

(2) File an application for modification of the license (or licenses) to delete the unused frequency (or frequencies); or

(3) Request waiver of this rule and demonstrate either that the frequency will be used (as evidenced by appropriate requests for service, etc.) within six months of the end of the initial period of nonuse, or that the frequency will be converted to allow rendition of other authorized public services within one year of the end of the initial period of nonuse by the filing of appropriate applications within six months of the end of the period of nonuse.

§ 101.307 Tariffs, reports, and other material required to be submitted to the Commission.

§§ 1.771 through 1.815 of this chapter contain summaries of certain materials and reports, including schedule of charges and accounting and financial reports, which, when applicable, must be filed with the Commission.

§ 101.309 Requirement that licensees respond to official communications.

All licensees in these services are required to respond to official communications from the Commission with reasonable dispatch and according to the tenor of such communications. Failure to do so will be given appropriate consideration in connection with any subsequent applications which the offending party may file and may result in the designation of such applications for hearing, or in appropriate cases, the institution of proceedings looking to the modification or revocation of the pertinent authorizations.

§ 101.311 Equal employment opportunities.

Equal opportunities in employment must be afforded by all common carrier licensees in accordance with the provisions of § 21.307 of this Chapter.

Subpart F-Developmental Authorizations

§ 101.401 Eligibility.

Developmental authorizations for stations in the radio services included in this part will be issued only to existing and proposed licensees who are legally, financially and otherwise qualified to conduct experimentation for the development of engineering or operational data, or techniques, directly related to a proposed radio service or to a regularly established radio service regulated by the rules of this part.

§ 101.403 Scope of service.

Developmental authorizations may be issued for:

- (a) Field strength surveys relative to or precedent to the filing of applications for licenses, in connection with the selection of suitable locations for stations proposed to be established in any of the regularly established radio services regulated by the rules of this part; or
- (b) The testing of existing or authorized antennas, wave guides, paths, or other equipment used in a system subject to this part.

§ 101.405 Adherence to program of research and development.

The program of research and development, as stated by an applicant in the application for license or stated in the instrument of station authorization, must be substantially adhered to unless the licensee is otherwise authorized by the Commission.

§ 101.407 Special procedure for the development of a new service or for the use of frequencies not in accordance with the provisions of the rules in this part.

(a) An authorization for the development of a new service not in accordance with the provisions of the rules in this part may be granted for a limited time, but only after the Commission has made a preliminary determination with respect to the factors set forth in this paragraph, as each case may require. This procedure also applies to any application that involves use of a frequency which is not in accordance with the provisions of the rules in this part, although in accordance with the Table of Frequency Allocations contained in Part 2 of this chapter. (An application which involves use of a frequency which is not in accordance with the Table of Frequency Allocations in Part 2 of this chapter should be filed in accordance with the provisions of Part 5 of this chapter, Experimental Radio Services.) The factors with respect to which the Commission will make a preliminary determination before acting on an application filed under this paragraph are as follows:

(1) That the public interest, convenience or necessity warrants consideration of the establishment of the proposed service or the use of the proposed frequency;

(2) That the proposed operation appears to warrant consideration to effect a change in the provisions of the rules in this part: and/or

(3) That some operational data should be developed for consideration in any rule making proceeding which may be initiated.

(b) Applications for stations that are intended to be used in the development of a proposed service must be accompanied by a petition to amend the Commission's rules with respect to frequencies and such other items as may be necessary to provide for the regular establishment of the proposed service.

§ 101.409 Terms of grant; general limitations.

(a) Developmental authorizations normally will be issued for one year, or such shorter term as the Commission may deem appropriate in any particular case, and will be subject to cancellation without hearing by the Commission at any time upon notice to the licensee.

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

(c) Frequencies allocated to the service toward which such development is directed will be assigned for developmental operation on the basis that no interference will be caused to the regular services of stations operating in accordance with the Commission's Table of Frequency Allocations (§ 2.106 of this chapter).

(d) The rendition of communication service for hire is not permitted under any developmental authorizations unless specifically authorized by the Commission.

(e) The grant of a developmental authorization carries with it no assurance that the developmental program, if successful, will be authorized on a permanent basis either as to the service involved or the use of the frequencies assigned or any other frequencies.

§ 101.411 Supplementary showing required.

(a) Authorizations for development of a proposed radio service in the services included in this part will be issued only upon a showing that the applicant has a definite program of research and development, the details of which must be set forth, which has reasonable promise of substantial contribution to these services within the term of such authorization. A specific showing should be made as to the factors which qualify the applicant technically to conduct the research and development program, including a description of the nature and extent of engineering facilities that the applicant has available for such purposes.

