

Operations at 2000-3000 and 5167.5 kHz.

We propose no rules corresponding to Sections 90.47, 90.53(b)(1) and 90.253 concerning operations at 2000-3000 kHz and 5167.5 kHz. A review of our licensing records indicated no applications under these rule sections. The rare applicant for these frequencies could file for a rule waiver.

Out-of-band Chirp Limitations.

We propose to add to our frequency stability limitations the requirement that all transmitters type accepted under Part 88 limit "chirps", e.g. transient transmissions at a rapidly changing frequency that may extend a few megahertz from the carrier frequency, to less than 20 milliseconds duration. In the past decade, synthesized transmitters have become common. This type of transmitter, if not properly designed, can cause brief chirps that could cause interference to other users, particularly to television receivers operating in adjacent bands and to other licensees operating digital systems. See § 88.425(c).

Partial Assignments.

We propose expanding the explicit option to make partial assignments to most frequencies under this part. In addition, the definition of partial assignment would allow a licensee to employ narrowband equipment and assign the rest of the original channel-width to another applicant. See Appendix D, § 88.127.

Power Limitations For Paging Operations.

We propose no changes to the power limitations for paging operations. We seek comment, however, on whether to raise permissible power levels on some paging frequency(s), and, if so, to what power and when? See Appendix D, § 88.1067.

Reduced Paperwork Requirements.

We propose to eliminate several rules that impose unnecessary regulatory burdens. For example, licensees are currently required to furnish us with detailed technical information describing the radio system so that we can process license applications or review compliance with our operational rules.²⁸ The information from these reporting requirements is not, in fact, used by our staff.

Shared Use of Radio Stations and Multiple Licensing.

We propose reducing the options for shared use to private carriers (SMRs) only. We also propose eliminating all forms of multiple licensing.²⁹ In the past, shared use was needed by industry because certain radio facilities became too expensive for a single small licensee. This need was significantly reduced by the rise of SMRs and other private carriers. Shared facilities and multiple licensed systems (such as community repeaters) are, from the point of view of most actual users, indistinguishable from private carriers. On the other hand, shared use and multiple licensing increase paperwork and cause the licensing database to contain unnecessary and often misleading information. See Appendix D, § 88.321.

Spread Spectrum Operations

We propose to include direct sequence spread spectrum systems for use in public safety covert operations. Because of the availability of direct sequence spread spectrum equipment, we believe that it would be in the public interest to not limit the use of spread spectrum systems by public safety eligibles solely to frequency hopping equipment. We seek comment on this proposal with respect to potential interference to normal operations by direct sequence spread spectrum systems. See § 88.491.

Trunked Operations.

We propose permitting centralized trunking below 800 MHz. Our proposed rules require either exclusivity or written concurrence. One particular difficulty in defining sufficient exclusivity concerns the proposed reduction of power. Thus, the proposed § 88.445(b) contains provisions about the area of exclusivity required to trunk given both current and proposed power limitations. We also propose that trunked operations be designated by a station class ending with a Y. Licensees seeking to trunk several channels they are currently licensed for would be required to modify their station class, and thus undergo frequency coordination. Frequency coordination is important in these cases because the applicant desiring to trunk several channels must identify co-channel licensees and, in certain cases, note their ERP and antenna height. All proposed trunked operations would be required to

²⁸See, for example, 47 C.F.R. § 90.129(c), (d) and (l).

²⁹Existing shared and multiple licensed systems could continue operation indefinitely, including adding users to community repeaters.

meet the power requirements set in proposed § 88.429. See Appendix D, §§ 88.445 and 88.1563.

Wideband Paging.

We propose permitting paging systems to continue operating on wideband (25 kHz) channels. Our proposed channelization scheme has been designed to properly separate two-way mobile operations and paging operations. For example, only two narrowband (5 kHz) channels, 158.440 and 158.445 MHz, would be created from the channel currently centered at 158.445 MHz. Those new narrowband channels are sufficiently removed from the paging channel centered at 158.460 MHz, so that wideband paging operations should not interfere with adjacent 5 kHz two-way narrowband mobile operations. New paging systems would be required to meet the out-of-band emissions requirements for narrowband two-way land mobile equipment. We also propose eliminating secondary two-way mobile use of paging frequencies. We do that to limit potential interference. Finally we seek comment on whether to designate specific narrowband paging channels. See Appendix D, § 88.1061.

