	
159.360	do	
159.375	do	
159.390	do	
159.405	do	
159.420	do	
159.435	do	
159.450	do	
159.465	do	
170.425	do	8, 10, 14
170.475	do	8, 10, 13
170.575	do	8, 10, 14
171.425	do	8, 10, 13
171.475	do	10, 14, 15
171.575	do	8, 10, 13
172.225	do	8, 10, 14
172.275	do	10, 13, 15
172.375	do	8, 10, 14
453.050	do	
453.100	do	
453.150	do	
453.200	do	
453.250	do	
453.300	do	
453.350	do	
453.400	do	
453.450	do	
453.500	do	
453.550	do	
453.600	do	
453.650	do	
453.700	do	
453.750	do	
453.800	do	
453.850	do	
453.900	do	
453.950	do	
458.050	Mobile	
458.100	do	
458.150	do	
458.200	do	
458.250	do	

Frequency or band	Class or station(s)	Limitations
<i>Mc/s</i>		
458.300	Mobile	
458.350	do	
458.400	do	
458.450	do	
458.500	do	
458.550	do	
458.600	do	
458.650	do	
458.700	do	
458.750	do	
458.800	do	
458.850	do	
458.900	do	
458.950	do	
(For frequencies 952 Mc/s and above, see § 89.101.)		

(e) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (d) of this section:

(1) [Reserved]

(2) [Reserved]

(3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s, and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).

(4) [Reserved]

(5) [Reserved]

(6) The use of this frequency is subject to the condition that no harmful interference will be caused to the service of any Canadian station.

(7) This frequency is available for assignment only in accordance with a geographical assignment plan.

(8) This frequency will be assigned only to licensees directly responsible for the prevention, detection, and suppression of forest fires, subject to the condition that no harmful interference will be caused to the service of any U. S. Government station.

(9) This frequency may be used for conservation activities upon the condition that no harmful interference will be caused to the service of any station using the frequency for forest fire prevention, detection and suppression.

(10) This frequency is reserved primarily for assignment to state licensees. Assignments to other licensees will be made only where the frequency is required for coordinated operation with the state system to which the frequency is assigned. Any request for such assignment must be supported by a statement from the state system concerned, indi-

cating that the assignment is necessary for coordination of activities.

(11) This frequency is shared with the Motor Carrier Radio Service.

(12) [Reserved]

(13) This frequency will be assigned for use only in areas east of the Mississippi River.

(14) This frequency will be assigned for use only in areas west of the Mississippi River.

(15) In addition to agencies responsible for forest fire prevention, detection and suppression, this frequency may be assigned to conservation agencies which do not have forest fire responsibilities: *Provided*, That such assignment is necessary to permit mobile relay operation by such agencies: *And provided*, That such operation will cause no harmful interference to any U. S. Government station.

(f) The frequencies shown in paragraph (d) of this section as being available for assignment to mobile stations only may be authorized for use by base stations only after coordination with affected licensees in the area and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(g) Frequencies offset by 7.5 kc/s or less from those in the 152 to 162 Mc/s band listed in paragraph (d) of this section may be assigned for developmental operation upon an adequate showing of the need for such irregular assignment together with an acceptable engineering report indicating that harmful interference to the operation of existing stations will not be caused.

**Subpart O—[Reserved]**

**Subpart P—Special Emergency Radio Service**

**§ 89.501 Availability of service.**

Special Emergency Radio Service is available only to the extent and for the purposes described in succeeding sections of this subpart. The eligibility requirements, classes of stations available to each eligible group, permissible communications in accordance with eligibility, and other applicable conditions of use are set forth as separate sections of this subpart.

## § 89.503 Hospitals.

(a) *Eligibility.* Institutions or establishments offering services, facilities, and beds for use beyond 24 hours in rendering medical treatment.

(b) *Eligibility showing.* The initial application from a hospital shall be accompanied by a statement describing the radio communication facilities desired, the area to be served, the proposed method of operation and the number and classes of stations required. The statement shall also demonstrate that the applicant meets the eligibility requirements of paragraph (a) of this section.

