

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

RECEIVED

NOV 13 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Applications of)
Satellite CD Radio Inc.)
for Authority to Construct)
Launch and Operate a Digital)
Audio Radio Satellite System)

File Nos. 49/50-DSS-P/LA-90
58/59-DSS-AMEND-90
44/45-DSS-AMEND-92

RECEIVED

NOV 17 1992

NATIONAL ASSOCIATION OF BROADCASTERS'
PETITION TO DENY

OFFICE OF CHIEF
DOMESTIC FACILITIES DIVISION
COMMUNICATIONS BUREAU

The National Association of Broadcasters ("NAB"),^{1/} pursuant to

§309(d)(1) of the Communications Act of 1934, as amended, and §73.3584(a) of the Commission's rules, hereby petitions the Commission to deny the above-referenced request of Satellite CD Radio, Inc. ("SCDR") for conditional authority to begin construction of a satellite system.

I. Introduction

The Commission has accepted for filing the application of Satellite CD Radio^{2/} for authority to construct, launch and operate a digital audio radio service satellite system, on neither a common carrier nor a broadcasting basis.

The Commission thereby announces its intention now to entertain this and thus other applications for satellite digital audio broadcasting ("DAB") service. It

1/ NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

2/ Compendium of Applications and Restatement of Petition for Rulemaking, submitted by Satellite CD Radio, Inc., September 14, 1992 ("SCDR Compendium").

does so despite the absence of any policy determinations as to the shape, structure or goals of DAB service in the United States, despite the lack of a plan and of proven technology for the provision of DAB service by the local broadcasting system of this country, despite the still uncertain and unplanned DAB situation worldwide and despite the absence of any apparent need to rush a new DAB satellite service into being. It does this before DAB technology has been fully developed and tested. It does this even before frequencies have been allocated. It does this with only one, fledgling applicant requesting such authority. And it does this in the face of a scarcity and struggle for spectrum by all manner of services and users.

If the Commission persists on this course, it will do so, as NAB has said before and here says again, to the great and serious prejudice of sound policy making for the future of radio service in America. This action is premature. It is prejudicial in the extreme. And it is a rush to judgment that does not comport with the pacing of the world wide DAB situation, with sound policy development, with the demands of the marketplace or of other applicants or with the careful tending of localism and free over-the-air radio service. Nor does it comport with the pause needed for a new Administration and a new Commission to reassess policy priorities.

NAB protests this action, in the strongest terms, and respectfully requests this Commission to deny the instant application or defer consideration of this and other applications until after the future of digital radio has been carefully charted by the new FCC.

To do otherwise not only would prejudice the interest of sound policy making, but would do a great disservice to our system of free, local radio

broadcasting, other service providers, other potential applicants and, most importantly, the public interest the Commission is charged to protect.

II. Consideration of SCDR's Application is Premature and Prejudicial to Sound Policy Making and the Public Interest Therein.

For more than two years SCDR has been requesting authorization to begin construction of a satellite system to provide DAB service nationwide, first as advertiser-supported, then as a subscription service, once in L-Band, now in S-band, and has modified its proposal over that time in significant respects. NAB has responded to each SCDR request for authorization by sounding the same warning, which we here again repeat.^{3/} That is that it is premature and prejudicial to invite and consider applications for construction of so mighty an undertaking as a multi-hundred million dollar satellite DAB system before the Commission has determined, through reasoned, careful rule making, how DAB service should be brought to the American public.

NAB appreciates that the instant applicant would like a head start in building a system that unquestionably takes several years to construct. But, first, the FCC must determine, by sound policy process, that it is in the public interest to devote spectrum and resources to such a system. Otherwise, the FCC, as it proposes here to do, puts the cart before the horse and sets it rolling in an unplanned direction which we all may be forced to follow. And, in that race to keep up with or follow the Satellite

^{3/} These earlier NAB filings on SCDR's requests are attached hereto, absent their appendices, for the convenience of the Commission's staff.

CD cart, U.S. policy as to the proper introduction of digital radio for the benefit of the listening public will be prejudiced.

