

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of

Amendment of Part 2 of the  
Rules and Regulations to  
Establish An Allocation in  
the 220-225 MHz Band for the  
Radio Reading Services

RM-5434

**ORDER**

Adopted: January 30, 1987; Released: February 20, 1987

By the Commission:

**INTRODUCTION**

1. By this action the Commission denies a Petition for Rule Making filed by The Association of Radio Reading Services, Inc. (ARRS) requesting reallocation of 500 kHz of spectrum in the 220-225 MHz band on a primary basis for use nationwide by radio reading services for the blind and print-handicapped.

**BACKGROUND**

2. Radio reading services are conducted by nonprofit organizations that read printed materials over electronic media as a service to persons who are visually impaired. Currently, radio reading services operate mainly on subcarrier channels available on FM radio stations. This is usually done under a leasing arrangement. Radio reading services alternatively utilize cable television systems, a television second audio program (SAP), or the main channel of an AM or FM radio station.

3. ARRS represents 152 radio reading service outlets. In its petition ARRS states that the existing subcarrier delivery system has certain limitations and does not fully serve the needs of print-handicapped persons. ARRS asserts that because of these limitations, the existing services have reached only a small portion of the blind and print-handicapped. ARRS estimates that only about 150,000 print-handicapped persons have been reached by radio reading services, leaving over 2,350,000 print-handicapped persons unserved.

4. Among the problems with current subcarriers, according to ARRS, are the unavailability of FM subcarrier channels for use by the various radio reading services, the expenses entailed by subcarrier transmissions, and a relatively inferior transmission quality. ARRS states that radio reading services are provided primarily over the subcarriers of noncommercial FM stations, and in many areas there are no noncommercial FM station in existence that can be used to transmit radio reading services. Also, in many areas where a noncommercial FM station does exist, a subcarrier may not be in use.<sup>1</sup> ARRS states that the leasing fees paid to FM radio stations, often as high as \$1,000 per month, are excessive and tend to inhibit the growth of radio reading services. ARRS claims also that

many print-handicapped individuals cannot afford the \$75-100 costs of an FM subcarrier receiver. According to ARRS, the sound quality of subcarrier transmissions is poor and prolonged listening to the service is wearisome. ARRS states that this is due both to inherent technical limitations of the transmission system and to the unwillingness of FM stations to take measures to improve subcarrier signal quality. This results in cross talk and static on the subcarrier channel.

5. ARRS states that with a primary frequency allocation of 500 kHz (10 channels of 50 kHz) in the 220-225 MHz band, it will be able to eliminate the technical and cost problems and expand the availability of radio reading services. ARRS contends that the 220-225 MHz band, which is currently allocated to the amateur, fixed and mobile services, is underutilized. ARRS asserts that receivers in this band would cost \$25 rather than \$75-\$100. Also, ARRS maintains that the new service would have better audio frequency response and be less subject to distortion and interference than the existing system.

6. A list of parties who commented on the petition is provided in the attached Appendix. Several commenters representing the interests of the blind and print-handicapped supported the petition. The petition is opposed by the American Radio Relay League (ARRL) and a number of amateur radio operators. The amateurs contend that the 220-225 MHz band is heavily utilized and that the proposed use would be detrimental to amateurs. Further, they argue that sufficient outlets exist for radio reading services and that subcarrier receiver cost information provided by ARRS is overstated. They also believe that costs to establish and maintain 220 MHz radio stations would be higher than the cost of providing service via FM subcarriers. ARRL also disagrees that transmission quality would be substantially improved by the allocation of the 220-225 MHz band to the radio reading services.

**DISCUSSION**

7. We believe that the existing means for providing reading services are sufficient. We note, at the outset, that reading services are available by means other than radio, such as by audio recordings of books and magazines. With the proliferation of FM broadcast stations and their widespread distribution throughout the country, FM subcarriers would appear to be well-suited for radio reading services. Most major populated areas have one or more noncommercial FM subcarriers.<sup>2</sup> ARRS has provided little documentation to support its claim that there are areas where radio reading services have been unable to acquire an FM subcarrier.<sup>3</sup> Moreover, a recent survey indicates that although subcarrier usage has lagged, the number of FM subcarriers used for voice service, including radio reading services, increased by about 16% from 1985 to 1986.<sup>4</sup> We expect a growing number of outlets to be available for radio reading services with the addition of new FM radio stations and growth in alternative media outlets.<sup>5</sup> For these reasons, we do not feel a primary allocation in the 220-225 MHz band, for radio reading services is appropriated at this time.

8. We recognize the desirability of reducing costs of radio reading services. However, we are unconvinced that the cost of service at 220 MHz would indeed be significantly less. It seems unlikely that a radio of the quality desired by ARRS will cost only \$25, considering that high

quality consumer AM and FM radios typically cost much more. The cost of 220 MHz receivers is likely to be as high or greater than FM subcarrier receivers of comparable quality. Further, ARRS has not taken into account the considerable costs of establishing and maintaining its own stations. As to the issue of sound quality, we see no reason why subcarriers should not be capable of providing an acceptable signal. Indeed, subcarriers have been used for many years to provide background music as a subscription service.