(c) *Class and number of stations available.* Each eligible hospital will normally be authorized only one base station and a number of mobile units, excluding mobile units of the hand or pack carried type, not in excess of vehicles actually engaged in rendering an efficient hospital service.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations licensed to hospitals may be used only for the transmission of messages necessary for the rendition of an efficient hospital service.

## § 89.505 Ambulance operators and rescue organizations.

(a) *Eligibility.* Persons or organizations operating an emergency ambulance service or rescue squad are eligible in this service.

(b) *Eligibility showing.* The initial application from a person or organization operating an ambulance service or rescue squad shall be accompanied by a statement describing the radio communication facilities desired and indicating how they would be used to enhance the safety of human life in the service being rendered. The statements also shall indicate the number of vehicles actually engaged in the emergency operation.

(c) *Class and number of stations available.* Each ambulance operator or rescue squad normally may be authorized to operate not more than one base station and a number of mobile units, excluding mobile units of the hand or pack carried type, not in excess of the number of vehicles actually engaged in the emergency operation. Mobile units of the hand carried or pack carried type may be authorized to an extent not to exceed two such units for each radio

equipped ambulance or rescue squad vehicle. Additional base stations or mobile units will be authorized only in exceptional circumstances when the applicant can show a specific need therefor.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations licensed to ambulance operators or rescue squads may be used only for the transmission of messages pertaining to the safety of life or property and urgent messages necessary for the rendition of an efficient ambulance or emergency rescue service.

## § 89.507 Physicians and veterinarians.

(a) *Eligibility.* Physicians and veterinarians are eligible in this service. As used in this part, the term "physician" or "veterinarian" shall be construed to mean individual physicians or veterinarians or schools of medicine, including schools of veterinary medicine.

(b) *Eligibility showing.* The initial application from a physician or veterinarian shall be accompanied by a statement in sufficient detail to permit a ready determination of the applicant's eligibility. Any subsequent application may refer to information previously filed if there has been no change in the status of the applicant's eligibility. In the event changes have occurred which affect the original eligibility statements, a new showing must accompany the application.

(c) *Class and number of stations available.* Each physician or veterinarian normally may be authorized to operate not more than one base station and two mobile units. Additional base stations or mobile units will be authorized only in exceptional circumstances when the applicant can show a specific need therefor.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations licensed to physicians or veterinarians may be used only for the transmission of messages pertaining to the safety of life or property and urgent messages relating to the medical duties of the licensee.

## § 89.509 Disaster relief organizations.

(a) *Eligibility.* Organizations established for disaster relief purposes and which have an emergency communica-

tions plan involving the use of radio are eligible in this service.

(b) *Eligibility showing.* The initial application from a disaster relief organization shall be accompanied by a copy of the charter or other authority under which the organization was established and a copy of the communications plan with a full explanation as to how the requested radio facilities would be used under such plan and integrated into any other communication facilities which normally would be available to assist in the alleviation of the emergency condition.

(c) *Class and number of stations available.* Disaster relief organizations may be authorized to operate an unlimited number of base, mobile and fixed stations.

(d) *Permissible communications.* Except for transmissions which are necessary for drills and tests as permitted by § 89.151(e), stations licensed to disaster relief organizations may be used only for the transmission of communications relating to the safety of life or property, the establishment and maintenance of temporary relief facilities, and the alleviation of the emergency situation during periods of actual or impending emergency, or disaster, and until substantially normal conditions are restored.

#### § 89.511 School buses.

(a) *Eligibility.* Persons or organizations operating school buses having regular routes into rural areas are eligible in this service.

(b) *Eligibility showing.* The initial application from a person or organization operating a school bus service shall be accompanied by a statement describing the radio communication facilities desired. The statement shall also indicate the school or schools being served and describe the area in which the service is operated. If the applicant is not a government sub-division the statement shall indicate the authority under which the school buses are being operated and the tenure of any contractual agreement in effect.

