### § 97.121

nearly as possible by city and state, commonwealth or possession.

[54 FR 25857, June 20, 1989, as amended at 54 FR 39535, Sept. 27, 1989; 55 FR 30457, July 26, 1990; 56 FR 28, Jan. 2, 1991; 62 FR 17567, Apr. 10, 1997; 63 FR 68980, Dec. 14, 1998; 64 FR 51471, Sept. 23, 1999; 66 FR 20752, Apr. 25, 2001; 75 FR 78171. Dec. 15, 20101

#### § 97.121 Restricted operation.

- (a) If the operation of an amateur station causes general interference to the reception of transmissions from stations operating in the domestic broadcast service when receivers of good engineering design, including adequate selectivity characteristics, are used to receive such transmissions, and this fact is made known to the amateur station licensee, the amateur station shall not be operated during the hours from 8 p.m. to 10:30 p.m., local time, and on Sunday for the additional period from 10:30 a.m. until 1 p.m., local time, upon the frequency or frequencies used when the interference is created.
- (b) In general, such steps as may be necessary to minimize interference to stations operating in other services may be required after investigation by the FCC.

## **Subpart C—Special Operations**

## § 97.201 Auxiliary station.

- (a) Any amateur station licensed to a holder of a Technician, General, Advanced or Amateur Extra Class operator license may be an auxiliary station. A holder of a Technician, General, Advanced or Amateur Extra Class operator license may be the control operator of an auxiliary station, subject to the privileges of the class of operator license held.
- (b) An auxiliary station may transmit only on the 2 m and shorter wavelength bands, except the 144.0–144.5 MHz, 145.8–146.0 MHz, 219–220 MHz, 222.00–222.15 MHz, 431–433 MHz, and 435–438 MHz segments.
- (c) Where an auxiliary station causes harmful interference to another auxiliary station, the licensees are equally and fully responsible for resolving the interference unless one station's operation is recommended by a frequency coordinator and the other station's is

not. In that case, the licensee of the non-coordinated auxiliary station has primary responsibilty to resolve the interference.

- (d) An auxiliary station may be automatically controlled.
- (e) An auxiliary station may transmit one-way communications.

[54 FR 25857, June 20, 1989, as amended at 56 FR 56171, Nov. 1, 1991; 60 FR 15687, Mar. 27, 1995; 63 FR 68980, Dec. 14, 1998; 71 FR 66462, Nov. 15, 2006; 75 FR 78171, Dec. 15, 2010]

#### § 97.203 Beacon station.

- (a) Any amateur station licensed to a holder of a Technician, General, Advanced or Amateur Extra Class operator license may be a beacon. A holder of a Technician, General, Advanced or Amateur Extra Class operator license may be the control operator of a beacon, subject to the privileges of the class of operator license held.
- (b) A beacon must not concurrently transmit on more than 1 channel in the same amateur service frequency band, from the same station location.
- (c) The transmitter power of a beacon must not exceed  $100~\mathrm{W}.$
- (d) A beacon may be automatically controlled while it is transmitting on the 28.20–28.30 MHz, 50.06–50.08 MHz, 144.275–144.300 MHz, 222.05–222.06 MHz or 432.300–432.400 MHz segments, or on the 33 cm and shorter wavelength bands.
- (e) Before establishing an automatically controlled beacon in the National Radio Quiet Zone or before changing the transmitting frequency, transmitter power, antenna height or directivity, the station licensee must give written notification thereof to the Interference Office, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, WV 24944.
- (1) The notification must include the geographical coordinates of the antenna, antenna ground elevation above mean sea level (AMSL), antenna center of radiation above ground level (AGL), antenna directivity, proposed frequency, type of emission, and transmitter power.
- (2) If an objection to the proposed operation is received by the FCC from the National Radio Astronomy Observatory at Green Bank, Pocahontas County, WV, for itself or on behalf of the Naval Research Laboratory at

Sugar Grove, Pendleton County, WV, within 20 days from the date of notification, the FCC will consider all aspects of the problem and take whatever action is deemed appropriate.

