

encoded numerical values and the transmission of such intelligence using discontinuous signals that change in frequency, amplitude, or phase.

**Digital voice emission.** An emission resulting from the use of digital voice modulation.

**Digital voice modulation.** The process by which some characteristic (frequency, phase, amplitude, or some combination thereof) of a carrier frequency is varied in accordance with a digital signal (e.g., pulses or states) that is a coded representation of the human voice.

**Dispatch communication.** Two-way voice communication, normally not more than one minute in duration, between base and mobile stations.

**Dispatch point.** Any position from which radio messages can be originated under the supervision of a control point.

**Duplex operation.** A method of radio communication that allows two stations to transmit and receive at the same time.

**Effective radiated power (ERP).** The product of the power supplied to an antenna and the gain of the antenna relative to a half-wave dipole in a given direction.

**Emission designators.** The symbols used to describe the basic characteristics of a radio wave, including bandwidth, modulation type, modulating signal(s), and type of information transmitted. See § 88.409(b) for discussion of emission designators applicable to the private land mobile radio services. See Part 2, Subpart C for explanation of emission designators applicable to the private land mobile radio services.

**Emission.** The electromagnetic radiation produced by a radio transmitter.

**Encryption.** The expression of a single character or a message in terms of a code to obtain communications privacy.

**Equivalent isotropically radiated power (EIRP).** The product of the power supplied to an antenna and the antenna gain in a given direction relative to an isotropic antenna.

**External controls.** Hardware on the outside of a transmitter that may be used to program the transmitter's operating frequencies.

**Fixed operation.** Radiocommunication service between specified fixed points.

**Fixed relay station.** A fixed station authorized to automatically retransmit toward other fixed stations communications received from fixed or mobile stations.

**Fixed station.** A station at a fixed location that communicates with other fixed, base, or mobile stations in the land mobile radio service.

**Frequency coordinator.** An entity or organization certified by the Commission to recommend frequencies for use by licensees in the Private Land Mobile Radio Services.

**Frequency division multiplexing (FDM).** The transmission of a number of signals over a common path by using a different frequency band for each signal.

**Frequency hopping spread spectrum.** A system where the frequency of the carrier is not fixed but changes at fixed intervals under the direction of a pseudorandom coded sequence. The wide RF bandwidth needed by such a system is not required by a spreading of the RF energy about the carrier but rather to accommodate the range of frequencies to which the carrier can hop. See § 2.1.

**Frequency sharing.** The sharing of the same portion of spectrum by two or more users where a possibility for interference exists.

**Frequency shift keying (FSK).** A form of frequency modulation in which the modulating waves (or digital pulses) shift the output frequency between different predetermined values.

**Frequency stability.** The extent to which the carrier frequency of a transmitter may be permitted to depart from the frequency assigned. For the purposes of this part, frequency tolerance is expressed in parts per million.

**Front-to-back ratio.** The ratio of power gain between the front and rear of a directional antenna.

**Geographic center.** The geographic center of an urbanized area is defined by the coordinates given at § 88.1601.

**Half-wave dipole.** A straight ungrounded antenna, usually fed in the center, having an electrical length equal to one-half the wavelength of the operating signal. When mounted vertically, it has a donut shaped pattern in the vertical plane and a circular pattern in the horizontal plane. Antenna gain is often measured in terms of gain "above a half-wave dipole."

**Harmful interference.** For the purpose of resolving conflicts between stations operating under this part or other parts of the Commission's Rules, any emission, radiation, or induction that seriously degrades, obstructs, or repeatedly interrupts the service provided by such stations. See § 2.1 of this chapter.

**Interconnection.** Connection through automatic or manual means of private land mobile radio stations with facilities of the public switched telephone network to permit the transmission of messages or signals between points in the wireline or radio network of a public telephone company and persons served by private land mobile radio stations. Wireline or radio circuits or links furnished by common carriers, which are used by licensees or other authorized persons for transmitter control (including dial-up transmitter control circuits) or as an integral part of an authorized, private internal system of communication or as an integral part of dispatch point circuits in a private

land mobile radio station are not considered to be interconnection for purposes of this rule part.

**Interference.** The effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.

**Internal system.** An internal system of communication is one in which messages are transmitted between the fixed operating positions located on the premises of a licensee and the associated mobile stations or paging receivers of the licensee.

**Interservice sharing.** Frequency sharing among users operating in different radio services.

**Itinerant operation.** Operation of a radio station at unspecified locations.

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

**Land mobile radio system.** A regularly interacting group of base, mobile and any associated control and relay stations intended to provide land mobile radio communications service over a single area of operation.

**Line A.** An imaginary line within the U.S., approximately paralleling the U.S.-Canadian border, north of which Commission coordination with Canadian authorities in the assignment of frequencies is generally required. It begins at Aberdeen, Washington, running by great circle arc to the intersection of 48° N., 120° W., then along parallel 48° N., to the intersection of 95° W., then by great circle arc through the southern most point of Duluth, Minn., then by great circle arc to 45° N., 85° W., then southward along meridian 85°W., to its intersection with parallel 41° N., then along parallel 41° N. to its intersection with meridian 82° W., then by great circle arc through the southernmost point of Bangor, Maine, then by great circle arc through the southernmost point of Searsport, Maine, where it ends.

**Line C.** An imaginary line in Alaska approximately paralleling the border with Canada, East of which Commission coordination with Canadian authorities in the assignment of frequencies is generally required. It begins at the intersection of 70° N., 144° W., then by great circle arc to the intersection of 60° N., 143° W., then by great circle arc so as to include all the Alaskan Panhandle.

**Meteor burst communications.** Communications through the propagation of radio signals reflected by ionized meteor trails.

**Mobile (vehicular) repeater station.** A mobile station authorized to automatically retransmit on a mobile station frequency, communications to or from hand-carried transmitters.

**Mobile relay station.** A base station authorized to automatically retransmit radio communications that originate on the transmitting frequency of a mobile

station or a control station and that are retransmitted on the receiving frequency of the mobile or control station. A mobile relay station is designed to extend the range of mobile stations in a land mobile radio system.

