AM Station

Commission eliminated restrictions on AM carrier usage. AM licensees will now be able to use their carrier signals for any purpose providing such usage does create interference to originating or other stations. This action is similar to recent deregulation of FM and TV subcarrier use. AM band is therefore able to participate in the marketplace for carrier services heretofore provided by FM and TV subcarriers.

—Amendment of Parts 2 and 73
MM Docket No. 83-1322

FCC 84-301
BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of
Amendment of Parts 2 and 73 of the Commission’s AM Broadcast Rules concerning the use of the AM carrier

MM Docket
No. 83-1322
RM-4367

REPORT AND ORDER
Adopted: June 27, 1984; Released: August 14, 1984

BY THE COMMISSION: COMMISSIONER RIVERA DISSENTING IN PART AND ISSUING A STATEMENT AT A LATER DATE.

Introduction

1. By this Report and Order, we are expanding the uses permitted for the carrier signal of AM radio stations. AM licensees will now be able to use their carrier signals for any broadcast or non-broadcast use that does not interfere with their main broadcast channel operation or the signals of other broadcast stations. Prior to this action, the only permitted non-broadcast uses of the AM carrier were remote control telemetry and utility load management.

Background

2. On December 1, 1983, the Commission adopted a Notice of Proposed Rule Making (Notice) proposing to extend the uses of the AM
carrier signal. To date, the only permitted non-broadcast uses of these signals were remote control telemetry and utility load management. In the Notice, the Commission suggested that no useful purpose is served by retaining restrictions on AM carrier use. The Commission further noted that because no additional spectrum is required to provide these new services, permitting such additional uses of AM carrier signals may result in more efficient use of the spectrum. The Commission also indicated that permitting AM broadcasters to utilize their carrier signals in this manner is consistent with the actions taken with regard to FM and TV aural subchannels.

3. In the Notice, the Commission proposed that any method used for the provision of AM carrier services must not disrupt or degrade the main broadcast signal of the station or the signals of any other radio service. The Commission also indicated that specific technical standards were not required for the secondary use of AM carrier signals. Finally, the Commission requested comments on the regulatory approach to be taken with regard to AM carrier services. A total of nine comments and three reply comments were filed in response to the Notice. A list of the commenting parties appears as Appendix A.

Discussion

4. After reviewing the record in this proceeding, we believe that the Commission's goal of full and efficient use of the spectrum is furthered by permitting additional uses for AM carrier signals. We now believe that no useful purpose is served by the retention of the existing restrictions of utility load management and remote control telemetry. As the Altran Electronics Division of McGraw-Edison Co., Inc. (Altran) points out in its comments, limiting AM carrier use to utility load management leaves many potential carrier signals idle. Further, by permitting additional secondary uses of the AM carrier, new and innovative services may be provided to the public without diminution of existing broadcast service.

5. We also believe that permitting AM stations to compete with FM and TV stations for business opportunities arising from multiplexing is beneficial. While there are significant technical differences between AM carrier signals and FM and TV aural subchannels that can preclude one

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2 FM radio and TV broadcast licensees are currently permitted to use their subcarriers for broadcast and non-broadcast purposes. See First Report and Order, BC Docket No. 82-586 (48 FR 28445), June 22, 1983 and Second Report and Order, Docket No. 21323 (49 FR 18100), April 27, 1984.

3 This is due to the fact there is generally only one utility company in any given area and therefore only one or two AM stations are likely to be involved in utility load management at any one time.
service from performing in the manner of the other, we believe that AM stations should have the opportunity to compete for those functions that can be provided by AM carrier signals. Giving AM broadcasters the opportunity to participate in this market should serve to reduce the costs of these services to the consumer and contribute to an overall healthy and competitive radio service environment. For the aforementioned reasons, we are amending our rules to permit AM stations to provide broadcast and non-broadcast services using AM carrier signals. By permitting any broadcast or non-broadcast use for AM carrier signals, we believe that AM licensees will be able to realize the most efficient and effective use of AM carrier services and that this will inure to the public’s benefit.

6. Technical matters. In the Notice, we stated that any method used for the provision of AM carrier services must not disrupt or degrade the signal of the station or the signals of any other radio station. Specifically, we requested comments regarding what should be considered degradation or disruption of the main broadcast signal and to what extent should the Commission remain concerned about such degradation. In addition, we noted that while compatibility and interference concerns have been raised in the past, particularly with regard to AM stereophonic operations, AM broadcasters have strong market incentives to protect their own transmissions and install systems compatible with their primary broadcast operations. No specific technical standards for AM carrier signals were proposed in the Notice.