(b) Expiring developmental authorizations may be renewed only upon the applicant's compliance with the applicable requirements of § 101.413(a) and (b) relative to the authorization sought to be renewed and upon a factual showing that further progress in the program of research and development requires further radio transmission and that the public interest, convenience or necessity would be served by renewal of such authorization.

§ 101.413 Developmental report required.

(a) Upon completion of the program of research and development, or, in any event, upon the expiration of the instrument of station authorization under which such investigations were permitted, or at such times during the term of the station authorization as the Commission may deem necessary to evaluate the progress of the developmental program, the licensee must submit, in duplicate, a comprehensive report on the following items, in the order designated:

- (1) Report on the various phases of the project which were investigated.
- (2) Total number of hours of operation on each frequency assigned.
- (3) Copies of any publication on the project.
- (4) Detailed analysis of the result obtained.
- (5) Any other pertinent information.

(b) In addition to the information required by paragraph (a) of this section, the developmental report of a station authorized for the development of a proposed radio service must include comprehensive information on the following items:

- (1) Probable public support and methods of its determination.
- (2) Practicability of service operations.
- (3) Interference encountered.
- (4) Pertinent information relative to merits of the proposed service.
- (5) Propagation characteristics of frequencies used, particularly with respect to the service objective.
- (6) Frequencies believed to be more suitable and reasons therefor.
- (7) Type of signals or communications employed in the experimental work.

(c) Developmental reports will be made a part of the Commission's public records, except upon the applicant's specific request for confidentiality and Commission approval in accordance with § 0.459 of this Chapter. Information determined confidential by the Commission will not be publicly disclosed.

Subpart G-Digital Electronic Message Service

§ 101.501 Eligibility.

Applications will be granted only in cases in which the applicant establishes it is legally, technically, financially and otherwise qualified to render the services proposed and that the public interest, convenience and necessity would be served by such a grant. Each application will identify the Standard Metropolitan Statistical Area (SMSA) within which boundaries the Digital Electronic Message Service (DEMS) nodal station will be constructed and which the

facility will serve.

§ 101.503 Digital Electronic Message Service Nodal Stations.

DEMS Nodal Stations may be authorized only as a part of an integrated communication system wherein DEMS User Stations associated therewith also are licensed to the DEMS Nodal Station licensee. Applications for DEMS Nodal Station licenses should specify the maximum number of DEMS User Stations to be served by that nodal station. Any increase in that number must be applied for pursuant to § 101.15.

§ 101.505 Frequencies.

(a) Frequencies in the 17,700-19,700 MHz band are available for assignment for all DEMS applicants. Assignment will consist of a pair of channels as set out in paragraph (c) of this section plus internodal channels as set out in paragraph (d) of this section.

(b) Licensees may apply for an additional channel pair in an SMSA only when it is operating its previously authorized DEMS at or near the expected capacity and the service to be provided will fully utilize all spectrum requested.

(c) DEMS assignments will be made according to the following plan, except that systems licensed, in operation, or applied for in the 10.565-10,615 and 10.630-10,680 MHz bands prior to July 15, 1993 are permitted to use frequencies in those bands if they prior coordinate with 10 GHz point-to-point licensees:

Channel No.	Nodal station frequency band (MHz)	User station frequency band (MHz)
30.....	18,870-18,880	19,210-19,220
31.....	18,880-18,890	19,220-19,230
32.....	18,890-18,900	19,230-19,240
33.....	18,900-18,910	19,240-19,250
34.....	18,910-18,920	19,250-19,260

These channel pairs will be assigned in each SMSA and may be subdivided as desired by the licensee.

(d) Internodal link assignments are to be made in accordance with the provisions of Subpart I, applying to point-to-point operations.

§ 101.507 Frequency stability

The frequency stability of each DEMS Nodal Station transmitter authorized for this service in the 17,700-19,700 MHz band must be $\pm 0.001\%$. The frequency stability of each DEMS User Station transmitter authorized for this service in this band must be $\pm 0.003\%$.

§ 101.509 Interference protection criteria.

(a) All harmful interference to other users and blocking of adjacent channel use in the same city and cochannel use in nearby Standard Metropolitan Statistical Areas is prohibited. In areas where SMSA's are in close proximity, careful consideration should be given to minimum power requirements and to the location, height, and radiation pattern of the transmitting antenna. Licensees and applicants are expected to cooperate fully in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.

(b) As a condition for use of frequencies in this service each carrier is required to:

(1) Engineer the system to be reasonably compatible with adjacent channel operations in the same city; and

(2) Cooperate fully and in good faith to resolve whatever potential interference and transmission security problems may be present in adjacent channel operation.