It is in fact that head start that SCDR desires and that the Commission offers by soliciting applications that will prejudice basic policy questions before they are considered. As NAB has before pointed out, actions once set in motion are not easily reversed and will, in fact, lead policy in their direction.

III. Questions As to the Nature of a Satellite DAB Service Are Part of Overall DAB Policy Making, and Must Be So Considered and Determined Before Applications Are Entertained.

Before considering any specific application the FCC must set the course for digital radio in the United States by carefully considering and deciding myriad policy questions. Such questions include, among many others, whether DAB technology and spectrum and Commission resources should first be directed to upgrading and enhancing and perpetuating the United States' free, local, universal terrestrial radio system and whether it is in the public interest to devote scarce spectrum and public resources to a new satellite service, one not in sync with the rest of the world, with no apparent demand, no receivers, no apparent revenue and with a video counterpart (DBS) still struggling after more than a decade to get off the ground.

Not only has the Commission not considered, much less determined, that a satellite DAB service is in the public interest, compared with other choices and other priorities, but it has not yet even allocated the spectrum for such a service, nor decided how many such providers should be authorized within the available spectrum. Nor has it considered whether this S-Band spectrum might, with rapidly developing technology,

be suitable for terrestrial DAB. And the Commission has yet no idea whether this or other spectrum might be needed for digital terrestrial service, depending on the developments and testing of so-called "in-band" terrestrial DAB.

Nor has the Commission nor the new Administration considered revisiting the possibilities for joining the rest of the world in a world-wide satellite/terrestrial frequency allocation. Certainly that question should be looked at, given the obvious and serious technical coordination problems facing the United States, Canada and Mexico with regard to DAB, terrestrial as well as satellite.^{4/} While that question would not be at issue in a DAB policy-setting rule making, it is wise to realize in this and other regards that DAB policy is not yet settled, domestically or internationally.

In fact, the WARC that recently allocated DAB frequencies set a 1998 DAB planning conference in recognition of the unsettled nature of DAB technical, sharing and policy issues. And the WARC allowed for "interim" DAB operation (i.e., before the 1998 planning conference) only in the upper 25 MHz of the DAB

^{4/} In this regard, SCDR's Application shows that coordination of its system with the Canadians will be extremely difficult. At WARC-92, the U.S. maintained that protection of U.S. incumbent telemetry users required a power flux density (PFD) limit of -172 dBW/m²/4kHz. The SCDR Application indicates that it would radiate into Canada a PFD of -139 dBW/m²/4kHz. SCDR Compendium at 4. Consequently, the probability that SCDR's satellite service will interfere with Canadian telemetry users in S-Band is correspondingly high and, in the end, it may be that no compromise is possible.

allocations,^{5/} and did so to accommodate administrations (specifically, Canada) who had highly developed and determined policy intentions.

Questions as to if, where and how much DAB satellite service should be authorized properly belong in the Commission's overall consideration of DAB policy and the future of radio and digital radio in the United States. The Commission simply must consider the impact of satellite DAB service on our terrestrial broadcasting system. Should satellite service be restricted to a subscription basis to avoiding harming the local service supported by advertising? Similarly the Commission should consider whether technical system standards can or should be the same for terrestrial and satellite systems. Should there be a common technical transmission format? Can different frequency bands reasonably be accommodated in one receiver, or should the public be presented with the choice (or necessity) of buying two receivers?

These questions, and myriad more, must be considered as part of a piece, not as stand-alone issues, capable of determination in a vacuum, unrelated to questions as to the future of terrestrial radio in a digital world. And the answers to overall DAB policy questions most clearly cannot be presumed and prejudged before they are even framed. To do so by prematurely considering individual applications for satellite DAB service would disserve the Commission, the parties and the public. Only by careful and deliberative consideration can the Commission be confident that it is setting a sure and steady course for future technological developments. Piecemeal and

^{5/} Final Acts of the World Administrative Radio Conference (WARC-92), Addendum + Corrigendum, Resolution COM4/W, p. 34, Malaga-Torremolinas, Spain (1992). SCDR's Application requests frequency authorization at 2325 MHz, which does not comport with Resolution COM4/W.

premature authorizations can only prejudice the setting of this course. The Commission should resist the temptation to let loose new technology proposals before it considers the big and future picture.

