

## § 5.89

(6) Names and addresses of persons for whom the survey is conducted.

(b) [Reserved]

### § 5.89 School and student authorizations.

The Commission may issue an authorization to schools or students for the purpose of presenting experiments or technical demonstrations for school or school approved projects that require the use of radio for a limited period of time. Such authorizations may be granted at the discretion of the Commission.

(a) An application for a school or student authorization may be filed in letter form and must comply with the provisions of § 5.63, of this part except where specified below. The application must be accompanied by a signed statement from a member of faculty of the school, on appropriate letterhead, indicating the person under whose general supervision the project will be conducted. In the case of student authorizations, the letter must state that the project has the approval of the school.

(b) Frequencies in the following bands are available for assignment in authorizations issued under this section:

27.23–27.28 MHz.

460–461 MHz.

462.525–467.475 MHz.

2402–2483.5 MHz.

10.00–10.50 GHz.

(c) Operations under this section are limited to 4 watts equivalent isotropically radiated power (EIRP). The Commission may authorize a greater power if a satisfactory showing is made that such greater power is necessary and that appropriate measures will be taken to prevent interference.

(d) The frequency of operation must be measured or checked prior to each time of operation.

(e) Subject to the provisions of (b), (c) and (d), the provisions in subpart C of this part are waived insofar as such provisions require a station authorized under this section to observe the technical and operating restrictions set forth therein.

(f) The licensee holding an authorization issued under this section shall

## 47 CFR Ch. I (10–1–11 Edition)

maintain a record of operation containing the following information:

(1) A brief description of the experimentation being conducted.

(2) The date and time of each period of operation.

(3) The frequency of operation as measured or checked at the beginning of each period of operation.

(g) The record of operation shall be retained for one month after the termination of the authorization.

[63 FR 64202, Nov. 19, 1998; 64 FR 43095, Aug. 9, 1999]

### § 5.91 Notification of the National Radio Astronomy Observatory.

In order to minimize possible harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia, any applicant for a station authorization other than mobile, temporary base, temporary fixed, Personal Radio, Civil Air Patrol, or Amateur seeking a station license for a new station, or a construction permit to construct a new station or to modify an existing station license in a manner that would change either the frequency, power, antenna height or directivity, or location of such a station within the area bounded by 39 deg. 15' N on the north, 78 deg. 30' W on the east, 37 deg. 30' N on the south and 80 deg. 30' W on the west shall, at the time of filing such application with the Commission, simultaneously notify the Director, National Radio Astronomy Observatory, P.O. Box NZ2, Green Bank, West Virginia, 24944, in writing, of the technical particulars of the proposed station. Such notification shall include the geographical coordinates of the antenna, antenna height, antenna directivity if any, frequency, type of emission, and power. In addition, the applicant shall indicate in its application to the Commission the date notification was made to the Observatory. After receipt of such applications, the Commission will allow a period of twenty (20) days for comments or objections in response to the notifications indicated. If an objection to the proposed operation

is received during the twenty-day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

#### **§ 5.93 Limited market studies.**

Unless otherwise stated in the instrument of authorization, licenses granted for the purpose of limited market studies pursuant to § 5.3(j) of this part are subject to the following conditions:

(a) All transmitting and/or receiving equipment used in the study shall be owned by the licensee.

(b) The licensee is responsible for informing anyone participating in the experiment that the service or device is granted under an experimental authorization and is strictly temporary.

(c) The size and scope of the experiment are subject to limitations as the Commission shall establish on a case-by-case basis. If the Commission subsequently determines that a market study is not so limited, the study shall be immediately terminated.

#### **§ 5.95 Informal objections.**

A person or entity desiring to object to or to oppose an Experimental Radio application for a station license or authorization may file an informal objection against that application. The informal objection and any responsive pleadings shall comply with the requirements set forth in §§ 1.41 through 1.52 of this chapter.

[68 FR 59336, Oct. 15, 2003]

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

#### **§ 5.101 Frequency stability.**

An applicant must propose to use a frequency tolerance that would confine emissions within the band of operation, unless permission is granted to use a greater frequency tolerance. Equipment is presumed to operate over the temperature range  $-20$  to  $+50$  degrees celsius with an input voltage variation of 85% to 115% of rated input voltage, unless justification is presented to demonstrate otherwise.

#### **§ 5.103 Types of emission.**

Stations in the Experimental Radio Service may be authorized to use any of the classifications of emissions covered in part 2 of this chapter.

#### **§ 5.105 Authorized bandwidth.**

Each authorization issued to a station operating in this service will show, as the prefix to the emission classification, a figure specifying the maximum necessary bandwidth for the emission used. The authorized bandwidth is considered to be the occupied or necessary bandwidth, whichever is greater. This bandwidth should be determined in accordance with § 2.202 of this chapter.

[63 FR 64202, Nov. 19, 1998; 64 FR 43095, Aug. 9, 1999]

#### **§ 5.107 Transmitter control requirements.**

Each licensee shall be responsible for maintaining control of the transmitter authorized under its station authorization. This includes both ensuring that transmissions are in conformance with the operating characteristics prescribed in the station authorization and that the station is operated only by persons duly authorized by the licensee.

#### **§ 5.109 Antenna and tower requirements.**

(a) Applicants with fixed stations that use antennas that exceed 6 meters in height above the ground level or more than 6 meters in height above an existing building must comply with the requirements of part 17 of this chapter.

(b) The licensee of any radio station that has an antenna structure required to be painted and illuminated pursuant to the provisions of section 303(q) of the Communications Act of 1934, as amended, and part 17 of this chapter, shall perform the inspections and maintain the tower marking and lighting, and associated control equipment, in accordance with the requirements of part 17, subpart C, of this chapter.

[63 FR 64202, Nov. 19, 1998; 64 FR 43095, Aug. 9, 1999]