(c) The following interference studies, as appropriate, must be included with each application for a new or major modification in a DEMS Nodal Station:

(1) An analysis of the potential for harmful interference with other stations if the coordinates of any proposed station are located within 80 kilometers (50 miles) of the coordinates of any authorized, or previously proposed station(s) that utilizes, or would utilize, the same frequency or an adjacent potentially interfering frequency; and

(2) An analysis concerning possible adverse impact upon Canadian communications if the station's transmitting antenna is to be located within 55 kilometers (35 miles) of the Canadian border.

(d) In addition a copy of the interference analysis submitted in response to paragraph (c)(1) of this section must be served on all applicants and/or grantees concerned within 5 days of its submission to the Commission.

§ 101.511 Purpose and permissible service.

(a) The DEMS is intended to provide for the exchange of digital information among and between subscribers using one or more DEMS Systems.

(b) Unless otherwise directed or conditioned in the applicable instrument of authorization,

DEMS may be used to exchange any type of digital information consistent with the Commission's Rules and the applicable tariff of the carrier.

(c) The carrier's tariff must fully describe the parameters of the service to be provided, including the degree of communications security a subscriber can expect in ordinary service.

§ 101.513 Transmitter power.

The transmitter power will be governed by § 101.113 of this rule part. Further, each application must contain an analysis demonstrating compliance with § 101.113(a).

§ 101.515 Emissions and bandwidth.

Different types of emissions may be authorized if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the bandwidth desired is no wider than needed to provide the intended service. In no event, however, may the necessary or occupied bandwidth exceed the specified channel width of the assigned pair.

§ 101.517 Antennas.

(a) Transmitting antennas may be omnidirectional or directional, consistent with coverage and interference requirements.

(b) The use of horizontal or vertical plane wave polarization, or right hand or left hand rotating elliptical polarization must be used to minimize harmful interference between stations.

(c) Directive antennas must be used at all DEMS User Stations and may be elevated no higher than necessary to assure adequate service. Antenna structures requiring FAA notification under Part 17 of this Chapter must be registered with the Commission. The structure owner is responsible for registering, painting, and lighting the structure if applicable. Requests for such authorization must show the inclusive dates of the proposed operation.

§ 101.519 Interconnection.

(a) All DEMS licensees must make available to the public all information necessary to allow the manufacture of user equipment that will be compatible with the licensee's network.

(b) All DEMS licensees must make available to the public all information necessary to allow interconnection of DEMS networks.

§ 101.521 Spectrum utilization.

All applicants for DEMS frequencies must submit as part of the original application a detailed

plan indicating how the bandwidth requested will be utilized. In particular the application must contain detailed descriptions of the modulation method, the channel time sharing method, any error detecting and/or correcting codes, any spatial frequency reuse system and the total data throughput capacity in each of the links in the system. Further, the application must include a separate analysis of the spectral efficiency including both information bits per unit bandwidth and the total bits per unit bandwidth.

Subpart H-Private Operational Fixed Point-to-Point Microwave Service

§ 101.601 Eligibility

Any person, or any governmental entity or agency, eligible for licensing in a radio service under Parts 80, 87, or 90 or any person proposing to provide communications service to such persons, governmental entities or agencies is eligible to hold a license under this Subpart.

§ 101.603 Permissible Communications.

(a) Except as provided in paragraph (b) of this section, stations in this radio service may transmit communications as follows:

(1) On frequencies below 21,200 MHz, licensees may transmit their own communications, including the transmission of their products and information services, to their customers except that the distribution of video entertainment material to customers is permitted only as indicated in § 101.101 and subparagraph (a)(2) of this section.

(2) In the frequency bands 6425-6525 MHz, 18,142-18,580 MHz and on frequencies above 21,200 MHz, licensees may deliver any of their own products and services to any receiving location;

(3) Licensees may transmit the communications of their parent corporation, or of another subsidiary of the same parent, or their own subsidiary where the party to be served is regularly engaged in any of the activities that constitute the basis for eligibility to use the frequencies assigned;

(4) Licensees may transmit the communications of other parties in accordance with § 101.135;

(5) Licensees may transmit emergency communications unrelated to their activities in accordance with § 101.205;

(6) Licensees may transmit communications on a commercial basis to eligible users, among different premises of a single eligible user, or from one eligible user to another as part of transmissions by Digital Electronic Message Service systems on the frequencies provided for this purpose;

(7) Licensees may transmit program material from one location to another, provided that the frequencies do not serve as the final RF link in the chain of distribution of the program material to broadcast stations;

(b) Stations licensed in this radio service shall not:

(1) Render a common carrier communications service of any kind.

(2) Transmit program material for use in connection with broadcasting, except as provided in paragraphs (a)(2), and (a)(7)) of this section.

(3) Be used to provide the final RF link in the chain of transmission of program material to cable television systems, multipoint distribution systems or master antenna TV systems, except in the frequency bands 6425-6525 and 18,142-18,580 MHz and on frequencies above 21,200 MHz.

