

December 1, 2000

David W. Noble
General Manager, Radio Information Service
Suite 140
2100 Wharton Street
Pittsburgh, PA 15203

Dear Mr. Noble:

Through your filings with the Commission and discussions with Chairman Kennard, my staff and other Commission staff, I have become aware of your interest in the performance of the sort of Subsidiary Communications Authorization (SCA) receivers used by audio information services.

In response to your ongoing interest, I am pleased to enclose a preliminary report on the issue of possible impact by LPFM service on radio subcarrier services by the Office of Engineering and Technology, "A Study of Co-Channel and Adjacent Channel Interference Immunities of Subsidiary Communications Authorization (SCA) FM Broadcast Receivers."

As you know, this study was conducted on a sample of fourteen FM broadcast SCA receivers provided by National Public Radio. The receivers were from a variety of manufacturers, were of various ages and had endured various degrees of usage and wear.

This study found that many radio reading service receivers have been manufactured and are in use that capably resist the effects of third adjacent channel signals, and thus would operate effectively in an environment that does not include third adjacent channel separations.

It also found, however, that other SCA receivers do not perform as well, and could have their performance unacceptably degraded by the introduction of third adjacent channel signals. However, these receivers also failed to adequately reject fourth adjacent channel signals, which occur under our current rules for full power stations. For some of these receivers, this is apparently due to a variety of factors including misalignment at the factory or during servicing, or simple drift due to aging of components. The number of such receivers currently in use is undetermined at this time.

The report also found that the deficiencies in the poorly performing receivers can often be readily resolved on a case-by-case basis by providing the subject listener with antennas, filters, or the substitution of a more appropriate receiver. This is confirmed by the practice of many radio reading services of simply exchanging receivers when one of their listeners encounters a performance problem.

Nevertheless, I recommend that we continue to protect the reception capabilities of blind and other print-disabled persons for audio information provided by the limited number of radio reading services in each community. Be assured that we continue to recognize the important and unique services that radio reading operations provide to blind and other print-disabled persons.

You have indicated that the release and publication of this report will permit your association's members to begin planning for the future. I hope that this information will be useful in that regard.

If our office can be of further assistance in analyzing equipment capabilities or other pertinent technical issues, please do not hesitate to contact us.

Sincerely,

Dale N. Hatfield
Chief
Office of Engineering & Technology

Enclosure