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## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

MAR 1 8 1991

Federal Communications Commission
Office of the Secretary

In the Matter of	)
SATELLITE CD RADIO, INC.	) File No. 8-DSS-MISC-91(2)
Application for authority to construct, launch and operate a space station in the Satellite Sound Broadcasting Service	

# PETITION TO DENY OF AMERICAN MOBILE SATELLITE CORPORATION

American Mobile Satellite Corporation ("AMSC"), by its attorneys and pursuant to Section 309 of the Communications Act, 47 U.S.C. Section 309, hereby petitions to deny the "Request for Conditional Authority to Begin Construction of Satellite System" filed by Satellite CD Radio, Inc. ("SCDR") in the above-referenced proceeding. SCDR's filing seeks authority to begin construction of a satellite system that, at a minimum, would provide Broadcast Satellite (sound) Service ("BSS") using frequencies that AMSC has shown should be allocated to Mobile Satellite Service ("MSS").

Due to the ambiguity of SCDR's request and to SCDR's subsequent filing of an amendment to its application, it appears that SCDR actually is seeking to begin construction of a satellite system that would use frequencies in addition to those specified in its application and would provide services other

<sup>1/</sup> See Public Notice, Report No. DS-1050 (February 13, 1991).

than BSS. AMSC therefore also seeks clarification of the SCDR application and reserves the right to supplement its petition following any such clarification.

American Mobile Satellite Corporation is the entity that has been authorized by the Commission to construct and operate a domestic Mobile Satellite Service ("MSS") system. AMSC is a party in interest in this proceeding inasmuch as it appears that SCDR may be seeking to construct a satellite system that would use the same frequencies as AMSC has proposed for Mobile Satellite Service. AMSC has shown that the public interest is best served by the allocation of certain frequencies to MSS rather than for a BSS system. SCDR should not be permitted to construct a BSS satellite system using frequencies that are better allocated to the Mobile Satellite Service.

SCDR has requested an allocation for BSS and a complementary terrestrial service in the 1459.8-1530 MHz band. Petition of Satellite CD Radio, Inc. to Establish a Satellite and Terrestrial CD Quality Broadcasting Service, RM-7400, (filed May 18, 1990).

AMSC has shown that the 1435-1530 MHz band is ideal for an MSS downlink because it is adjacent to an existing MSS allocation, and thus these frequencies readily can be built into AMSC's satellites. Moreover, AMSC has shown that MSS can share with the existing users of the band and BSS cannot. AMSC has also explained that BSS, as a new service, can be accommodated more easily than MSS in frequencies outside the 1435-1530 MHz band. See Comments, Reply Comments and Supplemental Comments of AMSC, Gen. Docket No. 89-554 (filed December 3, 1990, January 8, 1991 and February 21, 1991); Comments, Reply Comments and Further Reply of AMSC, RM-7400 (filed August 20, 1990, September 14, 1990 and October 18, 1990).

If the Commission does not dismiss the SCDR request, then the Commission should require SCDR to clarify its request. first source of confusion is an amendment to its application that SCDR filed after the Commission published its Public Notice of the SCDR request to begin construction. Unfortunately, SCDR's amendment fails to refer to the pending request to begin construction. Thus, the public (including AMSC) is left to wonder whether SCDR is seeking to construct a satellite that would be consistent with the proposal on file on January 31, 1991 or with the amendment that SCDR filed on March 1, 1991. matter must be clarified and, assuming that SCDR is seeking to construct a satellite system that reflects its current proposal, the public must be given a further opportunity to comment. particular, AMSC reserves the right to comment on the potential interference between SCDR's proposed system and a domestic MSS system.

It is also unclear how fully SCDR proposes to construct its satellite if it receives its conditional authorization. Although SCDR does not commit to limiting its efforts to satellite design, it seems to imply as much by claiming that a certain amount of design work can be performed with a relatively small investment.

<sup>4/</sup> SCDR's amendment to its digital audio radio satellite system application revises its L-band spectrum request to 1493-1525 MHz and requests the use of a generic MSS downlink at 1626.5-1644.5 MHz to provide for Subscription Digital Radio Service. To date, this amendment has not been placed on Public Notice.

SCDR Request, p. 5. If in fact SCDR is seeking authority only to work on the design of the satellite, then SCDR does not need authority from the Commission. 9

Moreover, it would appear that the work that SCDR claims is only inexpensive design work actually may be much more extensive and costly. As discussed in the attached affidavit of Billy S. Cain, in the typical satellite construction process, the "preliminary design review" and "critical design review" that SCDR speaks of in its request involve much more than design. Rather, it is during these phases that the satellite contractor and its subcontractors begin the fabrication of the parts that have a long lead-time for completion or that are critical to the early assembly phases of construction. This effort is extremely costly (the parts typically represent as much as half of the overall construction cost) and requires a fairly precise understanding of the frequencies that will be used. Commission should require SCDR to explain what aspects of the preliminary design review and the critical design review processes it is requesting permission to pursue at this time.

<sup>5/</sup> The Communications Act requires FCC approval before a potential licensee begins construction but places no such restrictions on design work. See 47 U.S.C. §319(a).

## Conclusion

Therefore, based on the foregoing, AMSC respectfully requests that the Commission deny the application of SCDR or, at a minimum, require that SCDR provide additional information regarding the system that it proposes to construct and the extent to which it will begin construction without further authorization.

Respectfully submitted,

AMERICAN MOBILE SATELLITE CORPORATION

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Its Attorneys

March 18, 1991

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### **AMERICAN MOBILE SATELLITE CORPORATION**

#### **AFFIDAVIT**

- I, Billy S. Cain, do hereby declare as follows:
- Implementation at the American Mobile Satellite Corporation ("AMSC"). At AMSC, I am involved with the design and construction of the AMSC Mobile Satellite Service system. Prior to my employment with AMSC, I was employed for nine years by Fairchild Space Company. In my last position at Fairchild, I was Senior Director, Program Management, and, as such, served as spacecraft manager of a large spacecraft program. Prior to that, I was spacecraft manager for Satellite Business Systems for approximately eight years.
- 2. It is my understanding that Satellite CD Radio, Inc. ("SCDR") has requested conditional authority to begin construction of its proposed satellite system. Specifically, SCDR suggests that with conditional authority it could complete within one year the preliminary design review ("PDR") and critical design review ("CDR") of its satellite system without risking a large investment.
- 3. Based on my experience with satellite design and construction, the PDR and CDR are part of a process during which the satellite contractor and its subcontractors typically begin producing parts that have a long lead-time for construction or

that are critical to the initial phases of construction of the satellite. By the time that PDR and CDR are completed, the satellite contractor may have already expended as much as 45-50 percent of the total cost of construction of the satellite. Without this commencement of actual construction, the undertaking of the PDR and CDR would not significantly reduce the overall time for construction of the satellite.

4. Because of the long lead-time required for these parts, it is important that the satellite contractor is fairly certain which frequencies will be used. A significant change in the frequency plan may require a substantial redesign of the satellite payload and a reordering of parts.

Under penalty of perjury, the foregoing is true and correct to the best of my knowledge.

Billy S. Cain

March 18, 1991

#### CERTIFICATE OF SERVICE

I, Ruth E. Davis, a secretary in the law offices of Gurman, Kurtis, Blask & Freedman, Chartered, do hereby certify that on this 18th day of March, 1991, a copy of the foregoing "Petition to Deny of American Mobile Satellite Corporation" was sent by U.S. first class mail, postage prepaid to:

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Ruth E Davis