

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

<p>In the Matter of</p> <p>SATELLITE CD RADIO, INC.</p> <p>Application for Authority to Construct, Launch, and Operate Two Satellites in the Satellite Digital Audio Radio Service</p>	<p>File Nos. 71-SAT-AMEND-97 49/50-DSS-P/LA-905 58/59-DSS-AMEND-90 8/9-DSS-AMEND-92 12/13-DSS-AMEND-92 44/45-DSS-AMEND-92 42-SAT-AMEND-95 71-SAT-AMEND-97</p>
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ORDER AND AUTHORIZATION

Adopted: October 10, 1997

Released: October 10, 1997

By Chief, International Bureau:

Introduction

1. With this Order, we authorize Satellite CD Radio, Inc. ("CD Radio") to launch and operate a satellite system in the geostationary-satellite orbit ("GSO") in order to provide satellite digital audio radio service (hereinafter referred to as "satellite DARS" or "SDARS") in the 2320-2332.5 MHz frequency band.¹ We also deny Primosphere Limited Partnership's ("Primosphere") petition to deny CD Radio's application.²

2. This authorization will provide CD Radio with the opportunity to fulfill the promise of

¹ We authorize CD Radio to operate in this portion of the 2320-2345 MHz band. Satellite Digital Audio Radio Service (*satellite "DARS"*) is a radiocommunication service in which audio programming is digitally transmitted by one or more space stations directly to fixed, mobile, and/or portable stations, and which may involve complementary repeating terrestrial transmitters. 47 C.F.R. § 25.201.

Additionally, in this Order we deny the petitions filed by the following: Aerospace and Flight Test Radio Coordinating Council; BSBB Communications; Emmis Broadcasting Corporation; Joint Parties; KSJB; KTFA 92.5 FM Radio; KVST Radio; The National Association of Broadcasters; and Southwest Florida Community Radio, Inc. For a detailed discussion of the issues raised by these petitioners see ¶¶ 28-36 herein.

satellite DARS to provide continuous nationwide radio programming with compact disc quality sound. The new service has the potential to increase the variety of programming available to the listening public. As proposed, CD Radio's satellite DARS will offer niche programming that will serve listeners with special interests. In addition, SDARS has the technological potential to provide a wide range of audio programming options to rural and mountainous sections of the country that have historically been underserved by terrestrial radio.

Background

3. On March 3, 1997, the Commission adopted rules to auction two 12.5 MHz SDARS authorizations in the 2320-2332.5 MHz and 2332.5-2345 MHz frequency bands.³ Shortly thereafter, the Commission announced the date of the auction⁴ and on March 28, 1997, the Commission received the required upfront payment from CD Radio in the amount of \$3,000,000.⁵ On April 2, 1997, CD Radio submitted one of two winning bids for a license to launch and operate a satellite DARS system.⁶ CD Radio subsequently made a post-auction down payment of \$13,669,200.⁷ On October 7, 1997, CD Radio submitted its final payment of \$66,676,800.00 after the Commission issued a public notice announcing that it was prepared to grant the license.⁸

A. CD Radio Application

³ License No. (EBN001) and License No. (EBN002). See also *Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, IB Docket No. 95-91, Gen Docket No. 90-357. ¶ 165 (March 3, 1997) ("*SDARS Order*"). These rules limited auction participants to the four applicants on file, including CD Radio.

⁴ See Public Notice, "*FCC Announces Auction of Digital Audio Radio Service*," released March 6, 1997.

⁵ See Public Notice, "*Auction of Satellite Audio Radio Service (Auction No. 15): Bidders Qualified to Participate in the DARS Auction*," released March 28, 1997.

⁶ CD Radio bid \$83,346,000 for use of the 2320-2332.5 MHz frequency band.

⁷ *Id.* (instructing winning bidders to bring their total deposits up to 20 percent of their winning bids by April 16, 1997); See also *SDARS Order* at ¶ 165.

⁸ *FCC Announces it is Ready to Grant Satellite Digital Audio Radio Authorizations to American Mobile Radio Corporation and Satellite CD Radio Inc.*, DA 97-2164 (released October 7, 1997).

4. CD Radio filed its original application on May 18, 1990.⁹ This application was subsequently amended on September 14, 1992. After the auction,¹⁰ on May 16, 1997, CD Radio filed an updated amendment to its original application to reflect changes made in order to conform to newly-adopted service rules.¹¹ According to its application, CD Radio proposes to launch and operate two satellites in the 2320-2332.5 MHz bands for its service downlink operations.¹² It proposes to use the 7060-7072.5 MHz frequency bands for feeder-link operations and tracking, telemetry, and control ("TT&C").¹³ CD Radio requests authority to locate its satellites at 80° W.L. and 110° W.L. It also proposes transfer orbit and emergency TT&C transmissions at 5926.0 MHz center frequency (downlink) and 3725.5 and 3726.0 MHz (uplink).

5. In the amendment to its application, CD Radio states that its system provides audio and limited auxiliary services directly from the satellite to users, particularly those on mobile platforms, throughout the continental United States. It also states that, on-orbit telemetry, tracking and command facilities, and an audio programming center, will be co-located with its uplink earth stations.

6. CD Radio proposes to provide nationwide satellite DARS to consumers by late 1999.¹⁴ CD Radio will operate two satellites providing coverage to the contiguous 48 United States ("CONUS"). It also proposes to provide programming for children, non-English speaking populations, and people with special interests, such as drama, literature, and classical and ethnic

⁹ See *Application of CD Radio, Inc. for an All-Digital CD Quality Satellite Sound Broadcasting System*, File Nos. 49-DDS-P/LA-90, 50-DDS-P/LA-90 (1990) ("*Application*").

¹⁰ The auction was held on April 1-2, 1997.

¹¹ See *In the Matter of Satellite CD Radio, Inc. Application to Launch and Operate a Digital Audio Radio Satellite Service in the 2320-2332.5 MHz Frequency Band: Submission and Amendment to Application of Satellite CD Radio, Inc.*, 71-SAT-AMEND-97, at 4 (May 16, 1997) ("*Amendment*"). See also April 2, 1997 Public Notice.

¹² Amendment at 13.

¹³ SDARS Order at ¶ 129 (stating that the Commission will license satellite feeder-link Earth stations according to existing regulations for FSS earth stations). This authorization only applies to the downlink operations. Licensees will be required to apply for earth station authorizations using the uplink feeder-link frequency bands.

¹⁴ Amendment at 4.

music.¹⁵ It proposes to offer these services as a private satellite operator, providing neither common carrier nor broadcast service.¹⁶

7. Since placing the highest bid in the auction, CD Radio has filed several documents reflecting changes in its ownership structure. In May 1997, it sought and was granted an exemption from the Commission's cut-off rule that allowed it to issue additional stock.¹⁷ In August 1997, CD Radio obtained financing from its satellite vendor, Loral, which involved purchase by Loral of a block of stock in CD Radio's corporate parent, CD Radio, Inc. On September 9, 1997, CD Radio filed an updated form 430 reflecting these changes and stated that it soon expects to implement the public offering and share conversion for which it had received earlier approval.¹⁸ According to its latest filing, approximately 32 percent of CD Radio Inc., the parent of CD Radio, is currently owned by non-U.S. citizens. CD Radio states that, after completion of its public offering and conversion of preferred shares to common stock, the percentage of foreign ownership will decline to approximately 15.5 percent.