IV. There Are Important Issues and Questions About SCDR's Application and Proposed Service That Should Be Evaluated By the Mass Media Bureau.

SCDR's Application and proposed subscription satellite DAB service raises issues and questions that should be evaluated by the FCC's Mass Media Bureau. Currently, SCDR's Application is being processed by the Common Carrier Bureau. The recently released Notice of Proposed Rule Making and Further Notice of Inquiry concerning digital audio radio services^{6/} is apparently being considered by the FCC's Office of Engineering and Technology. But there are here presented by this application significant issues of policy and radio service which must be considered by the Mass Media Bureau which not only is expert in these general policy areas but which can best advise the Commission as to the implications of new digital radio services for our existing terrestrial services. While the Common Carrier Bureau is of course the proper evaluator of the technical aspects of SCDR's satellite proposal, the Mass Media Bureau should consider the radio policy issues presented by the instant application and in the Rule Making and Inquiry.

The many issues mentioned above as to the shape and structure of DAB service in the United States, both terrestrial and satellite, are properly within the ken of the Mass Media Bureau. And of course one of the most important of these issues is the

^{6/} Notice of Proposed Rule Making and Further Notice of Inquiry in Gen. Docket No. 90-357, FCC 92-466, adopted October 8, 1992.

proper regulatory classification of a satellite service such as the one proposed by SCDR. SCDR has made application as a private satellite operator, not subject to the Commission's regulatory policies for either common carriers or broadcasters. Yet here SCDR is proposing to control thirty channels of radio programming,^{7/} albeit now proposed as a subscription service. Yet there are great questions whether such a subscription DAB service could possibly be economically feasible.^{8/} The Commission must make an evaluation of this question, before it proceeds to assign to such a service valuable and scarce spectrum.

^{7/} SCDR's Application makes clear that it intends to control 30 channels of programming, despite its claim that it will not be a broadcaster because it "does not participate in program content," SCDR Compendium at 74.

^{8/} SCDR's economic viability will be dependent, to a great extent, on the accuracy of its estimated revenue projections, SCDR Compendium at 36-40, 71, 72, and on the availability of low-cost receivers, SCDR Compendium at 7, 36, 84 et seq. Its revenue estimates are based on its forecast of demand for its subscription service, which is projected and compared to the demand for cellular radio services, id. at 38. The comparison, however, between the projected demand for SCDR's service and that for cellular radio is quite questionable. The analogy between the two services is inappropriate because of the most telling difference between the two products -- the availability of close substitutes. SCDR suggests that the two services have in common the offering of "a new capability, with partial substitutes available", id. at 39 (emphasis added). But there are countless more substitutes, and substitutes that are very close to SCDR's proposed service, unlike that for cellular. For cellular radio the substitute is for a driver of a car to stop and find a phone booth. Substitutes for SCDR's service, however, abound, to wit, over-the-air broadcast stations (some commercial free) tape and CD players and, in home settings, cable radio services.

SCDR's revenue estimates are also dependent on the availability of low-cost receivers. Yet the Delco Electronics Corp. article, SCDR Compendium, section IV, cited by SCDR as "evidence" that SCDR's radio can be made for \$200-300, id. at 7, clearly states that its estimate that the "ultimate" price of DAB mobile receivers will be in this range assumes satellite and terrestrial DAB and AM and FM service, id. at 242, and is dependent on a common frequency band world-wide, id. The Delco article further states that Delco is "convinced that a satellite only system for mobile listeners, particularly in urban environments, has low probability of success", id. at 237.

So too must it assess the impact of such a service on our local terrestrial radio system. And, it should decide now if the public interest in our local radio system can be served if SCDR should later conclude, as it did initially, that its satellite service should be advertiser-supported to be sustainable. For, once a multi-hundred million dollar satellite system is authorized, the Commission will be loathe to prevent its viability by precluding advertiser support. These and other important questions should be initially considered by the Mass Media Bureau so that the Commission can be advised by its most appropriate policy experts.

