FCC 60-497
87910

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington 25, D. C.

In the Matter of	)	
	)	
Inquiry into Amendment of Parts 2, 3, and 4 of the Commission's Rules and Regulations and the Standards of Good Engineering Practice Concerning FM Broadcast Stations to Permit FM Broadcast Stations to Engage in Specified Non-Broadcast Activities on a Multiplex Basis.	)	DOCKET NO. 12517

REPORT AND ORDER

By the Commission: Commissioner Lee absent.

1. On March 22, 1955, the Commission released a Report and Order in Docket No. 10832 (FCC 55-340) which adopted rules providing for the issuance of Subsidiary Communications Authorizations (SCA's) to FM broadcasters -- Section 3.293, et seq. Among other things, these rules provided for the rendition of multiplex background music and storecasting services by FM broadcasters as a means of bolstering station operating revenues. Approximately 240 SCA's have been issued during the past five years. The bulk of these authorizations specify one or two multiplex sub-carrier frequencies which are normally programmed separately from the main channel. Assigned sub-carrier frequencies fall within the range 20 to 75 kilocycles removed from the main carrier, in accordance with Section 3.319.

2. After the adoption of the SCA rules it became increasingly evident that multiplex techniques could be successfully employed for a variety of purposes above and beyond the limited "news, music, time, weather, and other similar programming" format prescribed in these rules. Accordingly, a Notice of Inquiry in Docket No. 12517 (FCC 58-636; 23 FR 5284) was released by the Commission on July 8, 1958, for the purpose of exploring possible additional uses of FM multiplexing, including slow-scan video transmission of advertisements, stock market reports, doctor paging, and traffic light control. The specific issues on which comments were invited were as follows:

(a) What limitation, if any, should the Commission impose upon the types of subsidiary communications which an FM station may provide?

(b) Should an FM station be permitted to use subsidiary communications for relay purposes?

(c) Should the number of subsidiary communications channels employed by a single FM broadcast station be limited, and, if so, what should be the limit?

(d) To what extend, if any, should subsidiary communications be permitted to affect the quality of the broadcast channel?

(e) Should specific sub-channel frequencies be allocated for subsidiary purposes? What quality and performance standards should be applied to the sub-channels?

(f) Should an FM broadcast station be permitted to transmit subsidiary communications at times when it is not providing a broadcast service on its main channel?

(g) To what extend should we permit a license holder to enter into contracts or arrangements with other parties to provide program material for subsidiary communications or to lease the rights to the multiplex channels?

3. A preliminary analysis of the comments submitted in response to above-mentioned Notice of Inquiry demonstrated a widespread interest in the related subject of FM multiplex stereophonic transmission. Accordingly, on March 12, 1959, the Commission released a Further Notice of Inquiry (FCC 59-211) which enlarged the scope of proceedings under Docket No. 12517 in order to afford interested persons an opportunity to submit further data and opinions directed specifically to the matter of FM stereophonic "broadcasting". The extended deadline for submission of comments in Docket No. 12517 was March 15, 1960. This Report and Order deals only with the issues raised in the original Notice of Inquiry. FM stereophonic "broadcasting" is the subject of a companion Notice of Proposed Rule Making being issued concurrently with this document. Related questions stemming from the decision of the United States Court of Appeals, D. C. Circuit, in Functional Music, Inc. v. USA & FCC, Case Nos. 14,374 and 14,375, will be treated in a separate Notice of Proposed Rule Making to be issued in the near future.

4. The more than 160 comments received in response to the Notice of Inquiry (paragraph 2, supra) are discussed below.

5. Limitations, if any, which should be imposed upon multiplex operation: The majority of comments were submitted by FM enthusiasts and "audiophiles" who expressed concern that any enlargement in the

