

§ 21.901 Frequencies.

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(e) Frequencies in the band segments 18,580-18,820 MHz and 18,920-19,160 MHz are available for assignment to fixed stations in this service for a point-to-point return link from a subscriber's location. Assignments in the 18 GHz band for these return links will be made in accordance with the provisions of Subpart I of Part 101.

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33. Section 21.902 is amended by revising paragraph (c)(1)(ii), to read as follows:

§ 21.902 Frequency interference.

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(c) * * *

(ii) if the great circle path between the applicant's proposed transmitter and the protected service area of any authorized, or previously-proposed, cochannel or adjacent-channel station(s) is within 241.4 kilometers or less and 90 percent or more of the path is over water or within 16.1 kilometers of the coast or shoreline of the Atlantic Ocean, the Pacific Ocean, the Gulf of Mexico, any of the Great Lakes, or any bay associated with any of the above (see §§ 21.901(a) and 74.902 of this chapter);

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34. Section 21.903 is amended by revising paragraph (a) to read as follows:

§ 21.903 Purpose and permissible service.

(a) Multipoint Distribution Service stations are generally intended to provide one-way radio transmission (usually in an omnidirectional pattern) from a stationary transmitter to multiple receiving facilities located at fixed points. When service is provided on a common carrier basis, subscriber supplied information is transmitted to points designated by the subscriber. When service is provided on a non-common carrier basis, transmissions may include information originated by persons other than the licensee, licensee-manipulated information supplied by other persons, or information originated by the licensee. Point-to-point radio return links from a subscriber's location to a MDS operator's facilities may be authorized in the 18,580 through 18,820 MHz and 18,920 through 19,160 MHz bands. Rules governing such operation are contained in Subpart I of Part 101, the Point-to-Point Microwave Radio

Service.

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IV. Part 94 of Chapter 1 of Title 47 of the Code of Federal Regulations is removed and reserved for future use.

V. Part 101 of Chapter 1 of Title 47 of the Code of Federal Regulations is added to read as follows:

PART 101

FIXED MICROWAVE SERVICES

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AUTHORITY: 47 U.S.C. Secs. 154, 303, unless otherwise noted.

Subpart A -- General

§ 101.1 Scope and authority.

(a) The purpose of the rules in this part is to prescribe the manner in which portions of the radio spectrum may be made available for private operational and common carrier fixed microwave operations that require transmitting facilities on land or in specified offshore coastal areas within the continental shelf.

(b) The rules in this part are issued pursuant to the authority contained in Titles I through III of the Communications Act of 1934, as amended, which vest authority in the Federal Communications Commission to regulate common carriers of interstate and foreign communications, to regulate radio transmissions and issue licenses for radio stations, and to regulate all interstate and foreign communications by wire and radio necessary to the accomplishment of the purposes of the Act.

§ 101.3 Definitions.

As used in this part.

Antenna power gain. The ratio of the maximum radiation intensity to that of an isotropic (omnidirectional) radiator in the far field of its main (forward direction) lobe.

Antenna power input. The radio frequency peak or RMS power, as the case may be, supplied to the antenna from the antenna transmission line and its associated impedance matching network.

Antenna structure. The antenna, its supporting structure and anything attached to it.

Assigned frequency. The center of the frequency band assigned to a station.

Assigned frequency bandwidth. The frequency band within which the emission of a station is authorized; the width of the band equals the necessary bandwidth plus twice the absolute value of the frequency tolerance.

Authorized bandwidth. The maximum bandwidth authorized to be used by a station as specified in the station license. (See §2.202)

Authorized frequency. The frequency, or frequency range, assigned to a station by the Commission and specified in the instrument of authorization.

Authorized power. The maximum power a station is permitted to use. This power is specified by the Commission in the station's authorization.

Automatic Transmitter Power Control (ATPC). ATPC is a feature of a digital microwave radio system that adjusts the transmitter output power. ATPC allows the transmitter to

operate at less than maximum power for most of the time. In a radio employing ATPC, the transmit power is reduced during normal operation conditions. When the receiver detects a reduction in signal level, a control signal is sent to the far end transmitter, instructing it to increase the power output to compensate for the signal reduction. The power output is limited to the licensed (maximum) transmit power. Guidelines for use of ATPC are set forth in the TIA Telecommunications Systems Bulletin TSB 10, "Interference Criteria for Microwave Systems (TSB 10)."

Bandwidth occupied by an emission. The band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power.

Bit rate. The rate of transmission of information in binary (two state) form in bits per unit time.

Carrier. In a frequency stabilized system, the sinusoidal component of a modulated wave whose frequency is independent of the modulating wave; or the output of a transmitter when the modulating wave is made zero; or a wave generated at a point in the transmitting system and subsequently modulated by the signal; or a wave generated locally at the receiving terminal which when combined with the side bands in a suitable detector, produces the modulating wave.

