

## § 74.710

City	Chan- nel	Coordinates	
		Latitude	Longitude
Philadelphia, PA .....	17	40°02'30"	075°14'24"
Pittsburgh, PA .....	16	40°26'46"	079°57'51"
Scranton, PA .....	16	41°10'58"	075°52'21"
Parkersburg, WV .....	15	39°20'50"	081°33'56"
Madison, WI .....	15	43°03'01"	089°29'15"

(c) A low power TV or TV translator station application will not be accepted if it specifies a site that is within the protected contour of a co-channel or first adjacent channel land mobile assignment.

(d) The low power TV or TV translator station field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) The field strength is calculated using Figure 10c of § 73.699 (F(50, 10) charts) of Part 73 of this chapter.

(2) A low power TV or TV translator station application will not be accepted if it specifies the same channel as one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 52 dBu.

(3) A low power TV or TV translator station application will not be accepted if it specifies a channel that is one channel above or below one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 76 dBu.

(e) To protect stations in the Off-shore Radio Service, a low power TV or TV translator station construction permit application will not be accepted if it specifies operation on channels 15, 16, 17 or 18 in the following areas. West Longitude and North Latitude are abbreviated as W.L. and N.L. respectively.

(1) On Channel 15: west of 92°00' W.L.; east of 98°30' W.L.; and south of a line extending due west from 30°30' N.L., 92°00' W.L. to 30°30' N.L., 96°00' W.L.; and then due southwest to 28°00' N.L., 98°30' W.L.

(2) On Channel 16: west of 86°40' W.L.; east of 96°30' W.L.; and south of a line extending due west from 31°00' N.L., 86°40' W.L. to 31°00' N.L., 95°00' W.L. and then due southwest to 29°30' N.L., 96°30' W.L.

(3) On Channel 17: west of 86°30' W.L.; east of 96°00' W.L.; and south of a line

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extending due west from 31°00' N.L., 86°30' W.L. to 31°30' N.L., 94°00' W.L. and then due southwest to 29°30' N.L., 96°00' W.L.

(4) On Channel 18: west of 87°00' W.L.; east of 95°00' W.L.; and south of 31°00' N.L.

[47 FR 21499, May 18, 1982, as amended at 50 FR 12027, Mar. 27, 1985; 50 FR 33942, Aug. 22, 1985; 69 FR 31906, June 8, 2004]

### § 74.710 Digital low power TV and TV translator station protection.

(a) An application to construct a new low power TV, TV translator, or TV booster station or change the facilities of an existing station will not be accepted if it fails to protect an authorized digital low power TV or TV translator station or an application for such station filed prior to the date the low power TV, TV translator, or TV booster application is filed.

(b) Applications for low power TV, TV translator and TV booster stations shall protect digital low power TV and TV translator stations pursuant to the following requirements:

(1) An application must not specify an antenna site within the protected contour of a co-channel or adjacent channel digital low power TV or TV translator station, as defined in § 74.792.

(2) The ratio in dB of the field strength of the low power TV, TV translator or TV booster station at the protected contour of a co-channel digital TV or TV translator station must meet the requirements specified in § 74.706(d)(1).

(3) The ratio in dB of the field strength of the low power TV, TV translator or TV booster station at the protected contour of a digital low power TV or TV translator station on the lower and upper adjacent channels must not exceed 49 dB and 48 dB, respectively.

(4) The analysis used in 74.710 should use the propagation methods specified in § 74.706(c).

(c) As an alternative to the requirements of paragraph (b) of this section, an applicant for a low power TV, TV translator or TV booster may make full use of terrain shielding and Longley-Rice terrain dependent propagation prediction methods to demonstrate that the proposed facility

would not be likely to cause interference to digital low power TV or TV translator stations, as described in § 74.707(e) (*i.e.*, reduce the service population by no more than 0.5% within the station's protected contour based on the interference thresholds of § 73.623(c) of this chapter).

[69 FR 69332, Nov. 29, 2004]

**§ 74.731 Purpose and permissible service.**

(a) Television broadcast translator stations and television broadcast booster stations provide a means whereby the signals of television broadcast stations may be retransmitted to areas in which direct reception of such television broadcast stations is unsatisfactory due to distance or intervening terrain barriers.

(b) Except as provided in paragraph (f) of this section, a television broadcast translator station or television broadcast booster station may be used only to receive the signals of a television broadcast station, another television broadcast translator station, a television translator relay station, a television intercity relay station, a television STL station, or other suitable source such as a CARS or common carrier microwave station, for the simultaneous retransmission of the programs and signals of a television broadcast station. Such retransmissions may be accomplished by either:

(1) Reception of the television programs and signals of a television broadcast station directly through space, conversion to a different channel by simple heterodyne frequency conversion and suitable amplification; or,

(2) Modulation and amplification of a video and audio feed, in which case modulating equipment meeting the requirements of § 74.750(d) shall be used.

(c) The transmissions of each television broadcast translator station shall be intended for direct reception by the general public and any other use shall be incidental thereto. A television broadcast translator station shall not be operated solely for the purpose of relaying signals to one or more fixed receiving points for retransmission, distribution, or further relaying.

(d) The technical characteristics of the retransmitted signals shall not be deliberately altered so as to hinder reception on conventional television broadcast receivers.

(e) A television broadcast translator station shall not deliberately retransmit the signals of any station other than the station it is authorized by license 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 a TV broadcast station and modulated with visual and aural information may be connected to the input terminals of a television broadcast translator or low power station for the purposes of transmitting still photographs, slides and voice announcements. The radio frequency signals shall be on the same channel as the normally used off-the-air signal being rebroadcast. When transmitting originations concerning financial support or public service announcements, connection of the locally generated signals shall be made automatically either by means of a time switch or upon receipt of a control signal from the TV station being rebroadcast designed to actuate the switching circuit. The switching circuit will be so designed that the input circuit will be returned to the off-the-air signal within 30 seconds. The connection for emergency transmissions may be made manually. The apparatus used to generate the local signal which is used to modulate the translator or low power station must be capable of producing a visual or aural signal or both which will provide acceptable reception on television receivers designed for the transmission standards employed by TV broadcast stations. The visual and aural materials so transmitted shall be limited to emergency warnings of imminent danger, to local public service announcements and to seeking or acknowledging financial support deemed necessary to the continued operation of the station. Accordingly, the originations concerning financial support and PSAs are limited to 30 seconds each, no