



NEWS

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET, N.W.
WASHINGTON, D.C. 20554

News media information 202 / 632-5050
Recorded listing of releases and texts
202 / 632-0002

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See MCI v. FCC, 515 F.2d 385 (D.C. Cir. 1975).

Report No. DC-

ACTION IN DOCKET CASE

April 12, 1989

FCC ADOPTS TECHNICAL AMENDMENT TO ITS RULES DESIGNED
TO IMPROVE THE QUALITY OF AM BROADCAST SERVICE
(MM DOCKET 88-376)

As part of its continuing effort to improve the quality of AM broadcast service, the Commission today adopted the National Radio Systems Committee (NRSC) emission limitation known as NRSC-2 as a new AM broadcast standard, beginning June 30, 1990. To facilitate the implementation of this new standard, the Commission also announced that until June 30, 1994, stations adhering to NRSC-1 audio pre-emphasis will be presumed to comply with NRSC-2, in the absence of specific information to the contrary.

Currently, AM stations are permitted to transmit a radio frequency signal with a bandwidth of up to 30 kHz. However, the majority of consumer receivers are designed with a much narrower receiver bandwidth so as to reduce the effects of interference from adjacent channel stations. This severely reduces the audio fidelity of AM radios. In an attempt to overcome this fidelity limitation, many broadcasters pre-emphasize, or "boost", the higher audio frequencies which exacerbates adjacent channel interference.

The NRSC developed two standards designed to reduce adjacent channel interference. They are: the NRSC-1 audio standard which establishes limits on program audio frequency response that will often, but not always, reduce adjacent channel interference; and the NRSC-2 emission limitation, which limits the RF bandwidth of emitted signals that actually cause interference.

Although many commenters urged adoption of the audio processing standard, the Commission concluded that meaningful adjacent channel interference improvements could best be obtained by restricting emissions. The FCC offered the following bases for this conclusion: 1) used alone, the NRSC-1 audio standard will not be effective in alleviating interference produced by overmodulation or transmission system anomalies; 2) the characteristics of the audio response intended to be produced by the NRSC-1 filter can be readily circumvented or abused by adjustments made to other audio processing equipment; and 3) to the extent NRSC-1 specifies a particular pre-emphasis of audio signals below 10 kHz, it restricts the flexibility of licensees in adjusting their audio processing equipment.

Until June 30, 1994, stations employing the NRSC-1 will be presumed to comply with NRSC-2 in the absence of specific information to the contrary and will not be required to make periodic emission measurements as required by FCC rules. However, the presumption of compliance with the emission limits may be rebutted by technical evidence of noncompliance.

(over)

If the Commission receives interference complaints containing such evidence, it will require licensees to make their own measurements and take appropriate corrective action. Licensees of existing stations who wish to operate pursuant to this presumptive compliance alternative must adhere to the NRSC-1 standard by June 30, 1990. Licensees of new AM stations who wish to operate pursuant to this alternative must comply with the NRSC-1 standard upon commencement of operation.

Action by the Commission April 12, 1989, by Report and Order (FCC 89-\\\). Commissioners

-FCC-

News Media contact: Patricia A. Chew at (202) 632-5050.
Mass Media Bureau contacts: James McNally at (202) 632-9660.