APPENDIX B

Initial Regulatory Flexibility Analysis

A. Reason for Action

1. The Commission proposes to: 1) create new channels by splitting existing channels between 72 and 512 MHz; 2) create a mechanism giving applicants the ability to obtain channel exclusivity in the 150-174 and 450-470 MHz bands; 3) allocate a block of channels for innovative shared use; 4) provide users technical flexibility to convert to higher technology; 5) consolidate the 19 Private Land Mobile Radio services; 6) reduce power and antenna height to increase frequency reuse; 7) substitute a new Part 88 for Part 90. These actions will reduce congestion, meet future communications capacity needs and generally permit, facilitate and encourage licensees to be spectrum efficient. These proposals will not unduly burden the public or increase administrative costs, and would improve government efficiency. The specific rules also eliminate certain reporting requirements. The new Part 88 will be much more user friendly than Part 90.

B. Objectives

2. We seek to reexamine our general rules and policies for private land mobile radio use in the bands below 800 MHz in order improve spectrum efficiency, and thus meet the varied communications needs of industry and the public safety community, without excessively burdening existing licensees or increasing administrative costs to the Commission. Overall, these proposed rules would increase efficiency by industry and the public safety community.

C. Legal Basis

3. The proposed action is authorized under Sections 4(1), 303(g), 303(r), and 331(a) of the Act, 47 U.S.C. §§ 154(i), 303(g), 303(r), and 332(a) (1988).

D. Reporting, Recordkeeping and Other Compliance Requirements

4. Licensees seeking exclusivity would have to file an application indicating that certain co-channel licensees have granted concurrence to freeze licensing on a certain frequency in a certain geographic area. Type acceptance of narrowband transmitters is needed. The channel split requires bandwidth to be reduced on existing equipment by certain deadlines. There are also proposed incentives to split channels sooner than required. Overall, after a short adjustment period resulting in some increased compliance activity, interference and other complaints should be significantly reduced.

E. Federal Rules Which Overlap, Duplicate or Conflict with These Rules

5. None.

F. Description, Potential Impact, and Number of Small Entities Involved

6. Small entities will be required to make minor adjustments to their existing equipment. The cost of these requirements would vary from nothing to over \$100 per transmitter. Most of the adjustments would be made in-house or by small two-way mobile service shops. Eventually some equipment will be replaced sooner than without these rules, although every licensee should have sufficient time to amortize equipment. Future equipment should be designed to be usable for the indefinite future. Although the Commission proposes no rule preventing anyone from continuing to operate indefinitely on their current frequency, many small entities may be reimbursed by other licensees for giving up part or all of their current assignment. These adjustments will reduce interference to all licensees and expand capacity eventually by over 300 percent. That extra capacity will allow existing entities to expand and new entities to meet future mobile communications needs. In total these actions will permit approximately 20 to 30 million additional transmitters to be licensed. We estimate that on average a transmitter and associated hardware and software will be valued at over \$1000. Thus, these proposed rules would cost the public approximately five hundred million dollars, but produce twenty to forty billion dollars in additional equipment sales. Overall, approximately 100,000 currently licensed small entities will be affected both positively and negatively, and approximately 300,000 small entities that would be strictly positively affected in the future.