Carrier frequency. The output of a transmitter when the modulating wave is made zero.

Central office. A landline termination center used for switching and interconnection of public message communication circuits.

Common carrier fixed point-to-point microwave service. A common carrier public radio service rendered on microwave frequencies by fixed and temporary fixed stations between points that lie within the United States or between points to its possessions or to points in Canada or Mexico.

Communication common carrier. Any person engaged in rendering communication service for hire to the public.

Control point. An operating position at which an operator responsible for the operation of the transmitter is stationed and which is under the control and supervision of the licensee.

Control station. A fixed station, the transmissions of which are used to control automatically the emissions or operations of a radio station, or a remote base station transmitter.

Coordination area. The area associated with a station outside of which another station sharing the same or adjacent frequency band neither causes nor is subject to interfering emissions greater than a permissible level.

Coordination contour. The line enclosing the coordination area.

Coordination distance. The distance on a given azimuth from a station beyond which another station neither causes nor is subject to interfering emissions greater than a permissible level.

Digital Electronic Message Nodal Station. A fixed point-to-multipoint radio station in a Digital Electronic Message Service providing two-way communication with Digital Electronic Message User Stations.

Digital Electronic Message Service. A two-way end-to-end fixed radio service utilizing digital termination systems for the exchange of digital information. This service may also make use of point-to-point microwave facilities, satellite facilities or other communications media to interconnect digital termination systems to comprise a network.

Digital Electronic Message User Station. Any one of the fixed microwave radio stations located at users' premises, lying within the coverage area of a Digital Electronic Message Nodal Station, and providing two-way digital communications with the Digital Electronic Message Nodal Station.

Digital modulation. The process by which some characteristic (frequency, phase, amplitude or combinations thereof) of a carrier frequency is varied in accordance with a digital signal, e.g. one consisting of coded pulses or states.

Drop point. A term used in the point-to-point microwave radio service to designate a terminal point where service is rendered to a subscriber.

Earth station. A station located either on the Earth's surface or within the major portion of Earth's atmosphere and intended for communication: (1) With one or more space stations; or (2) With one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

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

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Exchange. A unit of a communication company or companies for the administration of communication service in a specified area, which usually embraces a city, town, or village and its environs, and consisting of one or more central offices, together with the associated plant, used in furnishing communication service in that area.

Exchange area. The geographic area included within the boundaries of an exchange.

Fixed satellite earth station. An earth station intended to be used at a specified fixed point.

Fixed relay station. A fixed station associated with one or more stations, established to receive radio signals directed to it and to retransmit them automatically on a fixed service frequency.

Fixed Service. A radiocommunications service between specified fixed points.

Fixed station. A station in the fixed service.

Frequency tolerance. The maximum permissible departure by the center frequency of the frequency band occupied by an emission from the assigned frequency or, by the characteristic frequency of an emission from the reference frequency.

NOTE: The frequency tolerance is expressed as a percentage or in Hertz.

General communication. Two-way voice communication, through a base station, between (1) a common carrier land mobile or airborne station and a landline telephone station connected to a public message landline telephone system, or (2) two common carrier land mobile stations, or (3) two common carrier airborne stations, or (4) a common carrier land mobile station and a common carrier airborne station.

Harmful interference. Interference that 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 these Regulations.

Internodal link. A point-to-point communications link used to provide communications between Nodal Stations or to interconnect Nodal Stations to other communications media.

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

Local Television Transmission Service. A public radio communication service for the transmission of television material and related communications.

Long haul system. A microwave system licensed under this Part in which the longest radio circuit of tandem radio paths exceeds 402 kilometers.

Master station. A station in a multiple address radio system that controls, activates or interrogates four or more remote stations. Master stations performing such functions may also receive transmissions from remote stations.

Message center. The point at which messages from members of the public are accepted by the carrier for transmission to the addressee.

Microwave frequencies. As used in this part, this term refers to frequencies of 890 MHz and above.

Microwave link. A link is defined as a simplex communications circuit between two points utilizing a single frequency/polarization assignment. A duplex communications circuit would require two links, one link in each direction.

Miscellaneous common carriers. Communications common carriers that are not engaged in the business of providing either a public landline message telephone service or public message telegraph service.

Mobile earth station. An earth station intended to be used while in motion or during halts at unspecified points.

Mobile Service. A radiocommunication service between mobile and land stations or between mobile stations.

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

Multiple address system (MAS). A point-to-multipoint radio communications system, either one-way or two-way, utilizing frequencies in accordance with § 101.147 and serving a minimum of four unique remote stations. Each master station must serve at least its own four remotes. The remote stations must be scattered over the service area in such a way that two or more point-to-point systems would be needed to serve those remotes.

National Spatial Reference System. The National Spatial Reference System (NSRS) is the name given to all Geodetic Control information contained in the National Geodetic Survey (NGS) Data Base. This includes: A, B, First, Second, and Third-Order horizontal and vertical control observed by NGS as well as data submitted by other agencies (*i.e.*, USGS, BLM, States, Counties, Cities, and private surveying organizations).