Subpart I - Common Carrier Fixed Point-to-Point Microwave Service

§ 101.701 Eligibility.

(a) Authorizations for stations in this service will be issued to existing and proposed common carriers. Applications will be granted only in cases in which it is shown that:

(1) The applicant is legally, technically, financially and otherwise qualified to render the proposed service;

(2) There are frequencies available to enable the applicant to render a satisfactory service; and

(3) The public interest, convenience, and necessity would be served by a grant thereof.

(b) If the content is originated, selected, controlled, or otherwise substantively influenced by the applicant, licensee, or a closely affiliated entity, no station or radio frequency in this service will be authorized, or may be utilized, to transmit any closed circuit television signals or television signals other than broadcast television signals, unless:

(1) Such service is otherwise permitted for a specific length of time by grant of an acceptable petition for waiver of this rule; or

(2) Such service is otherwise permitted by a condition in the applicable instrument of authorization; or

(3) Such service is provided pursuant to applicable FCC tariff and is

temporary and occasional intra-company television communication for management, network supervision, or other internal carrier functions.

For purposes of this paragraph, an entity will be considered to be "closely affiliated" with an applicant if it is in a parent-subsidary relationship, or both are commonly controlled, or they have any common officers or management employees.

(c) Applications for stations or frequencies that will be used primarily to relay broadcast television signals must include a demonstration (including appropriate system diagrams and tables) that at least fifty percent of the customers (or points of service) on the microwave system involved, including those served through an interconnecting carrier(s), receiving applicant's service, will not be related or affiliated in any degree with the applicant, and that the proposed usage by such customers, in terms of hours of use and channels delivered, must constitute at least fifty percent of the usage of the applicant's microwave service. Applications that do not contain these demonstrations will be returned as unacceptable for filing.

§101.703 Permissible communications.

Stations in this service are authorized to render any kind of communication service provided for in the legally applicable tariffs of the carrier, unless otherwise directed in the applicable instrument of authorization or limited by § 101.147 or §§ 101.111 and 101.113.

§101.705 Renewal of station licenses.

(a) An application for renewal of a station license in the Common Carrier Fixed Point-to-Point Microwave Service primarily used to relay television signals must contain:

(1) A statement that such use complies with § 101.701(b); and

(2) The demonstration required by § 101.701(c). Applications that do not contain these items as appropriate will be returned as unacceptable for filing.

(b) Any application for renewal of license, for a term commencing January 1, 1975, or after, involving facilities utilizing frequency diversity must contain a statement showing compliance with § 101.103(c) or the exceptions recognized in paragraph 141 of the "First Report and Order" in Docket No. 18920 (FCC 71-547). If not in compliance, a complete statement with the reasons therefor must be submitted.

Subpart J-Local Television Transmission Service

§ 101.801 Eligibility.

Authorizations for stations in this service will be granted to existing and proposed communication common carriers. Applications will be granted only in cases where it is shown that (a) the applicant is legally, financially, technically and otherwise qualified to render the proposed service, (b) there are frequencies available to enable the applicant to render a satisfactory service, and (c) the public interest, convenience or necessity would be served by a grant thereof.

§ 101.803 Frequencies.

(a) Frequencies in the following bands are available for assignment to television pickup and television non-broadcast pickup stations in this service:

- 6,425 to 6,525 MHz./6/
- 11,700 to 12,200 MHz./3/
- 13,200 to 13,250 MHz./1/
- 14,200 to 14,400 MHz.
- 21,200 to 22,000 MHz./1./2./4./5/
- 22,000 to 23,600 MHz./1./2./5/
- 31,000 to 31,300 MHz./7/

/1/ This frequency band is shared with fixed and mobile stations licensed under this and other parts of the Commission's Rules.

/2/ This frequency band is shared with Government stations.

/3/ This frequency band is shared, on a secondary basis, with stations in the broadcasting-satellite and fixed-satellite services.

/4/ This frequency band is shared with stations in the earth-exploration satellite service.

/5/ Assignments to common carriers in this band are normally made in the segments 21,200-21,800 MHz and 22,400-23,800 MHz and to operational fixed users in the segments 21,800-22,400 MHz and 23,000-23,600 MHz. Assignments may be made otherwise only upon a showing that interference free frequencies are not available in the normally assigned band segments. The maximum power for the local television transmission service in the 14.2-14.4 GHz band is +45 dBW except that operations are not permitted within 1.5 degrees of the geostationary orbit.

/6/ This band is co-equally shared with mobile stations licensed pursuant to Parts 74 and 78, and Subpart H of this part of the Commission's rules.

/7/ Use of this spectrum for direct delivery of video programs to the general public or multi-channel cable distribution is not permitted.