permissible scope of SCA services would tend to encourage a proliferation of non-broadcast multiplexing, thereby compromising main channel quality and eventually undermining the development of wide-band FM stereophonic "broadcasting". This viewpoint was opposed by most of the 40 broadcast respondents, their general position being that no absolute limitation should be placed on the types of subsidiary communications which an FM station may provide. The Sundial Broadcasting Corporation, Charles River Broadcasting Company, Northeast Radio Network, Westinghouse Broadcasting Company, Metropolitan Broadcasting Corporation, and Pacifica Foundation expressed an interest in the following uses to which FM multiplexing might be put: transmission of news photographs by facsimile, slow-scan TV, paging signals, servo-mechanism control pulses, musical A pitch, stock market quotations, detailed weather reports, remote pickup and cueing intelligence, studio-transmitter administrative messages, transmitter telemetry and radio teletype. Additionally, Pacifica Foundation and others urged that non-commercial educational FM broadcast stations be permitted to render subsidiary communications services on the same basis as commercial FM stations. The telephone interests, notably the American Telephone and Telegraph Company, registered opposition to any expansion of subsidiary undertakings on the part of FM broadcasters. Various licensees in the Domestic Public Radio Services reinforced this opposition, citing their generally low operating revenues and the allegedly ruinous effect of additional competition from a new source. In this connection, organizations providing radio paging and communications services for hire emphasized their status as common carriers under Title II of the Communications Act, and their responsibility to service the public without discrimination pursuant to published tariffs. It would be grossly unfair, they argue, to be placed in competition vis-a-vis unregulated operators who could "skim the cream" off the existing market for radio paging and related services. Traffic light control as a subsidiary service to be provided by FM broadcasters was supported by the International Municipal Signal Association. On the other hand, the General Electric Company voiced opposition to non-broadcast operations in the FM broadcast band as a matter of allocations principle. By the same token, the Electronic Industries Association concluded that "if there is sufficient FM frequency space available to permit FM broadcasters to use that valuable space /for/ non-broadcast activities, it would appear that a basic question of frequency allocation is raised which can only be treated properly in a comprehensive study such as that now underway in Docket No. 11997". To summarize, further expansion of non-broadcast sub-carrier operations by FM broadcast stations was generally opposed by listeners, telephone interests, communications services, and by a broad segment of the electronic manufacturing industry, while the only substantial endorsement of such expansion came from the broadcast industry itself.

6. Use of multiplex sub-carriers for relay purposes: The proposal to use multiplex sub-carriers for relay purposes is but one facet of the larger question of expanded uses discussed in the preceding paragraph; hence, respondents' reactions followed the same general pattern, i.e., multiplex relaying was opposed by the telephone interests and supported by the broadcast industry. The broadcasters' main interest in multiplex relaying focused on the program relay services which have been and are being rendered by a few FM stations under temporary authorizations issued by the Commission. For example, Radio Station KDKA-FM (Westinghouse Broadcasting Company) originates play-by-play descriptions of the Pittsburgh "Pirates" baseball games and transmits them to numerous standard and FM broadcast stations within its primary service area on a sub-carrier frequency of 67 kilocycles without disturbing the serious music programming on its own main channel. The Northeast Radio Network distributes WQXR-FM musical programs throughout north-central New York State in much the same manner. The WGBH Educational Foundation asserted that educational networks could be developed on the same principle if non-commercial educational FM stations were permitted to engage in multiplexing. Many comments favorable to multiplex relaying suggested that it should be limited to the relaying of programs of a broadcast nature.

7. Limitations, if any, which should be imposed upon the number of multiplex sub-channels employed by a single FM broadcast station: While the record discloses some sentiment for limiting the number of available sub-channels to three or less, the majority of comments addressed to this issue (most of which came from FM broadcasters) disapproved of any limitation on the theory that the types of programming provided on the sub-channels would automatically limit the number which could be successfully used at any given installation.

8. The extent, if any, to which multiplex sub-carrier operation should be permitted to affect main channel operation: Most respondents disapproved of any reduction in main channel quality, although the proponents of wide-band FM stereophonic systems recognized that some degradation of main channel quality would be an inevitable by-product of accommodating such systems.

9. Allocation of specific sub-channels for FM multiplexing: Broadcast interests were generally opposed to a sub-channel allocations plan and to the application of performance standards to such sub-channels. Those favoring such measures were, for the most part, seeking the allocation of a single stereophonic channel which, it was contended, would standardize the manufacture of stereophonic adapters and indirectly discourage the "pirating" of functional music programs.

10. Sub-carrier operation during periods of main channel inactivity: Under Section 3.310(i) and other applicable provisions of the Commission's Rules sub-channel operation is proscribed during periods of main channel inactivity. Some FM broadcasters who derive substantial revenue from their subsidiary operations would like to schedule such operations beyond the required 36 hour weekly main channel minimum without incurring an obligation to program the main channel during the extended hours. A few broadcasters and others branded the idea a misuse of frequencies allocated to FM broadcasting.

11. Propriety of multiplex sub-channel leasing arrangements: The only substantial interest in this issue was expressed by FM broadcasters, most of whom advocated the continuance of such arrangements in view of the existing requirement that each licensee be responsible for, and in control of, all activities conducted on its authorized sub-channels.

12. The major issue posed by the Notice of Inquiry is whether, on balance, the public interest would be served by permitting an expansion of multiplex subcarrier operations by FM broadcasters, and if so, to what extent. In our Report and Order adopting the present SCA rules (Docket No. 10832), we expressed the belief that " . . . the character of the specialized operation /should/ not run completely counter to that of a broadcast operation."