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. The necessary bandwidth may be calculated using the formulas in § 2.202 of this Chapter.

Nodal station. The central or controlling station in a radio system operating on point-to-multipoint frequencies in the 2.5, 10.6, or 18 GHz bands.

Occupied bandwidth. The width of a frequency bandwidth such that, below the lower and

above the upper frequency limits, the mean powers emitted are each equal to a specified percentage, B/2 of the total mean power of a given emission. Unless otherwise specified by the CCIR for the appropriate class of emission, the value of B/2 should be taken as 0.5%.

Note: The percentage of the total power outside the occupied bandwidth is represented by B.

Operational fixed station. A private fixed station not open to public correspondence.

Passive repeater. A re-radiation device associated with a transmitting/receiving antenna system that re-directs intercepted radiofrequency energy. For example, it may consist of reflector(s) or back-to-back parabolic or horn antennas.

Path Length. The total distance of a path from the transmit to the receive antenna, inclusive of all passive repeaters, if any.

Periscope antenna system. An antenna system which involves the use of a passive reflector to deflect radiation from or to a directional transmitting or receiving antenna which is oriented vertically or near vertically.

Prior coordination. A bilateral process conducted prior to filing applications which includes the distribution of the technical parameters of a proposed radio system to potentially affected parties for their evaluation and timely response.

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

Private line service. A service whereby facilities for communication between two or more designated points are set aside for the exclusive use or availability for use of a particular customer and authorized users during stated periods of time.

Private operational fixed point-to-point microwave service. A private line radio service rendered on microwave frequencies by fixed and temporary fixed stations between points that lie within the United States or between points to its possessions or to points in Canada or Mexico.

Public correspondence. Any telecommunication which the offices and stations must, by reason of their being at the disposal of the public, accept for transmission.

Public message service. A service whereby facilities are offered to the public for communication between all points served by a carrier or by interconnected carriers on a non-exclusive message by message basis, contemplating a separate connection for each occasion of use.

Radio station. A separate transmitter or a group of transmitters under simultaneous common control, including the accessory equipment required for carrying on a radiocommunication service.

Radiocommunication. Telecommunication by means of radio waves.

Rated power output. The maximum radio frequency power output capability (peak or average power) of a transmitter, under optimum conditions of adjustment and operation, specified by its manufacturer.

Record communication. Any transmission of intelligence which is reduced to visual record form at the point of reception.

Reference frequency. A frequency having a fixed and specified position with respect to the

assigned frequency. The displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the centre of the frequency band occupied by the emission.

Relay station. A fixed station used for the reception and retransmission of the signals of another station or stations.

Remote station. A fixed station in a multiple address radio system that transmits one-way to one or more central receive sites, controls a master station, or is controlled, activated or interrogated by, and may respond to, a master station.

Repeater station. A fixed station established for the automatic retransmission of radiocommunications received from one or more mobile stations and directed to a specified location; for public mobile radio operations, a fixed station that automatically retransmits the mobile communications and/or transmitter information about the base station, along a fixed point-to-point link between the base station and the central station.

Short haul system. A microwave system licensed under this Part in which the longest radio circuit of tandem radio paths does not exceed 402 kilometers.

Signaling communication. One-way communications from a base station to a mobile or fixed receiver, or to multi-point mobile or fixed receivers by audible or subaudible means, for the purpose of actuating a signaling device in the receiver(s) or communicating information to the receiver(s), whether or not the information is to be retained in record form.

Standby transmitter. A transmitter installed and maintained for use in lieu of the main transmitter only during periods when the main transmitter is out of service for maintenance or repair.

Symbol rate. Modulation rate in bauds. This rate may be higher than the transmitted bit rate as in the case of coded pulses or lower as in the case of multilevel transmission.

Telegraphy. A form of telecommunication which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form. Unless otherwise specified, telegraphy means a form of telecommunication for the transmission of written matter by the use of signal code.

Telemetry. The use of telecommunication for automatic indicating or recording measurements at a distance from the measuring instrument.

Telephony. A form of telecommunication set up for the transmission of speech, or in some cases, other sounds.

Television. A form of telecommunication for transmission of transient images of fixed or moving objects.

Temporary fixed station. A station established in a non-permanent mode (temporary) at a specified location for a short period of time, ranging up to one year. Temporary-fixed operations are itinerant in nature, and are not to be confused with mobile-type operations.

Video entertainment material. The transmission of a video signal (e.g. United States Standard Monochrome or National Television Systems Committee 525-line television) and an associated audio signal which is designed primarily to amuse or entertain, such as movies and games.

Subpart B: Applications and Licenses

GENERAL FILING REQUIREMENTS

§ 101.4 Transition period.