(b) Communications common carriers in the Local Television Transmission Service may be assigned frequencies listed in §§ 74.602(a), 78.18(a)(7) and 78.18(a)(8) to provide service to television broadcast stations, television broadcast network-entities, cable system operators and cable network-entities. Frequency availability is subject to the provisions of § 74.604 and the use of the facility is limited to the permissible uses described in §§ 74.631 and 78.11. Operations on these frequencies are subject to the technical provisions of Part 74, Subpart F, and Part 78, Subpart D of this chapter.

(c) [Reserved]

(d) Frequencies in the following bands are available for assignment to television STL stations in this service:

3,700 to 4,200 MHz <i>/1/</i>	21,200 to 22,000 MHz <i>/2/, /4/, /7/, /8/</i>
5,925 to 6,425 MHz <i>/1/, /5/</i>	22,000 to 23,600 MHz <i>/2/, /6/, /8/</i>
10,700 to 11,700 MHz <i>/1/, /6/</i>	31,000 to 31,300 MHz <i>/9/</i>
13,200 to 13,250 MHz <i>/2/</i>	

/1/ This frequency band is shared with stations in the Point to Point Microwave Radio Service and, in United States Possessions in the Caribbean area, with stations in the International Fixed Radiocommunications Services.

/2/ This frequency band is shared with fixed and mobile stations licensed under this and other parts of the Commission's rules.

/3/ This frequency band is shared with space stations (space to earth) in the fixed-satellite service.

/4/ This frequency band is shared with Government stations.

/5/ This frequency band is shared with earth stations (earth to space) in the fixed-satellite services.

/6/ The band segments 10.95-11.2 and 11.45-11.7 GHz are shared with space stations (space to earth) in the fixed-satellite service.

/7/ This frequency band is shared with space stations (space to earth) in the earth exploration satellite service.

/8/ Assignments to common carriers in this band are normally made in the segments 21,200-21,800 MHz and 22,400-23,000 MHz and to operational fixed users in the segments 21,800-22,400 MHz and 23,000-23,600 MHz. Assignments may be made otherwise only upon a showing that interference free frequencies are not available in the appropriate band segments.

/9/ Frequencies in this band are co-equally shared with stations in the Auxiliary Broadcasting (Part 74), Cable Television Relay (Part 78), Private Operational-Fixed Microwave (Subpart H) and General Mobile Radio (Part 95) Services.

(e) 31.0 to 31.3 GHz. These frequencies are shared on a co-equal basis with other stations in the fixed and mobile services (see Parts 74, 78, and 95, and Subpart H). No interference

protection is afforded to fixed or mobile stations operating in this band.

- (1) 25 MHz authorized bandwidth channels, 150 MHz separation.

Transmit (receive) (MHz)	Receive (transmit) (MHz)
31,012.5	31,162.5
31,037.5	31,187.5
31,062.5	31,212.5
31,087.5	31,237.5
31,112.5	31,262.5
31,137.5	31,287.5

- (2) 50 MHz authorized bandwidth channels, 150 MHz separation.

Transmit (receive) (MHz)	Receive (transmit) (MHz)
31,025.0	31,175.0
31,075.0	31,225.0
31,125.0	31,275.0

(f) On the condition that harmful interference will not be caused to services operating in accordance with the Table of Frequency Allocations, persons holding valid station authorizations on July 15, 1963, to provide television nonbroadcast pickup service in the 6525-6575 MHz band may be authorized to continue use of the frequencies specified in their authorization for such operations until July 15, 1968.

(g) 6425 to 6525 MHz--Mobile Only. Paired and un-paired operations permitted. Use of this spectrum for direct delivery of video programs to the general public or for multi-channel cable distribution is not permitted. This band is co-equally shared with mobile stations licensed pursuant to Parts 74 and 78 of the Commission's Rules. The following channel plans apply.

- (1) 1 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6425.5	6475.5

6450.5 6500.5

(2) 8 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6430.0	6480.0
6438.0	6488.0
6446.0	6596.0
6455.0	6505.0
6463.0	6513.0
6471.0	6521.0

(3) 25 MHz maximum authorized bandwidth channels.

Transmit (or receive) (MHz)	Receive (or transmit) (MHz)
6437.5	6487.5
6462.5	6512.5

(h) The frequency 27.255 MHz in the 27.23-27.28 MHz band is allocated for assignment to microwave auxiliary stations in this service on a shared basis with other radio services. Assignments to stations on this frequency will not be protected from such interference as may be experienced from the emissions of industrial, scientific and medical equipment operating on 27.12 MHz in accordance with § 2.106 of this chapter.

§ 101.805 Assignment of frequencies to mobile stations.

The assignment of frequencies to mobile stations in this service will not be limited to a single licensee within any area. However, geographical limits within which mobile units may operate may be imposed by the Commission.