Mobile station. A station in the land mobile radio service intended to be used while in motion or during halts at unspecified points. This includes hand carried transmitters.

Mutually exclusive applications. Two or more applications for a license, only one of which can be granted.

Necessary bandwidth. For a given class of emission, the width of the frequency band that is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions. See 2.202 of this chapter for calculations of necessary bandwidth.

Occupied bandwidth. The width of a frequency band such that, below its lower and above its upper frequency limits, the mean powers radiated are equal to 0.5% of the total mean power radiated by a given emission. In some cases, such as multichannel frequency-division systems, the percentage of 0.5% may lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful.

Offset frequencies. Frequencies that are separated from regularly assigned frequencies by a given amount and may be assignable in certain land mobile radio services under certain conditions.

Out-of-band emission. Emission on a frequency or frequencies immediately outside the necessary bandwidth that results from the modulation process (excluding spurious emissions).

Output power. The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load impedance of the value recommended by the manufacturer.

Paging. A one-way communications service from a base station to mobile or fixed receivers that provide signaling or information by such means as tone, tone-voice, tactile, optical readout, etc.

Peak envelope power. The average power supplied to the antenna during one radio frequency cycle at the highest crest of the modulation envelope, taken under conditions of normal operation.

Phase shift keying (PSK). A form of phase modulation in which the modulating function shifts the instantaneous phase of the modulated wave between predetermined discrete values.

Point-to-point. Describing communication between two fixed stations.

**Portable station.** A station designed to be hand carried and capable of transmitting and/or receiving while in motion or during brief halts at unspecified locations.

**Primary operation.** Radio communications that are protected from harmful interference from facilities operating on a secondary basis.

**Private carrier.** An entity licensed in the private services and authorized to provide communications service to other entities on a commercial basis.

**Protection ratio.** The minimum value of the desired-to-undesired signal ratio, usually expressed in decibels, at the receiver input determined under specific conditions such that specified reception quality of the wanted signal is achieved at the receiver output.

**Public switched telephone network (PSTN).** The network that provides circuits for public telephone service.

**Radio call box.** A transmitter used by the public to request fire, police, medical, road service, or other emergency assistance.

**Radio service.** An administrative subdivision descriptive of particular groups of licensees, as, for example, the Public Safety Radio Service.

**Radiodetermination.** The determination of position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

**Radiolocation.** Radiodetermination used for purposes other than those of radionavigation.

**Repeater station.** See Mobile relay station.

**Secondary operation.** Radio communications that may not cause harmful interference to operations authorized on a primary basis and that are not protected from harmful interference from primary operations.

**Signal booster.** A device that automatically amplifies and transmits received transmissions with no change in frequency or authorized bandwidth.

**Simplex operation.** Radio communication between two stations that takes place in only one direction at a time. This includes press-to-talk operation (PTT), voice operated transmit, and other forms of manual or automatic switching from transmit to receive.

**Single sideband.** An amplitude modulated emission where only one sideband is transmitted.

**Specialized Mobile Radio (SMR) Service.** A radio service in which licensees provide land mobile communications services on a commercial basis.

**Spread spectrum.** A communications technique in which many signal waveforms are transmitted over a band much wider than needed to transmit each signal alone, spreading the signal power thinly over the wide band. See § 2.1 of this chapter.

**Spurious emission.** Emission on a frequency or frequencies that are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, intermodulation products and frequency conversion products, but exclude out-of-band emissions.

**Squelch.** A circuit that acts to quiet a receiver (silencing receiver noise) in the absence of signals of a certain level.

**Station authorization.** Any license or special temporary authorization issued by the Commission for the operation of a radio station.

**Station.** A combination of one or more transmitters, receivers, antennas and various accessory equipment used to provide radio communication.

**Suburban-conventional radio system.** A conventional radio system in which the transmitter site is located more than 24 km (15 mi) from the geographic center of any of the first 50 urbanized areas (ranked by population) of the United States. See §§ 88.429(k)(1) and 88.1601.

**Suppressed carrier emissions.** A type of transmission in which the carrier frequency is either partially or totally suppressed and one or both sidebands are transmitted.

**Telemetering/telemetry.** The transmission of non-voice signals for the purpose of automatically indicating or recording measurements at a distance from the measuring instrument.

**Telephony.** A system of telecommunication for the transmission of speech or other sounds. See Emission Designators, § 88.409(b).

**Tone signalling.** The use of voice-frequency tones or impulse signals to transmit supervisory, address or alerting messages.

**Travelers' information station.** A base station authorized to local government entities that is used to transmit non-commercial, voice information pertaining to traffic and road conditions, traffic hazards and travelers' advisories, including directions, availability of lodging, rest stops, and service stations, and descriptions of local points of interest.

**Trunked radio system (in mobile communications).** A radio system utilizing trunking as a means for selecting radio frequency channels.

**Trunking (in mobile communications).** The automatic selection of an unoccupied radio channel from among several channels available to a particular licensee.

**Type acceptance.** An equipment authorization issued by the Commission based on representations and test data submitted by the applicant.

**Urban-conventional radio system.** A conventional radio system in which the transmitter site is located within 15 miles (24 km) of the geographic center of any of the first 50 urbanized areas (ranked by population) of the United States. See §§ 88.429(k)(1) and 88.1601.

**Waiting list.** A list of applicants applying for radio licenses in a particular area. Each applicant is ranked in order of receipt of application, and licenses are granted as channels become available.

**Wireline common carrier.** A common carrier that is certificated to provide landline local exchange telephone service.

#### **§ 88.11 Private Land Mobile Radio Services.**

The Private Land Mobile Radio Services allow state and local governments, commercial and non-profit organizations to use the electromagnetic spectrum for mobile and ancillary fixed telecommunications to assure safety of life and property, and to improve productivity and efficiency.

