this section would be exceeded by their proposed radio facilities (except mobile stations). The following is a suggested guide for determining whether coordination is needed:

(i) All stations within 2.4 kilometers (1.5 statute miles);

(ii) Stations within 4.8 kilometers (3 statute miles) with 50 watts or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iii) Stations within 16 kilometers (10 statute miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iv) Stations within 80 kilometers (50 statute miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station.

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in §0.121(b) of this chapter and also meets the criteria outlined in paragraphs (f)(2) and (3) of this section.

§5.91 Notification to 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 an Experimental Radio Service station authorization other than a mobile, temporary base, or temporary fixed station, within the area bounded by 39°15′ N on the north, 78°30′ W on the east, 37°30′ N on the south and 80°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.

§5.95 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 be submitted electronically consistent with the requirements set forth in §5.55.

Subpart C—Technical Standards and Operating Requirements

§5.101 Frequency stability.

Experimental Radio Service licensees shall ensure that transmitted emissions remain within the authorized frequency band under normal operating conditions: 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.

The occupied bandwidth of transmitted emissions from an Experimental Radio Service station shall not exceed the authorized bandwidth specified in the authorization. Each authorization will show, as the prefix to the

emission classification, a figure specifying the necessary bandwidth. The application may request an authorized bandwidth that is greater than the necessary bandwidth for the emission to be used, if required for the experimental purpose. Necessary bandwidth and occupied bandwidth are defined and determined in accordance with § 2.1 and § 2.202 of this chapter.

§ 5.107 Transmitter control requirements.

Each licensee shall be responsible for maintaining control of the transmitter authorized under its station authorization, including the ability to terminate transmissions should interference occur.

(a) *Conventional experimental radio stations.* The licensee shall ensure 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.

(b) *Program experimental radio stations.* The licensee shall ensure that transmissions are in conformance with the requirements in subpart E of this part and that the station is operated only by persons duly authorized by the licensee.

(c) *Medical testing experimental radio stations.* The licensee shall ensure that transmissions are in conformance with the requirements in subpart F of this part and that the station is operated only by persons duly authorized by the licensee.

(d) *Compliance testing experimental radio stations.* The licensee shall ensure that transmissions are in conformance with the requirements in subpart G of this part and that the station is operated only by persons duly authorized by the licensee.

(e) *Broadcast experimental stations.* Except where unattended operation is specifically permitted, the licensee of each station authorized under the provisions of this part shall designate a person or persons to activate and control its transmitter. At the discretion of the station licensee, persons so designated may be employed for other duties and for operation of other transmitting stations if such other duties will not interfere with the proper operation of the station transmission systems.

EFFECTIVE DATE NOTE: At 78 FR 25162, Apr. 29, 2013, §§ 5.107 was revised. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 5.109 Responsibility for antenna structure painting and lighting.

Experimental Radio Service licensees may become responsible for maintaining the painting and lighting of any antenna structure they are authorized to use in accordance with part 17 of this chapter. *See* § 17.6 of this chapter.

§ 5.110 Power limitations.

(a) The transmitting radiated power for stations authorized under the Experimental Radio Service shall be limited to the minimum practical radiated power necessary for the success of the experiment.

(b) For broadcast experimental radio stations, the operating power shall not exceed by more than 5 percent the maximum power specified. Engineering standards have not been established for these stations. The efficiency factor for the last radio stage of transmitters employed will be subject to individual determination but shall be in general agreement with values normally employed for similar equipment operated within the frequency range authorized.

§ 5.111 Limitations on use.

(a) Stations may make only such transmissions as are necessary and directly related to the conduct of the licensee's stated program of experimentation and the related station instrument of authorization, and as governed by the provisions of the rules and regulations contained in this part. When transmitting, the licensee must use every precaution to ensure that it will not cause harmful interference to the services carried on by stations operating in accordance with the Table of Frequency Allocations of part 2 of this chapter.

(b) A licensee shall adhere to the program of experimentation as stated in its application or in the station instrument of authorization.