§ 101.807 Transmitter power.

Stations in this service will not be authorized to use transmitters having a rated power output in excess of the limits set forth in § 101.113(b) and a standby transmitter having a rated power output in excess of that of the main transmitter with which it is associated will not be authorized.

§ 101.809 Bandwidth and emission limitations.

(a) Stations in this service operating on frequencies in the 27.23-27.28 MHz band will be authorized to employ only amplitude modulated or frequency modulated emission for radiotelephony. The authorization to use such emissions will be construed to include authority to employ unmodulated emission only for temporary or short periods necessary for equipment testing incident to the construction and maintenance of the station.

(b) Stations in the service operating on frequencies above 940 MHz may be authorized to use amplitude modulated, frequency modulated or pulse type of emission for radiotelephony and television. In addition, the use of unmodulated emission may be authorized in appropriate cases.

(c) The maximum bandwidths which will normally be authorized for single channel operation on frequencies below 500 MHz in this service must not exceed the limits set forth below:

Type of emission	Authorized bandwidth (kHz)
A3E	8
F3E or (G3E)	40

(d) Maximum bandwidths in the following frequency bands must not exceed the limits set forth below:

Frequency band (MHz)	Maximum authorized bandwidth (MHz)
3,700 to 4,200	20
5,925 to 6,425	30
6,425 to 6,525	25
10,700 to 12,200	40
13,200 to 13,250	25
22,000 to 23,600	100

(e) The bandwidths authorized on frequencies above 500 MHz must be appropriate to the type of operation in any particular case. An application requesting such authorization must fully describe the modulation, emission, and bandwidth desired and must specify the bandwidth to be occupied.

§ 101.811 Modulation requirements.

- (a) The use of modulating frequencies higher than 3000 hertz for single channel radiotelephony or tone signaling on frequencies below 500 MHz is not authorized.
- (b) When amplitude modulation is used, the modulation percentage must be sufficient to provide efficient communication and must normally be maintained above 70 percent on positive peaks, but may not exceed 100 percent on negative peaks.
- (c) When phase or frequency modulation is used for single channel radiotelephony on frequencies below 500 MHz, the deviation arising from modulation may not exceed plus or minus 15 kHz from the unmodulated carrier.
- (d) Each unmultiplexed radiotelephone transmitter having more than 3 watts plate power input to the final radio frequency stage and initially installed at the station in this service after September 4, 1956, must be provided with a device that will automatically prevent modulation in excess of that specified in paragraphs (b) and (c) of this section which may be caused by greater than normal audio level.

§ 101.813 Remote control operation of mobile television pickup stations.

- (a) Mobile television pickup stations (including nonbroadcast) may be operated by remote control from the fixed locations for periods not to exceed 6 months.
- (b) The Commission may, upon adequate showing by the licensee as to why the television pickup operations should not be conducted under a fixed station authorization, renew the authority granted under the provisions of paragraph (a) of this section.
- (c) Reference should be made to § 101.125 concerning mobile station antenna height restrictions and to paragraphs (c) and (f) of § 101.131 concerning control points.

§ 101.815 Stations at temporary fixed locations.

- (a) Authorizations may be issued upon proper application for the use of frequencies listed in § 101.803 by stations in the Local Television Transmission Service for rendition of temporary service to subscribers under the following conditions:
 - (1) When a fixed station is to remain at a single location for less than 6 months, the location is considered to be temporary. Services that are initially known to be of longer than 6 months' duration may not be provided under a temporary fixed authorization but rendered pursuant to a regular license
 - (2) When a fixed station authorized to operate at temporary locations is installed and it subsequently becomes necessary for the station to operate from such location for more than six months, application FCC Form 494 for a station authorization to specify the permanent location must be filed at least thirty days prior to the expiration of the six month period.

(3) The station must be used only for rendition of communication service at a remote point where the provision of wire facilities is not practicable.

(4) The antenna structure height employed at any location may not exceed the criteria set forth in § 17.7 of this chapter unless, in each instance, authorization for use of a specific maximum antenna structure height for each location has been obtained from the Commission prior to erection of the antenna. See § 101.125.

(5) Applications for such stations must comply with the provisions of § 101.713.

(b) Applications for authorizations to operate stations at temporary locations under the provisions of this section may be made upon FCC Form 494. Blanket applications may be submitted for the required number of transmitters.

(c) Prior coordination of mobile assignments will be in accordance with the procedures in § 101.103(d) except that the prior coordination process for mobile (temporary fixed) assignments may be completed orally and the period allowed for response to a coordination notification may be less than 30 days if the parties agree.

§ 101.817 Notification of station operation at temporary locations.