G. Any Significant Alternatives Minimizing the Impact on Small Entities Consistent with the Stated Objectives

7. None.

Appendix C

Initial Commenters

Advanced MobileComm, Inc. (AMI)
American Association of State Highway and Transportation Officials
American Automobile Association, Inc.
American Radio Relay League, Incorporated
American Telephone and Telegraph Company (AT&T)
American Trucking Association, Inc. (ATA)
Associated Oregon Loggers Services, Inc
Associated Public-Safety Communications Officers, Inc. (APCO)
Association for Private Carrier Paging Section of the National Association of
Business and Education
Association of American Railroads (AAR)
Association of Federal Communications Consulting Engineers
C-Comm of Kalamazoo, Inc.
California Emergency Medical Services Authority
California Public-Safety Radio Association, Inc.
Central Station Alarm Association
Chips International, Inc.
County of Orange, California
County of Santa Barbara
E. F. Johnson Company
ETrunk Systems, Inc
Ericsson Corporation, The
Forest Industry Telecommunications (FIT)
Forestry Conservation Communications Association (FCCA)
Georgia-Pacific Corporation
Hansen Logging
Hewlett-Packard Company Medical Products Group (HP)
Institute of Electrical and Electronics Engineers, U.S. Activities Board,
Committee on Communications and Information Policy
Intelligent Vehicle Highway Society of AMERICA
International Association of Fire Chiefs, Inc. and The International Municipal
Signal Association
International Mobile Machines Corp.
International Taxicab and Livery Association
Joint Comments of the Special Industrial Radio Service Association, Inc.,
National Association of Business and Educational Radio, Inc., American
Petroleum Institute, American Mobile Telecommunications Association,
Inc., Telephone Maintenance Frequency Advisory Committee, and Council of
Independent Communication Suppliers (Joint Commenters)
Ketchikan Air Service, Inc
Land Mobile Communications Council (LMCC)
Manufacturers Radio Frequency Advisory Committee, Inc.
Metropolitan Water District of Southern California
Mobile Communications Service
Motorola, Inc.
National Association of State Emergency Medical Services Directors
National Association of State Foresters
National Telecommunications and Information Administration (NTIA)

National Telephone Cooperative Association
Nippon Telegraph and Telephone
Orion Telecom
Region-20 Public Safety Plan Review Committee
Roseburg Forest Products
SCS MOBILECOM, INC
SEA Inc.
Spacelabs
Spectrum Resources, Inc.
State of California
State of Nevada, Department of Wildlife
State of Washington, Washington State Patrol
Stern, Harold, Assistant Professor of EE University of Alabama-College of
Engineering
T and W Electronics, Inc.
Tacoma Public Utilities
Telecommunications Industrial Association (TIA)
Union Pacific Railroad Company and Missouri Pacific Railroad Company
Utilities Telecommunications Council (UTC)
West Repeater Service
Weyerhaeuser Information Systems

Reply Commenters

Advanced MobileComm, Inc.
American Association of State Highway and Transportation Officials
Arizona Department of Transportation
Arkansas Highway and Transportation Department
Associated Public-Safety Communications Officers, Inc.
Association for Maximum Service Television
Association of American Railroads
California Department of Transportation
Cycomm Corporation
Delaware Department of Transportation
District of Columbia Department of Public Work
Forest Industry Telecommunications
Forestry Conservation Communications Association
Hawaii Department of Transportation
Health Industry Manufacturers Association
Hewlett-Packard Company Medical Products Group
Idaho Transportation Department
Illinois Department of Transportation
Indiana Department of Transportation
International Association of Fish and Wildlife Agencies
Iowa Department of Transportation