(c) *Class and number of stations available.* Each school bus operator normally may be authorized to operate not more than one base station and a number of mobile units not in excess of the total of the number of buses and

maintenance vehicles regularly engaged in the school bus operation. Additional base stations or mobile units will be authorized only in exceptional circumstances when the applicant can show a specific need therefor.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations licensed to school bus operators may be used only for the transmission of messages pertaining to the safety of life or property or urgent messages relating to buses which have become inoperative on regular runs.

#### § 89.513 Beach patrols.

(a) *Eligibility.* Persons or organizations operating beach patrols having responsibility for life-saving activities are eligible in this service.

(b) *Eligibility showing.* The initial application from a person or organization operating a beach patrol shall be accompanied by a statement describing the radio communication facilities desired and the area served by the beach patrol. The statement shall also clearly indicate the proposed method of operation and the number and classes of stations required.

(c) *Class and number of stations available.* Eligibles in this category will be authorized to operate base, mobile, and fixed stations in the stated area served by the beach patrol. The number of such stations requested shall be fully justified in the eligibility showing.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations licensed to persons or organizations operating beach patrols may be used only for the transmission of messages pertaining to the safety of life or property.

#### § 89.515 Establishments in isolated areas.

(a) *Eligibility.* Persons or organizations maintaining establishments in isolated areas where public communication facilities are not available and where the use of radio is the only feasible means of establishing communication with a center of population, or other point from which emergency assistance might be obtained if needed, are eligible in this service.

(b) *Eligibility showing.* The initial application requesting a station authori-

zation for an establishment in an isolated area shall be accompanied by a statement describing the radio communication facilities desired, the applicant's need therefor, and the proposed method of operation, including the location, class of station and name of licensee of the station with which communication is requested. The statement shall also describe the status of public communication facilities in the area of the applicant's establishment and indicate the results of any attempts the applicant may have made to obtain public communication service. In the event radio communications service is to be furnished the proposed station by another station which is not licensed to the applicant, a statement shall be submitted from the licensee of the station involved indicating that the proposed service will be rendered.

(c) *Class and number of stations available.* Persons or organizations in this category may be authorized to operate not more than one fixed station at any isolated establishment and in addition not more than one fixed station in a center of population.

(d) *Permissible communications.* Except for test transmissions as permitted by §89.151(e), stations licensed for use at establishments in isolated areas may be used only during an actual or impending emergency endangering life, health or property for the transmission of essential communications arising from the emergency. The transmission of routine or non-emergency communications is strictly prohibited.

(e) *Communication service rendered and received.* (1) The licensee of a fixed station at an establishment in an isolated area shall make the communication facilities of such station available at no charge to any person desiring the transmission of any communication permitted by paragraph (d) of this section.

(2) For the purpose of providing the communications link desired the licensee of a fixed station at an establishment in an isolated area either may be the licensee of a similar station at another location or may obtain communication service under a mutual agreement from the licensee of any station in the Public Safety Radio Services or any other station which is authorized to communicate with the special emergency fixed station.

#### § 89.517 Communication standby facilities.

(a) *Eligibility.* Persons or organizations operating communication circuits are eligible for standby radio facilities in this service; *Provided*, That the applicant can qualify under either of the following conditions:

(1) The applicant is a communications common carrier.

(2) The applicant is a person or organization operating communications circuits which normally carry essential communications of such a nature that any disruption thereof will endanger life or public property.

(b) *Eligibility showing.* The initial application from an eligible in this category proposing to operate a radio standby facility for other normal communication circuits shall be accompanied by a statement describing the radio communication facilities desired and the proposed method of operation. When appropriate, the statement shall include a description of the messages normally being carried and explain how a disruption thereof will endanger life or public property.

(c) *Class and number of stations available.* Eligibles in this category may be authorized to operate an unlimited number of fixed stations as standby radio facilities. Any such fixed station may be licensed for operation either at a specified location or at any temporary location within a specified area. In the latter case the area of desired operation must be specified by the applicant.

(d) *Permissible communications.* Except for test transmission as permitted by §89.151(e), stations licensed for communication circuit standby facilities may be used only during periods when the normal circuits are inoperative due to circumstances beyond the control of the user. During such periods the radio facilities may be used to transmit any communication which would normally be carried by the regular circuits.