(a) The licensee of stations authorized pursuant to § 101.813 must notify the Commission prior to each period of operation. This notification may be oral or written and must include:

(1) The call sign, manufacturer's name, type or model number, output power and specific location of the transmitter(s).

(2) The maintenance location for the transmitter.

(3) The location of the transmitting or receiving station with which it will communicate and the identity of the correspondent operating such facilities.

(4) The exact frequency or frequencies to be used.

(5) The public interest, convenience and necessity to be served by operation of the proposed installation.

(6) The commencement and anticipated termination dates of operation from each location. In the event the actual termination date differs from the previous notification, written notice thereof promptly must be given to the Commission.

(7) Where the notification contemplates initially a service that is to be rendered for a period longer than 90 days, the notification must contain a showing as to why application should not be made for regular authorization.

(8) A notification must include compliance with the provisions of § 101.813(c).

(b) A copy of the notification must be kept with the station license.

§ 101.819 Stations affected by coordination contour procedures.

In frequency bands shared with the communication-satellite service, applicants must also comply with the requirements of § 101.21.

APPENDIX B

Cross Reference Table

Present Section	Proposed Section	Present	Proposed Section
Subpart A--General		21.36--21.37	Deleted.
21.1	101.1	21.38	101.53
21.2	101.3	21.39	101.55
Subpart B--Applications and Licenses		21.40	101.57
21.3	101.5	21.41	101.59
21.4	101.7	21.42	101.61
21.5	101.9	21.43	101.63
21.6	101.11	21.44	101.65
21.7	101.15	21.45	101.67
21.8--21.10 . . .	Deleted.	21.50	101.69
21.11	101.15	Subpart C--Technical Standards	
21.12	Deleted.	21.100	101.103
21.13	101.19	21.101	101.107
21.14	Deleted.	21.102--21.104	Deleted.
21.15	101.21	21.105	101.109
21.16	Deleted.	21.106	101.111
21.17	Deleted.	21.107	101.113
21.18	Deleted.	21.108(a)-(d)	101.115(a)-(d)
21.19	101.23	21.108(e)	101.145
21.20	101.35	21.109	Deleted.
21.21	101.25	21.110	101.117
21.22	101.27	21.111	101.119
21.23	101.29	21.112	101.121
21.24	Deleted.	21.113	101.123
21.25	101.31	21.114	101.125
21.26	101.35	21.115	Deleted.
21.27	101.37	21.116	101.127
21.28	101.39	21.117	101.129
21.29	101.41	21.118	101.131
21.30	101.43	21.119	101.133(a)
21.31	101.45	21.120	101.139
21.32	101.47	21.121	Deleted.
21.33	101.49	21.122	101.141
21.34	Deleted.		
21.35	101.51		

Present Section	Proposed Section
Subpart D--Technical Operations	
21.200	101.201
21.201	101.215
21.202--21.208	Deleted.
21.209	101.205
21.210	101.207
21.211	101.209
21.212--21.213	Deleted.
21.214	101.211
Subpart E--Miscellaneous	
21.300	Deleted.
21.301	101.301
21.302	101.303
21.303	101.305
21.304	101.307
21.305	Deleted.
21.306	101.309
21.307	101.311
Subpart F--Developmental Authorizations	
21.400	101.401
21.401	101.403
21.402	101.405
21.403	101.407
21.404	101.409
21.405	101.411
21.406	101.413
Subpart G--Digital Electronic Message Service	
21.500	101.501
21.501	101.503
21.502	101.505
21.503	101.507
21.504	101.509
21.505	101.511
21.506	101.513
21.507	101.113
21.508	101.515
21.509	101.517

Present Section	Proposed Section
21.510	101.519
21.511	101.521
Subpart H--[Reserved]	
Subpart I--Point-to-Point Microwave Radio Service	
21.700	101.701
21.701	101.147
21.702	101.113
21.703	101.109 & 101.111
21.704	101.141
21.705	101.703
21.706	101.21
21.707	101.31
21.708	101.31
21.709	101.705
21.710(a-c)	101.145
21.710(d)	101.141
21.711	101.149
21.713	Deleted
Subpart J--Local Television Transmission Service	
21.800	101.801
21.801	101.803
21.802	101.805
21.803	101.807
21.804	101.809
21.805	101.811
21.806	101.813
21.807	101.815
21.808	101.817
21.809	101.819
Subpart K--Multipoint Distribution Service [This Subpart retained in Part 21]	