Joint Comments of the Special Industrial Radio Service Association, Inc.,
 National Association of Business and Educational Radio, Inc., American
 Petroleum Institute, American Mobile Telecommunications Association,
 Inc., Telephone Maintenance Frequency Advisory Committee, and Council of
 Independent Communication Suppliers
 Joint Reply Comments of Manufacturers Radio Frequency Advisory Committee,
 Inc., Forest Industry Telecommunications and American Trucking
 Associations, Inc.
 Kentucky Transportation Cabinet
 Land Mobile Communications Council
 Louisiana Department of Transportation and Development
 Manufacturers Radio Frequency Advisory Committee, Inc
 Michigan Department of Transportation
 Minnesota Department of Transportation
 Mississippi State Highway Department
 Missouri Highway and Transportation Department Stephen Knobbe
 Missouri Highway and Transportation Department Wayne Muri
 Montana Department of Transportation
 Motorola Inc.
 New Hampshire Department of Transportation
 New Mexico State Highway and Transportation Department
 New York State Department of Transportation
 North Carolina Department of Transportation
 Oklahoma Department of Transportation
 Oregon Department of Transportation
 Pacific Bell
 Pennsylvania Department of Transportation
 REACT International, Inc.
 Region Planning Update Committee of Tri-State Radio Planning Committee (FCC
 Region 8)
 SEA Inc.
 South Carolina Department of Highways and Public Public Transportation
 Southwestern Bell Telephone Company
 State of Louisiana Department of Transportation and Development
 State of Nevada, Department of Wildlife
 Telecommunications Industrial Association
 Texas Department of Transportation
 Texas Turnpike Authority
 U S WEST Communications, Inc.
 Uniden America Corporation
 United States Telephone Association
 Utah Department of Transportation
 Utilities Telecommunications Council
 Virginia Department of Transportation
 Washington State Department of Transportation
 Wyoming Department of Transportation

We also received 8 letters after the reply comment deadline that have been
 included in the record of this proceeding.

Appendix D

Proposed Rules

47 C.F.R. Parts 1, 2, and 94 are amended, Part 90 is removed, and a new Part 88 is added as follows:

Part 1 - Practice and procedure

1. The authority citation for Part 1 continues to read as follows:

Authority: Sections 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303; Implement, 5 U.S.C. 552, unless otherwise noted.

2. § 1.914 is amended by designating the existing paragraph as paragraph (a) and adding new paragraphs (b) and (c) to read as follows:

§ 1.914 Full disclosures.

* * * * *

(b) Each application shall be clear and complete in itself without cross reference to information previously filed. An application for modification of an existing station must show in precise detail all particulars of the desired operation, including those not affected by the modification.

(c) Each application for digital voice emission will be made only with the understanding that the applicant must disclose current encoding information to an FCC official upon request at any time after station authorization. All authorizations for digital voice systems are issued subject to this requirement.

3. § 1.918 is amended by revising paragraph (b) and adding a new paragraph (f) to read as follows:

§ 1.918 Amendment of applications.

* * * * *

(b) Any application, except for mutually exclusive applications, may be amended as a matter of right at any time prior to the time the application is granted or designated for hearing. However, an application that is substantially amended, as defined by § 1.962(c), will be considered a newly filed application as of the date of the filing of the amendment.

* * * * *

(f) No application for a radio station in the 220-222 MHz band or above 800 MHz may be amended so as to substitute a new entity as the applicant except in the following circumstances:

(1) The amendment is allowed as a matter of right under paragraph (b) of this section; or

(2) The amendment does not involve a substantial change in the ownership or control of the applicant; or

(3) The changes in the ownership or control of the applicant are involuntary due to the original applicant's insolvency, bankruptcy, incapacity, or death.

4. § 1.922 is amended by revising the titles of Forms 402, 572, 572C, and 574-B, removing Forms 525, 574-A and 577, and adding Form xxx to read as follows:

§ 1.922 Forms to be used.

FCC Form	Title
402	Application for Station Authorization in the Private Operational Fixed Microwave Radio Service.

* * * * *

572	Temporary Permit to Operate a Part 88 Radio Station.
572C	Conditional Temporary Authorization to Operate a Part 88 Radio Station.

* * * * *

574-B	Private Radio Services Supplementary Information Form.
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xxx	Private Radio Application for Exclusive Use Overlay (EUO) and Temporary Licensing Freeze.
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5. § 1.924 is amended by adding a sentence at the end of paragraph (a) (1) to read as follows:

§ 1.924 Assignment or transfer of control, voluntary or involuntary.

(a) (1) * * * A station authorization and the rights it grants shall not be transferred, assigned, or in any manner disposed of to any person, unless the Commission shall, after obtaining full information, decide that the transfer, assignment, or disposal is in the public interest, convenience or necessity and give its consent in writing.

* * * * *

6. § 1.925 is amended by removing paragraphs (h) and (i),

redesignating paragraph (j) as (h), and revising the section heading paragraph (g) to read as follows:

§ 1.925 Application for special temporary authority authorization, temporary permit or temporary operating authority.