(a) All systems subject to Parts 21 and 94 of the Rules, which are licensed or which are proposed in an application on file, as of the effective date of this part, are subject to the requirements under Part 21 or Part 94, as applicable.

(b) For purposes of this section, a "system" shall include:

(i) the originally licensed system;

(ii) any modification to the original system involving a change in antenna azimuth, antenna beam width, channel loading, emission, station location, antenna height, authorized power, or authorized frequencies;

(iii) additional links constructed to complete an integrated communications network;

or

(iv) operationally connecting new facilities and/or frequencies.

(c) All radio frequency devices authorized pursuant to Part 2 of the Rules as being in compliance with applicable Part 21 or Part 94 requirements can be used indefinitely with systems licensed under Part 101.

§ 101.5 Station authorization required.

(a) No radio transmitter shall be operated in this service except under and in accordance with a proper station authorization granted by the Federal Communications Commission. Except as provided in paragraph (d) of this section, no construction, modification or operation of a station may be commenced without an authorization from the Commission.

(b) A separate application form must be filed for each Digital Electronic Message Service Nodal Station. No license is required for a Digital Electronic Message User Station. Authority for a Digital Electronic Message Nodal Station licensee to serve a specific number of user stations to be licensed in the name of the carrier must be requested on FCC Form 494 filed for the Digital Electronic Message Nodal Station.

(c) If construction and or operation may have a significant environmental impact as defined by § 1.1307 of the Commission's rules, the requisite environmental assessment as prescribed in § 1.1311 of this chapter must be filed with the application and Commission environmental review must be completed before construction of the station is initiated. See § 1.1312 of this

chapter.

(d) For stations authorized under Subpart H (Private Operational Fixed Point-to-Point Microwave Service) and Subpart I (Common Carrier Fixed Point-to-Point Microwave Service), construction of new or modified stations may be initiated prior to grant of an authorization. As a condition to commencing construction under this subparagraph (d), the Commission may, at any time and without hearing or notice, prohibit such construction for any reason. Any construction conducted hereunder is at the applicant's sole risk.

§ 101.7 Eligibility for station license.

(a) A station license may not be granted to or held by a foreign government or by a representative of a foreign government.

(b) In the Common Carrier service, a station license may not be granted or held by:

(1) Any alien or the representative of any alien.

(2) Any corporation organized under the laws of any foreign government.

(3) Any corporation of which any officer or director is an alien.

(4) 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 representatives thereof; or any corporation organized under the laws of a foreign country.

(5) 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.

(6) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens or their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign government, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

§ 101.9 Formal and informal applications.

(a) Except for an authorization under any of the proviso clauses of § 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a)), the Commission will grant the following authorizations only upon written application: Station licenses; modifications of station licenses; renewals of station licenses; extensions of time to construct; transfers and assignments of station licenses or of any rights thereunder.

(b) Except as may be otherwise permitted by this Part, a separate written application must be filed for each instrument of authorization requested. Applications may be:

(1) "Formal applications" where the Commission has prescribed in this part a standard form; or

(2) "Informal applications" (normally in letter form) where the Commission has not prescribed a standard form.

(c) An informal application will be accepted for filing only if:

(1) A standard form is not prescribed or clearly applicable to the authorization requested;

(2) It is a document submitted, in duplicate, with a caption which indicates clearly the nature of the request, radio service involved, location of the station, and the application file number (if known); and

(3) It contains all the technical details and informational showings required by the rules and states clearly and completely the facts involved and authorization desired.

§ 101.11 Filing of applications, fees, and number of copies.

(a) Part 1 of this chapter contains information on application filing procedures and requirements for all services authorized under this Part. All filings must include the original application plus one copy.

(b) Applications or filings requiring fees as set forth at Part 1, Subpart G of this chapter must be filed in accordance with § 0.401(b) of this chapter. Applications or filings not requiring fees must be submitted to: Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, PA 17325.

(c) All correspondence or amendments concerning a submitted application must clearly identify the radio service, the name of the applicant, station location, and the Commission file number (if known) or station call sign of the application involved.

(d) Except as otherwise specified, all applications, amendments, and correspondence must be signed as prescribed by Part 1 of this Chapter.

§ 101.13 Application forms and requirements for private operational fixed stations.

(a) A separate application must be submitted on FCC Form 402 for the following:

(1) New station authorization for private operational fixed microwave station.

(2) New authorization to operate one or more fixed stations at temporary locations in this service.

(3) Modification of station license.

(4) New station authorization or modification of license for each master station of a system consisting of a master station and its associated remote stations.

(5) The Commission's consent to the complete or partial assignment of an authorization to another person or entity, or the transfer of control of an entity holding an authorization. In addition, the application must be accompanied by a signed letter from proposed assignor/transferor stating the desire to assign all or part of its right, title, and interest in and to such authorization, or to transfer control over the entity holding the authorization, stating the call sign and location of the station, and that, if applicable, the assignor will submit its current station authorization for cancellation upon completion of the assignment. Form 1046 may be used in lieu of this letter. Licensees who fail to consummate must modify their licenses to conform them to their initial state within 30 days of a failure to consummate.