13. In light of the comments herein, and other relevant considerations, we adhere to the same position. The economic plight of the FM industry, which was one of the chief factors leading to the original adoption of the SCA rules, has somewhat improved recently as a result of increased interest in FM as a broadcast medium. 1/

- -

1/ The number of applications for commercial FM broadcast stations received in calendar year 1959 was approximately 500% greater than the number received in 1956. The sharp increase in public interest in FM as a broadcast medium is further attested to by statistics supplied by the Electronics Industries Association to the effect that 329,274 FM receivers were produced during the first eight months of 1958, but that 593,952 sets were produced during the corresponding months of 1959. In the New York, Los Angeles, and other large metropolitan markets, the demand for FM channels already exceeds the supply, in view of which many applications have been set for comparative hearing.

In any event, such economic considerations are not a valid basis for permitting in the FM band operations which are completely unrelated to and different from broadcast activities. To permit use of the FM broadcast band for such operations would amount to a de facto reallocation of broadcast frequencies, an unsound approach to a matter which could appropriately be considered only in a frequency reallocation proceeding. Moreover, it has been shown to our satisfaction that the rendition by FM broadcast stations of radio paging and other services of a completely non-broadcast character would cause serious and unwarranted financial hardship to many licensees in the Domestic Public Radio Services which have been duly authorized to provide common carrier services in portions of the spectrum reserved therefor. As an additional consideration, it appears that such a very substantial expansion of permissible SCA uses would, by encouraging FM broadcasters in large numbers to provide such services on their sub-channels, tend to foreclose in many communities the future development of FM stereophonic "broadcasting". With respect to one of the non-broadcast services proposed as an appropriate SCA use--traffic light control--we note that suitable fixed service frequencies are available to interested municipalities in other portions of the radio spectrum.

14. We conclude that the public interest would not be served by allowing FM broadcasters to provide any signalling, control, telemetering or communications service basically unrelated to broadcast operation. The following uses remain:

(a) Those involving programming which is of a broadcast nature but which is of interest primarily to limited segments of the public desiring to subscribe thereto. The following categories are illustrative of such services: background music and storecasting; detailed weather forecasts; special time signals; and other material of a broadcast nature expressly designed and intended for any business, professional, educational, religious, trade, labor, agricultural or other group engaged in any lawful activity.

(b) Those involving services which are directly related to the operation of FM broadcast stations, but for which provision is not made in Part 4--(Experimental, Auxiliary, and Special Broadcast Services), or which could be performed with separate transmitting equipment licensed under that Part but which for reasons of convenience or economy can be accomplished as well or better by multiplexing techniques. Examples include: relaying of broadcast material to other FM and standard broadcast stations; remote cueing and order circuits; remote control telemetering functions associated with authorized STL operation; and similar uses.

We find that the public interest would be served by expanding the permissible scope of FM multiplexing to the limited extent indicated in sub-paragraphs (a) and (b), supra, and as reflected in Section 3.293, as amended herein. It is our view that this limited expansion will not create a substantial barrier to the adequate future development of FM stereophonic "broadcasting" and that the types of additional operations so permitted need not materially impair the quality of main channel operation. In approving this modest expansion, however, we do not attempt to spell out precise standards of eligibility. As in the past, FM broadcast licensees and permittees must, in their SCA applications, fully describe the purpose or purposes for which multiplexing will be used. Marginal applications will continue to be judged on a case-by-case basis. If an SCA application is granted, the licensee will be limited to those purposes or uses specified in the application, and must apply for and obtain a modified SCA if additional uses are desired.

15. Fordham University, Pacifica Foundation, and the WGBH Educational Foundation have urged that non-commercial educational FM broadcast stations also be permitted to engage in multiplex operation. While sympathetic with the objectives expressed in these comments, we feel that this issue goes beyond the scope of our Notice of Inquiry in this proceeding, and would more properly be considered in connection with formal petitions for rule amendment now pending before the Commission. By the same token, the question of remote pickup facsimile by means of multiplex will be considered at a later date in connection with a petition for rule amendment now pending filed by WSTP, Inc.

16. Turning to the technical issues raised in the Notice of Inquiry, 2/ we find the existing engineering standards to be adequate for SCA

2/ Issue (c): Should the number of subsidiary communications channels employed by a single FM broadcast station be limited, and, if so, what should be the limit?

(d) To what extent, if any, should subsidiary communications be permitted to affect the quality of the broadcast channel?