8. Several petitioners have filed petitions to deny and related comments in response to CD Radio's application. Many of the issues raised by petitioners were addressed and resolved in the *SDARS Order*. After the auction, Primosphere, an unsuccessful satellite DARS applicant, petitioned the Commission to deny CD Radio's application because, according to Primosphere, it does not comply with the foreign ownership restrictions of Section 310(b) of the Communications Act. Moreover, on September 8, 1997, Primosphere filed a pleading, described as a "supplement" to its earlier filed Reply,¹⁹ which alleged information that reflects on Mr. Friedland's character and "fitness

¹⁵ *Id.*

¹⁶ Amendment at 5. See also *Compendium of Applications and Restatement of Rulemaking Petition*, 49/50-DDS-P/LA-90, 58/59-DDS-AMEND-90 (1992) ("*Compendium*") at 73.

¹⁷ See also *In the Matter of Satellite CD Radio, Inc. Request for Declaratory Ruling for Further Exemption Pursuant to 47 C.F.R. 25.116(c)(2)*, DA 97-1327 (released June 26, 1997), where the International Bureau found it in the public interest to conditionally grant CD Radio's request for further exemption in order to permit CD Radio to make a public offering of up to 15 million shares of common stock and complete the conversion of its delayed preferred shares into voting stock for the development of its SDARS system.

¹⁸ See Letter from Carl R. Frank to William Caton dated September 9, 1997 ("*Updated Amendment*").

¹⁹ Supplement of Primosphere Limited Partnership to Reply to Opposition to Petition to Deny. File No. 71-SAT-AMEND-97 (September 8, 1997) ("*Supplement*").

to be an FCC licensee.²⁰ In granting CD Radio's license, we deny all petitions filed against CD Radio's application.

Discussion

9. Petitioners argue that CD Radio is not legally and technically qualified under Section 310(b) of the Communications Act to hold a satellite DARS authorization.²¹ As discussed below, we disagree. Specifically, we conclude that CD Radio's application is not inconsistent with the foreign ownership restrictions of Section 310(b). We also conclude that CD Radio complies with all technical and other requirements of the service rules adopted in the *SDARS Order*.²²

10. Section 25.156 outlines the standard of review the Commission uses for granting an authorization.²³ It provides that authorizations will be granted if the Commission finds that the applicant is legally, technically, and otherwise qualified and grant of the application will serve the public interest, convenience, and necessity.²⁴

(1) *Legal Qualifications.*

(a) *Alien Ownership.*

11. In its petition to deny, Primosphere argues that CD Radio does not comply with the foreign ownership restrictions of Section 310(b) of the Communications Act.²⁵ Primosphere made these arguments before CD Radio's latest ownership filing that reflects foreign ownership of approximately thirty two percent.²⁶ Even before the filing was made, Primosphere stated that the foreign ownership listed in CD Radio's Exhibit IX to its amended application amounted to 20:244

²⁰ See 47 C.F.R. § 73.4280.

²¹ See Primosphere Petition to Deny (1997) at 3. See also 47 U.S.C. § 310(b)(4).

²² See *SDARS Order*.

²³ See 47 C.F.R. § 25.156.

²⁴ *Id.*

²⁵ Primosphere Petition to Deny (1997) at 1. Primosphere Petition (1992) at 1.

²⁶ See Updated Amendment.

percent,²⁷ but that it should, in fact, be considered greater than that amount. It asserts that one of CD Radio's listed shareholders, Darlene Friedland, owns 27.483 percent of CD Radio's voting stock. Primosphere contends that, although Ms. Friedland is listed as a U.S. citizen, it "believes" that her husband is a Canadian citizen and that Ms. Friedland is holding joint ownership with her spouse in order to avoid noncompliance with the Communications Act's alien ownership provisions.²⁸

12. Primosphere also claims that, in reports filed with the Securities Exchange Commission ("SEC") on March 27, 1996, CD Radio stated that the company borrowed "Canadian \$2,292,955" from an unidentified shareholder of the company and later issued a promissory note to that shareholder evidencing the loan, which note the shareholder assigned "to a relative" who accepted 60,000 shares of the company's stock as payment for the note.²⁹ Primosphere "believes" that the unidentified shareholder is Mr. Friedland, a Canadian citizen, and that the assignee "relative" is his wife, Darlene Friedland.³⁰ Additionally, Primosphere suggests that the amount of foreign ownership of CD Radio could be greater because CD Radio failed to conduct and reflect any survey of the citizenship of the company's public shareholders.³¹ At a minimum, Primosphere requests the Commission to inquire further into CD Radio's foreign ownership and the nature of Ms. Friedland's interest.³²

13. Primosphere contends that the question of whether foreign ownership restrictions apply to non-common carrier or non-broadcast services is still open.³³ It indicates that, in a joint letter from the State Department, the Department of Commerce, and the U.S. Trade Representative, these agencies requested a full Commission review of foreign ownership of direct broadcast satellite service ("DBS") licenses.³⁴ The letter was written in response to the International Bureau's

²⁷ Primosphere Petition to Deny (1997) at 2.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.* at 2 n.*.

³¹ Primosphere Petition (1997) at 2.

³² *Id.* at 3.

³³ Primosphere Reply to Opposition to Deny at 2.

³⁴ *Id.* Letter from State Department International Communications Coordinator Vonya B. McCann, Department of Commerce Assistant Secretary for Communications and Information Larry Irving, and Deputy U.S. Trade Representative Jeffrey M. Lang to FCC Chairman Reed E. Hundt, dated May 5.

December 6, 1996 Order granting MCI Telecommunications Corporation a DBS authorization. Primosphere contends that the issues surrounding the application of foreign ownership restrictions to DBS and SDARS are identical.³⁵ In both services, the licensee can elect its own regulatory classification and can elect to provide service on a subscription basis. Primosphere argues that the manner in which foreign ownership of subscription satellite services should be treated by the Commission is unclear and may be subject to a future rulemaking.³⁶ Primosphere contends that, under these circumstances, the Commission should not grant CD Radio's application because that action would pre-judge the outcome of a possible pending matter.³⁷ It states that CD Radio's application would be affected by the outcome of any rulemaking proceeding on foreign ownership of subscription services and contends that, if a Commission review ultimately concludes that the alien ownership restrictions do in fact apply to subscription satellite services, CD Radio's application must be denied.³⁸ Primosphere maintains that the Commission should either deny CD Radio's application or hold it in abeyance until the resolution of this issue.³⁹

14. Primosphere contends that, even if the Commission determines that the foreign ownership restrictions do not apply to subscription satellite service, CD Radio's application must nevertheless be denied.⁴⁰ Primosphere notes that the SDARS rules permit a satellite DARS licensee to choose to operate as a subscription carrier.⁴¹ It argues that a satellite DARS licensee may also elect to operate its service more like a broadcast service.⁴² Primosphere contends that, although CD

1997 ("*Administration Letter*").