(6) Amendment of any application.

(b) An application for authority to operate a fixed station at temporary locations must specify the precise geographic area within which the operation will be confined. The area specified must be defined as a radius of operation about a given state or states, latitude/longitude, or as a rectangular area bounded by upper and lower lines of latitude and longitude. Exception to this specific requirement may be made for exceptionally large areas, such as the continental United States. Sufficient data must be submitted to show the need for the proposed area of operation.

(1) If an operational-fixed station is authorized to be operated at temporary locations and actually remains, or is to remain, at the same location for a period of over a year, application for a permanent authorization specifying the fixed location must be made as soon as possible but not later than 30 days after the expiration of the one-year period.

(c) A separate Form 402 for point-to-multipoint frequencies in the 10.6 GHz and 18 GHz bands must be filed for each Nodal Station except for operations consistent with § 101.147. Each Nodal Station application must specify the service area that will be served by the station in terms of a distance radius or other geographical specification, and, if applicable, the Standard Metropolitan Statistical Area (SMSA) being served.

(d) Application for renewal of station licenses must be submitted on such form as the Commission may designate by public notice. Applications for renewal must be made during

the license term and should be filed within 90 days, but not later than 30 days, prior to the end of the license term. When a licensee submits a timely application for renewal of a station license, the existing license for that station will continue as a valid authorization until the Commission has made a final decision on the application. Whenever a group of station licenses in the same radio service are to be renewed simultaneously, a single "blanket" application may be filed to cover the entire group if the application identifies each station by call sign and station location. Applicants should note also any special renewal requirements under the rules for such radio station(s).

(e) A separate application must be filed for each fixed master station in a Multiple Address System (MAS). Applications may include any number of remote stations in a single application, but must specify the geographic service area in which these remote stations will be located. Applications for mobile operations or for systems employing only remote stations must designate a reference point (set of coordinates) at or near the center of the area being served.

(f) Cancellation of a license can be made by letter.

§ 101.15 Application forms for common carrier fixed stations.

(a) New or modified facilities. FCC Form 494 must be submitted and a license granted for each station. FCC Form 494 also must be submitted to amend any license application, to modify any license pursuant to §§ 101.57(a) and 101.59, and to notify the Commission of modifications made pursuant to § 101.61. Cancellation of a license can be made by letter.

(b) Additional time to construct. FCC Form 701 ("Application for Additional Time to Construct Radio Station") must be filed prior to the expiration of the time for construction noted in a conditional license to modify the license by extending the period of construction.

(c) Renewal of station license. Except for renewal of special temporary authorizations, FCC Form 405 ("Application for Renewal of Station License") must be filed by the licensee between thirty (30) and sixty (90) days prior to the expiration date of the license sought to be renewed. Whenever a group of station licenses in the same radio service are to be renewed simultaneously, a single "blanket" application may be filed to cover the entire group if the application identifies each station by call sign and station location. Applicants should note also any special renewal requirements under the rules for each radio service. When a licensee submits a timely application for renewal of a station license, the existing license continues in effect until the Commission has rendered a decision on the renewal application.

(e) Assignment of license. FCC Form 702 ("Application for Consent to Assignment of Radio Station Construction Authorization or License for Stations in Services Other than Broadcast") must be submitted to assign voluntarily (as by, for example, contract or other agreement) or involuntarily (as by, for example, death, bankruptcy, or legal disability) the station authorization. In the case of involuntary assignment (or transfer of control) the application

must be filed within 10 days of the event causing the assignment (or transfer of control). FCC Form 702 must also be used for non-substantial (pro forma) assignments. Whenever a group of station licenses in the same radio services are to be assigned to a single assignee, a single "blanket" application may be filed to cover the entire group, if the application identifies each station by call sign and station location. Licensees who fail to consummate must modify their licenses to conform them to their initial state within 30 days of a failure to consummate.

(f) Partial assignment of license. Authorization for assignment from one company to another of only a part or portions of the facilities (transmitters) authorized under an existing license (as distinguished from an assignment of the facilities in their entirety) may be granted upon application:

(1) By the assignor on FCC Form 494 for deletion of the assigned facilities (no fee required).

(2) By the assignee on FCC Form 494 with a request for recertification in the name of the assignee for frequencies eliminated from assignor's license (fee required).

In the event that consummation does not occur, FCC Form 494 must be submitted to return the assignor's license to its original condition.

(g) Transfer of control of corporation holding a conditional license or license. FCC Form 704 ("Application for Consent to Transfer of Control") must be submitted in order to voluntarily or involuntarily transfer control (de jure or de facto) of a corporation holding any conditional licenses or licenses. FCC Form 704 must also be used for non-substantial (pro forma) transfers of control. Licensees who fail to consummate must modify their licenses to conform them to their initial state within 30 days of a failure to consummate.