#### **§ 88.13 Public Safety Radio Service.**

(a) **Eligibility.** Any territory, possession, state, city, county, town or similar governmental entity, including a district and an authority, but not including a school district or authority or a park district or authority, and persons charged with specific public safety activities, including police and fire protection, forestry-conservation, emergency life support or emergency rescue operations, is eligible to hold authorizations in the Public Safety Radio Service to operate radio stations for transmission of communications essential to official activities of the licensee. Applications from persons or organizations other than governmental entities must be accompanied by a statement from the governmental entity having legal jurisdiction over the area to be served, supporting the request.

(b) For **Travelers' Information Station** applications only, eligibility requirements for the Public Safety Radio Service also includes park districts and authorities. See §§ 88.1089-88.1097.

#### **§ 88.15 Non-Commercial Radio Service.**

(a) **Eligibility.** Any business, charitable or non-profit organization, or government agency is eligible to hold a license in the Non-Commercial Radio Service to operate a system that will be used primarily for the licensee's internal use, by the licensee's parent corporation, by a subsidiary of the same parent, or by a subsidiary of the licensee except:

(1) Foreign governments and agents of foreign governments are ineligible for any license under this Part.

(2) Federal government agencies are not eligible for licenses under this Part, unless otherwise indicated, although certain frequencies are available for both Government and non-Government use.

(b) Management Contracts. A licensee in the Non-Commercial Radio Service using the system strictly for internal use may employ a system manager to operate the system provided that the contract leaves the licensee with de jure and de facto control of the actual system

(c) Excess Capacity. Except in the 220-222 MHz band, a licensee in the Non-Commercial Radio Service operating a system for its own internal use may lease excess capacity, provided that at least 50 percent of the mobiles in that system are for licensee's own use, including those permitted by § 88.465. Only mobiles used by the licensee count towards loading. See § 88.273.

#### § 88.17 Specialized Mobile Radio Service.

(a) Eligibility. Any entity proposing to provide station and ancillary facilities on a commercial basis may apply for a license as a Specialized Mobile Radio System (SMRS), except:

(1) Foreign governments and agents of foreign governments are ineligible for any license or to receive service from another licensee under this service.

(2) In the 220-222 MHz, 806-821/851-866 and 896-901/935-940 MHz bands, wire line telephone common carriers are restricted to a non-controlling interest in any SMRS.

(b) Management Contracts. A licensee in the Specialized Mobile Radio Service may employ a system manager to operate the system provided that the contract leaves the licensee with de jure and de facto control of the actual system.

#### § 88.21 General Category Pool.

General category pool frequencies are available to applicants eligible for any of the Private Land Mobile Radio Services including the Public Safety Radio Service, the Non-Commercial Radio Service or the Specialized Mobile Radio Service.

## Subpart B - General Procedures And Policies

### § 88.51 Scope.

The rules in this subpart govern the submission and filing of applications to operate radio facilities under this part. It also contains information concerning the Commission's policies for assigning frequencies governed by this part, frequency coordination procedures, and procedures under which licensees may obtain channel exclusivity.

### APPLICATIONS AND AUTHORIZATIONS

### § 88.55 Station authorizations.

No radio transmitter may be operated in the services governed by this part except under and in accordance with a proper authorization granted by the Commission. Persons desiring a radio station or radio system authorization must first submit the appropriate application(s). The following sections contain procedures and requirements for submitting or filing applications for authority to operate radio facilities under this part. Subpart F of Part 1 of this chapter contains additional general information on this subject. The rest of this Part contains numerous exceptions and additional requirements regarding more specific classes of operations.

### § 88.59 Ineligibility of foreign governments.

No station authorization in the radio services governed by this part will be granted to or held by a foreign government or its representative.

### § 88.63 Applications for station or system authorizations.

Prescribed application forms are listed in §§ 1.922, 1.924, 1.926 and 88.67 of this chapter. The forms may be obtained from the Washington, D.C. office of the Commission, its Gettysburg, Pa. office, or from any of its engineering field offices. (See § 88.111 for information regarding special temporary authorizations.) Part 1, subpart F lists where applications are to be filed, full disclosure, who may sign applications, amendment of applications, defective applications, resubmitted applications, dismissal of applications, and Commission processing of applications.

### § 88.67 Application forms.

The following application forms must be used--

(a) Form 574 must be used to apply for new base, fixed, or mobile station authorizations governed by this part, to modify or to modify and renew an existing authorization (see § 88.87), to reinstate an expired license, (see

paragraphs (e)(1) and (h) of this section), and to reassign an existing authorization to another person or entity.

(1) Application for a radio system may be submitted on a single Form 574.

(2) If the control station(s) will operate on the same frequency as the mobile station, and if the height of the control station(s) antenna(s) will not exceed 6.1 meters (20 feet) above ground or an existing man-made structure (other than an antenna structure), there is no limit on the number of such stations that may be authorized. Items 1 through 5 of Form 574 must be completed showing the frequency, the station class, the total number of control stations, the emission, and the output power of the highest powered control station. Applicants for all control stations in the 470-512 MHz band must furnish the information requested in Items 1-11 of Form 574.

(3) Applications for frequencies in the 220-222 MHz band must specify the number of frequencies requested and whether their intended use is for 5 or 10-channel nationwide systems, commercial or non-commercial use, 5-channel trunked systems, public safety/mutual aid use, individual data/voice use, or individual data only use. All frequencies in this band will be assigned by the Commission. An applicant in a geographic area for frequencies in this band may not have any interest in another pending application in the same geographic area for frequencies in the same category (trunked, individual, individual data, public safety/mutual aid) in that band.

(b) Applications to reassign an existing authorization to another person or entity must be accompanied by a letter from the assignor setting forth his desire to assign all right, title, and interest in and to such authorization, stating the call sign and location of the station, and that the assignor will submit his current station authorization for cancellation upon completion of the assignment. Form 1046 may be used in lieu of this letter.

(c) Applications for frequencies below 27.5 MHz required by this Section to be filed on Form 574 must be accompanied by Form 574-B.