#### § 89.519 Emergency repair of public communicatious facilities.

(a) *Eligibility.* Communications common carriers are eligible in this service for radio facilities to be used in effecting expeditious repairs to interruptions of public communications facilities where such interruptions have resulted in disabling intercity circuits

or service to a multiplicity of subscribers in a general area.

(b) *Eligibility showing.* The initial application from a communications common carrier under the provisions of this section shall be accompanied by a statement describing the radio communication facilities desired and the proposed method of use under such emergency conditions as the applicant expects to arise. The statement shall also clearly indicate the number and classes of stations required in the proposed operation.

(c) *Class and number of stations available.* Eligibles in this category may be authorized to operate base, mobile and fixed stations. The number of such stations requested shall be fully justified in the eligibility showing.

(d) *Permissible communications.* Except for test transmissions as permitted by § 89.151(e), stations authorized under the eligibility provisions of this section may be used only, when no other means of communication is readily available, for the transmission of messages relating to the safety of life and property and messages which are necessary for the efficient restoration of the public communication facilities which have been disrupted.

#### § 89.521 Points of communication.

(a) Special emergency base stations are primarily authorized to intercommunicate with special emergency mobile stations. Special emergency mobile stations are primarily authorized to intercommunicate with base and other special emergency mobile stations.

(b) Special emergency base and mobile stations are secondarily authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the service of any station transmitting to a point of communication for which that station is primarily authorized.

(c) Special emergency fixed stations are authorized to intercommunicate with other stations in the Public Safety Radio Services and to transmit to receivers at fixed locations. Such stations are also authorized to intercommunicate with any other station which is authorized to communicate with the special emergency fixed station.

#### § 89.523 Station limitations.

(a) [Reserved]

(b) Except for fixed stations operating on frequencies assigned under the provisions of limitation note 9 of § 89.525(f), each operator of a station in the Special Emergency Radio Service shall listen on the licensed frequency of the station prior to transmitting and shall not transmit until it has been reasonably determined that harmful interference will not be caused to any authorized communication in progress on the frequency.

(c) Where a radio station authorization in the Special Emergency Radio Service is held by a person or organization engaging in activities beyond the scope of those indicated in the eligibility provisions of this service the operation of such station shall be strictly confined to those activities on which the eligibility was established except for messages relating to the safety of life.

#### § 89.525 Frequencies available to the Special Emergency Radio Service.

(a) The frequencies or bands of frequencies listed herein are available for assignment to stations in the Special Emergency Radio Service subject to the conditions and limitations of this section.

(b) The amount of separation between assignable frequencies listed in this section does not necessarily indicate the amount of frequency separation required for systems operation; accordingly, grants of adjacent channel assignments in all bands shall be in the discretion of the Commission.

(c) The operation of mobile systems in the Special Emergency Radio Service will be restricted to the use of only one frequency: *Provided*, That an additional frequency may be authorized when mobile relay stations are authorized pursuant to paragraph (h) of this section.

(d) Frequencies indicated normally for base and mobile stations in the Special Emergency Radio Service will be authorized to fixed stations also subject to the condition that harmful interference will not be caused to the mobile service.

(e) The following tabulation indicates the frequency or bands of frequencies, the class of station(s) to which they are normally available, and the specific as-

signment limitations, which are developed in paragraph (f) of this section:

Frequency or band	Class of station(s)	Limitations
<i>kc/s</i>		
2000 to 3000.....	Fixed.....	9
2726.....	Base and mobile.....	10
3201.....	do.....	
<i>Mc/s</i>		
33.02.....	Base and mobile.....	6
33.04.....	do.....	
33.06.....	do.....	6
33.08.....	do.....	
33.10.....	do.....	6
37.90.....	do.....	6
37.94.....	do.....	6
37.98.....	do.....	6
45.92.....	do.....	15
45.96.....	do.....	15
46.00.....	do.....	15
46.04.....	do.....	15
47.42.....	do.....	7
47.46.....	do.....	
47.50.....	do.....	
47.54.....	do.....	
47.58.....	do.....	
47.62.....	do.....	
47.66.....	do.....	
72.02 to 74.58.....	Operational fixed.....	3
75.42 to 75.98.....	do.....	3
155.160.....	Base and mobile.....	15
155.175.....	do.....	16
155.205.....	do.....	16
155.220.....	do.....	15
155.235.....	do.....	16
155.265.....	do.....	16
155.280.....	do.....	15
155.295.....	do.....	16
155.325.....	do.....	16, 17
155.340.....	do.....	15, 17
155.355.....	do.....	16, 17
155.385.....	do.....	16, 17
155.400.....	do.....	15, 17
(For frequencies 952 Mc/s and above, see § 10.101.)		

