

## Federal Communications Commission

## § 74.802

case of custom modifications (those not related to installation of manufacturer-supplied and FCC-certificated equipment), the licensee shall certify compliance with all applicable transmission system requirements.

(6) The licensee shall maintain with the station's records for a period of not less than two years the following information and make this information to the Commission upon request:

(i) A description of the modifications performed and performance tests or, in the case of installation of a manufacturer-supplied modification kit, a description of the nature of the modifications, installation and test instructions and other material provided by the manufacturer;

(ii) Results of performance-tests and measurements on the modified transmitter; and

(iii) Copies of related correspondence with the Commission.

(c) In connection with the on-channel conversion of existing analog transmitters for digital operation, a limited allowance is made for transmitters with final amplifiers that do not meet the attenuation of the Simple emission mask at the channel edges. Station licensees may obtain equivalent compliance with this attenuation requirement in the following manner:

(1) Measure the level of attenuation of emissions below the average digital power output at the channel edges in a 500 kHz bandwidth; measurements made over a different measurement bandwidth should be corrected to the equivalent attenuation level for a 500 kHz bandwidth using the formula given in § 74.794;

(2) Calculate the difference in dB between the 46 dB channel-edge attenuation requirement of the Simple mask;

(3) Subtract the value determined in the previous step from the authorized effective radiated power ("ERP") of the analog station being converted to digital operation. Then subtract an additional 6 dB to account for the approximate difference between analog peak and digital average power. For this purpose, the ERP must be expressed in decibels above one kilowatt:  $ERP(dBk) = 10 \log ERP(kW)$ ;

(4) Convert the ERP calculated in the previous step to units of kilowatts; and

(5) The ERP value determined through the above procedure will produce equivalent compliance with the attenuation requirement of the simple emission mask at the channel edges and should be specified as the digital ERP in the minor change application for an on-channel digital conversion. The transmitter may not be operated to produce a higher digital ERP than this value.

[69 FR 69336, Nov. 29, 2004]

### Subpart H—Low Power Auxiliary Stations

#### § 74.801 Definitions.

*Cable television system operator.* A cable television operator is defined in § 76.5(cc) of the rules.

*Low power auxiliary station.* An auxiliary station authorized and operated pursuant to the provisions set forth in this subpart. Devices authorized as low power auxiliary stations are intended to transmit over distances of approximately 100 meters for uses such as wireless microphones, cue and control communications, and synchronization of TV camera signals.

*Motion picture producer.* Motion picture producer refers to a person or organization engaged in the production or filming of motion pictures.

*Television program producer.* Television program producer refers to a person or organization engaged in the production of television programs.

*Wireless assist video device.* An auxiliary station authorized and operated by motion picture and television program producers pursuant to the provisions of this subpart. These stations are intended to transmit over distances of approximately 300 meters for use as an aid in composing camera shots on motion picture and television sets.

(Sec. 5, 48 Stat. 1068; 47 U.S.C. 155)

[42 FR 14729, March 16, 1977, as amended at 43 FR 14662, Apr. 7, 1978; 51 FR 4603, Feb. 6, 1986; 51 FR 9966, Mar. 24, 1986; 54 FR 41842, Oct. 12, 1989; 68 FR 12772, Mar. 17, 2003]

#### § 74.802 Frequency assignment.

(a) Frequencies within the following bands may be assigned for use by low power auxiliary stations:

## § 74.803

26.100–26.480 MHz  
54.000–72.000 MHz  
76.000–88.000 MHz  
161.625–161.775 MHz (except in Puerto Rico or the Virgin Islands)  
174.000–216.000 MHz  
450.000–451.000 MHz  
455.000–456.000 MHz  
470.000–488.000 MHz  
488.000–494.000 MHz (except Hawaii)  
494.000–608.000 MHz  
614.000–806.000 MHz  
944.000–952.000 MHz

(b) Operations in the bands allocated for TV broadcasting, listed below, are limited to locations removed from existing co-channel TV broadcast stations by not less than the following distances unless otherwise authorized by the FCC. (See § 73.609 for zone definitions.)

(1) 54.000–72.000 MHz and 76.000–88.000 MHz:

Zone I 105 km (65 miles)  
Zones II and III 129 km (80 miles)

(2) 174.000–216.000 MHz

Zone I 97 km (60 miles)  
Zones II and III 129 km (80 miles)

(3) 470.000–608.000 MHz and 614.000–806.000 MHz.

All zones 113 km (70 miles)

(c) Specific frequency operation is required when operating within the bands allocated for TV broadcasting.

(1) The frequency selection shall be offset from the upper or lower band limits by 25 kHz or an integral multiple thereof.

(2) One or more adjacent 25 kHz segments within the assignable frequencies may be combined to form a channel whose maximum bandwidth shall not exceed 200 kHz.

(d) Low power auxiliary licensees will not be granted exclusive frequency assignments.

[52 FR 2535, Jan. 23, 1987, as amended at 68 FR 12772, Mar. 17, 2003]

### § 74.803 Frequency selection to avoid interference.

(a) Where two or more low power auxiliary licensees need to operate in the same area, the licensees shall endeavor to select frequencies or schedule operation in such manner as to avoid mutual interference. If a mutually satisfactory arrangement cannot

## 47 CFR Ch. I (10–1–08 Edition)

be reached, the Commission shall be notified and it will specify the frequency or frequencies to be employed by each licensee.

(b) The selection of frequencies in the bands allocated for TV broadcasting for use in any area shall be guided by the need to avoid interference to TV broadcast reception. In these bands, low power auxiliary station usage is secondary to TV broadcasting and land mobile stations operating in the UHF-TV spectrum and must not cause harmful interference. If such interference occurs, low power auxiliary station operation must immediately cease and may not be resumed until the interference problem has been resolved.

[42 FR 14729, Mar. 16, 1977, as amended at 52 FR 2535, Jan. 23, 1987]

### § 74.831 Scope of service and permissible transmissions.

The license for a low power auxiliary station authorizes the transmission of cues and orders to production personnel and participants in broadcast programs and motion pictures and in the preparation therefor, the transmission of program material by means of a wireless microphone worn by a performer and other participants in a program or motion picture during rehearsal and during the actual broadcast, filming, or recording, or the transmission of comments, interviews, and reports from the scene of a remote broadcast. Low power auxiliary stations operating in the 944–952 MHz band may, in addition, transmit synchronizing signals and various control signals to portable or hand-carried TV cameras which employ low power radio signals in lieu of cable to deliver picture signals to the control point at the scene of a remote broadcast.

[42 FR 14729, Mar. 16, 1977, as amended at 51 FR 4603, Feb. 6, 1986]

### § 74.832 Licensing requirements and procedures.

(a) A license authorizing operation of one or more low power auxiliary stations will be issued only to the following:

(1) A licensee of an AM, FM, TV, or International broadcast station or low power TV station. Low power auxiliary stations will be licensed for used with a