* * * * *

(g) An applicant for a private land mobile station license utilizing an already authorized facility may operate the radio station(s) for a period of up to 180 days under a temporary permit evidenced by a properly executed temporary license certificate (Form 572) after submitting or filing a formal application for station license in accordance with § 88.75, provided that all the antennas employed by control stations are twenty feet or less above ground or twenty feet or less above a man-made structure other than an antenna tower to which it is affixed. When required by § 88.305, applications must be accompanied by evidence of frequency coordination. The temporary operation of stations, other than mobile stations, within the Canadian coordination zone is limited to stations with a maximum of 5 watts effective radiated power (except for exclusive assignments) and a maximum antenna height of 6.1 meters (20 ft) above average terrain.

* * * * *

7. § 1.931 is revised to read as follows:

§ 1.931 Requests for waiver of private radio rules

(a) Requests for waiver of the rules in this subpart must state the nature of the waiver or exception desired, and set forth reasons in support thereof, including a showing that unique circumstances are involved and that there is no reasonable alternative solution within existing rules. When a waiver request is submitted with a specific application under Part 88 of these rules, the submission and filing procedures of § 88.75 of this chapter will also apply. Requests for waivers will be evaluated based on whether good cause for the request is shown and whether grant of the waiver would promote the public interest.

(b) Applications may be dismissed if the accompanying petition for waiver of the rules does not set forth reasons that, if true, would justify a waiver or exception.

(c) Applicants requiring expeditious processing of their request for waiver shall clearly caption both their request for waiver and the envelope containing it with the words "WAIVER--TIMELY ACTION REQUESTED."

(d) All requests for waiver of the rules governing the Private Radio Services that require a fee (see § 1.1102) shall be submitted to the Mellon Bank, Pittsburgh, Pennsylvania, at the address set forth in § 1.1102. Waiver requests that do not require a fee shall be addressed to: Federal Communications Commission, Gettysburg, Pennsylvania 17326. Waiver requests attached to applications must be filed in accordance with § 0.401(b) of this chapter.

8. § 1.933(a) is revised to read as follows:

§ 1.933 Installation or removal of apparatus.

(a) In the Private Land Mobile Radio Services, replacement of transmitting equipment may be made without prior authorization provided that the replacement transmitter is included in the Commission's current Radio Equipment List as type-accepted for use under Part 88, and the substitute equipment employs the same type of emission and the power does not exceed the station authorization.

* * * * *

9. §§ 1.951(b) is revised to read as follows:

§ 1.951 How applications are distributed.

* * * * *

(b) Land Mobile Branch. Public Safety, Non-Commercial, Specialized Mobile Radio, and General Category.

10. § 1.952(a) is revised to read as follows:

§ 1.952 How file numbers are assigned.

(a) File numbers are assigned to certain categories of applications by the Private Radio Bureau. The assignment of a file number to an application is for administrative convenience and does not indicate the acceptance of the application for filing and processing.

* * * * *

11. § 1.958(a) is amended by revising the introductory paragraph to read as follows:

§ 1.958 Defective applications.

(a) Applications that are incomplete with respect to answers, supplementary statements, execution, or other matters of a formal character shall be deemed defective and may be dismissed. In addition, if an applicant is requested to file any additional documents or information not included in the prescribed application form, failure to comply with such request will render the application defective and it may be dismissed. Applications will also be deemed to be defective and will be dismissed in the following cases:

* * * * *

Part 2 - Frequency allocations and radio treaty matters; general rules and regulations

12. The authority citation for Part 2 continues to read:

Authority: Sec.4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 154(i), 302, 303, 303(r), and 307, unless otherwise noted.