(f) Explanation of assignment limitations appearing in the frequency tabulation of paragraph (e) of this section.

- (1) [Reserved]
- (2) [Reserved]
- (3) Assignable frequencies spaced by 40 kc/s beginning with the frequencies 72.02 and 75.42 Mc/s, and ending with the frequencies 74.58 and 75.98 Mc/s, respectively, are available on a shared basis with other services only in accordance with the provisions of § 89.101(c).
- (4) [Reserved]
- (5) [Reserved]
- (6) This frequency is shared with the Highway Maintenance Radio Service.
- (7) This frequency is reserved for assignment only to National organizations established for disaster relief purposes.
- (8) [Reserved]
- (9) Appropriate frequencies in the band 2000-3000 kilocycles which are designated in Part 83 of this chapter as

available to Public Ship Stations for telephone communication with Public Coast Stations may be assigned on a secondary basis to special emergency fixed stations for communication with Public Coast Stations only, provided such stations are located in the United States and the following conditions are met:

(i) That such fixed station is established pursuant to the eligibility provisions of § 89.515 and that the isolated area involved is an island or other location not more than 300 statute miles removed from the desired point of communication and isolated from that point by water.

(ii) That evidence is submitted showing that an arrangement has been made with the coast station licensee for the handling of emergency communications permitted by § 81.302(b) of this chapter and § 89.515(d).

(iii) That operation of the special emergency fixed station shall at no time conflict with any provision of Part 83 of this chapter and further, that such operation in general shall conform to the practices employed by Public Ship Stations for radiotelephone communication with the same Public Coast Station.

(10) This frequency is shared with the State Guard Radio Service.

- (11) [Reserved]
- (12) [Reserved]
- (13) [Reserved]
- (14) [Reserved]

(15) Available for assignment: *Provided*, That until further order of the Commission, application is accompanied by a written and signed statement that licensees of all stations, excluding Special Emergency stations, located within a radius of 75 miles of the proposed location and authorized to operate on a frequency 30 kc/s or less removed have concurred with such assignment, or is accompanied by an acceptable engineering report indicating that harmful interference to the operation of such existing stations will not be caused.

(16) Available for developmental operation: *Provided*, That

(i) The proposed station location is removed by at least 40 miles from the station location of each other station, not including those authorized to other Special Emergency licensees, which is authorized to operate on frequencies 30 kc/s or less removed; and

(ii) The application is accompanied by a written and signed statement that the licensees of all stations, excluding Special Emergency licensees, located within a radius of 75 miles of the proposed location and authorized to operate on a frequency 30 kc/s or less removed have concurred with such assignment or is accompanied by an acceptable engineering report indicating that harmful interference to the operation of existing stations, excluding Special Emergency stations, will not be caused, together with a written statement that the licensees of all stations, excluding Special Emergency stations, located within a radius of 75 miles of the proposed station and authorized to operate on frequencies 30 kc/s or less removed have been notified of the applicant's intention to request the assignment.

(17) Available for assignment only to hospitals eligible under § 89.503 and to those ambulances which submit a showing that they render coordination and cooperation with a hospital authorized on this frequency.

(g) The frequencies shown in paragraph (e) of this section as being available for assignment to mobile stations only may be authorized for use by base stations only after coordination with affected licensees in the area and subject to the condition that no harmful interference will be caused to the service of any mobile station using the particular frequency. Evidence of the required coordination shall be submitted with any request for such use.

