FM channel	Interference Contour F(50,10) curves (dBu)
215	78
216	80
217	81
218	85
219	88
220	90

(d) FM translator stations authorized prior to June 1, 1991 with facilities that do not comply with the predicted interference protection provisions of this section, may continue to operate, provided that operation is in conformance with §74.1203 regarding actual interference. Applications for major changes in FM translator stations must specify facilities that comply with the provisions of this section.

[55 FR 50695, Dec. 10, 1990, as amended at 58 FR 42025, Aug. 6, 1993]

§ 74.1231 Purpose and permissible service.

(a) FM translators provide a means whereby the signals of AM or FM broadcast stations may be retransmitted to areas in which direct reception of such AM or FM broadcast stations is unsatisfactory due to distance or intervening terrain barriers, and a means for AM Class D stations to continue operating at night.

(b) An FM translator may be used for the purpose of retransmitting the signals of a primary AM or FM radio broadcast station or another translator station the signal of which is received directly through space, converted, and suitably amplified, and originating programming to the extent authorized in paragraphs (f), (g), and (h) of this section. However, an FM translator providing fill-in service may use any terrestrial facilities to receive the signal that is being rebroadcast. An FM booster station or a noncommercial educational FM translator station that is operating on a reserved channel (Channels 201-220) and is owned and operated by the licensee of the primary noncommercial educational station it rebroadcasts may use alternative signal delivery means, including, but not limited to, satellite and terrestrial microwave facilities. Provided, however, that an applicant for a noncommercial educational translator operating on a reserved channel (Channel 201–220) and owned and operated by the licensee of the primary noncommercial educational AM or FM station it rebroadcasts complies with either paragraph (b)(1) or (b)(2) of this section:

- (1) The applicant demonstrates that:
- (i) The transmitter site of the proposed FM translator station is within 80 kilometers of the predicted 1 mV/m contour of the primary station to be rebroadcast; or.
- (ii) The transmitter site of the proposed FM translator station is more than 160 kilometers from the transmitter site of any authorized full service noncommercial educational FM station; or,
- (iii) The application is mutually exclusive with an application containing the showing as required by paragraph 74.1231(b)(2) (i) or (ii) of this section; or,
- (iv) The application is filed after October 1, 1992.
- (2) If the transmitter site of the proposed FM translator station is more than 80 kilometers from the predicted 1 mV/m contour of the primary station to be rebroadcast or is within 160 kilometers of the transmitter site of any authorized full service noncommercial educational FM station, the applicant must show that:
- (i) An alternative frequency can be used at the same site as the proposed FM translator's transmitter location and can provide signal coverage to the same area encompassed by the applicant's proposed 1 mV/m contour; or,
- (ii) An alternative frequency can be used at a different site and can provide signal coverage to the same area encompassed by the applicant's proposed $1\ mV/m$ contour.

Note: For paragraphs 74.1231(b) and 74.1231(i) of this section, auxiliary intercity relay station frequencies may be used to deliver signals to FM translator and booster stations on a secondary basis only. Such use shall not interfere with or otherwise preclude use of these frequencies for transmitting aural programming between the studio and transmitter location of a broadcast station, or between broadcast stations, as provided in paragraphs 74.531 (a) and (b) of this part. Prior to filing an application for an auxiliary intercity relay microwave frequency, the applicant shall notify the local frequency coordination committee, or, in the

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absence of a local frequency coordination committee, any licensees assigned the use of the proposed operating frequency in the intended location or area of operation.

- (c) The transmissions of each FM translator or booster station shall be intended only for direct reception by the general public. An FM translator or booster shall not be operated solely for the purpose of relaying signals to one or more fixed received points for retransmission, distribution, or further relaying in order to establish a point-to-point FM radio relay system.
- (d) The technical characteristics of the retransmitted signals shall not be deliberately altered so as to hinder reception on conventional FM broadcast receivers.
- (e) An FM translator shall not deliberately retransmit the signals of any station other than the station it is authorized to retransmit. Precautions shall be taken to avoid unintentional retransmission of such other signals.
- (f) A locally generated radio frequency signal similar to that of an FM broadcast station and modulated with aural information may be connected to the input terminals of an FM translator for the purpose of transmitting voice announcements. The radio frequency signals shall be on the same channel as the normally used off-theair signal being rebroadcast. Connection of the locally generated signals shall be made by any automatic means when transmitting originations concerning financial support. The connections for emergency transmissions may be made manually. The apparatus used to generate the local signal that is used to modulate the FM translator must be capable of producing an aural signal which will provide acceptable reception on FM receivers designed for the transmission standards employed by FM broadcast stations.
- (g) The aural material transmitted as permitted in paragraph (f) of this section shall be limited to emergency warnings of imminent danger and to seeking or acknowledging financial support deemed necessary to the continued operation of the translator. Originations concerning financial support are limited to a total of 30 seconds an hour. Within this limitation the length of any particular announcement

will be left to the discretion of the translator station licensee. Solicitations of contributions shall be limited to the defrayal of the costs of installation, operation and maintenance of the translator or acknowledgements of financial support for those purposes. Such acknowledgements may include identification of the contributors, the size or nature of the contributions and advertising messages of contributors. Emergency transmissions shall be no longer or more frequent than necessary to protect life and property.

- (h) An FM translator station that rebroadcasts a Class D AM radio broadcast station as its primary station may originate programming during the hours the primary station is not operating, subject to the provisions of §74.1263(b) of this part.
- (i) FM broadcast booster stations provide a means whereby the licensee of an FM broadcast station may provide service to areas in any region within the primary station's predicted, authorized service contours. An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmissions, except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the ap-

Note: In the case of an FM broadcast station authorized with facilities in excess of those specified by §73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned.

[35 FR 15388, Oct. 2, 1970, as amended at 45 FR 37842, June 5, 1980; 52 FR 31406, Aug. 20, 1987; 53 FR 14803, Apr. 26, 1988; 54 FR 35342, Aug. 25, 1989; 55 FR 50695, Dec. 10, 1990; 57 FR 41111, Sept. 9, 1992; 58 FR 42026, Aug. 6, 1993; 63 FR 33879, June 22, 1998; 74 FR 45130, Sept. 1, 2009]