

Before the  
Federal Communications Commission  
Washington, D.C.

In the Matter of )  
 ) RM-9419  
Amendment of Sections 74.1231, )  
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74.1232, 74.1233, and 74.1284 of the )  
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Commission's Rules )  
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To: Mass Media Bureau

Comments of Harold Hallikainen

1. Harold Hallikainen submits these comments in response to the Petition for Rulemaking submitted by the American Community Broadcasters Association.

I do not support the petition because I believe it will not result in more listenership on the AM broadcast band, it is not spectrum efficient, and it does not increase the diversity of voices;

***AM Band Listenership***

2. The petition correctly points out that duplicating their programming on low power FM transmitters will provide a competitive advantage to AM stations (see *petition*, page 8). However, when the same programming is available on an FM station, there is little incentive for the public to listen to the original AM station. If anything, approving this petition would *reduce* AM listenership.

### ***Spectrum Efficiency***

3. Duplication of programming on two frequencies in the same geographic area is inefficient use of the spectrum. Though the petitioners claim the purpose of the proposed use of translators is to provide fill-in coverage *at night*, there is no mention as to what is to be done with these low power FM stations during the day. If, as expected, they continue to rebroadcast the AM station, listeners will move away from AM (or never go back after listening to the FM at night), and the duplicate programming will result in inefficient spectrum use. If the petitioners had suggested separate programming during the day, there would be more efficient spectrum use, since identical programming would not be available on two frequencies. The petitioners have made no such "separate programming" request, and, in fact, origination of programming on FM translators is not permitted under the current rules.

### ***Diversity of Voices***

4. The petitioners imply (on page 3) that providing an existing broadcaster with another frequency serves the goal of achieving "the widest possible dissemination of information from diverse and antagonistic sources." This goal would be better met by authorizing "another voice" not yet heard in the community to use the available FM frequency. Diversity of voices is served better by Low Power FM, as proposed in the Commission's NPRM in Docket 99-25, where a new licensee would use the frequency as opposed to the rebroadcast of an existing licensee's station, as proposed in this petition.

## ***AM Band Night Operation***

5. On page 6, the petitioners write of "the inherent deficiencies in the AM broadcast signal require stations to lower, or in many cases, shut off their power at night." This "deficiency" is, in fact, efficient use of the spectrum. Specifically, the authorization of daytime only AM stations allows "frequency reuse" during the day, in the absence of skywave propagation from distant stations that provides useable coverage over great distances at night. This day/night differential is inherent in the AM band. If this is not desirable for broadcasting, perhaps broadcasting should be completely moved to another band (such as the existing FM band) where such differentials do not exist. If, however, useful service can be provided with use of the AM broadcast band, then listeners should be encouraged to listen to the AM band, instead of encouraging them to listen to duplicated programming on FM.
6. AM stations that cannot cover certain areas of their communities at night may be able to improve their coverage in any several ways. Many stations operating with directional antennae at night do not have their community of license in the major lobe of the antenna pattern. A site change may allow the major lobe to cover the community while still providing required protection of other stations. Further, different antenna configurations may reduce skywave radiation allowing a power increase while continuing to protect other stations at night.
7. AM stations might also be able to add low power AM booster transmitters in neighborhoods where their nighttime coverage is inadequate. Such a low power booster would provide the same protection to distant stations due to

its low power, but would provide local coverage due to its proximity to the listeners' receivers.

### ***Proposed Modification of 74.1231***

8. The petitioners propose to permit "authorized" AM stations to use FM translators. Generally, FM translators operate by a "heterodyne and amplify" process whereby the received signal is changed to an output frequency (generally through two frequency conversions) and amplified to sufficient power level to drive the transmit antenna. I believe this "heterodyne and amplify" technique is what is meant by the phrase "received directly through space, converted, and suitably amplified," as used in this section of the rules. Noncommercial Educational (NCE) FM stations are permitted to use other signal delivery techniques, but demodulation and remodulation on the new carrier frequency is not currently permitted for commercial FM stations, and is not proposed in the petition. However, "heterodyne and amplify," as is permitted by the rules, would not result in a usable signal on a listener's FM receiver.
9. The proposed requirement that translators rebroadcasting NCE stations be restricted to the reserved portion of the band appears contrary to the purpose of the band reservation. I believe the reservation of this portion of the band for NCE use is to benefit NCE stations. The proposal will harm NCE stations by making fewer frequencies available for their translators.
10. The petition proposes modifying § 74.1231(b)(1) to authorize FM translators rebroadcasting AM stations if the translator is within the

500uV/m contour of the AM station, though it is not specified whether this is the daytime or nighttime contour of the AM station.

### ***Conclusion***

11. In conclusion, I do not support the petition because I believe it will not result in more listenership on the AM broadcast band, it is not spectrum efficient, and it does not increase the diversity of voices;

Dated this 9<sup>th</sup> day of February, 1999

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