§ 101.17 [Reserved]

§ 101.19 General application requirements.

(a) Each application for a license or for consent to assignment or transfer of control must:

(1) Disclose fully the real party (or parties) in interest, including (as required) a complete disclosure of the identify and relationship of those persons or entities directly or indirectly owning or controlling (or both) the applicant;

(2) Demonstrate the applicant's legal, technical, and other qualifications to be a licensee;

(3) Submit the information required by the Commission's Rules, requests, and application forms;

(4) Be maintained by the applicant substantially accurate and complete in all significant respects in accordance with the provisions of § 1.65 of this chapter; and

(5) Show compliance with the special requirements applicable to each radio service and make all special showings that may be applicable (e.g., those required by §§ 101.103(d), 101.701, and of this part, etc.).

(b) In addition to the general application requirements of §§ 101.19 and 101.21 of this part, applicants must submit any additional documents, exhibits, or signed written statements of fact:

(1) As may be required by the other parts of the Commission's Rules, and the other subparts of this part (particularly Subpart C and those subparts applicable to the specific radio service involved); and

(2) As the Commission, at any time after the filing of an application and during the term of any authorization, may require from any applicant, permittee, or licensee to enable it to determine whether a radio authorization should be granted, denied, or revoked.

(c) All applicants are required to indicate at the time their application is filed whether an authorization of the facilities is categorically excluded as defined by § 1.1306 of the Commission's rules. If answered affirmatively, an Environmental Assessment as described by § 1.1311, need not be filed with the application.

§ 101.21 Technical content of applications.

Applications must contain all technical information required by the application form and any additional information necessary to fully describe the proposed facilities and to demonstrate compliance with all technical requirements of the rules governing the radio service involved (see Subparts C, F, G, I, and J, as appropriate). The following paragraphs describe a number of technical requirements.

(a) Each application proposing a new or modified antenna structure for a station (including a receive-only or passive repeater) must indicate whether the owner has registered the structure with the Commission. Complete information as to rules concerning the registration, construction, marking and lighting of antenna structures is contained in Part 17 of this chapter. See also § 101.121 if the structure is used by more than one station.

(b) Each application for construction permit for a developmental authorization must be accompanied by pertinent supplemental information as required by § 101.411 in addition to such information as may be specifically required by this section.

(c) An applicant proposing construction of one or more new stations or modification of existing stations must submit the location and telephone number (if known) of the

maintenance center for a fixed microwave system. In lieu of providing the location and telephone number of the maintenance center(s) on a case by case basis, a licensee may file a complete list for all operational stations with the Commission and the Engineer-In-Charge of the appropriate radio district on an annual basis or at more frequent intervals as necessary to keep the information current.

(d) Each application in the Private Operational Fixed Point-to-Point Microwave, Common Carrier Fixed Point-to-Point Microwave, Local Television Transmission, and Digital Electronic Message Services (excluding user stations) proposing a new or replacement antenna (excluding omnidirectional antennas) must include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission in which case the applicant may reference in its application the FCC-ID number that indicates that the pattern is on file with the Commission.

(e) Each application in the Private Operational Fixed Point-to-Point Microwave Service and the Common Carrier Fixed Point-to-Point Microwave Service must include the following information:

- Applicant's name and address.
- Transmitting station name.
- Transmitting station coordinates.
- Frequencies and polarizations to be added, changed or deleted.
- Transmitting equipment type, its stability, actual output power, emission designator, and type of modulation (loading).
- Transmitting antenna type(s), model, gain, and, if required, a radiation pattern provided or certified by the manufacturer.
- Transmitting antenna center line height(s) above ground level and ground elevation above mean sea level.
- Receiving station name.
- Receiving station coordinates.
- Receiving antenna type(s), model, gain, and, if required, a radiation pattern provided or certified by the manufacturer.
- Receiving antenna center line height(s) above ground level and ground elevation above mean sea level.
- Path azimuth and distance.
- Estimated transmitter transmission line loss expressed in dB.
- Estimated receiver transmission line loss expressed in dB.

NOTE: The position location of antenna sites shall be determined to an accuracy of no less than ± 1 second in the horizontal dimensions (latitude and longitude) and ± 1 meter in the vertical dimension (ground elevation) with respect to the National Spatial Reference System.

(f) All applicants for regular authorization must, before filing an application, amendments to a pending application, or modifications to a license, prior coordinate the proposed frequency usage with existing users in the area and other applicants with previously filed applications in accordance with the procedures in § 101.103.