(d) Applications for stations on frequencies above 27.5 MHz in areas where international coordination is required may be accompanied by Form 574-B. If the applicant does file Form 574-B, the information on that form will be provided to the coordinating nation by the Commission. If the applicant does not file Form 574-B, the information provided by the Commission to the coordinating nation will be based on assumed technical characteristics determined by the Commission and described in instructions to Form 574. Also see § 1.955 of this chapter.

(e) Form 405-A must be used to notify the Commission of a change in the licensee's name or mailing address (see § 88.87(b)), and to notify the Commission that the licensee has discontinued station operation and wishes to cancel the license (see § 88.143).

(f) Form 703 must be used to change, as by transfer of stock ownership, the control of a corporate licensee.

(g) Form 572, Temporary Permit to Operate a Part 88 Radio Station, should be properly executed if the applicant is eligible and desires to operate his station pending the processing of his formal application (See also § 88.147).

(h) Form 574-R must be used to apply for renewal of an existing authorization and may be used to apply for reinstatement of an expired license, if the renewal or reinstatement does not involve the modification of the station or system license. (Form 574-R is generated by the Commission and mailed to the licensee approximately sixty (60) days prior to the expiration of the license term.) If the licensee has not received renewal Form 574-R in the mail from the Commission sixty days prior to license expiration, Form 405-A should be used.

(i) Exclusive use overlay (EUO) and licensing freeze applications for the 150-174 MHz and 450-470 MHz bands must be filed on a Form XXXX.

(j) Form 410 must be filed by Canadian licensees desiring to operate in the United States under the terms of Article 2 and 3 of the Convention between the United States and Canada concerning operation of Certain Radio Equipment or Stations (which entered into force May 15, 1952). This form may be obtained from the Department of Communications, Ottawa, Canada. That department should also be consulted by U.S. licensees desiring to operate in Canada. See also, § 1.955 of this chapter.

#### § 88.75 Submission and filing of applications.

(a) Applications for private land mobile licenses requiring both frequency coordination and fees as set forth at Part 1, Subpart G of this chapter must first be sent to the certified coordinator for the radio service or frequency group concerned. The coordinator will then forward all relevant materials including the fee to the appropriate address in § 0.401(b) of this chapter. A list of the certified frequency coordinators may be obtained from the Federal Communications Commission, Gettysburg, PA, 17326.

(b) Applications for private land mobile licenses requiring frequency coordination but no fee must be sent to the certified coordinator for the radio service or frequency group concerned. The coordinator will forward the application to the Federal Communications Commission, Gettysburg, PA 17326.

(c) Applications for private land mobile licenses requiring a fee but no frequency coordination must be sent to the appropriate address in § 0.401(b) of this chapter.

(d) All applications for private land mobile licenses that do not require either frequency coordination or a fee must be sent to the Federal Communications Commission, Gettysburg, PA 17326.

(e) Timely requirement. Unless otherwise specified, an application should be filed at least 60 days prior to the desired date of Commission action. Applications for renewal must be filed no more than 90 days nor less than 30 days prior to the end of the license term. When timely and sufficient

application for renewal of the license has been made, the license will not expire until Commission action on the application has been completed. Applications for reinstatement must be filed no later than 30 days after the expiration date of the license. See § 1.4 of this chapter.

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

**§ 88.79 Requests for mobile transmitter authorization.**

Each application must limit its request for authorized mobile transmitters and paging receivers to:

(a) Mobile transmitters and paging receivers that will be installed and operated immediately after authorization.

(b) Mobile transmitters and paging receivers for which purchase orders have already been signed and that will be in use within eight months of the authorization date.

(c) In the Public Safety Radio Service, to transmitters for which bid orders have been or will be sought and that will be in use within eight months of the authorization date, and to transmitters to be placed in operation more than eight months after the authorization date, pursuant to a specific implementation schedule adopted by the appropriate final authorities of the applicant; and

(d) For operation in the 806-824/851-869 and 896-901/935-940 MHz bands, to transmitters authorized pursuant to § 88.135.

**§ 88.83 Supplemental information to be submitted with applications.**

Each application received by the Commission must be accompanied by the applicable information listed below:

(a) Evidence of frequency coordination as required by § 88.305.

(b) Description of certain equipment. Description of any equipment proposed to be used if it does not appear on the Commission's current Radio Equipment List, Equipment Acceptable for Licensing, and designated for use under this part.

(c) The environmental assessment required by §§ 1.1307 and 1.1311 of this chapter, if applicable.

(d) Applicants for frequencies in the 806-824/851-869 MHz and 896-901/935-940 MHz bands

(1) In the Public Safety Radio Service, Non-Commercial Radio Service, and General Category must specify on the application the frequencies on which the proposed system will operate pursuant to a recommendation by the applicable frequency coordinator. Applicants for SMR only frequencies (see § 88.621) in those bands either may request specific frequencies by including in their applications justification for the frequencies requested or may request the Commission to select frequencies for the system from the SMR Radio Service.

(2) All applicants for conventional radio systems must:

(i) Furnish a list of all radio systems licensed to them or proposed by them within 64 km. (40 mi.) from the location of the base station transmitter site of the facility for which they have applied.

(ii) Specify the number of mobile units to be placed in operation upon grant of the authorization and the number of such units that will be placed in operation within 8 months of the date of grant.

(3) All applicants for trunked systems must:

(i) Furnish a list of all radio systems licensed to them within 64 km (40 mi.) from the location of the base station transmitter site of the facility for which they have applied;

(ii) Specify the number of vehicular and portable mobile units and control stations to be placed in operation within the term of the license.

(e) Applicants for frequencies in the 220-222 MHz bands must specify the number of frequencies requested and whether their intended use is for nationwide systems, SMR or non-commercial use, public safety/mutual aid, data, trunked or individual channels. All frequencies in this band will be assigned by the Commission.

(f) Any other statements or other data specifically required under special circumstances by an applicable section of this part, by the particular form on which the application is filed, or upon request by the Commission.