³⁵ Primosphere Reply to Opposition to Deny at 2.

³⁶ *Id.*

³⁷ *Id.*

³⁸ Primosphere Reply to Opposition to Deny at 3.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.* (citing CD Radio Opposition at 2, n.8 (citing SDARS Order at ¶ 84: "[t]he record supports a conclusion that satellite SDARS licensees should be able to tailor their services to meet customer needs and that mandating a particular regulatory classification is unwarranted."))

⁴² Primosphere Reply to Opposition to Deny at 3 (citing SDARS Order at ¶ 84 where the Commission decided that "[f]lexibility for licensees to meet market demands is crucial and it may be that the viability of a satellite DARS service will depend on offering a mix of advertising supported and subscription service).

Radio has elected to operate as a private or subscription carrier, if later this method of operation proves not economically viable, CD Radio might choose to operate as a broadcast service and depend on advertising revenues for its income.⁴³ Primosphere contends that, in light of the flexibility that satellite DARS licensees have to operate as a broadcast or subscription service, or as a hybrid service somewhere between the two, the more restrictive foreign ownership rules that apply to broadcast services should also apply to SDARS licensees.⁴⁴

15. In response, CD Radio contends that Primosphere's claims are legally irrelevant and factually wrong.⁴⁵ CD Radio states it proposes to operate as a private satellite operator, providing neither common carrier nor broadcast service⁴⁶ and that the alien ownership restrictions of the Act apply only to "broadcast or common carrier" and certain aeronautical services.⁴⁷ CD Radio proposes to operate its satellite DARS license as a private or subscription carrier⁴⁸ and the Commission has confirmed that operating as a subscription service is permissible.⁴⁹ Thus, CD Radio argues that, even

⁴³ Primosphere Reply to Opposition to Deny at 3-4.

⁴⁴ *Id.* Primosphere argues that the Commission followed this reasoning elsewhere in the satellite DARS proceeding when it determined to limit satellite DARS license terms to eight years, as opposed to ten years, as originally proposed. It cites the SDARS Order and states that the Commission determined that, because licensees choosing to operate as broadcasters would be limited to an eight year term, two different terms would be too confusing if an operator decided to change the mix of services it offered, and would undermine the flexibility licensees were given to choose the format under which to operate. Primosphere cites further the following passage in the SDARS Order: "because the Communications Act limits broadcast license terms to eight years, . . . all satellite DARS license terms should be eight years." SDARS Order at ¶ 111.

⁴⁵ CD Radio Opposition at 1-2.

⁴⁶ *See* Amendment at 5. *See also* Compendium at 73.

⁴⁷ *Id.* (*citing* Orion Satellite Corp., 5 FCC Rcd 4937, 4939 (1990) (finding "no statutory bar or policy reason" to limit participation by aliens in non-broadcast, non-common carrier satellite services)).

⁴⁸ CD Radio Opposition at 2 (*citing* Amendment at 5).

⁴⁹ CD Radio Opposition at 2 (*citing* the SDARS Order at 84, where the Commission states that "[t]he record supports a conclusion that satellite DARS licensees should be able to tailor their services to meet customer needs and that mandating a particular regulatory classification is unwarranted.").

if more than twenty five percent of its ownership consisted of non-U.S. citizens, its application could be granted without regard to the ownership restrictions of Section 310(b).

16. In addition, CD Radio states that Darlene Friedland is a U.S. citizen, and is the sole owner of the shares in question. CD Radio also asserts that Robert Friedland, Ms. Friedland's husband, was born in the U.S. and remains a U.S. citizen, so that any attribution between spouses is irrelevant.⁵⁰ Finally, CD Radio states that, because Section 310(b)'s foreign ownership limits do not apply, it is under no obligation to conduct a foreign ownership survey, and that the foreign ownership listed on CD Radio's most recent Form 430 filing represents a good faith assessment of the citizenship of its current shareholders. In responding to Primosphere's supplemental pleading, CD Radio states that the filing is untimely, does not support the contention that Mr. Friedland, not Mrs. Friedland, is the owner of the stock, and fails to allege matters that are relevant to the grant of CD Radio's application to provide non-broadcast subscription services.

17. We agree with CD Radio that, under Commission and Bureau precedents, the Section 310(b) foreign ownership restrictions do not apply to an application proposing non-common carrier, non-broadcast subscription services. Further, we find that, even if the foreign ownership restrictions of Section 310(b) did apply, it would not be in the public interest to deny the application. Finally, we conclude that the record does not support the contention that Darlene Friedland is holding the shares of CD Radio for her husband, Robert Friedland, and the character allegations in Primosphere's supplemental filing are therefore irrelevant.⁵¹

(b) Inapplicability of Section 310(b) of the Communications Act.

18. Section 310(b) of the Communications Act contains restrictions on non-United States ownership of certain types of licenses. This Section provides, in pertinent part, that:

[n]o broadcast or common carrier or aeronautical en route or aeronautical fixed radio station license shall be granted to or held by...any corporation directly or indirectly controlled by any other corporation... of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representatives thereof, or by any corporation organized under the laws

⁵⁰ CD Radio Opposition at 3. CD Radio points out that Robert Friedland holds dual U.S. and Canadian citizenship.

⁵¹ According to the declaration of Darlene Friedland, which appears as an exhibit to CD Radio's supplement, Robert Friedland "does not control or have any legal or beneficial interest in [Darlene Friedland's] CD Radio Inc. stock." *Updated Amendment at Exhibit VIII, Control of Satellite CD Radio Inc. and Declaration of Darlene Friedland* (dated September 15, 1997).

of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.⁵²

19. By its terms, Section 310(b) applies only to common carrier, broadcast or certain aeronautical licenses.⁵³ In adopting the *SDARS Order*, the Commission stated that a satellite DARS licensee should be able to tailor its services to meet customer needs and found that mandating a particular regulatory classification was unwarranted.⁵⁴ Because CD Radio intends to offer a non-common carrier, subscription service, its SDARS license does not fall under any of the regulatory classifications covered by Section 310(b).⁵⁵

20. Recently, in the context of DBS, another subscription satellite service, the International Bureau concluded that Section 310(b) did not apply.⁵⁶ The Bureau relied on the Commission's 1986 *Subscription Video Services Order* that stated that a service offered pursuant to a subscription agreement using a scrambled signal is not a broadcast service.⁵⁷ In that order, the Commission formally reclassified subscription DBS as a "non-broadcast" service.⁵⁸ Further, the Commission stated that licensees that limit receipt of program services to paying subscribers are providing non-

⁵² See 47 U.S.C. § 310(b)(4).

⁵³ *Id.*

⁵⁴ See *SDARS Order* at ¶ 84.

⁵⁵ See *In the Matter of Subscription Video*, 2 FCC Rcd. 1001 (1987 ("*Subscription Video*").

⁵⁶ *In re Application of MCI Telecommunications Corporation for Authority to Construct, Launch and Operate a Direct Broadcast Satellite System at 110° W.L.*, DA-1793 (released December 6, 1996) application for review pending; See also *In the Matter of Loral Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA-97-725 (released May 14, 1997).