(i) In those frequency bands shared with the communication-satellite service, an applicant for a new station, for new points of communication, for the initial frequency assignment in a shared band for which coordination has not been previously effected, or for authority to modify the emission or radiation characteristics of an existing station in a manner that may increase the likelihood of harmful interference, must ascertain in advance whether the station(s) involved lie within the great circle coordination distance contours of an existing Earth station or one for which an application has been accepted for filing, and must coordinate his proposal with each such Earth station operator or applicant. For each potential interference path, the applicant must perform the computations required to determine that the expected level of interference to or from the terrestrial station does not exceed the maximum permissible interference power level in accordance with the technical standards and requirements of §§ 25.251-25.256 of this chapter. The Commission may, in the course of examining any application, require the submission of additional showings, complete with pertinent data and calculations in accordance with Part 25 of this chapter, showing that harmful interference will not likely result from the proposed operation. (Technical characteristics of the Earth stations on file and coordination contour maps for those Earth stations will be kept on file for public inspection in the offices of the Commission's International Bureau in Washington, D.C.)

§ 101.23 Waiver of rules.

Waivers of these rules may be granted upon application or on the Commission's own motion. A request for waiver shall contain a statement of reasons sufficient to justify a waiver. A waiver will not be granted except upon an affirmative showing that:

(a) The underlying purpose of the rule will not be served, or would be frustrated, by its application in the particular case, and that grant of the waiver is otherwise in the public interest; or

(b) The unique facts and circumstances of a particular case render application of the rule inequitable, unduly burdensome or otherwise contrary to the public interest. Applicants must also show the lack of a reasonable alternative.

§ 101.25 Inconsistent or conflicting applications.

While an application is pending and undecided, no subsequent inconsistent or conflicting application may be filed by the same applicant, the applicant's successor or assignee, or on behalf or for the benefit of the same applicant, the applicant's successor or assignee.

§ 101.27 Repetitious applications.

(a) Where an applicant has been afforded an opportunity for a hearing with respect to a particular application for a new station, or for an extension or enlargement of a service or facilities, and the Commission has, after hearing or default, denied the application or dismissed it with prejudice, the Commission will not consider a like application involving service of the same kind to the same area by the same applicant, or by the applicant's successor or assignee, or on behalf of or for the benefit of the original parties in interest, until after the lapse of 12 months from the effective date of the Commission's order. The Commission may, for good cause shown, waive the requirements of this section.

(b) Where an appeal has been taken from the action of the Commission denying a particular application, another application for the same class of station and for the same area, in whole or in part, filed by the same applicant or by the applicant's successor or assignee, or on behalf or for the benefit of the original parties in interest, will not be considered until the final disposition of such appeal.

§ 101.29 Amendment of pending applications.

(a) Any pending application may be amended as a matter of right if the application has not been designated for hearing, or for comparative evaluation pursuant to § 101.51, or for the random selection process, provided, however, that the amendments must comply with the provisions of § 101.41 as appropriate.

(b) Requests to amend an application designated for hearing or for comparative evaluation, or tentatively selected by the random selection process may be granted only if a written petition demonstrating good cause is submitted and properly served upon the parties of record.

(c) The Commission will classify amendments on a case-by-case basis. Whenever previous amendments have been filed, the most recent amendment will be classified by reference to how the information in question stood as of the latest Public Notice issued which concerned the application. An amendment will be deemed to be a major amendment subject to § 101.37 and § 101.45 under any of the following circumstances:

(1) if the amendment results in a substantial modification of the engineering proposal such as (but not necessarily limited to):

(i) A change in, or an addition of a radio frequency channel;

- (ii) A change in polarization of the transmitted signal;
- (iii) An increase in the equivalent isotropically radiated power of three (3) dB or more;
- (iv) A change in type of transmitter emission or an increase in emission bandwidth of more than ten (10) percent;
- (v) A change in the geographic coordinates of a station's transmitting antenna of more than five (5) seconds of latitude or longitude, or both;
- (vi) A change of more than one (1) degree in the azimuth of the center of the main lobe of radiation of a point-to-point station's transmitting antenna (including any deflections by repeating devices);
- (vii) Any change which increases the antenna center line height by 3.0 meters (ten (10) feet) or more;
- (viii) Any changes or combination of changes which would cause harmful electrical interference to an authorized facility or result in a mutually exclusive conflict with another pending application; or
- (ix) Any technical change that would increase the effective radiated power in any direction by more than one and one-half (1.5) dB in the Digital Electronic Message Service.

(2) If the amendment would convert a proposal, such that it may have a significant impact upon the environment under § 1.1307 of the Commission's rules, which would require the submission of an environmental assessment, see § 1.1311 of this chapter, and Commission environmental review, see §§ 1.1308 and 1.1312 of this chapter.

(3) If the amendment results in a substantial and material alteration of the proposed service.

(4) If the amendment specifies a substantial change in beneficial ownership or control (*de jure* or *de facto*) of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under § 310(d) of the Communications Act of 1934 [47 U.S.C. § 310(d)]. Such a change would not be considered major where the assignment or transfer of control is for legitimate business purposes other than the acquisition of applications.