13. In 47 C.F.R. § 2.106, the Table of Frequency Allocations is amended by changing all references in Column 6 of the Table from Private Land Mobile (90) to Private Land Mobile (88), (70 places), removing all references in Column 6 to Footnotes NG49, NG51, and NG70, removing these Footnotes, and revising Footnotes US11, US44, US48, US49, US50, US51, US58, US110, US220, US266, US281, US298, US312, NG6, NG17, NG28, NG42, NG66, NG111, NG112, NG114, NG124, NG134, and NG141 to read as follows:

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US11 is amended by replacing the words "public safety radio services" in the first and second sentences with "Public Safety Radio Service".

US44, US48, US49, US50, US51, US58 (2 places), and US110 are amended by replacing the words "The non-Government radiolocation service" with "Non-Government radiolocation operations".

US220 is amended by removing the words "in the petroleum radio service,".

US266 is amended by replacing the words "public safety radio services" with "Public Safety Radio Service".

US281 is amended by deleting the words "in the industrial radio services".

US298 is deleted.

US312 is amended by replacing "Police Radio Service" with "Public Safety Radio Service".

NON-GOVERNMENT (NG) FOOTNOTES

NG6 is amended by deleting in the first sentence "in the public safety radio services", and replacing in the last sentence "public radio service system" with "public safety radio service stations".

NG17 is amended by deleting in the first sentence "in the land transportation radio services", and replacing in the last sentence "land transportation radio service system" with "stations".

NG28 is amended by replacing "the land transportation radio service." with "stations in the Non-Commercial Radio Service."

NG42 is amended by replacing "stations in the radiolocation service" with "radiolocation operations".

NG49 is deleted.

NG51 is deleted.

NG66 is amended by replacing the second sentence with "In the land mobile services it is available in the Public Mobile Services and Private Land Mobile Radio Services at, or in the vicinity of 13 urbanized areas of the United States, as set forth in the table below", replacing in the third sentence "public safety radio services" with "Public Safety Radio Service", and in the last sentence, replacing "90" with "88".

NG70 is deleted.

NG111 is amended by replacing "paging operations in the special emergency radio service." with "medical paging operations".

NG112 is revised to read "The frequencies 25.04, 25.08, 150.980, 150.985, 154.590, 158.440, 158.445, 159.480, 159.485, 453.990625/458.990625, 453.996875/458.996875, 454.003125/459.003125, and 454.009375/459.009375 MHz may be authorized to stations in the private land mobile radio services for use primarily in oil spill containment and cleanup operations and secondarily in regular land mobile communications.

NG114 is amended by replacing "Parts 22 and 90" with "Parts 22 and 88".

NG124 is revised to read "In the Public Safety Radio Service, allocations within the band 30-50 MHz, 150-174 MHz, and 450-470 MHz, police licensees are authorized to operate low-power radio transmitters on a secondary, non-interference basis in accordance with the provisions of Sections 2.803 and 88.1155 of the Rules."

NG134 is amended by replacing "stations in the radiolocation service" with "radiolocation operations".

NG141 is amended by replacing in the second sentence "90" with "88".

14. Part 90 is removed in its entirety and Part 88 is added to read as follows:

15. The authority citation for Part 88 reads:

Authority: Sections 4, 303, 332, 48 Stat., as amended, 1066, 1082; 47 U.S.C. §§ 154, 303, and 332 unless otherwise noted.

PART 88 - PRIVATE LAND MOBILE RADIO SERVICES

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Sec.

- 88.1 Basis and purpose.
- 88.5 Related rule parts.
- 88.7 Glossary of terms.
- 88.11 Private Land Mobile Radio Services.
- 88.13 Public Safety Radio Service.
- 88.15 Non-Commercial Radio Service.
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Subpart B - General Procedures And Policies

- 88.51 Scope.

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- 88.83 Supplemental information to be submitted with applications.
- 88.87 Modification of license.
- 88.91 Loading data reports.
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- 88.107 SMR waiting lists.
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- 88.115 Mailing address.
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ASSIGNMENT OF FREQUENCIES

- 88.171 General.