- (f) A beacon must cease transmissions upon notification by a District Director that the station is operating improperly or causing undue interference to other operations. The beacon may not resume transmitting without prior approval of the District Director.
- (g) A beacon may transmit one-way communications.

[54 FR 25857, June 20, 1989, as amended at 55 FR 9323, Mar. 13, 1990; 56 FR 19610, Apr. 29, 1991; 56 FR 32517, July 17, 1991; 62 FR 55536, Oct. 27, 1997; 63 FR 41204, Aug. 3, 1998; 63 FR 68980, Dec. 14, 1998; 69 FR 24997, May 5, 2004; 71 FR 66462, Nov. 15, 2006; 75 FR 78171, Dec. 15, 2010]

# § 97.205 Repeater station.

- (a) Any amateur station licensed to a holder of a Technician, General, Advanced or Amateur Extra Class operator license may be a repeater. A holder of a Technician, General, Advanced or Amateur Extra Class operator license may be the control operator of a repeater, subject to the privileges of the class of operator license held.
- (b) A repeater may receive and retransmit only on the 10 m and shorter wavelength frequency bands except the  $28.0-29.5~\mathrm{MHz},~50.0-51.0~\mathrm{MHz},~144.0-144.5~\mathrm{MHz},~145.5-146.0~\mathrm{MHz},~222.00-222.15~\mathrm{MHz},~431.0-433.0~\mathrm{Mhz},~\mathrm{and}~435.0-438.0~\mathrm{Mhz}~\mathrm{segments}$
- (c) Where the transmissions of a repeater cause harmful interference to another repeater, the two station licensees are equally and fully responsible for resolving the interference unless the operation of one station is recommended by a frequency coordinator and the operation of the other station is not. In that case, the licensee of the non-coordinated repeater has primary responsibility to resolve the interference.
- (d) A repeater may be automatically controlled.
- (e) Ancillary functions of a repeater that are available to users on the input channel are not considered remotely controlled functions of the station.

Limiting the use of a repeater to only certain user stations is permissible.

- (f) [Reserved]
- (g) The control operator of a repeater that retransmits inadvertently communications that violate the rules in this part is not accountable for the violative communications.
- (h) The provisions of this paragraph do not apply to repeaters that transmit on the 1.2 cm or shorter wavelength bands. Before establishing a repeater within 16 km (10 miles) of the Arecibo Observatory or before changing the transmitting frequency, transmitter power, antenna height or directivity of an existing repeater, the station licensee must give written notification thereof to the Interference Office, Arecibo Observatory, HC3 Box 53995, Arecibo, Puerto Rico 00612, in writing or electronically, of the technical parameters of the proposal. Licensees who choose to transmit information electronically should e-mail prcz@naic.edu.
- (1) The notification shall state the geographical coordinates of the antenna (NAD-83 datum), antenna height above mean sea level (AMSL), antenna center of radiation above ground level (AGL), antenna directivity and gain, proposed frequency and FCC Rule Part, type of emission, effective radiated power, and whether the proposed use is itinerant. Licensees may wish to consult interference guidelines provided by Cornell University.
- (2) If an objection to the proposed operation is received by the FCC from the Arecibo Observatory, Arecibo, Puerto Rico, within 20 days from the date of notification, the FCC will consider all aspects of the problem and take whatever action is deemed appropriate. The licensee will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory.

[54 FR 25857, June 20, 1989, as amended at 55 FR 4613, Feb. 9, 1990; 56 FR 32517, July 17, 1991; 58 FR 64385, Dec. 7, 1993; 59 FR 18975, Apr. 21, 1994; 62 FR 55536, Oct. 27, 1997; 63 FR 41205, Aug. 3, 1998; 63 FR 68980, Dec. 14, 1998; 69 FR 24997, May 5, 2004; 70 FR 31374, June 1, 20051