#### **§ 88.87 Modification of license.**

(a) All applications for modification of license must include the number of mobile transmitters and paging receivers in use on the licensed facilities. All licensees must, as part of their license renewal application, report the number of mobile transmitters or paging receivers that are in use on the licensed facilities.

(b) Major changes. The following changes in authorized stations require an application for modification of license:

- (1) Change in frequency.
- (2) Change in the type of emission.
- (3) Change in power from that authorized.
- (4) Change in antenna height from that authorized.
- (5) Change in the authorized location or number of base stations, fixed, control or for systems operating on non-exclusive assignments above 150 MHz, a change in the number of mobile transmitters, or a change in the area of mobile operations from that authorized.
- (6) Change in the class of a land station, including changing from multiple licensed to shared use or from shared to unshared use.
- (7) Any change in ownership, control, or corporate structure.

(c) The following changes in authorized stations do not require an application for modification of license:

- (1) Change in mailing address of licensee.
- (2) Change of name only of licensee, without changes in ownership, control, or corporate structure.
- (3) Change in the number and location of station control points or of control stations operating below 470 or above 800 MHz meeting the requirements of § 88.67(a) (2).
- (4) Change in the number of mobile units operated by Radiolocation licensees.
- (5) Licensees of trunked SMR systems operating above 800 MHz when there is a change in the location or number of fixed, control, or mobile transmitters from that authorized, including area of mobile operations, except where tower or environmental concerns exist.
- (6) Any other changes not listed in paragraph (a) of this section.

(d) Unless specifically exempted in § 88.305, requests for modifications listed in paragraph (b) of this section must be submitted on Form 574 to the applicable frequency coordinator.

(e) In case of a change listed in paragraph (c) (1) or (c) (2) of this section, the licensee must notify the Commission immediately. Notification may be by Form 405-A or by letter. The letter must contain the name and address of the licensee as they appear in the Commission's records, the new name or address, the call signs and classes of all radio stations authorized to the

licensee under this part and the radio service in which each station is authorized. The completed and signed Form 405-A or the letter must be sent to: Federal Communications Commission, Gettysburg, Pennsylvania 17326. Licensees whose licenses are due for renewal and who have received the renewal Form 574-R in the mail from the Commission must use the appropriate boxes on that form to notify the Commission of a change listed in paragraph (c) (1) or (c) (2) of this section.

(f) In the case of a change listed in paragraphs (c) (3), (c) (4), and (c) (5) of this section, the licensee must notify the Commission within 30 days of the change. The notice may be filed on FCC Form 574 or may be contained in a letter specifying the nature of the change, the name and address of the licensee as appearing on Commission records, and the call sign, class, and radio service of the station. The notice must be sent to: Federal Communications Commission, Gettysburg, Pennsylvania 17326.

(g) Any change that requires a fee as set forth at Part 1, Subpart G of this chapter must be filed in accordance with § 1.912(b) or § 1.912(b) (2) of the rules.

#### **§ 88.91 Loading data reports.**

(a) Trunked SMR above 800 MHz. A base station licensee of a trunked Specialized Mobile Radio system operating above 800 MHz that applies for additional channels to expand an existing system or to construct a new system within 40 miles of its existing system, or a base station licensee of a trunked system applying for its first renewal in a waiting list area for a system licensed before June 1, 1993 must identify on the appropriate application form the number of mobiles and control stations loaded on its system as calculated in paragraph (b).

(b) Calculation Method. The number described in paragraph (a) of this section must be calculated according to the average number of mobiles and control stations operating on a licensee's system on the first business day of each of the six months immediately preceding the filing of an application and must be based on the licensee's business records for that period. Alternative calculations will be permitted upon good cause showings of special circumstances.

(c) Business records may constitute invoices, customer service agreements, customer lists or any other type of record kept in the ordinary course of business.

(d) The FCC will use the loading data required by this section to determine whether the licensee's existing system has a sufficient number of mobiles as required by our Rules to qualify for additional channels or for initial renewal of trunked systems licensed before June 1, 1993.

(e) SMRs in the 220-222 MHz band must maintain records of the names and addresses of each customer and the dates that service commenced and terminated. These records must be made available to the Commission upon

request. Such licensees must report at the time of license renewal the number of mobile units being served.

(f) Non-Commercial trunked system licensees in the 220-222 MHz band must report at the time of license renewal the number of mobile units being served.

**§ 88.95 Operation at temporary locations.**

(a) An application for authority to operate a base or a fixed transmitter at temporary locations must be filed as follows:

(1) When one or more individual transmitters are to be operated by a licensee 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.

(2) The application must specify the general geographic area within which the operation will be confined. The area may be specified as a city, a county or counties, a state or states or other definable geographic area such as a specified radius in miles of a particular city or known geographic site.

(3) Applications for operation at temporary locations exceeding 180 days must be accompanied by evidence of frequency coordination.

(b) When any unit or units of a base station or fixed station that are authorized for operation at temporary locations actually remain or are intended to remain at the same location for more than 1 year, an application for a separate authorization specifying the fixed location must be made as soon as possible, but not later than 30 days after the expiration of the 1-year period.

**§ 88.103 Grants of applications.**

(a) The Commission will grant an application for a station authorization without a hearing if it is in proper form, and conforms with all rule requirements, and would serve the public interest, convenience or necessity.

(b) All applications in pending status will be processed in the order received by the Commission. If there are more applications (including EUC applications) than can be accommodated on available frequencies, the Commission will grant the applications using the system of random selection described in § 1.972 of this chapter, except as provided in 88.107. An application that is dismissed will lose its place in the processing line.

(c) In the 220-222 MHz band, applications will first be considered to determine whether they are substantially complete and acceptable for filing. If so, they will be assigned a file number and put in pending status. If not, they will be dismissed.