EXCLUSIVE USE/ASSIGNMENT PROTECTION

- 88.175 Exclusivity.
- 88.179 Exclusive use overlay (EVO) (150-174 MHz, 450-470 MHz).
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- 88.243 Limits on shared channels in the 25-50 MHz, 150-174 MHz, and 450-470 MHz bands.
- 88.245 Bandwidth reductions in the 150-174 MHz, 421-430 MHz, and 450-470 MHz bands.
- 88.247 Number of frequencies in the 806-821/851-866 MHz and 896-901/935-940 MHz bands assignable for conventional systems.
- 88.251 Number of trunked frequency pairs and trunked systems in the 806-821/851-866 MHz and 896-901/935-940 MHz bands.
- 88.255 Wide-area operations in the 806-821/851-866 MHz and 896-901/935-940 MHz bands.
- 88.259 Number of systems authorized in the 220-222 MHz band in a geographical area.

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- 88.277 Loading standards for EUO wide-area systems.
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- 88.289 Loading standards for conventional systems in the 806-824/851-866 MHz and 896-901/935-940 MHz bands.
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- 88.305 Frequency coordination requirements.

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- 88.761 New York City only frequency.
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- 88.769 Forest Fire frequencies available west of the Mississippi.
- 88.773 Authorization in the 421-430 MHz band.
- 88.775 Available frequencies in the 421-430 MHz band.
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AUTHORITY: Sections 4, 303, 331, 48 Stat., as amended, 1066, 1082; 47 U.S.C. 154, 303, and 332, unless otherwise noted.

SUBPART A - General Information

§ 88.1 Basis and purpose.

(a) **Basis.** The rules in this part are promulgated under Title III of the Communications Act of 1934, as amended, which gives the Federal Communications Commission authority to regulate radio transmission and to license radio stations. All rules in this part are in accordance with applicable treaties and agreements to which the United States is a party.

(b) **Purpose.** The purpose of these rules is to establish the requirements and conditions under which private land mobile radio stations may be licensed and used in the Public Safety, Non-Commercial and Specialized Mobile Radio Services.

§ 88.5 Related rule parts.

Other Commission rule parts that may be referenced in regard to the licensing and operation of the radio services governed under this part include the following:

(a) **Part 0** of this chapter describes the Commission's organization and delegations of authority. This part also lists available Commission publications, and standards and procedures for access to Commission records, the location of Commission offices, and the addresses for mailing applications and filings to the Commission.

References to Part 0 of this chapter.

- (1) Section 88.75 (§ 0.401(b) of this chapter) - concerning fee information.
- (2) Section 88.317 (§ 0.121(c) of this chapter) - concerning protection of FCC facilities.
- (3) Section 88.1113 (§ 0.121(c) of this chapter) - concerning protection of FCC facilities.

(b) **Part 1** of this chapter includes rules of practice and procedure for adjudicatory proceedings, rule making proceedings, procedures for reconsideration and review of the Commission's actions, provisions concerning violation notices and forfeiture proceedings, rules concerning the application for radio licenses (including forms to be used, filing requirements, etc), and the schedule of fee charges.

References to Part 1 of this chapter.

- (1) Section 88.75 (§§ 1.1207 and 1.1311 of this chapter) - concerning environmental assessments.
- (2) Section 88.75 (§ 1.918 of this chapter) - concerning amendment or dismissal of applications.
- (3) Section 88.87 (§ 1.912(b) of this chapter) - concerning fees.
- (4) Section 88.103 (§ 1.972 of this chapter) - concerning random selection procedures.

(5) Section 88.305 (§ 1.955 of this chapter) - concerning coordination with Canada.

(c) Part 2 of this chapter contains the U.S and International Table of Frequency Allocations, information concerning the marketing and importation of radio frequency devices, and procedures for obtaining equipment authorization.

References to Part 2 of this chapter.

- (1) Sections 88.405, 88.1113 and 88.1125 (§ 2.803 of this chapter) - concerning equipment approval.
- (2) Section 88.413 (§ 2.202 of this chapter) - concerning bandwidth calculations.
- (3) Sections 88.1283 (§ 2.106 of this chapter) - referencing the frequency allocations table.

(d) Part 5 of this chapter contains standards and procedures for obtaining experimental authorizations.