⁵⁷ *Id.* (citing *Subscription Video*, 2 FCC Rcd 1001 ¶ 34 (1987) *aff'd sub nom National Association for Better Broadcasting v. F.C.C.*, 849 F.2d 665 (D.C. Cir. 1988)). In its 1982 rules to govern DBS, the Commission decided not to require DBS licensees to operate under a specified service classification. Instead, the Commission indicated that it would consider the particular services proposed by individual applicants in making any service classification decisions (citing *Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcasting Satellites for the Period Following the 1982 Regional Administrative Radio Conference*, 86 FCC 2d 719 (1981); 90 FCC 2d 676 (1982) *aff'd sub nom National Association of Broadcasters v. F.C.C.*, 740 F.2d 1190 (1984)).

⁵⁸ See *Subscription Video*, 2 FCC Rcd 485 ¶ 34 (1987).

broadcast services.⁵⁹ In classifying subscription DBS as a non-broadcast service, the Commission made clear that "[s]uch a classification would relieve a regulatory burden on the service providers insofar as they would not be subject to statutory restrictions applicable to broadcasters."⁶⁰

21. In the *SDARS Order*, the Commission allowed satellite DARS licensees the flexibility to determine their own regulatory classifications, depending on the services they provide.⁶¹ Like DBS, SDARS licensees can provide service on a non-broadcast, subscription basis. Indeed, CD Radio proposes to limit its SDARS transmissions to paying subscribers. The Commission tailored its rules concerning satellite DARS similarly to those established for DBS.⁶² Thus, we conclude that, under Bureau precedent, Section 310(b) of the Act does not apply to CD Radio's proposed service.⁶³ Although we find that Section 310(b) does not apply to CD Radio's application, we recognize that the issue of foreign ownership of subscription satellite services is before the Commission, pursuant to Applications for Review of the MCI Order. Our action here is thus subject to being revisited in a future proceeding.⁶⁴

(c) *Section 310(b)(4) Analysis.*

22. Even if the foreign ownership restrictions in Section 310(b)(4) were to apply, we find that it would not be in the public interest to deny CD Radio's application. CD Radio's revised form 430 indicates that the amount of foreign ownership of CD Radio Inc., its parent corporation, is slightly greater than 31 percent.⁶⁵ As a wholly-owned subsidiary, CD Radio, the proposed licensee, would be subject to a 25 percent limitation on foreign ownership under Section 310(b)(4). This section, however, gives the Commission discretion to license a company with alien ownership in excess of 25 percent along a vertical ownership chain if it finds that the issuance of such a license is

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ See *SDARS Order* at ¶ 84.

⁶² See *SDARS Order* at n. 21.

⁶³ *In re Application of MCI Telecommunications Corporation for Authority to Construct, Launch and Operate a Direct Broadcast Satellite System at 110° W.L.*, DA-1793 (released December 6, 1996) (citing *Subscription Video* at 1001).

⁶⁴ See *In the Matter of Loral Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA-97-725 (released May 14, 1997).

⁶⁵ See FCC Form 430, Exhibit VIII. Control of Satellite CD Radio, Inc. (August 31, 1997).

in the public interest.⁶⁶ This determination is made on a case-by-case basis.⁶⁷

23. In the common carrier context, the International Bureau has developed a two step inquiry to determine whether approval of alien ownership in an amount exceeding 25 percent is consistent with the public interest.⁶⁸ As a threshold matter, the Bureau determines the "home market" of an investor. If it concludes that the home market is a country other than the U.S., it then examines whether that market provides effective competitive opportunities for U.S. entities.⁶⁹ In the *Foreign Carrier Entry Order*, the Commission indicated that it would examine a number of factors to determine an entity's home market, including:

(1) the country of its incorporation, organization, or charter; (2) the nationality of all the investment principals, officers, and directors; (3) the country in which its world headquarter is located; (4) the country in which the majority of its tangible property, including production, transmission, billing, information, and control facilities is located; and (5) the country from which it derives the greatest sales and revenues from its operations. If all five of these factors indicate that the same country should be considered to be the entity's home market, it will be presumed to be so, subject only to rebuttal based on clear and convincing evidence to the contrary. If these five factors yield inconsistent results, however, we will balance them, as well as any other information that is particularly relevant to the case, to determine the appropriate home market under the totality of the circumstances.⁷⁰

24. Although this analysis has not been adopted for DBS, the Bureau noted in a recent decision involving Loral that, if Section 310(b) did in fact apply to DBS, the home market inquiry

⁶⁶ See *In re Request of MCI Communications Corporation British Telecommunications Plc.*, 9 FCC Rcd 3960 at ¶ 21 (1994).

⁶⁷ *Id.* See generally *In the Matter of Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Satellite Service in the United States*, IB Docket No. 96-111, FCC 97-252 (released July 18, 1997) ("DISCO II NPRM").

⁶⁸ See *Market Entry and Regulation of Foreign-affiliated Entities*, 11 FCC Rcd 3873 at ¶¶ 199-208 and 209-212 (1995) ("*Foreign Carrier Entry Order*"). See also *In the Matter of AT&T Corp. and Loral SpaceCom Corporation for Authority to Assign the Licenses of Telestars et. al.*, DA 97-125 (released January 17, 1997) at ¶ 10 ("*Loral Common Carrier Order*").

⁶⁹ See *Loral Common Carrier Order* at ¶ 8.

⁷⁰ *Foreign Carrier Entry Order* at ¶ 207.

would be instructive in resolving alien ownership issues raised in that context.⁷¹

25. Although the level of foreign equity investment in CD Radio Inc. exceeds Section 310(b)(4)'s statutory benchmark by slightly more than six percent, we find that it is consistent with the public interest.⁷² Most of CD Radio's foreign ownership is divided between Loral, which holds roughly 15.2 percent, and David Margolese, a citizen of Canada, who holds 12.7 percent. In addition, eleven other individual Canadian citizens and corporations own a combined interest of less than three percent. The ownership interests of these minority owners of CD Radio Inc. are widely dispersed. As such, these minority owners will have neither the interest nor the ability to control CD Radio.⁷³ Likewise, Mr. Margolese, with less than a 13 percent ownership interest, is not in a position to exercise significant control over the licensee. Further, CD Radio Inc. has a dominant U.S. presence on its board of directors.⁷⁴

26. Loral holds the largest percentage of foreign-owned CD Radio Inc. stock.⁷⁵ However, in two separate decisions, a common carrier decision and a DBS decision, the International Bureau has found that it was consistent with the public interest for it to hold ownership interests in an amount greater than 25 percent.⁷⁶ In approving Loral's ownership of a common carrier licensee, the Bureau applied the "home market" analysis delineated in the Commission's *Foreign Carrier Entry Order*,⁷⁷ identifying Loral's "home market," for the purposes of Section 310(b), as the United

⁷¹ See *In the Matter of Loral Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA-97-725 (released May 14, 1997) at ¶ 8. See also Loral Common Carrier Order at ¶ 8.