(5) If the amendment, or the cumulative effect of the amendment, is determined by the Commission otherwise to be substantial pursuant to § 309 of the Communications Act of 1934.

(d) A pending application may be amended by a major amendment to reflect the relocation of a proposed station site and a new application will not be required if:

(1) The geographic coordinates of the new station site are within 32.2 kilometers of the coordinates of the original site; and.

(2) The relocated station would serve essentially the same purpose in the system as originally proposed.

(e) The applicant must serve copies of any amendments or other written communications upon the following parties:

(1) Any applicant whose application appears on its face to be mutually exclusive with the application being amended, including those applicants originally served under § 101.509:

(2) Any applicant whose application has been found by the Commission, as published in a public notice, to be mutually exclusive with the application being amended; and

(3) Any party who has filed a petition to deny the application or other formal objection, when that petition or formal objection has not been resolved by the Commission.

(f) The Commission may waive the service requirements of paragraph (e) of this section and prescribe such alternative procedures as may be appropriate under the circumstances to protect petitioners' interests and to avoid undue delay in a proceeding, if an applicant submits a request for waiver which demonstrates that the service requirement is unreasonably burdensome. Requests for waiver must be served on petitioners. Oppositions to the petition may be filed within five (5) days after the petition is filed and must be served on the applicant. Replies to oppositions will not be entertained.

(g) Any amendment to an application must be signed and must be submitted in the same manner, and with the same number of copies, as was the original application. Amendments may be made in letter form if they comply in all other respects with the requirements of this chapter.

§ 101.31 Special temporary, temporary, and conditional authorizations.

(a) Special temporary authorization.

(1) In circumstances requiring immediate or temporary use of facilities, licensees subject to this part may request special temporary authority to install and/or operate new or modified equipment. Any such request may be submitted as an informal application in the manner set forth in § 101.9 and must contain full particulars as to the proposed operation including all facts sufficient to justify the temporary authority sought and the public interest therein. No such request will be considered unless the request is received by the Commission

at least 10 days prior to the date of proposed construction or operation or, where an extension is sought, expiration date of the existing temporary authorization.

(2) Special temporary authorization may be granted upon written request in the following circumstances:

(i) in emergency situations;

(ii) to permit restoration or relocation of existing facilities to continue communication service;

(iii) to conduct tests to determine necessary data for the preparation of an application for regular authorization;

(iv) for a temporary, non-recurring service where a regular authorization is not appropriate;

(v) in other situations involving circumstances which are of such extraordinary nature that delay in the institution of temporary operation would seriously prejudice the public interest.

(3) The Commission may grant requests for special temporary authority without issuing the public notice provided for in § 101.37 of this chapter for periods not exceeding 180 days, if there are extraordinary circumstances supporting the request and where delay in commencing temporary operation would seriously prejudice the public interest. Requests for special temporary authorization not involving extraordinary circumstances may be granted without public notice for a period of 30 days where an application for regular operation is not contemplated or for 60 days pending or after the filing of an application for regular operation. Requests for special temporary authority are issued on a strictly secondary, non-interfering basis, and does not in any way affect the final disposition of any application or action pending before the Commission.

(4) Extension of a special temporary authorization for a period of 180 days may be granted, but the renewing applicant bears a heavy burden to show that extraordinary circumstances warrant such an extension.

(5) Request for special temporary authorization must contain the following information:

(i) Name, address, and citizenship status of the applicant;

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

- (iii) Type of operation to be conducted;
- (iv) Purpose of operation;
- (v) Time and date of operation desired;
- (vi) Class of station and nature of service;
- (vii) Location of station and points with which station will communicate;
- (viii) Equipment to be used, specifying manufacturer, model number, and number of units;
- (ix) Frequency(s) desired.
- (x) Azimuth and beamwidth of major lobe of transmitting antenna and ERP;
- (xi) Type of emission;
- (xii) Description of antenna to be used, including height.
- (xiii) Certification that prior coordination is complete.

(6) In cases of emergency found by the Commission, involving danger to life or property or due to damage of equipment, or during a national emergency proclaimed by the President or declared by the Congress or during the continuance of any war in which the United States is engaged and when such action is necessary for the national defense or safety or otherwise in furtherance of the war effort, or in cases of emergency where the Commission finds that it would not be feasible to secure renewal applications from existing licensees or otherwise to follow normal licensing procedure, the Commission will grant construction permits and station licenses, or modifications or renewals thereof, during the emergency found by the Commission or during the continuance of any such national emergency or war, as special temporary licenses, only for the period of emergency or war, requiring such action, without the filing of formal applications.

(b) Temporary authorizations.

(1) Authorizations may be issued upon proper application for rendition of temporary service to subscribers under the following conditions:

(i) When a fixed station, authorized to operate at temporary locations, is to remain at a single location for more than 6 months, an application (FCC Form 402 or 494, as