(d) If an application is returned for correction and resubmitted and received by the Commission within 30 days from the date on which it was returned to the applicant, it will retain its place in the processing line. If it is not received within 30 days, it will be dismissed and lose its place in the processing line. A resubmitted application in the 220-222 MHz, 806-824 MHz, 851-869 MHz, 896-901 MHz, and 935-940 MHz bands must be received within 60 days to retain its place in processing line.

(e) The Commission may grant any application in part, or add privileges, terms or conditions not requested. When such action is taken without a hearing, the applicant may accept the authorization as granted, or may return it to the Commission along with a written request for a hearing. Any such request for hearing must be made within 30 days from the date of the grant, or from its effective date, if a later date is specified. Upon receipt of a request for hearing, the Commission will vacate the grant and designate the application for hearing in the usual manner.

#### **§ 88.107 SMR waiting lists.**

Applications for SMR frequencies in the 806-821/851-866 MHz band that cannot be granted due to a lack of available channels in a particular area will be placed on a waiting list for that area. Waiting lists will consist of two groups. The first group will be comprised of applications from existing licensees who, in the area corresponding to the particular waiting list, operate trunked systems with 70 or more mobile units per channel. The second group will be comprised of applications to establish new systems or to obtain additional channels for conventional systems. Applications will be placed in the appropriate group according to filing dates, with the earliest date receiving the highest ranking. All applications in the first group will receive priority over any application in the second group regardless of filing date. When channels become available as a result of either the Commission's compliance activities, a licensee's voluntary and independent request for license cancellation, or failure by the recipient of a finder's preference to timely submit an application in a form acceptable for filing, the highest ranking application(s) will be granted based on the site specified and the Commission's mileage separation standards. An applicant filing a timely request for a finder's preference that results in the recovery of SMR category channels, and that also timely submits an application in a form acceptable for filing, will receive a dispositive preference for those channels over the highest ranking application(s). Where more than one applicant obtains a preference for the same channel(s), we will grant the license to operate on the channel(s) to one of these applicants through our random selection procedures. See § 1.972 of this chapter. Trunked systems that have had authorized channels cancelled due to failure to meet the loading requirements in §§ 88.285 and 88.287 will not be permitted on the waiting list for a period of six months from the date of the issuance of the superseding license.

**§ 88.111 Special temporary authority.**

(a) In circumstances requiring the temporary use of radio facilities, the Commission may issue special temporary authority for new or modified operations. A request for special temporary authority may be made in letter form signed in accordance with § 1.913 of this chapter. It should be submitted, in duplicate, at least 10 days prior to the date of the proposed operation. However, in cases of emergency involving danger to life or property, or due to damage to equipment, the request may be made by telephone, telegraph or facsimile transmission under the condition that a letter request is submitted within the following 10 days. All requests for special temporary authority must be clear and complete within themselves and may not rely on any pending application. Also see § 1.925 of this chapter.

(b) Every request for special temporary authority must contain the following information: name and address of the applicant, need for special action, including a description of any emergency or damage of equipment, type of operation to be conducted (such as field test, dispatching etc.), class of station and name of radio service, location, including geographic coordinates if known, of transmitter and/or mobile area of operations, number of fixed transmitters and number of mobile units, operating frequency, output power of the transmitter, type of emission, description of antenna, including height above ground and power gain.

(c) Requests for special temporary authority to operate for periods exceeding 180 days require evidence of frequency coordination if such coordination would be required for a regular licensee. Requests for shorter periods do not require coordination and, if granted, will be authorized on a secondary, non-interference basis.

**§ 88.115 Mailing address.**

Each application must set forth an each licensee and each licensee must furnish the Commission with an address in the United States to be used by the Commission in serving documents or directing correspondence to that licensee. Unless any licensee advises the Commission to the contrary, the address contained in the licensee's most recent application will be used by the Commission for this purpose.

**§ 88.119 License term.**

(a) Licenses for stations authorized under this part will be issued for a term not to exceed five years from the date of the original issuance, modification or renewal. Licensees have an additional (30) days to apply for reinstatement of expired licenses.

(b) If no application for reinstatement has been filed as specified in this Part, the authorization automatically cancels on the expiration date specified in the authorization.

(c) Authorizations for stations engaged in developmental operation will be issued on a temporary basis for a specific period of time, not to exceed 1 year from date of original issuance, modification or renewal.

(d) Nationwide and Innovative Shared Use Radio operation authorizations under this part will be issued for a term not to exceed ten years from the date of the original issuance, modification or renewal.

**§ 88.123 Transfer or assignment of station authorization.**

(a) No transfer without Commission consent. A station authorization and the rights it grants may not be transferred, assigned, or in any manner disposed of to any person, unless the Commission gives its consent in writing.

(b) No assignment prior to construction. A license may not be assigned or transferred prior to the completion of construction and commencement of operation of the facility. However, the Commission may give its consent to the assignment or transfer of control of such a license prior to the completion of construction where:

(1) The assignment or transfer does not involve a substantial change in ownership or control of the authorized radio facilities; or,

(2) The assignment or transfer is involuntary due to the licensee's insolvency, bankruptcy, incapacity, or death.

**§ 88.127 Partial assignments.**

Licensees of constructed systems, except in the 220-222 MHz and 806-809.750/851-854.750 MHz bands, are permitted to make partial assignments of an authorized grant to an applicant proposing to create a new system or to an existing licensee eligible for additional channels. Partial assignments may include both whole channel assignments and narrowband assignments that split a channel. An applicant authorized to expand an existing system or to create a new system with frequencies obtained through partial assignment will receive the assignor's existing license expiration date and loading deadline, if applicable, for the frequencies that are assigned. A licensee that makes a partial assignment of a station's frequencies will not be authorized to obtain additional frequencies for that station for a period of one year from the date of the partial assignment.

**§ 88.131 Time by which station must be placed in operation.**

(a) General. All stations authorized under this part, except as provided in paragraphs (b) or (c) of this section, in §§ 88.135, 88.983 or 88.1013, must be placed in operation within 8 months from the date of grant or the authorization cancels automatically and must be returned to the Commission.