⁷² *Id.*

⁷³ See *In re Request of MCI Communications Corporation British Telecommunications PLC*, 9 FCC Rcd 3960 at ¶ 11 (1994). In determining whether to allow MCI to increase its capital stock from 28 to 35 percent, one of the factors that the International Bureau examined was whether the foreign ownership investors have the interest or ability to control the licensee.

⁷⁴ See Letter from Carl R. Frank to William Caton, Exhibit VII, dated September 9, 1997.

⁷⁵ See Letter from Carl R. Frank to William Caton, dated September 9, 1997, Exhibit IX, Ownership of CD Radio Inc.

⁷⁶ See Loral Common Carrier Order. See also *In the Matter of Loral Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA-97-725 (released May 14, 1997).

⁷⁷ See Foreign Carrier Entry Order.

States.⁷⁸ The Bureau also held that "no reasonable inference can be drawn" that Loral should not be considered a United States corporation for alien ownership purposes.⁷⁹ Because the Bureau found that Loral's home market is the United States, it concluded that examination under the effective competitive opportunities test was not necessary.⁸⁰

27. Similarly, in the context of DBS, the International Bureau found that, if it were to apply Section 310(b) to the subscription service, the indirect ownership by Loral of a DBS licensee would not contravene the Commission's foreign ownership rules.⁸¹ The International Bureau noted that, in the common carrier context, it had previously determined that the U.S. should be considered Loral's home market. It then stated that, although the home market inquiry "has not been adopted in the DBS context and currently only applies to common carrier licensees, in the instant case, even if we were to apply such a test, the most analogous precedent suggests that approval of the transaction is warranted."⁸²

28. We also note that CD Radio, in its updated ownership filing, states that it intends to implement a public offering and preferred share conversion.⁸³ It states that the effect of the forthcoming offerings on the ownership of the company will be to bring non-U.S. ownership below 25 percent to approximately 15.5 percent. Under these circumstances, we conclude that, even if Section 310(b)(4) were applicable here, permitting CD Radio to hold a SDARS licensee would be in the public interest.

29. We reject Primosphere's argument that, because CD Radio could change the nature of its service, it must therefore be subject to the alien ownership standard set forth for broadcasters. CD

⁷⁸ See Loral Common Carrier Order at ¶ 9.

⁷⁹ *Id.*

⁸⁰ *Id.* at ¶ 10.

⁸¹ See *In the Matter of Loral Corporation Request for Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA 97-725 (May 14, 1997).

⁸² See *In the Matter of Loral Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, DA-97-725 ¶ 8 (citing Loral Common Carrier Order at ¶ 9); see also DISCO II NPRM.

⁸³ See FCC Form 430, Exhibit VIII, Control of Satellite CD Radio, Inc. (August 31, 1997). See also *In the Matter of Satellite CD Radio, Inc. Request for Declaratory Ruling for Further Exemption Pursuant to 47 C.F.R. 25.116(c)(2)* DA 97-1327 (released June 26, 1997).

Radio proposes to offer service as a private satellite operator.⁸⁴ In the event that CD Radio elects to change its classification, it must seek an appropriate ruling from the Commission and its ownership structure would be subject to review at that time.⁸⁵

(d) *Primosphere's Supplemental Pleading.*

30. Finally, we find Primosphere's supplemental pleading raising character issues procedurally deficient and legally irrelevant. First, it was filed almost two months after the deadline for filing replies to CD Radio's Opposition and was not accompanied by the requisite motion for leave to file additional pleadings.⁸⁶ Second, Primosphere's supplemental pleading was not supported by an affidavit from an individual with knowledge about the underlying factual assertions.⁸⁷ Third, the allegations made were in connection with Robert Friedland, not Darlene Friedland, and there is insufficient evidence in the record to support any theory that Robert Friedland is in fact the owner of the stock in question. Fourth, even if we were to look to Mr. Friedland's character, SDARS is not a broadcast service, and thus the heightened scrutiny given to the character of broadcast licensees is not appropriate here.⁸⁸ Finally, even if we were to apply a broadcast licensing analysis, the allegations in Primosphere's supplement are related to unadjudicated claims and pending litigation, and are thus irrelevant.⁸⁹

(2) *Additional Issues.*

⁸⁴ See Amendment at 5. See also Compendium at 73.

⁸⁵ 47 C.F.R. § 1.2.

⁸⁶ See 47 C.F.R. § 1.41 and § 25.154.

⁸⁷ 47 C.F.R. § 1.16.

⁸⁸ 47 C.F.R. § 73.4280; see also *In the Matter of Policy Regarding Character Qualifications in Broadcast Licensing, Memorandum Opinion and Order*, FCC 92-448 (released October 9, 1992).

⁸⁹ See 47 C.F.R. 165; see also *In the Matter of Lorai Corporation Request for a Declaratory Ruling Concerning Section 310(b)(4) of the Communications Act of 1934*, at n. 40 and 41 (citing *Letter from Clay Pendarvis, Acting Chief, Distribution Services Branch, Video Services Division, Mass Media Bureau, to Philip L. Verveer* (dated April 6, 1994), which stated, "[t]he Commission has consistently taken the position that it is not the proper forum for the resolution of private contractual disputes and that such matters are appropriately left to the courts or other for[a] which have the jurisdiction to resolve them." (citing *Sonderling Broadcasting Co.*, 46 RR 2d 889, 894 (1979), *Transcontinent Television Corp. (WROC-TV)*, 21 RR 2d 945 (1961); *John R. Runner, Receiver (KBIF)*, 36 RR 2d 773 (1979))).

31. Various parties have raised issues with respect to CD Radio's application throughout the several years of the pending satellite DARS proceeding.⁹⁰ In March 1997, the Commission released the *SDARS Order* and addressed many of the issues raised throughout the proceeding, including: (1) the public interest and economic impact of SDARS on terrestrial broadcasters, (2) the licensing plan, (3) service rules for SDARS, and (4) technical rules.⁹¹ Many of the petitions were filed after CD Radio first filed its application in 1990. To the extent that there are remaining issues that were not resolved in the *SDARS Order*, we will address them herein.

32. Commenters raise issues concerning the public interest benefits of satellite DARS and its economic impact on terrestrial radio broadcasters.⁹² These issues were thoroughly examined in the *SDARS Order*.⁹³ Specifically, the National Association of Broadcasters ("NAB") questions whether it is in the public interest to grant CD Radio a satellite radio license. It asserts that CD Radio will be unable to provide service to urban areas and will only be able to provide service to rural and suburban areas with South-facing windows because its proposed link margin will not provide high quality service.⁹⁴

33. NAB does not establish that granting CD Radio an SDARS license would contravene the public interest.⁹⁵ As indicated in CD Radio's updated amendment, CD Radio will utilize satellite spatial diversity and time diversity to avoid outages from blockage, multipath and tree foliage. Its two satellites provide adequate elevation angles to mobile receivers in the contiguous United States. In core urban areas and tunnels, CD Radio intends to augment its SDARS transmissions by

⁹⁰ See *supra* n. 2.

⁹¹ See *SDARS Order*.