(h) Mobile relay stations in the Special Emergency Radio Service will be authorized only on frequencies above 952 Mc/s and only where:

(1) a special emergency radio system cannot function satisfactorily without communication between mobile units over a distance in excess of that which can be obtained by direct car-to-car communication; or

(2) an integrated system of radio communication is desirable between two or more licensees in the Special Emergency Radio Service and where, by use of a mobile relay station, the integrated system results in an actual reduction in the number of frequencies required in the area as compared to the number of frequencies which would be required if the same number of licensees operate separate systems.

## Subpart Q—[Reserved]

## Subpart R—State Guard Radio Service

### § 89.551 Eligibility.

(a) Authorizations for stations in the State Guard Radio Service will be issued only to the official state guard or comparable organization of a state, territory, possession, or the District of Columbia and only where such organization has been duly created by law and is completely subject to the control of the Governor, or highest official of the creating governmental entity.

(b) To facilitate a determination of eligibility, the first application from each organization for a new station in the State Guard Radio Service shall be accompanied by a statement citing the statute, executive order, or other legal authority under which the guard was created and definitely indicating whether or not the guard is under the absolute authority of the Governor or highest official of the governmental entity.

### § 89.553 Permissible communications.

(a) Stations in the State Guard Radio Service are primarily authorized to transmit emergency communications directly relating to public safety and the protection of life and property.

(b) Stations in the State Guard Radio Service are secondarily authorized to transmit essential nonemergency communications necessary for training and maintaining an efficient organization: *Provided*, That all communications authorized by this paragraph shall be kept to an absolute minimum and shall cause no harmful interference to stations in other services or to other stations in the State Guard Radio Service when such stations are transmitting communications authorized by paragraph (a) of this section.

(c) The transmission of nonessential communications is strictly prohibited.

### § 89.555 Points of communication.

(a) State guard base, mobile and fixed stations are primarily authorized to intercommunicate with all other state guard stations authorized to the same licensee.

(b) State guard base, mobile and fixed stations are secondarily authorized to intercommunicate with other stations in the Public Safety Radio Services and to

transmit to receivers at fixed locations: *Provided*, That no harmful interference will be caused to the service of any station transmitting to a point of communication for which that station is primarily authorized.

§ 89.557 Station limitations.

(a) Mobile relay stations will not be authorized in the State Guard Radio Service.

(b) Each operator of a station in the State Guard Radio Service shall listen on the licensed frequency of the station prior to transmitting and shall not transmit until it has been reasonably determined that harmful interference will not be caused to any authorized communication in progress on the frequency.

§ 89.559 Frequencies available to the State Guard Radio Service.

(a) The frequency 2726 kilocycles is available for assignment to base and mobile stations in the State Guard Radio Service for use on a shared basis with stations in the Special Emergency Radio Service.

(b) In instances where circumstances in a particular state appear to warrant the use of a second frequency in the band 2505–3500 kilocycles and where a frequency can be made available through appropriate arrangements, with Government agencies if necessary, for restricted area use on a shared basis with other assignments such additional frequency may be assigned. The maximum power input, emission and hours of operation authorized for use on any frequency assigned under the provisions of this paragraph will be determined on the basis of the technical conditions involved in using the selected frequency in the particular area.

(c) The frequencies indicated in paragraphs (a) and (b) of this section will also be assigned to fixed stations in the State Guard Radio Service subject to the condition that harmful interference will not be caused to the mobile service.

**PART 91—INDUSTRIAL RADIO SERVICES**

NOTE 1: See Commission Order (FCC 61-764 adopted June 21, 1961, effective July 20, 1961, in Docket 14029), 26 F.R. 5798, June 29, 1961, providing for licensing of Private Microwave Systems on a Regular Basis on certain bands above 952 Mc/s and providing type acceptance for such systems.

NOTE 2: See Commission Order (FCC 61-952 adopted July 26, 1961, effective Septem-

ber 1, 1961, in Docket 13953) 26 F.R. 6849, Aug. 1, 1961, providing for frequency pairing in the 952–960 Mc/s band and making certain other channels in the 952–960 Mc/s band available for omni-directional operations.

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