(b) Trunked Systems. Licensees of trunked facilities in the 806-824/851-869 MHz and 896-901/935-940 MHz bands must complete construction within one year. If a station is not placed in permanent operation within one year, except as provided in § 88.135, its license cancels automatically and must be returned to the Commission.

(c) Exclusive Use Overlay. Stations authorized by an EVO license must be placed in operation within 6 months, except as provided in § 88.135, from the date of grant or the authorizations for the system and EVO cancel automatically and must be returned to the Commission.

(d) 220-222 MHz and Cancelled Channels. A licensee that loses authorization for some or all of its channels in the 220-222 MHz band due to failure to meet construction deadlines or benchmarks may not reapply for channels in the same category in the same geographic area for one year from the date the Commission takes final action affirming that those channels have been cancelled.

(e) Placed in Operation. For purposes of this part, a base station is not considered to be placed in operation unless at least one associated mobile station is also placed in operation, except that at least two mobile stations must be placed in operation for trunked systems.

#### § 88.135 Slow growth.

On frequencies above 150 MHz listed in Subpart D, except the 220-222 MHz band, applicants may be authorized a period of up to five (5) years for placing a station in operation in accordance with the following:

(a) The applicant submits justification for an extended implementation period. The justification must include the implementation schedule, including a description of the applicant's proposed system, benchmarks for construction of the proposed base stations (including identification of channels to be "constructed" at each station at each of the indicated benchmarks), and must show that:

(1) The proposed system will require more time than permitted in § 88.131 (twelve months for trunked systems above 800 MHz, six months for EVO systems, eight for other systems) to construct and place in operation because of its purpose, size, or complexity; or

(2) The proposed system is to be a part of a coordinated or integrated area-wide system that will require more time than permitted in § 88.131 (twelve months for trunked systems above 800 MHz, six months for EVO systems, eight for other systems) to plan, approve, fund, purchase, construct and place in operation; or

(3) The applicant is required by law to follow a multi-year cycle for planning, approval, funding and for purchasing the proposed system.

(b) Authorizations under this section are conditioned upon the licensee constructing and placing its system in operation within the authorized implementation schedule and in accordance with an approved implementation schedule. If the licensee fails to construct and place its system in operation within the authorized implementation schedule and in accordance with an approved implementation schedule, all channels not constructed and placed in operation at the base station locations identified in the implementation schedule and all base stations not constructed and placed in operation in accordance with the implementation schedule will be deleted from the licensee's authorization.

(c) In the frequencies above 800 MHz, if after the end of five years, all channels in the licensee's radio service are assigned in the geographic area, authorization for trunked channels not loaded to 70 mobile stations cancels automatically at a rate that allows the licensee to retain one channel for every 100 mobiles loaded, plus one additional channel. Conventional channels not loaded to 70 mobile units may be subject to shared use by the addition of other licensees.

(d) For purposes of this section a system is not considered constructed unless all of the base stations in the system are constructed in accordance with the system description provided as per paragraph (a) of this section.

#### **§ 88.143 Discontinuance of station operation.**

(a) The license for a station cancels automatically upon permanent discontinuance of operations and the licensee must forward the station license to the Commission. Alternatively, the licensee may notify the Commission of the discontinuance of operations of a station by checking the appropriate box on Form 574-R or Form 405-A and requesting license cancellation. Notification of discontinued operation or cancellation must be sent to: Federal Communications Commission, Gettysburg, PA 17326.

(b) For the purposes of this section, any station that has not operated for 1 year or more is considered to have been permanently discontinued.

#### **§ 88.147 Temporary permit.**

An applicant for a private land mobile station license utilizing an already authorized facility may operate the radio station(s) for a period of up to 180 days under a temporary permit evidenced by a properly executed temporary license certificate (Form 572) after submitting or filing a formal application for station license in accordance with § 88.75, provided that all the antennas employed by control stations are twenty feet or less above ground or twenty feet or less above a man-made structure other than an antenna tower to which it is affixed. When required by § 88.305, applications must be accompanied by evidence of frequency coordination. The temporary operation of stations, other than mobile stations within the Canadian coordination zone, is limited to stations with a maximum of 5 watts effective radiated power (except for

exclusive assignments) and a maximum antenna height of 6.1 meters (20 ft.) above average terrain.

**§ 88.151 Conditional permit.**

(a) An applicant proposing to operate a new private land mobile radio station or modify an existing station below 150 MHz or on a one-way paging listed at §§ 88.1063(a) or (b) that is required to submit a frequency recommendation pursuant to § 88.305 may operate the proposed station while its application is pending for a period of up to 180 days under a conditional permit upon the filing of an application that complies with § 88.75 if the application is accompanied by evidence of frequency coordination in accordance with §§ 88.305 and 88.309, and provided that the applicant certifies that the following conditions are satisfied:

(1) The proposed station location is south of Line A or west of Line C as defined in § 88.7.

(2) The proposed antenna structure has been previously studied by the Federal Aviation Administration and determined to pose no hazard to aviation safety as required by § 17.4 of this chapter; or the proposed antenna or tower structure does not exceed 6.1 meters (20 feet) above ground level or above an existing man-made structure (other than an antenna structure), if the antenna or tower has not been previously studied by the Federal Aviation Administration and cleared by the FCC.

(3) The grant of the application does not require a waiver of the Commission's Rules.

(4) The applicant has determined that the proposed facility will not significantly affect the environment as defined in § 1.1307 of this chapter.

(5) The applicant has determined that the proposed station affords the level of protection to radio "quiet" zones and monitoring facilities as specified in §§ 88.317 and 88.1113(f)(3).

(b) An applicant proposing to operate an itinerant station, or an applicant seeking license modification solely for a change in the number of mobile units and paging receivers (except for systems operating on non-exclusive frequencies above 150 MHz), or an applicant seeking the assignment of authorization or transfer of control of a license for an existing station operating below 150 MHz, or in the 929-930 MHz band, may operate the subject station while its application is pending for a period not to exceed 180 days under a conditional permit upon the filing of an application that complies with § 90.75. Conditional authority ceases immediately if the application is returned by the Commission because it is not acceptable for filing. All other categories of applications listed in 88.305(d) are excluded from the provisions of this rule section.