⁹² See BSB Communications Petition to Deny at 3-5; KVST Petition to Deny at 1 (stating that satellite SDARS will result in the demise of small independent owned radio stations); Southwest Florida Community Radio Inc. Petition to Deny at 2 (where petitioner requests the Commission to recognize the heavy economic burden placed on local broadcasters with the addition of CD Radio and other satellite radio systems; AMSC Subsidiary Corporation Comments requests the Commission to ensure that there is a demonstrated demand for one or more satellite DARS system in the 2310-2360 MHz bands to maximize spectrum use); KSBJ Petition to Deny at 2; KTFA 92.5 FM Radio Petition to Deny at 3 (commenters concerned with localism argue that satellite DARS will flood the market with too many signals and in turn repress localism).

⁹³ *SDARS Order* at ¶¶ 7-38.

⁹⁴ NAB Petition to Deny at 4.

⁹⁵ *SDARS Order* at ¶¶ 7-38.

implementing terrestrial repeaters.⁹⁶ CD Radio indicated that it plans to apply for the appropriate licenses after the completion of the proposed *SDARS Notice of Rulemaking* on the subject of terrestrial repeaters.⁹⁷

34. Several petitioners raise issues concerning the allocation of spectrum for SDARS.⁹⁸ Aerospace and Flight Test Radio Coordinating Council argues that reallocation of the 2360-2370 MHz bands to CD Radio would impose excessive flight testing costs and operational burdens on aircraft and missile testing. Because CD Radio's updated amendment did not request use of the 2360-2370 MHz band or the 1470-1530 MHz bands for its SDARS system, this issue is moot. Emmis argues that CD Radio's use of 1470-1530 MHz frequency does not conform to the Table of Frequency Allocations. The allocation issues were addressed in the 1995 allocation Order.⁹⁹ In addition, in our *SDARS Order* we concluded that a viable and competitive satellite DARS service will require at least 12.5 MHz of spectrum.¹⁰⁰ AMSC requests the Commission to assign CD Radio 8 MHz of spectrum or the minimum amount needed to implement its system. In its amendment, CD Radio stated that it will require 12.5 MHz of spectrum to implement its SDARS system.¹⁰¹ Therefore, we are authorizing CD Radio the minimum amount of spectrum needed to implement its SDARS system.

35. Some petitioners also urge the Commission to classify satellite DARS as a broadcast service, and not a private carrier service.¹⁰² Petitioners argue that the use of terrestrial repeaters¹⁰³ gives CD Radio the ability to support satellite advertising, which is no different from radio networks

⁹⁶ Amendment at 9.

⁹⁷ Amendment at 9.

⁹⁸ Aerospace and Flight Test Radio Coordinating Council Petition to Deny at 1-2; Emmis Broadcasting Corporation Petition to Deny at 2; AMSC Subsidiary Corporation Comments at 6.

⁹⁹ *Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services*, 10 FCC Rcd. 2310 (1995) ("*Allocation Order*").

¹⁰⁰ SDARS Order at ¶ 74.

¹⁰¹ Amendment at 11.

¹⁰² Joint Parties Petition to Deny at 3-4.

¹⁰³ Terrestrial repeaters may be necessary to implement ("gap-fillers") in urban canyons and other areas where it may be difficult to receive SDARS signals transmitted by a satellite. These terrestrial gap-fillers would re-transmit the information from the satellite to overcome the effects of signal blockage and multipath interference.

providing programming via satellite to affiliates located throughout the country.¹⁰⁴ In the *SDARS Order*, the Commission concluded that "satellite DARS licensees should be able to tailor their services to meet customer needs, and that mandating a particular regulatory classification is unwarranted."¹⁰⁵ In essence, a satellite DARS licensee may elect to provide service on a broadcast, common carrier or subscription service basis.

36. Petitioners also question the purpose of the new service.¹⁰⁶ In their petition, Joint Parties assert that the availability of digital cable radio via terrestrial means, the increase in FM stations, and the potential for future in-band innovations eliminate consumer need for satellite DARS.¹⁰⁷ Additionally, KTFA supports improving existing radio technology, rather than implementing satellite DARS service.¹⁰⁸ NAB discourages the grant of CD Radio's construction permit until "the Commission is precise whether terrestrial digital radio should or should not be implemented before radio satellite service."¹⁰⁹ In the *SDARS Order*, the Commission concluded that it was in the public interest to license satellite DARS.¹¹⁰ It also concluded that, although SDARS might have some impact on terrestrial radio, the record did not demonstrate that it would threaten the provision of local radio service.¹¹¹

37. Emmis also argues that CD Radio has not satisfied the applicable financial qualifications.¹¹² Its petition to deny was filed before the decision was made to auction satellite DARS licenses. In view of the auction and CD Radio's successful bid, it is unnecessary to make a finding regarding financial qualifications. Satellite DARS applicants do not have to meet financial

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at ¶ 84.

¹⁰⁶ Joint Parties at 4-6; and KTFA 92.5 FM Radio Petition to Deny at 3.

¹⁰⁷ Joint Parties Petition to Deny at 4-6.

¹⁰⁸ KTFA 92.5 FM Radio at 3.

¹⁰⁹ NAB petition to Deny at 2.

¹¹⁰ SDARS Order at ¶ 2.

¹¹¹ SDARS Order at ¶ 31.

¹¹² Emmis Broadcasting Corporation Petition to Deny at 2.

qualification requirements.¹¹³

38. The NAB raises some additional technical issues in its petition to deny filed in response to the original applications. NAB argues that CD Radio's proposed system is not compatible with Eureka or USA Digital Systems, because CD Radio does not propose to operate with the same bit rate as the other systems.¹¹⁴ As discussed in the *SDARS Order*, however, it is the Commission's policy to refrain from mandating the use of a particular form of technology.¹¹⁵ Requiring CD Radio's system to be compatible with Eureka or USA Digital Systems would contradict the intent of the *SDARS Order* to give SDARS operators the flexibility to implement the channelization plans and modulations schemes of their choice.¹¹⁶ NAB also inquires whether CD Radio will be able to offer reasonably priced 2 decibel ("dB") noise receivers.¹¹⁷ In its updated amendment, CD Radio's SDARS system design provides for 18 dB of available downlink margin.¹¹⁸ Therefore, CD Radio's application renders this issue moot.

39. In the *SDARS Order*, the Commission allowed licensees the flexibility to determine the most cost-effective way to meet our receiver inter-operability requirements.¹¹⁹ We concluded that interoperable systems would encourage consumer investment.¹²⁰ We believe that consumers should be able to access the services from all licensed satellite DARS systems and our rule on receiver interoperability accomplishes this goal.¹²¹ We believe that it is in the public interest to promote the new satellite DARS service in a manner that seeks to keep costs reasonable and encourages consumer investment in affordable satellite receiving equipment.¹²²

¹¹³ See *SDARS Order* at ¶110 ([b]ecause of our decision to auction licenses, financial qualifications are unnecessary).

¹¹⁴ NAB Petition to Deny at 3.

¹¹⁵ *SDARS Order* at ¶ 102.

¹¹⁶ *Id.*

¹¹⁷ *Id.* at 5.

¹¹⁸ Amendment at ¶ 26.