7. NBC, Inc. (NBC), in its comments, supports the Commission’s proposal that AM carrier signals should not be permitted to disrupt or degrade main channel programming or the signals of any other AM station. NBC believes that main channel integrity must be maintained and should not be compromised in any way. NBC states that the Commission should not permit the use of any AM carrier that results in any unrelated audible sound or tone during any main channel programming. For example, audible AM carrier tones during main channel programming to activate non-broadcast services should not be permitted according to NBC. Altran and the NAP Consumer Electronics Corporation (NAPCEC) suggest that AM licensees be allowed to determine the acceptability

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4 In the AM Utility Load Management Report and Order in BC Docket No. 81-896 (47 FR 25342), June 11, 1982, the Commission alerted potential manufacturers and users of AM carrier systems of possible interference problems with AM stereo systems (see para. 15).

5 In this regard, NBC proposes that the language suggested in the Notice be modified to indicate that AM broadcasters may transmit non-broadcast carrier signals not audible on “all receivers” rather than “ordinary consumer receivers.”

6 In the Notice, the Commission indicated that it had received a request from an AM station to permit the transmission of low-volume audible tones to activate teleprinters to disseminate information to the hearing impaired. A copy of this request had been placed in the docket file of this proceeding.
ty of their signals. These commenters state that if consumers are not satisfied with the signal of a radio station they will merely turn to another station that provides the level of service they desire. Altran also requests clarification regarding off-hour use of the carrier signal. Altran suggests that there is no reason why an AM station should not be able to transmit carrier signals during hours when they do not provide an audio service. CBS, Inc. (CBS) opposes carrier use during non-authorized hours of operation due to interference considerations. CBS states that restrictive power and hours of main channel operation for AM stations are there to protect other AM stations' main channel from possible interference.

8. Comments filed by Motorola, Inc. (Motorola) express concern over the effect of AM carrier signals on AM stereo operation. Motorola believes that the Commission should wait for the marketplace to decide on one of the competing AM stereo systems before it takes action on additional AM carrier use. At the very least, Motorola states that the Commission should draft rules that would protect stereo pilot tones from "falsing" on AM carrier signals. The National Association of Broadcasters (NAB) and Altran suggest that marketplace incentives will overcome any signal integrity problems created by additional carrier use. These commenters state that AM broadcasters have strong motivations to protect their main channel operations and the AM band, in general, whether or not they choose to operate in stereo.

9. After reviewing the record, we conclude that our original proposal with regard to the provision of AM carrier services is appropriate. We will therefore amend our rules, as contained in the attached Appendix B, to allow any technical method for the provision of AM carrier services provided that such method does not disrupt or degrade the main broadcast signal of the station or signals of any other radio service. AM carrier services will be limited to the hours authorized for main channel operation. (It should be noted that carrier services may be provided during hours when the station is not providing an audio service but is authorized to operate.) These constraints have worked well in the provision of remote control telemetry and utility load management services and we see nothing in the record of this proceeding to indicate that they will not do so under our expanded AM carrier authority. We believe that such an approach will provide broadcasters with wide latitude in the types of services that they may provide and significant technical flexibility in the

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7 Motorola is concerned that AM stereo receivers will "falsely" go into the stereo mode of operation when the station is not broadcasting in stereo due to the transmission of certain AM carrier signals. The current four AM stereo systems use subaudible pilot tones at 5, 15, 25 and 55 Hz.

8 We believe that carrier operation outside authorized hours would have the same potential for creating interference as unauthorized main channel operation.
manner in which they can provide them. At the same time, AM broadcast service to the public will not be diminished.

10. With regard to AM stereo operations, we are aware that there may be certain compatibility problems associated with the use of AM carrier signals and AM stereo. As stated in the Notice, however, designers of AM carrier systems have marketplace incentives to build equipment that meets the needs of AM broadcasters (both stereophonic and monophonic). Likewise, AM broadcasters have strong incentives to protect their transmissions (as well as AM transmissions in general) and install systems compatible with their primary broadcast operations. We recognize the possibility that a station transmitting carrier signals may cause certain stereo receivers to switch into the stereo mode of operation when there is no stereo signal actually present (or for stereo receivers incompatible with the stereo system used by the station to switch into this incompatible stereo mode). Nevertheless, we do not find this situation so severe as to warrant either a delay in our authorization of additional uses for AM carrier signals or a requirement to protect the pilot tones of all AM stereo systems. We believe that the public benefits of additional carrier services outweigh any compatibility concerns that may arise. In this regard, we note that protection of AM pilot tones would severely inhibit AM carrier operations to the extent that it is doubtful that AM broadcasters could offer such services. Furthermore, we note that certain compatibility problems already exist among AM stereo systems and that reception of one AM stereo system with a receiver designed for another type of AM stereo system may provide less than optimal performance.

