#### §5.1

- 5.89 School and student authorizations.
- 5.91 Notification of the National Radio Astronomy Observatory.
- 5.93 Limited market studies.
- 5.95 Informal objections.

#### Subpart C—Technical Standards and Operating Requirements

- 5.101 Frequency stability.
- 5.103 Types of emission.
- 5.105 Authorized bandwidth.
- 5.107 Transmitter control requirements.
- 5.109 Antenna and tower requirements.
- 5.111 General limitations on use.
- 5.113 Adherence to program of research.
- 5.115 Station identification.
- 5.117 Suspension of transmission required.
- 5.119 Posting station licenses.
- 5.121 Retention of station records.
- 5.123 Inspection of stations.
- 5.125 Authorized points of communication.

AUTHORITY: Secs. 4, 302, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 302, 303. Interpret or apply sec. 301, 48 Stat. 1081, as amended: 47 U.S.C. 301

SOURCE: 63 FR 64202, Nov. 19, 1998, unless otherwise noted.

# Subpart A—General

#### §5.1 Basis and purpose.

- (a) The rules following in this part are promulgated pursuant to the provisions of Title III of the Communications Act of 1934, as amended, which vests authority in the Federal Communications Commission to regulate radio transmissions and to issue licenses for radio stations.
- (b) The purpose of this part is to prescribe the manner in which parts of the radio frequency spectrum may be made available for experimentation as defined and provided for in this part.

#### § 5.3 Scope of service.

Stations operating in the Experimental Radio Service will be permitted to conduct the following type of operations:

- (a) Experimentations in scientific or technical radio research.
- (b) Experimentations under contractual agreement with the United States Government, or for export purposes.
- (c) Communications essential to a research project.
- (d) Technical demonstrations of equipment or techniques.

- (e) Field strength surveys by persons not eligible for authorization in any other service.
- (f) Demonstration of equipment to prospective purchasers by persons engaged in the business of selling radio equipment.
- (g) Testing of equipment in connection with production or regulatory approval of such equipment.
- (h) Development of radio technique, equipment or engineering data not related to an existing or proposed service, including field or factory testing or calibration of equipment.
- (i) Development of radio technique, equipment, operational data or engineering data related to an existing or proposed radio service.
  - (i) Limited market studies.
- (k) Types of experiments that are not specifically covered under paragraphs (a) through (j) of this section will be considered upon demonstration of need for such additional types of experiments.

[63 FR 64202, Nov. 19, 1998; 64 FR 43094, Aug. 9, 1999]

#### § 5.5 Definition of terms.

For the purpose of this part, the following definitions shall be applicable. For other definitions, refer to part 2 of this chapter (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations).

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

Authorized power. The power assigned to a radio station by the Commission and specified in the instrument of authorization.

Experimental radio service. A service in which radio waves are employed for purposes of experimentation in the radio art or for purposes of providing essential communications for research projects that could not be conducted without the benefit of such communications.

Experimental station. A station utilizing radio waves in experiments with a view to the development of science or technique.

Fixed service. A radiocommunication service between specified fixed points.

Fixed station. A station in the fixed service.

Harmful interference. Any radiation or induction that endangers the functioning of a radionavigation or safety service, or obstructs or repeatedly interrupts a radio service operating in accordance with the Table of Frequency Allocations and other provisions of part 2 of this chapter.

Landing area. As defined by 49 U.S.C. 40102(a)(28) of the Civil Aeronautics Act of 1938, as amended, any locality, either of land or water, including airdromes and intermediate landing fields, that is used, or intended to be used, 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.

Land station. A station in the mobile service not intended for operation while in motion.

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

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

Person. An individual, partnership, association, joint stock company, trust, or corporation.

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

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

Station authorization. Any license or special temporary authorization issued by the Commission.

# Subpart B—Applications and Licenses

§5.53

### §5.51 Eligibility of license.

- (a) Authorizations for stations in the Experimental Radio Service will be issued only to persons qualified to conduct experimentation utilizing radio waves for scientific or technical operation data directly related to a use of radio not provided by existing rules; or for communications in connection with research projects when existing communications facilities are inadequate.
- (b) Applicants eligible for authorizations in an established service, and seeking to develop operational data or techniques directed toward the improvement or extension of that service shall file applications and conduct such projects under the developmental rules of the established service.
- (c) A station license shall not be granted to or held by a foreign government or a representative thereof.

#### §5.53 Station authorization required.

- (a) No radio transmitter shall be operated in the Experimental Radio Service except under and in accordance with a proper station authorization granted by the Commission. However, construction of proposed experimental satellite facilities may begin prior to Commission grant of an authorization. Such construction will be entirely at the applicant's risk and will not entitle the applicant to any assurances that its proposed experiment will be subsequently approved or regular services subsequently authorized. Additionally, the applicant must notify the Commission's Office of Engineering and Technology in writing that it plans to begin construction at its own risk.
- (b) Persons desiring to install and operate radio transmitting equipment under this part should first submit an application for a radio station license in accordance with §5.59 of this part.
- (c) If installation and/or operation of the equipment may significantly impact the environment, see §1.1307 of this chapter, an environmental assessment as defined in §1.1311 of this chapter must be submitted with the application.

## 681