Part 94

Present Section	Proposed Section	Present Section	Proposed Section
		94.31(f)	101.19
		34.31(g)	Deleted.
		34.31(h)	101.121
		94.31(i)	101.5(c)
		94.31(j)	Deleted.
		94.31(k)	101.147
		94.33	101.35
		94.35(a)	Deleted.
		94.35(b)	101.39(a)
		94.37	101.47
		94.39(a)	101.67(d)
		94.39(b)	101.409
		94.41	101.47(d)
		94.43	101.31
		94.45	101.57(d)(e)
		94.47(a)	101.53(a)
		94.47(b)	101.55(b)
		94.49	Deleted.
		94.51	101.63
		94.53	101.65(d)
		94.57	Deleted.
		94.59	101.69
Subpart A--General Information		Subpart C--Technical Standards	
94.1	101.1	94.61	101.101
94.3	101.3	94.63	101.105
94.5	101.601	94.65	101.147
94.7	101.7(a)	94.67	101.107
94.9	101.603	94.69	101.109(b)
94.11(a)	101.133(b)	94.71(a)	101.109(a)
94.11(b)	101.205	94.71(b)	101.109(c)
94.13	101.137	94.71(c)-(e)	101.111
94.15(a)	101.103(a)	94.73	101.113
94.15(b)-(d)	Deleted.	94.75(a)(b)	101.115
94.15(e)	101.149	94.75(c)	Deleted.
94.15(f)	101.149	94.75(d)-(f)	101.115
94.15(g)	101.149	94.75 (g)	Deleted.
94.15(h)	Deleted.	94.75(h)	101.517
94.15(i)(j)	Deleted.	94.77(a)	101.145
94.17	101.135	94.79	101.143
94.19	101.133(c)		
Subpart B--Applications, Authorizations, and Notifications			
94.23	101.5(a)		
94.25(a)(b)	101.11		
94.25(d)	101.13(b)		
94.25 (e)	101.13(c)		
94.25(f)	101.123(a)		
94.25(g)	101.123(b)		
94.25(h)	101.603(b)(3)		
94.25(i)	101.123(c)		
94.25(j)	101.13(f)		
94.25(k)	101.101		
94.27	101.13		
94.29	101.33		
94.31(a)	101.19		
94.31(b)(c)	Deleted.		
94.31(d)	101.411		
94.31(e)	101.13(b)		

Present Section	Proposed Section
94.81	101.139
94.83	101.131(a)
94.85	Deleted.
94.88	101.147(r)(10)
94.90	101.147(q)
94.91	101.147(s)
94.92	101.105(d)
94.93	101.147(p)
9.94	101.141(e)
94.95	Deleted.

Subpart D--Station Operating Requirements

94.101	101.209
94.103	101.211
94.105	101.213
94.107	101.215
94.109	101.201
94.111	101.121
94.113	101.217

Subpart E--Developmental Operation

94.151	101.401
94.153	101.407
94.155	101.405
94.157	101.409(b)
94.159	101.409(b)
94.161	101.409
94.163	101.411
94.165	101.413

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APPENDIX C

WT Docket No. 94-148 Commenters List

COMMENTS

1. AirTouch Communications, Inc.
2. Alcatel Network Systems, Inc.
3. ALLTELL Mobile Communications, Inc.
4. American Petroleum Institute
5. Association of American Railroads
6. AT&T Corp.
7. BellSouth
8. C.S.I. Telecommunications
9. Cellular Communications of Puerto Rico, Inc.
10. Central and South West Services, Inc.
11. Comsearch
12. Creative Broadcast Techniques, Inc.
13. Digital Microwave Corporation
14. E.F. Johnson Company
15. EDS Corporation
16. Entergy Services, Inc.
17. GTE Service Corporation
18. Harris Corporation-Farion Division

19. Industrial Telecommunications Association, Inc.
20. Liberty Cable Company
21. Local Area Telecommunications, Inc.
22. MCI Telecommunications Corporation
23. Metropolitan Water District of Southern California
24. Motorola
25. NYNEX Corporation
26. Omaha Public Power District
27. Pacific Bell, Nevada Bell and Pacific Bell Mobile Services
28. People's Choice TV Corp.
29. Pepper & Corrazzini, L.L.P.
30. Rural Common Carrier Microwave Coalition
31. SBC Communications
32. Telecom Services Group, Inc.
33. Telephone and Data Systems, Inc.
34. The Southern Company
35. TIA/NSMA
36. UTC
37. Western Multiplex Corporation
38. WinComm, Inc
39. Wireless Cable Association International, Inc.

Replies

1. AirTouch Communications, Inc.
2. Alcatel Network Systems, Inc.
3. American Petroleum Institute
4. Association of American Railroads
5. AT&T Corp.
6. C.S.I. Telecommunications
7. CellNet Data Systems
8. Comsearch
8. Creative Broadcast Techniques, Inc.
10. Digital Microwave Corporation
11. EMI Communications Corporation
12. GTE Service Corporation
13. MCI Telecommunications Corporation
14. Montana Power Company
15. Personal Communications Industry Association
16. The Southern Company
17. TIA/NSMA
18. Union Telephone Company
19. UTC