11. In addition, to the degree that AM carrier signals may cause problems for AM stereo receivers, these problems already exist with the provision of utility load management and remote control telemetry operations. Our experience to date does not convince us that specific rules are required to resolve these problems. Further, we note that a number of AM stereo receivers are equipped with a switch to select monophonic or stereophonic operation. Selection of monophonic reception will eliminate any problems associated with reception of a station engaging in AM carrier service and not providing AM stereo. Finally, we agree with those who indicate that the AM licensee has strong marketplace incentives to provide adequate service and that if consumers are not satisfied with the signal of the radio station they will merely turn to another station that provides the level of service they desire. In implementing this decision, it

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9 AM carrier services, in general, would utilize subaudible signals for transmission. As noted previously, however, the four current AM stereo systems also make extensive use of subaudible pilot tones (at 5, 15, 25 and 55 Hz). Protection of these pilot tones would therefore eliminate a significant (if not all) portion of the subaudio band.
should be noted that complaints of interference to other services and with AM stereo receiver operation received by the Commission’s Field Operations Bureau will be referred to the station licensee for resolution. The licensee will have the responsibility for resolving the problem to the complainant’s satisfaction.

12. Regulatory matters. In the Notice, we proposed to follow the regulatory model set out in our Report and Order concerning the use of FM subchannels. Briefly, we proposed to require that broadcast-related services such as subscription services using AM carrier signals remain subject to the control of the licensee. However, they would not be subject to the statutory requirements imposed on the licensee’s main broadcast operations. With regard to non-broadcast related uses of AM carrier signals, we proposed that it would be necessary to determine whether the service offered constitutes private or common carrier use under applicable statutes and case law. Once a licensee has determined that the service is common carriage, authorization would be sought to provide that service from the Common Carrier Bureau and state commissions, as appropriate. For AM licensees seeking to provide private services, we proposed that they notify the Commission’s Private Radio Bureau and certify compliance with pertinent private radio regulations.

13. In general, the commenters support this approach. Several commenters suggest, however, that the Commission should forebear from applying common carrier regulation to AM carrier use. NBC, for example, states that AM carrier services should be classified as “hybrid” and therefore subject to minimal regulation. NBC claims this action would be consistent with the Commission’s SBS holding and would generally fall under a “point-to-point” service category. The NAB states that AM carrier operation should not be subject to separate application or licensing


12 The determination as to the appropriate regulatory classification of AM carrier service would rest, in the first instance, with the licensee, guided by the standards articulated in applicable judicial decisions and statutory provisions. Specifically, assuming there is no legal compulsion requiring operation as a common carrier, a finding of common carrier status would generally turn on whether a particular entity actually operates as a common carrier, that is, whether the carrier “undertakes to carry for all people indifferently.” See National Associations of Regulatory Utility Commissioners v. FCC, 525 F. 2d 630 (D.C. Cir. 1976), cert. denied, 425 U.S. 992 (1976) (“NARUC I”) and Report and Order in BC Docket No. 82-536, supra at paras. 21-22. For mobile radio services, Section 331(c) of the Act shall apply. See Report and Order, BC Docket No. 82-536, supra at para. 23.

Amendment of Parts 2 and 73

procedure, logging requirements, political broadcast rule, fairness doctrine or other programming regulation applied to conventional broadcasting. NAB also does not want the determination of the regulatory class of the carrier left to the licensee. Bonneville International Corp. (Bonneville), and the National Radio Broadcasters Association (NRBA) join NAB and NBC in stating that the Commission can and should forebear from applying common carrier regulation on carrier use. NAB, NBC and Bonneville also request that the Commission preempt state and local entry regulation. They claim that AM carrier services classified as common carrier services would be subject to varying state and local regulations which would act to discourage entry into this area by AM licensees. On the other hand, the Joint Telephone Companies, in their comments, support having common carrier regulation apply to AM carrier use. They claim that this action would be consistent with other subcarrier uses and that if broadcasters are exempt from such regulation, telephone companies offering similar services would be put at a competitive disadvantage.