(e) Part 15 of this chapter contains rules for the operation of radio frequency devices that do not require an FCC license.

References to Part 15 of this chapter.

- (1) Section 88.1113 - concerning operation of field disturbance sensors.
- (2) Section 88.1213 (§ 15.113 of this chapter) - concerning use of power line carrier systems.

(f) Part 17 of this chapter contains detailed requirements for the construction, marking, and lighting of antenna towers.

(g) Part 18 of this chapter deals with the operation of industrial, scientific, and medical (ISM) devices.

References to Part 18 of this chapter.

Sections 88.1109 and 88.1125 - concerning ISM devices.

(h) Part 22 of this chapter contains regulations for the public (common carrier) mobile radio services, including cellular radio and the Basic Exchange Telephone Radio Service.

Reference to Part 22 of this chapter.

Section 88.313 - concerning Basic Exchange Telephone Radio Service.

(i) Part 68 of this chapter provides the technical standards for the connection of private land mobile radio equipment to the public switched telephone network.

(j) Part 80 of this chapter contains the operating procedures for the maritime services.

Reference to Part 80 of this chapter.

Section 88.1109 - concerning maritime radionavigation.

(k) Part 87 of this chapter contains the operating procedures for the aviation services.

Reference to Part 87 of this chapter.

Section 88.1109 - concerning aeronautical radionavigation.

(l) Part 94 of this chapter governs the licensing and operation of private operational- fixed radio stations on frequencies in the microwave spectrum above 928 MHz.

§ 88.7 Glossary of terms.

Amplitude compandered single sideband (ACSB). A type of single sideband modulation that uses narrow channels and incorporates the use of a pilot tone.

Analog. The physical representation of information such that the output varies as a continuous function of the input.

Antenna height above average terrain (AAT). Height of the center of the radiating element of the antenna above the average terrain. See § 88.429(j)(2) for calculation method.

Antenna height above sea level. The height of the topmost point of the antenna above mean sea level.

Antenna structure. The structure on which an antenna is mounted.

Assigned frequency band. The frequency band the center of which coincides with the frequency assigned to the station and the width of which equals the necessary bandwidth plus twice the absolute value of the frequency stability.

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

Assignment.

1. The transfer, by any means, of an authorization from the present holder to another person as defined in section 3(i) of the Communications Act.
2. An action that conveys a license or construction permit from one person to another.

Automatic vehicle monitoring (AVM) systems. Systems using non-voice signalling methods to locate vehicles and transmit status or instructional messages concerning vehicles.

Average terrain. The average elevation of terrain between 3 and 16 km (2 and 10 miles) from the antenna site.

Base station.

1. A station at a specified site authorized to communicate with mobile stations.

2. A station in the land mobile radio service.

Bio-medical telemetry. A low power communications device, consisting of one or more transmitters, used to transmit, within a restricted area, measurements of either human or animal biomedical phenomena.

Bit rate. The rate at which digital information is transmitted over a communication path, normally expressed in bits per second (bps).

Carrier frequency. The frequency of the unmodulated fundamental output from a radio transmitter.

Channel loading. The number of mobile transmitters authorized to operate with a particular base station on a particular channel within a particular service area.

Class of emission. The set of characteristics of an emission, designated by standard symbols and describing, for example, type of modulation, modulating signal, and type of information to be transmitted.

Continuous tone controlled squelch system (CTCSS). A squelch system that permits audio signals to appear at the receiver output only when a carrier modulated with a specific tone is received.

Control point. An operating position from which a transmitter's functions may be controlled.

Control station. A station at a specified site that automatically controls the emissions or operations of a base station or mobile relay.

Conventional radio system. A land mobile radio system that operates on one or more channels but does not employ trunking technology.

Data communication. The movement of encoded information by means of electromagnetic transmission systems.

Developmental operation. A licensed operation used for developing and testing new equipment and techniques in the radio services governed by this part.

Digipeater. A simplex station that automatically retransmits digital information, delayed in time.

Digital. The representation of information such that the output varies as a discrete, discontinuous function of the input.

Digital communications. The transfer of intelligence through the use of