¹¹⁹ *SDARS Order* at ¶ 103.

¹²⁰ *SDARS ORder* at ¶ 103.

¹²¹ *SDARS Order* at ¶ 106.

¹²² *Id.*

(3) *Technical Qualifications*

40. The *SDARS Order* requires SDARS licensees' systems to provide, at a minimum, full CONUS coverage.¹²³ In addition, coverage to other areas or territories of the United States is strongly encouraged, if practical.¹²⁴ CD Radio proposes that its two geostationary satellites at approximately 80° W.L. and 110° W.L., at a minimum, provide continuous SDARS to the 48 contiguous states of the United States. Accordingly, CD Radio's proposed SDARS system complies with the *SDARS Order's* coverage/service area requirements.¹²⁵

41. The *SDARS Order* also requires SDARS applicants to provide information on their service link budgets in accordance with Section 25.114(c)(9) of the Commission's rules.¹²⁶ According to its amendment, CD Radio will provide a service link margin of 18 dB.¹²⁷

42. The *SDARS Order* mandates that, at the very least, consumers should be able to access the covered services from all licensed SDARS systems via a single receiver.¹²⁸ There are significant differences between CD Radio's and AMRC's proposed transmission technologies that may affect receiver interoperability. However, in its amendment, CD Radio expressed its commitment to work with all interested parties to insure that the SDARS receivers will permit customers to access both systems.¹²⁹ Considering that SDARS receiver interoperability is in the interest of consumers, the industry, and the licensees, CD Radio's license is conditioned upon its certification to the Commission that its final receiver design is interoperable with the AMRC SDARS.

43. The *SDARS Order* requires applicants to identify which coding scheme and coding rate(s) they plan to implement in their SDARS systems, and requires those SDARS systems that intend to offer audio formats other than CD quality to be capable of transmitting lower quality audio

¹²³ See also § 25.144 (2)(i) ([s]ervice of the 48 states of the United States is full CONUS).

¹²⁴ SDARS Order at ¶ 99.

¹²⁵ Amendment at 8.

¹²⁶ SDARS Order at ¶ 101.

¹²⁷ Amendment at 26, Table. 3.

¹²⁸ SDARS at ¶ 106.

¹²⁹ CD Radio Amendment at 25.

at lower data rates.¹³⁰ CD Radio's SDARS system complies with the applicable data compression/coding requirements. The CD Radio system will use Perceptual Audio Coding ("PAC") algorithm to compress CD quality information stream from 1.44 Mbps to 128 Kbps. The resulting data stream will be convolutionally encoded with half-rate K=7 error coding, interleaved, divided into blocks and block-error encoded with 10 percent depth Reed-Solomon code. The CD Radio system will be able to provide approximately 30 CD quality stereo channels. In addition, five 128 Kbps channels will be subdivided into 32 Kbps channels to be used for voice programming. Standard voice codecs¹³¹ will be used to provide 20 FM audio-quality channels. Flexibility will be maintained on these channels so that they can be subdivided further (i.e., 16 Kbps, 8 Kbps, 4 Kbps, 2 Kbps, 1 Kbps, 0.5 Kbps) to provide auxiliary services such as paging, light aircraft weather advisory, GPS differential data and national emergency alerting. Compression of this type of information would be use-specific. At least some of such auxiliary service data would be encoded using Linear Predictive Coding ("LPC").¹³²

44. The *SDARS Order* does not set a specific PFD limit on SDARS. Instead, the Commission expects that appropriate PFD limits will be established through international coordination with adjacent countries. According to Section 25.114 (c)(11) of the Commission's rules, however, SDARS applicants are required to identify PFD at the Earth's surface from their spacecraft.¹³³ In its amendment to its application, CD Radio complies with the Commission's rules by providing the PFD within its coverage area. Although the border PFD value is critical for purposes of international coordination, to comply with the intent of Section 25.114 (c)(11), and for the purposes of domestic coordination, CD Radio should provide maximum (peak) PFD value within its coverage area. CD Radio recognizes that the reported PFD values will trigger the requirement to coordinate with radiocommunications systems of other countries. In the absence of a set of PFD limits for the 2320-2332.5 MHz band, CD Radio's license to provide SDARS is conditioned upon completion of successful coordination between the CD Radio SDARS system and the foreign systems.

45. The *SDARS Order* requires SDARS licensees to meet out-of-band and spurious emission limits contained in Section 25.202(f) of the Commission's rules.¹³⁴ In its the amendment to

¹³⁰ SDARS Order at ¶ 108.

¹³¹ Codecs is a term used for coder/decoder.

¹³² Amendment at 23.

¹³³ SDARS Order at ¶¶ 113 and 114.

¹³⁴ SDARS Order at ¶ 118.

its license application. CD Radio verifies that its proposed system will suppress out-of-band spurious emissions to the levels specified in Section 25.202(f).¹³⁵ In its updated amendment, CD Radio states that it will coordinate its SDARS system frequency use in order to prevent the potential for unacceptable interference.¹³⁶

46. The *SDARS Order* requires SDARS licensees to accommodate telemetry beacons for their systems within their exclusively-licensed bandwidth, but allows each licensee the flexibility to determine the appropriate amount of spectrum necessary for its telemetry beacons.¹³⁷ CD Radio appears to comply with this requirement by locating its telemetry beacons within a bandwidth of 200 KHz at 2320.25 MHz.¹³⁸

47. In the *SDARS Order*, the Commission permits an SDARS licensee, pursuant to an agreement with the other SDARS licensee, to transmit on cross-polarized frequencies in frequency assigned to the other SDARS licensee. The Commission stipulated that the parties who reach such an agreement would be required to apply to the Commission for agreement approval.¹³⁹ CD Radio states that at this time it does not intend to employ cross-polarization within its frequency assignment and will operate on left-hand circular polarization ("LHCP"). CD Radio is required to apply to the Commission for approval of any change from its use of LHCP.¹⁴⁰

48. The Commission recognized in the *SDARS Order* that the SDARS systems cannot operate without sufficient feeder-link spectrum. The *SDARS Order*, therefore, identified the non-congested 7025-7075 MHz fixed satellite service ("FSS") frequency band as the spectrum for SDARS feeder-link operations. CD Radio has tentatively identified 12.5 MHz of spectrum for its feeder-link use. However, this is subject to licensing and coordination. The *SDARS Order* states that the Commission will authorize the SDARS feeder-link network as a fixed-satellite service in the 7025-7075 MHz bands on a co-primary basis, but only after the applicant demonstrates that coordination with potentially affected users in the band has been successfully completed.¹⁴¹ CD Radio feeder-links

¹³⁵ Amendment at Section VIII.

¹³⁶ Amendment at ¶ 6.

¹³⁷ SDARS Order ¶ 121.

¹³⁸ Amendment at 13

¹³⁹ SDARS Order at ¶ 122.

¹⁴⁰ Amendment at 10.

¹⁴¹ SDARS Order at ¶ 129, 134, 135. Potential affected users include existing broadcast auxiliary users.

will be coordinated internationally under the ITU procedures for the FSS. Therefore, CD Radio is required to provide the necessary APS4 information to facilitate this process.