(c) The original conditional licensing 572C Certification Form must be kept with the station records. The Commission may at any time cancel or modify the

conditional authority without hearing. The applicant assumes all risks associated with operation under conditional authority, the termination or modification of conditional authority, or the subsequent dismissal or denial of its application. Authority reverts back to the original licensee if an assignee or transferee's conditional authority is cancelled.

(d) The transmissions of new stations operating under conditional authority must be identified by a temporary call sign consisting of the prefix "WT" followed by the applicant's local seven digit business telephone number as provided in § 2.302 of this chapter. Transmissions by applicants for the modification, assignment of authorization or transfer of control of an existing station must be identified by the station's call sign.

#### ASSIGNMENT OF FREQUENCIES

##### § 88.171 General.

(a) Available Frequencies. The frequencies that ordinarily may be assigned to stations in the services governed by this part are listed in subpart D and E of this part. As provided elsewhere in this part, frequencies assigned to land mobile stations are available either on a shared basis or may be assigned for the exclusive use of a licensee.

(b) All applicants and licensees must cooperate in the selection and use of frequencies in order to reduce interference and make the most effective use of the authorized facilities. Licensees of stations suffering or causing harmful interference are expected to cooperate and resolve this problem by mutually satisfactory arrangements. If the licensees are unable to do so, the Commission may impose restrictions including specifying the transmitter power, antenna height, or area or hours of operation of the stations concerned. Further, 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 as to specified geographical areas, maximum power, or such other operating conditions, contained in this part or in the station authorization. Lastly, in cases where sanctions may be warranted, the Commission may, inter alia, impose monetary forfeitures.

(c) Frequencies allocated for Federal Government radio stations under Executive order of the President may be authorized for the 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 the Federal Government, and where the Commission finds, after consultation with the appropriate government agency or agencies, that such assignment is necessary.

(d) The radio facilities authorized under this part are intended for use in connection with and as an adjunct to the primary governmental or business activities of the licensee.

(e) Persons requesting authority to operate in the band 25-50 MHz should recognize that this band is shared with various services in other countries and that harmful interference may be caused by the propagation of signals in this band from distant stations. No protection from such harmful interference generally can be expected.

(f) Except for those frequencies that are not allocated to the Private Land Mobile Radio Services on a primary basis and those frequencies shared with the Federal Government, frequencies allocated to specific services and listed in the tables in Subpart D may also be available for assignment in services other than those they are allocated to provided that such interservice sharing assignments meet the requirements of § 88.309 or 88.313 of the rules.

(g) International police radiocommunication. Police radio licensees located close to the borders of the United States may be authorized to communicate internationally. Request for such authority must be written and signed and submitted in duplicate. The request must 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.

#### EXCLUSIVE USE/ASSIGNMENT PROTECTION

##### § 88.175 Exclusivity.

In the bands above 150 MHz, assignments may be limited on certain channels in a specific geographic area. This may result in a licensee having channel exclusivity in that geographic area. The rules exclusivity vary band-by-band and are set forth in sections 88.179-88.229.

##### § 88.179 Exclusive use overlay (EVO) (150-174 MHz, 450-470 MHz).

An applicant may be granted an exclusive use overlay (EVO) license to convert frequencies in the 150-174 MHz and 450-470 MHz bands listed at Subpart D from shared use in a particular geographic area (as defined in the next sentence) to exclusive assignments (unless otherwise noted in § 88.667). No additional licenses will be granted to operate a base or fixed station on the same frequency within 80 km (50 mi) of the base station of an EVO licensee, except with written concurrence of the EVO licensee. The rules for EVO licenses are set forth in this section through § 88.207.

##### § 88.183 Protection of existing users by EVO licensees.

Existing licensees with base stations on the same frequency within 80 km (50 mi) of a base station with EVO are co-primary to the EVO licensee, may add additional mobiles (or users with respect to SMRs and Non-Commercial Radio Service licensees selling excess capacity, and existing multiple licensed

facilities), but may not add control stations, fixed stations or base stations without written concurrence from the EUO licensee.

**§ 88.187 Preferred existing systems.**

A licensee operating a base station is, for the purpose of EUO licensing, a preferred existing system on those frequency(s) at the site of that base station, provided that

(a) The base station operates at least 3 Watts output power; and

(b) If the system was initially licensed between [release date of the NPRM] and [sixty days after the Report and Order], the system has been constructed and placed in operation for at least one year; and

(c) If the base station is:

(1) Within 161 km (100 mi) of New York City or Los Angeles (see § 88.1601 for coordinates), the system has at least 70 mobiles per channel or channel pair; or

(2) Within 161 km (100 mi) of markets 3-73 listed at § 88.1601, the system has at least 50 mobiles per channel or channel pair, or

(3) More than 161 km (100 mi) from markets 1-75 listed at § 88.1601, the system has at least 20 mobiles per channel or channel pair; or instead of paragraph (c) of this section,

(d) Failure of that system would create an imminent danger to the public safety.

**§ 88.191 EUO eligibility.**

(a) Until February 1, 1996, only systems that are constructed and operating are eligible for an EUO license. Also see § 88.187(b).

(b) Any applicant eligible to be licensed on a specific frequency is eligible for an EUO license provided that the application includes the written concurrence of all preferred existing licensees (see § 88.187) for the frequencies applied for with base stations located within 80 km. (50 miles) of the proposed base station or the system meets the criteria in paragraph (d) of this section.

(c) If there is no preferred existing licensee, then the EUO grant is conditioned on the licensee constructing within six months of the grant of the EUO license and meeting the loading criteria at § 88.273 within eight months of the grant of the EUO license. The license to operate the base station at that frequency will automatically cancel if the system fails to meet the spectrum efficiency standards at § 88.433(a) and (b). Also see § 88.103.