9. ARRS also argues that transmissions over subcarriers are subject to the same restrictions as broadcasters and therefore certain materials, such as adult magazines, cannot be read over FM subcarriers. These restrictions would not apply, according to ARRS, if a new radio reading service were established in the 220-225 MHz band and categorized as a private radio service. However, ARRS's concern, even if valid is based upon a faulty premise. Subcarrier transmission of a program service does not constitute broadcasting within the meaning of Section 3(o) of the Communications Act, since subcarrier operation is not intended for the general public.<sup>6</sup>

10. In conclusion, we do not find sufficient reason to allocate spectrum for radio reading services. The frequency band sought for use by ARRS is, we believe, better used for the amateur, fixed and mobile radio services.<sup>7 8</sup>

11. For the reasons given in the foregoing discussion, IT IS ORDERED That the ARRS petition for allocation of 500 kHz in the 220-225 MHz band, for use by the radio reading services, IS DENIED.

12. For further information concerning this Order, contact Mr. Raymond LaForge, Office of Engineering and Technology, telephone (202) 653-8155.

## FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico  
Secretary

### APPENDIX

#### Parties Filing Comments in Response to RM 5434

American Association of Retired Persons  
The American Radio Relay League  
Amocams, Inc.  
Arkansas Radio Reading Service for the Blind, Inc.  
Association of Maximum Service Telecasters  
Elizabeth Chadwick  
Chicagoland Radio Information Service, Inc.  
Larry Wayne Hebert  
James M. Homan  
Jerold R. Johnson WASON  
Bernhard E. Keiser  
University of Kansas Audio-Reader Network  
Catherine M. McGough  
Dr. R. T. McLean  
Minnesota State Services for the Blind and Visually Handicapped

Rodney F. Moag WONDSD  
John F. Mulvihill, Jr.  
Marian W. Palmer  
Arthur B. Reis  
Bruce L. Rodenkirch  
The Washington Ear, Inc.  
WBHM Radio Reading Service, University of Alabama at Birmingham  
Mary E. White  
Written Communications Radio Service  
Charles J. Zabilski

#### Parties Filing Reply Comments in Response to RM 5434

American Association of Retired Persons  
Association of Radio Reading Services, Inc.

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### FOOTNOTES

<sup>1</sup> ARRS states that its ability to obtain use of a subcarrier on noncommercial stations has been difficult despite the Commission's decision in the Report and Order in BC Docket No. 82-1, 48 FR 26608 (June 3, 1983) as corrected, 48 FR 29872, which permitted FM noncommercial educational stations to use their subcarriers for remunerative activities provided they ensured that neither existing nor potential radio reading services for the blind are diminished in quality or quantity. The Commission stated that a station utilizing one of its subcarriers for commercial purposes would be obliged to accommodate radio reading services on another subchannel. Despite our policy to promote radio reading services in this earlier proceeding, ARRS alleges that the rule has not been the incentive that the Commission intended it to be. The Commission recently released a Memorandum Opinion and Order and Notice of Inquiry in response to a separate Petition for Rule Making filed by ARRS, RM-5509, in which it expressed this concern and sought improved access to FM subcarriers. The Commission saw the cost issue as the only unresolved matter. The Commission said in order to determine whether costs imposed by public radio stations are fair, that is, charged on a not-for-profit basis as required by the Commission, an inquiry appears necessary. See *Memorandum Opinion and Order* in MM Docket No. 87-9, FCC 87-30, adopted January 16, 1987.

<sup>2</sup> There are approximately 5000 FM radio stations nationwide including about 1200 that are classified as noncommercial.

<sup>3</sup> Most commonly transmitted subsidiary services, whether on National Public Radio (NPR) or Corporation for Public Broadcasting (CPB)-qualified FM public radio stations, were reading services of the visually impaired. See *Memorandum Opinion and Order*, MM Docket 87-9, supra, at 10.

<sup>4</sup> See "FM Subcarrier Market Growth Lags in 1985-1986", *Industrial Communications*, October 24, 1986, at p. 16.

<sup>5</sup> See *Report and Order* in Gen Docket No. 80-90, 48 FR 29486 (May 26, 1983). As a result of action taken in that proceeding, about 1200 new FM stations are expected to be authorized in the next few years.

<sup>6</sup> See *Report and Order* on Subscription Video Services, General Docket No. 85-305, adopted November 25, 1986. In re Request by Greater Washington Educational Telecommunications Association, Inc., Radio Station WETA-FM, Arlington,

VA. For Declaratory Ruling, 49 FCC 2d 948 (1974). See also *KMLA Broadcasting Corporation v. 20th Century Cigarette Vendors, et al.*, 264 F. Supp. 35 (1967).

<sup>7</sup> See Notice of Proposed Rule Making, in Gen. Docket No. 87.45 adopted February 2, 1987, where we are proposing a realignment of the allocations in the 216-225 MHz band among the amateur, fixed and land mobile services.

<sup>8</sup> ARRL submitted a Motion to Strike portions of the ARRS reply comments that allegedly misquoted comments filed by the amateurs regarding usage of the 220-225 MHz band. In view of the action taken herein, the Motion to Strike is moot.