

§ 73.8000), ATSC A/53, Parts 1–6: 2007 “ATSC Digital Television Standard,” (January 3, 2007), except for section 6.1.2 (“Compression Format Constraints”) of A/53 Part 4: 2007 (“MPEG–2 Video Systems Characteristics”) and the phrase “see Table 6.2” in section 6.1.1 Table 6.1 and section 6.1.3 Table 6.3 (incorporated by reference, see § 73.8000), and ATSC A/65C: “ATSC Program and System Information Protocol for Terrestrial Broadcast and Cable, Revision C With Amendment No. 1 dated May 9, 2006,” (January 2, 2006) (incorporated by reference, see § 73.8000). Although not incorporated by reference, licensees may also consult ATSC A/54A: “Recommended Practice: Guide to Use of the ATSC Digital Television Standard, including Corrigendum No. 1,” (December 4, 2003, Corrigendum No. 1 dated December 20, 2006, and ATSC A/69: “Recommended Practice PSIP Implementation Guidelines for Broadcasters,” (June 25, 2002) (Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303)). ATSC A/54A and ATSC A/69 are available from Advanced Television Systems Committee (ATSC), 1750 K Street, NW., Suite 1200, Washington, DC 20006, or at the ATSC Web site: <http://www.atsc.org/standards.html>.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13660, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 73.682, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

EFFECTIVE DATE NOTE: At 76 FR 55603, Sept. 8, 2011, § 73.682 was amended by revising paragraph (d), effective Oct. 11, 2011. For the convenience of the user, the revised text is set forth as follows:

**§ 73.682 TV transmission standards.**

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(d) *Digital broadcast television transmission standard.* Effective October 11, 2011 transmission of digital broadcast television (DTV) signals shall comply with the standards for such transmissions set forth in ATSC A/52: “ATSC Standard Digital Audio Compression (AC–3)”, ATSC A/53, Parts 1–4 and 6: 2007 “ATSC Digital Television Standard,” (January 3, 2007), and ATSC A/53 Part 5:2010 “ATSC Digital Television Standard: Part 5—

AC–3 Audio System Characteristic,” (July 6, 2010), except for section 6.1.2 (“Compression Format Constraints”) of A/53 Part 4: 2007 (“MPEG–2 Video Systems Characteristics”) and the phrase “see Table 6.2” in section 6.1.1 Table 6.1 and section 6.1.3 Table 6.3, and ATSC A/65C: “ATSC Program and System Information Protocol for Terrestrial Broadcast and Cable, Revision C With Amendment No. 1 dated May 9, 2006,” (January 2, 2006) (all standards incorporated by reference, see § 73.8000). Although not incorporated by reference, licensees may also consult ATSC A/54A: “Recommended Practice: Guide to Use of the ATSC Digital Television Standard, including Corrigendum No. 1,” (December 4, 2003, Corrigendum No. 1 dated December 20, 2006, and ATSC A/69: “Recommended Practice PSIP Implementation Guidelines for Broadcasters,” (June 25, 2002) (Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303)). ATSC A/54A and ATSC A/69 are available from Advanced Television Systems Committee (ATSC), 1750 K Street, NW., Suite 1200, Washington, DC 20006, or at the ATSC Web site: <http://www.atsc.org/standards.html>.

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**§ 73.683 Field strength contours and presumptive determination of field strength at individual locations.**

(a) In the authorization of TV stations, two field strength contours are considered. These are specified as Grade A and Grade B and indicate the approximate extent of coverage over average terrain in the absence of interference from other television stations. Under actual conditions, the true coverage may vary greatly from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. The required field strength, *F* (50,50), in dB above one micro-volt per meter (dBu) for the Grade A and Grade B contours are as follows:

	Grade A (dBu)	Grade B (dBu)
Channels 2–6 .....	68	47
Channels 7–13 .....	71	56
Channels 14–69 .....	74	64

(b) It should be realized that the *F* (50,50) curves when used for Channels 14–69 are not based on measured data at distances beyond about 48.3 kilometers (30 miles). Theory would indicate that the field strengths for Channels 14–69

should decrease more rapidly with distance beyond the horizon than for Channels 2–6, and modification of the curves for Channels 14–69 may be expected as a result of measurements to be made at a later date. For these reasons, the curves should be used with appreciation of their limitations in estimating levels of field strength. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated. In licensing proceedings these variations will not be considered.

(c) The field strength contours will be considered for the following purposes only:

(1) In the estimation of coverage resulting from the selection of a particular transmitter site by an applicant for a TV station.

(2) In connection with problems of coverage arising out of application of § 73.3555.

(3) In determining compliance with § 73.685(a) concerning the minimum field strength to be provided over the principal community to be served.

(d) For purposes of determining the eligibility of individual households for satellite retransmission of distant network signals under the copyright law provisions of 17 U.S.C. 119(d)(10)(A), field strength shall be determined by the Individual Location Longley-Rice (ILLR) propagation prediction model. Such eligibility determinations shall consider only the signals of network stations located in the subscriber's Designated Market Area. Guidance for use of the ILLR model in predicting the field strength of analog television signals for such determinations is provided in OET Bulletin No. 72 (stations operating with analog signals include some Class A stations licensed under part 73 of this chapter and some licensed low power TV and TV translator stations that operate under part 74 of this chapter). Guidance for use of the ILLR model in predicting the field strength of digital television signals for such determinations is provided in OET Bulletin No. 73 (stations operating

with digital signals include all full service stations and some Class A stations that operate under part 73 of this chapter and some low power TV and TV translator stations that operate under part 74 of this chapter). OET Bulletin No. 72 and OET Bulletin No. 73 are available at the FCC's Headquarters Building, 445 12th St., SW., Reference Information Center, Room CY-A257, Washington, DC, or at the FCC's Office of Engineering and Technology (OET) Web site: <http://www.fcc.gov/oet/info/documents/bulletins/>.

(e) If a location was predicted to be unserved by a local network station using a version of the ILLR model specified in OET Bulletin No. 72 or OET Bulletin No. 73, as appropriate, and the satellite subscriber at that location is receiving a distant signal affiliated with the same network from its satellite provider, the satellite subscriber shall remain eligible for receiving the distant signal from its satellite provider if that location is subsequently predicted to be served by the local station due to either a change in the ILLR model or a change in the station's operations that change its coverage.

(f) A satellite carrier is exempt from the verification requirements of 47 U.S.C. 339(c)(4)(A) with respect to a test requested by a satellite subscriber to whom the retransmission of the signals of local broadcast stations is available under 47 U.S.C. 338 from such carrier. The definitions of satellite carrier, subscriber, and local market contained in 47 CFR 76.66(a) apply to this paragraph (f).

[44 FR 36039, June 20, 1979, as amended at 47 FR 35990, Aug. 18, 1982; 50 FR 23699, June 5, 1985; 50 FR 32416, Aug. 12, 1985; 65 FR 36641, June 9, 2000; 70 FR 21670, Apr. 27, 2005; 75 FR 80363, Dec. 22, 2010]

#### § 73.684 Prediction of coverage.

(a) All predictions of coverage made pursuant to this section shall be made without regard to interference and shall be made only on the basis of estimated field strengths. The peak power of the visual signal is used in making predictions of coverage.

(b) Predictions of coverage shall be made only for the same purposes as relate to the use of field strength contours as specified in § 73.683(c).