

## Federal Communications Commission

## § 21.122

### § 21.118 Transmitter construction and installation.

(a) The equipment at the operating and transmitting positions shall be so installed and protected that it is not accessible to, or capable of being operated by, persons other than those duly authorized by the licensee.

(b) In any case where the maximum modulating frequency of a transmitter is prescribed by the Commission, the transmitter shall be equipped with a low-pass or band-pass modulation filter of suitable performance characteristics. In those cases where a modulation limiter is employed, the modulation filter shall be installed between the transmitter stage in which limiting is effected and the modulated stage of the transmitter.

(c) Each transmitter employed in these services shall be equipped with an appropriately labeled pilot lamp or meter which will provide continuous visual indication at the transmitter when its control circuits have been placed in a condition to activate the transmitter. Such requirement will not be applicable to MDS response stations or MDS booster stations authorized pursuant to § 21.913(e). In addition, facilities shall be provided at each transmitter to permit the transmitter to be turned on and off independently of any remote control circuits associated therewith.

(d) [Reserved]

(e) At each transmitter control point the following facilities shall be installed:

(1) A carrier operated device which will provide continuous visual indication when the transmitter is radiating, or, in lieu thereof, a pilot lamp or meter which will provide continuous visual indication when the transmitter control circuits have been placed in a condition to activate the transmitter.

(2) Facilities which will permit the operator to turn transmitter carrier on and off at will.

(f) Transmitter control circuits from any control point shall be so installed that grounding or shorting any line in the control circuit will not cause the transmitter to radiate: *Provided, however*, That this provision shall not be applicable to control circuits of stations which normally operate with con-

tinuous radiation or to control circuits which are under the effective operational control of responsible operating personnel 24 hours per day.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987; 63 FR 65101, Nov. 25, 1998]

§ 21.119 [Reserved]

### § 21.120 Authorization of transmitters.

(a) Except for transmitters used at developmental stations, each transmitter shall be a type which has been certificated by the Commission for use under the applicable rules of this part.

(b) Any manufacturer of a transmitter to be produced for use under the rules of this part may request certification by following the applicable procedures set forth in part 2 of this chapter. Type accepted and notified transmitters are included in the Commission's Radio Equipment List.

(c) Certification for an individual transmitter may also be requested by an applicant for a station authorization, pursuant to the procedures set forth in part 2 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 49 FR 3999, Feb. 1, 1984; 50 FR 7340, Feb. 22, 1985; 58 FR 49226, Sept. 22, 1993; 59 FR 19645, Apr. 25, 1994; 61 FR 26676, May 28, 1996; 63 FR 36603, July 7, 1998]

§ 21.121 [Reserved]

### § 21.122 Microwave digital modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 15 GHz shall, with appropriate multiplex equipment, comply with the following additional requirement: The bit rate, in bits per second, shall be equal to or greater than the bandwidth specified by the emission designator in Hertz (e.g., to be acceptable, equipment transmitting at a 6 Mb/s rate must not require a bandwidth of greater than 6 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

(b) For purposes of compliance with the emission limitation requirements of § 21.106(a)(2) of this part and the requirements of paragraph (a) of this section, digital modulation techniques are considered as being employed when

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digital modulation contributes 50 percent or more to the total peak frequency deviation of a transmitted radio frequency carrier. The total peak frequency deviation shall be determined by adding the deviation produced by the digital modulation signal and the deviation produced by any frequency division multiplex (FDM) modulation used. The deviation (D) produced by the FDM signal shall be determined in accordance with § 2.202(f) of part 2 of this chapter.

(c) Transmitters employing digital modulation techniques shall effectively eliminate carrier spikes or single frequency tones in the output signal to the degree which would be obtained without repetitive patterns occurring in the signal.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23451, Apr. 27, 1981; 49 FR 37775, Sept. 26, 1984; 58 FR 49226, Sept. 22, 1993; 61 FR 26676, May 28, 1996]

## Subpart D—Technical Operation

### § 21.200 Station inspection.

The licensee of each station authorized in the radio services included in this part shall make the station available for inspection by representatives of the Commission at any reasonable hour.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987]

### § 21.201 Posting of station license.

(a) The instrument of authorization, a clearly legible photocopy thereof, or the name, address and telephone number of the custodian of the instrument of authorization shall be available at each station, booster station authorized pursuant to § 21.913(b) and MDS response station hub. Each operator of an MDS booster station shall post at the booster station the name, address and telephone number of the custodian of the notification filed pursuant to § 21.913(e) if such notification is not maintained at the booster station.

(b) If an MDS station, an MDS booster station or an MDS response station hub is operated unattended, the call sign and name of the licensee shall be displayed such that it may be read

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within the vicinity of the transmitter enclosure or antenna structure.

[64 FR 63731, Nov. 22, 1999]

### §§ 21.202–21.208 [Reserved]

### § 21.209 Communications concerning safety of life and property.

(a) Handling and transmission of messages concerning the safety of life or property which is in imminent danger shall be afforded priority over other messages.

(b) No person shall knowingly cause to be transmitted any false or fraudulent message concerning the safety of life or property, or refuse upon demand immediately to relinquish the use of a radio circuit to enable the transmission of messages concerning the safety of life or property which is in imminent danger, or knowingly interfere or otherwise obstruct the transmission of such messages.

### § 21.210 Operation during emergency.

The licensee of any station in these services may, during a period of emergency in which normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in a manner other than that specified in the instrument of authorization: *Provided*, That (a) That as soon as possible after the beginning of such emergency use, notice be sent to the Commission at Washington, D.C. stating the nature of the emergency and the use to which the station is being put, and (b) that the emergency use of the station shall be discontinued as soon as substantially normal communication facilities are again available, and (c) that the Commission at Washington, D.C. shall be notified immediately when such special use of the station is terminated, and (d) that, in no event, shall any station engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided by the Commission, or by law, and (e) that the Commission may, at any time, order