14. After review of the record, the Commission believes that the regulatory approach set forth in the Notice is the appropriate one to follow. We disagree with NAB that the determination of whether the service provided by AM carrier signals is common carrier or private is an unreasonable burden to place on the licensee. Further, the Commission is unpersuaded by those who contend that services provided by AM carrier signals should be exempt from all regulations. We believe that the minimal requirements we are adopting herein are necessary to carry out our responsibilities under the Communications Act and will not place an unreasonable burden on those wishing to implement AM carrier services.

15. AM carrier services will be regulated in the same manner as TV aural subchannel and FM subcarrier uses. Subscription programming services will not be considered broadcasting but will remain under the licensee’s control unless offered on a common carrier basis. For non-broadcasting services, the AM licensee determines whether the service offered constitutes private or common carrier use under applicable statutes and case law. The licensee then either seeks appropriate authorization if the service is common carriage or complies with the

14 Thus, for example, the fairness doctrine and equal time requirements will not be applicable to AM subcarrier services. See e.g., Second Report and Order, Docket No. 21323, supra at para. 26.

15 An AM licensee may also choose to lease the use of its AM carrier to an entity that will provide a private or common carrier service. In such cases, the lessee or the lessor may seek appropriate service authorization. However, the primary licensee remains responsible for the technical operation of the transmitting facilities, including the use of the AM carrier signals.
simple notification and certification requirements for private services.\(^{16}\) It
should be noted, that applicants for use of AM carrier signals will not be
seeking approval for the technical facilities of the AM station. The
technical facilities are appropriately considered in the context of the
station’s primary purpose of broadcasting and these facilities would not
be subject to challenge or modification on the basis of proposed,
secondary carrier activities. AM carrier use will be considered as a
secondary privilege that runs with the primary broadcast station license.

16. We indicated in the Notice and are adopting herein the regulatory
model used for FM subchannel services. On April 26, 1984, the Commis­sion adopted a Memorandum Opinion and Order (MO&O) in BC Docket
No. 82-536 that inter alia preempted state regulation that has the effect
of prohibiting or impeding entry of radio common carrier services offered
on FM subcarriers.\(^{17}\) In the MO&O, the Commission noted that compara­ble kinds of communications, with some technical variations, may also be
distributed using the ancillary communications capability of other broad­
cast media. In particular, the MO&O stated that the resolution of the
preemption issue with respect to FM subchannels would cover TV
subchannels as well. In this proceeding, similar issues have been raised
concerning certain state and local entry requirements. We believe that
these entry restrictions will frustrate our legitimate efforts to foster
efficient utilization of the spectrum and conflict with our pro-competitive
spectrum allocation policies.\(^{18}\) Accordingly, as with FM subchannel use,
we are preempting state regulations that have the effect of prohibiting or
impeding entry of radio common carrier services provided by AM carrier
signals.

17. Pursuant to the Regulatory Flexibility Act of 1980, the Commis­sion’s final analysis is as follows:

\(^{16}\) AM broadcast licensees seeking to provide private carrier services must simply notify
the Licensing Division of the Private Radio Bureau in Gettysburg, Pennsylvania, by
letter certifying that their facilities will be used only for permissible purposes under 47
CFR Parts 90 and 94 of the rules. They must also certify that any interconnection of the
station with a telephone exchange or interexchange service will be obtained in
accordance with Section 331 of the Communications Act. The letter of notification is all
that is required to be sent to the Commission. There are no application forms, and
separate licenses will not be issued. In addition, the letters of notification do not give rise
to any comment period or petitions to deny. Private systems operating on AM carrier
signals are exempt from state and local regulation in accordance with §331(c)(3) of the
Communications Act.

\(^{17}\) See Memorandum Opinion and Order, BC Docket 82-536 (49 FR 19659), released, May
2, 1984.

\(^{18}\) For a more complete treatment of our preemption of state and local entry regulation see
Memorandum Opinion and Order, supra.
I. Need for and purpose of the rules.

The Commission believes that limiting AM carrier use to remote control telemetry and utility load management does not comport with the goal of maximizing efficient utilization of the spectrum. The restrictions also artificially restrict competition in business opportunities arising from carrier use. Therefore, the Commission is allowing additional uses for the AM carrier as long as such uses do not create interference to main channel operation of either the originating station or other stations.

II. Summary of issues raised by public comments in response to the initial regulatory flexibility analysis, Commission assessment and changes made as a result.