49. Although licensing of the SDARS feeder-link Earth stations is outside the scope of this proceeding, it is important to note that, in its amendment to its license application, CD Radio expressed a willingness to coordinate with existing services in the 7025-7075 MHz band using the same techniques that are used in the coordination of existing FSS earth stations. Therefore, we grant CD Radio the authority to launch SDARS space stations capable of operating with the feeder-links in the 7025-7075 MHz band designated for SDARS feeder-links.

(4) Miscellaneous

(a) Timely Payments.

50. In order to participate in the satellite DARS auction conducted in April, applicants were required to submit a down payment of \$3,000,000. In addition, our auction rules required a down payment of 20 percent of the winning bid within ten business days of the announcement of winning bidders. CD Radio paid \$3,000,000 to participate in the auction. After, the Wireless Telecommunications Bureau announced the winners of the SDARS auction by Public Notice, dated April 2, 1997, CD Radio was required to pay and paid \$13,669,200 by April 16, 1997. CD Radio was required to pay and paid the balance, in the amount of \$66,676,800, within ten business days of the date of the Commission's Public Notice indicating that the SDARS authorization was ready for grant.¹⁴²

(b) Construction Milestones.

51. Our rules require that CD Radio must, within ten days after the date of a required implementation milestone, as specified in its system authorization and on the basis of the documentation contained in its application, certify to the Commission by affidavit that the milestone requirement has been met or notify the Commission by letter that it has not.¹⁴³ Our rules require that CD Radio: (1) complete contracting for construction of its first space station or begin construction of its first space station within one year; (2) complete contracting for construction of its second space station or begin second space station construction within two years; (3) launch and begin operating its first space station within four years; and/or (4) be in full operation of its satellite system within six

¹⁴² CD Radio paid by wire transfer on October 7, 1997. See Wire Confirmation, SEQ-971007007433.

¹⁴³ See § 25.144 (b).

years based on the date of its authorization.¹⁴⁴ CD Radio expects to be operational in 1999. Upon grant, CD Radio's authorization will be conditioned upon the timely completion of the above referenced milestones.

(d) Terrestrial Repeaters.

52. In urban canyons and other areas where it may be difficult to receive SDARS signals, CD Radio plans to implement, as necessary, terrestrial repeaters. Terrestrial repeaters would re-transmit information transmitted from the satellite to overcome the effects of signal blockage and multipath interference. Issues concerning the regulation of terrestrial repeaters for SDARS operations are outstanding and will be addressed in the *SDARS Further Notice*.

Conclusion

53. As the previous discussion indicates, upon review of CD Radio's application to provide satellite digital audio radio service, we find that CD Radio is qualified to be a Commission licensee and, pursuant to Section 309 of the Communications Act of 1934, as amended, 47 U.S.C. § 309, that grant of this application will serve the public interest, convenience, and necessity. Therefore, CD Radio's authorization is ready for grant in accordance with the provisions of this Order.

Ordering Clauses

54. Accordingly, IT IS ORDERED that File Nos. 49/50-DSS-P/LA-905, 58/59-DSS, AMEND-90, 8/9-DSS-AMEND-92, 12/13-DSS-AMEND-92, 44/45-DSS-AMEND-92, 42-SAT-AMEND-95, 71-SAT-AMEND-97 ARE GRANTED, and Satellite CD Radio, Inc. IS AUTHORIZED to launch and operate two geostationary satellites at 80° W.L. and 110° W.L. for purpose of providing a Satellite Digital Audio Radio Service in the United States in the 2320.0-2332.5 MHz (space-to-Earth) frequency band, in accordance with the *Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Bands*, DA 97-70 (adopted March 3, 1997), and consistent with the Commission's rules governing satellite operations, 47 C.F.R. Part 25, unless specifically conditioned or waived herein, and consistent with the technical specifications set forth in its space station application.

55. IT IS FURTHER ORDERED that Satellite CD Radio IS AUTHORIZED to launch two GSO satellites at 80° and 110° W.L. capable of operating with the feeder-links in the 7025-7075 MHz (Earth-to-space) frequency band in accordance with technical specifications set forth in its space

¹⁴⁴ *Id.* See also SDARS Order at ¶ 110.

station application and consistent with our rules, unless specifically waived or conditioned herein.

56. IT IS FURTHER ORDERED that Satellite CD Radio will prepare any necessary submissions for launch and operation in accordance with the procedures of the International Telecommunication Union (ITU) Radio Regulations and, specifically, this authorization is subject to completion of coordination between the Satellite CD Radio Satellite Digital Audio Radio Service system and affected radiocommunication systems of other Administrations

57. IT IS FURTHER ORDERED that this authorization is subject to certification by Satellite CD Radio Corporation that its final receiver design is interoperable with respect to the American Mobile Radio Corporation's Satellite Digital Audio Radio Service system final receiver design.

58. IT IS FURTHER ORDERED that Satellite CD Radio specify the value of the maximum (peak) Power Flux Density at the Earth's surface from its Satellite Digital Audio Radio Service system.

59. IT IS FURTHER ORDERED that the Petitions to Deny filed by Primosphere Limited Partnership, Aerospace and Flight Test Radio Coordinating Council, BSBB Communications, Emmis Broadcasting Corporation, Joint Parties, KSJB, KTFA 92.5 FM Radio, KVST Radio, The National Association of Broadcasters, and Southwest Florida Community Radio, Inc. ARE DENIED.

60. IT IS FURTHER ORDERED that the license term for each space station is eight years and will begin on the date Satellite CD Radio, Inc. certifies to the Commission that its first satellite has been successfully placed into orbit and that its operations fully conform to the terms and conditions of this authorization.

61. IT IS FURTHER ORDERED that Satellite CD Radio is afforded thirty days from the date of the release of this Order and authorization to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

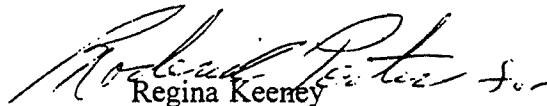
62. IT IS FURTHER ORDERED that Satellite CD Radio's authorization is conditioned upon timely completion of the Satellite Digital Audio Radio milestones. The satellite DARS milestones are based on Satellite CD Radio's date of authorization. Satellite CD Radio is required to complete contracting for construction of its first space station or begin construction of its first space station within one year. It is required to complete contracting for construction of its second space station or begin construction of its second space station within two years. Satellite CD Radio is required to launch and begin operating at least one space station within four years, and/or be in full operation of its satellite system within six years of license grant. See § 25.144(b). This authorization

shall become NULL AND VOID in the event each space station is not constructed, launched, and successfully placed into operation in accordance with the technical parameters and terms and conditions of the authorizations by the following dates:

	<u>Construction Commenced</u>	<u>Launch</u>
First satellite	October 1998	October 2001
Second satellite	October 1999	
Full Operation		October 2003

63. This Order is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, and 1.115, may be filed within 30 days of the date of public notice of this Order *See* 47 C.F.R. § 1.4 (b)(2).

FEDERAL COMMUNICATIONS COMMISSION


Regina Keeney
Chief, International Bureau