(e) Should specific sub-channel frequencies be allocated for subsidiary purposes? What quality and performance standards should be applied to the sub-channels?

purposes, and discern no compelling reason to modify those standards at this time. 3/ This finding, however, is without prejudice to the possible allocation, at a later date, of a specific sub-carrier frequency for stereophonic "broadcasting" together with related performance standards.

17. With respect to sub-carrier operation during periods of main channel inactivity--Issue (f), we are of the opinion that such use either with or without periodic main channel identification would be basically incompatible with the concept of SCA operation as an adjunct to regular FM broadcasting. We therefore decline to amend existing requirements in this regard. We are herein amending Section 3.293 to clarify the requirements of the rules in this respect.

18. Concerning the propriety of sub-channel leasing arrangements--Issue (g), we note that Section 3.295(c) of the Commission's Rules already provides in part that "in all arrangements entered into under the SCA with outside parties, the licensee or permittee must pass on all material to be transmitted over the station's facilities, with the right to reject any material which it deems inappropriate or undesirable . . ." Additionally Section 1.342(d) requires that contracts relating to SCA operation be filed with the Commission within 30 days of the execution thereof. If no written contract is involved, the substance of the oral agreement must be reported in the same manner. A number of sub-channel leasing arrangements are in force and have been reported pursuant to these rules. We find the existing provisions sufficient to satisfy the control requirements of the Communications Act, and without excluding the possibility of future modification, we are not persuaded that these provisions should be changed at this time.

19. A number of FM broadcasters providing background music services complained that their transmissions are being "pirated" by non-subscribers who have purchased or assembled suitable multiplex adapters. In this connection, we adhere to the view that Section 605 of the Communications Act is contravened by the unauthorized reception of FM multiplex programs intended solely for reception by industrial, mercantile and other subscribers. At the same time, we are constrained to observe that this agency does not exercise licensing jurisdiction over the manufacture, sale or use of radio receivers, as such, including tuners capable of receiving multiplex signals, nor are we responsible for the enforcement of Section 605 of the Communications Act. Since the Department of Justice has the ultimate responsibility for the enforcement of Section 605, the only assurance we can offer in this

- -

3/ Section 3.319

regard is that we will, in appropriate cases, continue to refer such matters to the Department of Justice for prosecution or for such other corrective measures as may be warranted.

20. As noted in paragraph 3, supra, this Report and Order is dispositive only of the issues raised in the original Notice of Inquiry. The more controversial aspects of multiplexing (notably FM stereophonic "broadcasting" and the future status of FM stations still providing background music services on a simplex basis) are being or will be handled separately under appropriate Notices of Proposed Rule Making. However, with respect to the issues here involved, we feel that sufficient data is before us to justify the adoption of this Report and Order, and therefore that no useful purpose would be served by the issuance of still another Notice of Proposed Rule Making. Moreover, inasmuch as the effect of the amendment herein ordered is to relieve existing restrictions, it may be made effective less than 30 days from the publication thereof, pursuant to Section 4(c) of the Administrative Procedure Act.

21. Authority for the adoption of this Report and Order and associated rule amendment is contained in Sections 301, 303(b), (g), and (r) of the Communications Act of 1934, as amended.

22. IT IS ORDERED, This 4th day of May, 1960, that effective May 16, 1960, the Commission's Rules BE AMENDED as set forth in the attached Appendix; and

23. IT IS FURTHER ORDERED, That proceedings under Docket No. 12517 ARE HEREBY TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION

Ben F. Waple
Acting Secretary

Appendix attached

Released: May 9, 1960

NOTE: Rules changes herein will be covered by Transmittal Sheet III-6.

A P P E N D I X

Section 3.293 is amended to read as follows:

§3.293 Subsidiary Communications Authorizations.

(a) A FM broadcast licensee or permittee may apply for a Subsidiary Communications Authorization (SCA) to provide limited types of subsidiary services on a multiplex basis. Permissible uses must fall within one or both of the following categories:

(1) Transmission of programs which are of a broadcast nature, but which are of interest primarily to limited segments of the public wishing to subscribe thereto. Illustrative services include: background music; storecasting; detailed weather forecasting; special time signals; and other material of a broadcast nature expressly designed and intended for business, professional, educational, religious, trade, labor, agricultural or other groups engaged in any lawful activity.

(2) Transmission of signals which are directly related to the operation of FM broadcast stations; for example: relaying of broadcast material to other FM and standard broadcast stations; remote cueing and order circuits; remote control telemetering functions associated with authorized STL operation, and similar uses.

(b) Applications for Subsidiary Communications Authorizations shall be submitted on FCC Form 318. An applicant for SCA shall specify the particular nature or purpose of the proposed use.

(c) SCA operations may be conducted without restriction as to time so long as the main channel is programmed simultaneously.