A. Issues raised.

No issues or concerns were raised specifically in response to the initial regulatory flexibility analysis. All commenters supported relaxation of the restrictions on AM carrier use to some degree. Most supported unrestricted use of carrier signals. One commenter, however, was concerned about additional carrier use creating problems for the fledgling AM stereo industry.

B. Assessment.

The Commission believes that market forces will mitigate any problems with AM stereo operation. Further, to the degree that this remains a problem, the Commission believes that the benefits of additional AM carrier use outweigh these concerns.

C. Changes made as a result of such comments.

None.

III. Significant alternative considered and rejected.

The Commission considered the following alternatives: (1) to not allow other uses for AM carrier signals; and, (2) to allow other uses but fashion rules to protect AM stereo pilot tones. The Commission feels that the first alternative would not allow the full potential benefits of unrestricted carrier use to accrue to AM licensees and those who use carrier/subchannel services. The Commission also believes marketplace incentives will protect AM stereo pilot tones without Commission mandates. Therefore both options were rejected.

18. Authority for amending the rules is contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended.


100 F.C.C. 2d
20. IT IS FURTHER ORDERED, that the Secretary shall cause a copy of the Report and Order, including the regulatory flexibility analysis, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act (Pub. L. No. 96-354, 94 Stat. 1164. 50 U.S.C. §601 et seq.) (1982).

21. IT IS FURTHER ORDERED, that this proceeding IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION

WILLIAM J. TRICARICO, Secretary

* Appendix A — May be seen in FCC Dockets Branch, 1919 M Street, N.W. Washington, D.C.

APPENDIX B

Parts 2 and 73 of the Title 47 of the Code of Federal Regulation's are amended as follows:


1. Section 2.106, the National Table of Frequency Allocations, is amended by changing footnote NG128, in the list of footnotes following the Table to read as follows:

NG128 In the band 535-1605 kHz, AM broadcast licensees or permittees may use their AM carrier on a secondary basis to transmit signals intended for both broadcast and non-broadcast purposes. In the band 88-108 MHz, FM broadcast licensees or permittees are permitted to use subcarriers on a secondary basis to transmit signals intended for both broadcast and non-broadcast purposes. In the bands 54-72, 76-88, 174-216 and 740-890 kHz, TV broadcast licensees or permittees are permitted to use subcarriers on a secondary basis for both broadcast and non-broadcast purposes.

2. In Section 2.1001, paragraph (h) is revised to read as follows:

§2.1001 Changes in type accepted equipment.

(h) The interconnection of a multiplexing exciter with a type accepted AM broadcast transmitter in accordance with the manufacturer's instructions without electrical or mechanical modification of the transmitter circuits and completion of equipment performance measurements showing the transmitter meets the minimum performance requirements applicable thereto is defined as a Class I permissive change for compliance with this Section.

B. Part 73 - Radio Broadcast Services

3. Section 73.127 is amended by revising the introductory paragraph, paragraphs (b) and (c) and by adding paragraphs (d), (e) and (f) to read as follows:

§73.127 Use of multiplex transmissions.

100 F.C.C. 2d
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:

(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)(6).

2. In Section 73.1690, subparagraph (e)(6) is amended to read as follows:

§73.1690 Modification of transmission systems.

(e) * *

(6) Modification of the transmitter for multiplexing of the carrier with an exciter unit that has been designed for interfacing with the type accepted transmitter with which it is to be used in accordance with the following:

(i) The combination of the multiplexing exciter and transmitter meets the minimum specifications given in §73.40 and 73.44.

(ii) The frequency stability requirements of §73.1545(a) must be maintained.

(iii) No electrical or mechanical changes in the transmitter circuits are allowed.
STATEMENT OF
COMMISSIONER HENRY M. RIVERA
DISSENTING IN PART

RE: Amendment of Parts 2 and 73 of the Commission's AM Broadcast Rules Concerning the Use of the AM Carrier

I dissent from that part of the majority's decision that preempts state entry regulation of interstate ratio services operating on the AM subcarrier for the same reasons I dissented from the Commission's preemption of state entry regulation of FM subcarrier services. Similarly, I dissent from the majority's decision to classify all uses of the AM subcarrier as "ancillary" and, thus, to exempt broadcast uses of this radio service from Title III obligations for reasons outlined previously.

1 I believe that the Communications Act prohibits preemption. Memorandum Opinion and Order, BC Docket No. 82-536 50 Fed. Reg. 6177 (February 14, 1985) (Statement of Commissioner Henry M. Rivera, Dissenting in Part.)