

§ 73.127

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Moreover, the PSRA or PSSA does not extend beyond the term of the basic authorization.

(j) The Commission will periodically recalculate maximum permissible power and times for commencing PSRA and PSSA for each Class D station operating in accordance with paragraph (c) of this section. The Commission will calculate the maximum power at which each individual station may conduct presunrise operations during extended daylight saving time and shall issue conforming authorizations. These original notifications and subsequent notifications should be associated with the station's authorization. Upon notification of new power and time of commencing operation, affected stations shall make necessary adjustments within 30 days.

(k) A PSRA and PSSA does not require compliance with §§ 73.45, 73.182 and 73.1560 where the operation might otherwise be considered as technically substandard. Further, the requirements of paragraphs (a)(5), (b)(2), (c)(2), and (d)(2) of § 73.1215 concerning the scale ranges of transmission system indicating instruments are waived for PSRA and PSSA operation except for the radio frequency ammeters used in determining antenna input power.

(1) A station having an antenna monitor incapable of functioning at the authorized PSRA and PSSA power when using a directional antenna shall take the monitor reading using an unmodulated carrier at the authorized daytime power immediately prior to commencing PSRA or PSSA operations. Special conditions as the FCC may deem appropriate may be included for PSRA or PSSA to insure operation of the transmitter and associated equipment in accordance with all phases of good engineering practice.

[56 FR 64860, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992, as amended at 58 FR 27950, May 12, 1993]

§ 73.127 Use of multiplex transmission.

The licensee of an AM broadcast station may use its AM carrier to transmit signals not audible on ordinary consumer receivers, for both broadcast and non-broadcast purposes subject to the following requirements:

(a) Such use does not disrupt or degrade the station's own programs or the programs of other broadcast stations.

(b) AM carrier services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the FCC for the appropriate authorization and to comply with all policies and rules applicable to the service. Responsibility for making the initial determinations of whether a particular activity is common carriage rests with the AM station licensee. Initial determinations by licensees are subject to FCC examination and may be reviewed at the FCC's discretion. AM carrier services that are private carrier in nature must notify the Licensing Division of the Private Radio Bureau at Gettysburg, Pennsylvania 17325, by letter, prior to initiating service certifying compliance with 47 CFR parts 90 and 94.

(c) AM carrier services are of a secondary nature under the authority of the AM station authorization, and the authority to provide such communications services may not be retained or transferred in any manner separate from the station's authorization. The grant or renewal of an AM station permit or license is not furthered or promoted by proposed or past service. The permittee or licensee must establish that the broadcast operation is in the public interest wholly apart from the subsidiary communications services provided.

(d) The station identification, delayed recording, and sponsor identification announcements required by §§ 73.1201, 73.1208, and 73.1212 are not applicable to leased communications services transmitted via services that are not of a general broadcast program nature.

(e) The licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable.

(f) Installation of the multiplex transmitting equipment must conform with the requirements of § 73.1690(e).

[47 FR 25345, June 11, 1982, as amended at 49 FR 34015, Aug. 28, 1984; 51 FR 41629, Nov. 18, 1986; 51 FR 44478, Dec. 10, 1986]

§ 73.128 AM stereophonic broadcasting.

(a) An Am broadcast station may, without specific authority from the FCC, transmit stereophonic programs upon installation of type accepted stereophonic transmitting equipment and the necessary measuring equipment to determine that the stereophonic transmissions conform to the modulation characteristics specified in paragraphs (b) and (c) of this section. Stations transmitting stereophonic programs prior to March 21, 1994 may continue to do so until March 21, 1995 as long as they continue to comply with the rules in effect prior to March 21, 1994.

(b) The following limitations on the transmitted wave must be met to insure compliance with the occupied bandwidth limitations, compatibility with AM receivers using envelope detectors, and any applicable international agreements to which the FCC is a party:

(1) The transmitted wave must meet the occupied bandwidth specifications of § 73.44 under all possible conditions of program modulation. Compliance with requirement shall be demonstrated either by the following specific modulation tests or other docu-

mented test procedures that are to be fully described in the application for type acceptance and the transmitting equipment instruction manual. (See § 2.983(d)(8) and (j)).

(i) Main channel (L+R) under all conditions of amplitude modulations for the stereophonic system but not exceeding amplitude modulation on negative peaks of 100%.

(ii) Stereophonic (L-R) modulated with audio tones of the same amplitude at the transmitter input terminals as in paragraph (b)(i) of this section but with the phase of either the L or R channel reversed.

(iii) Left and Right Channel only, under all conditions of modulation for the stereophonic system in use but not exceeding amplitude modulation on negative peaks of 100%.

(c) Effective on December 20, 1994, stereophonic transmissions shall conform to the following additional modulation characteristics:

(1) The audio response of the main (L+R) channel shall conform to the requirements of the ANSI/EIA-549-1988, NRSC-1 AM Preemphasis/Deemphasis and Broadcast Transmission Bandwidth Specifications (NRSC-1).

(2) The left and right channel audio signals shall conform to frequency response limitations dictated by ANSI/EIA-549-1988.

(3) The stereophonic difference (L-R) information shall be transmitted by varying the phase of the carrier in accordance with the following relationship:

$$\phi = \tan^{-1} \left(\frac{m(L(t) - R(t))}{1 + m(L(t) + R(t))} \right)$$

where:

L(t)=audio signal left channel,

R(t)=audio signal right channel,

m=modulation factor, and

$m_{\text{peak}}(L(t)+R(t))=1$ for 100% amplitude modulation,

$m_{\text{peak}}(L(t) - R(t))=1$ for 100% phase modulation.

(4) The carrier phase shall advance in a positive direction when a left channel

signal causes the transmitter envelope to be modulated in a positive direction. The carrier phase shall likewise retard (negative phase change) when a right channel signal causes the transmitter envelope to be modulated in a positive direction. The phase modulation shall be symmetrical for the condition of difference (L-R) channel information