V. There Remain in the SCDR's Revised Application Serious Technical Questions That Must Be Resolved.

NAB has raised in its three previous filings^{9/} on earlier versions of SCDR's application several technical problems. SCDR has redesigned and amended its technical submissions to address these problems. However, in attempting to solve these shortcomings, SCDR has created further technical issues which must be addressed by the Commission. There also remains a substantial technical issue which SCDR has not sufficiently addressed.

That issue is the compatibility between SCDR's system and the evolving standards for DAB. SCDR maintains that its system may be adapted for use with Eureka, "in-band," or other DAB coding. However, it remains unclear whether SCDR means that its system will be compatible with other transmission coding systems or merely with the source coding which is used by these systems.^{10/} Regardless of what

^{9/} See NAB's previous comments attached hereto as appendices.

^{10/} SCDR Compendium at 50.

SCDR intends to claim, SCDR's supplied link budget and system is designed around a non-compatible QPSK transmission scheme and a non-compatible source coding rate.

While SCDR has before claimed that its "bent pipe" system can be adapted to any technical standard later adopted by the FCC, such adjustment will require a concomitant change in its cost structure, service proposal, and technical designs.

To respond to earlier claims that SCDR would not provide adequate signal coverage to reach mobile listeners, SCDR has made changes to its system design. For example, to reduce the power requirement at the mobile receiver, SCDR now proposes to use a source coding rate of 128 kbps. Yet, no other DAB proponent has advocated the use of such a high compression rate. Indeed, despite SCDR's claim to provide CD quality sound, tests by international standards organizations have thus far limited CD quality sound to data rates of at least 192 kbps.^{11/}

Additionally, SCDR has changed its proposed frequency plan. SCDR proposes that satellites operate on overlapping frequency allocations, with discrimination provided to the receiver by orthogonal polarization of overlapping satellite signals. While such an approach is commonly used in fixed services, satellite DAB will be broadcast to highly mobile receivers in areas of high multipath reflections. In such an environment, depolarization is common and could result in high levels of interference between satellite transmissions using overlapping spectrum.

^{11/} See, e.g., Bergman, S., et al., "MPEG/Audio Subjective Assessments Test Report," Swedish Broadcasting Corporation, July 30, 1990; Bergman, S., et al., "The SR Report on the MPEG/Audio Subjective Listening Test, Stockholm April/May 1991," Swedish Broadcasting Corporation, June 1991.

VI. Conclusion.

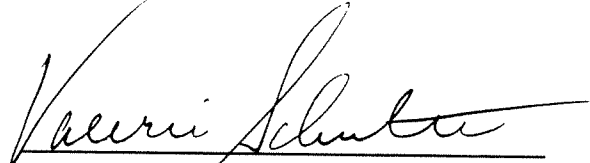
For the reasons stated herein, NAB petitions the Commission to deny, or defer consideration of, the Application of Satellite CD Radio to provide a satellite digital audio radio service. The Commission, we are confident, will determine that it must first develop policies for the future structure and shape of digital radio in the United States, and further consider the world-wide DAB environment, before it invites and entertains applications for a digital radio satellite system.

Respectfully submitted,

NATIONAL ASSOCIATION OF
BROADCASTERS
1771 N Street, N.W.
Washington, D.C. 20036



Henry L. Baumann
Executive Vice President & General
Counsel



Valerie Schulte
Senior Associate General Counsel

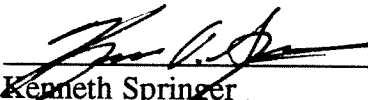
Ken Springer
Staff Engineer
NAB Science & Technology

November 13, 1992

AFFIDAVIT

I, Kenneth Springer, hereby state as follows:


I am Digital Communications Engineer, National Association of Broadcasters ("NAB"). I have read and am familiar with the statements made in NAB's Petition to Deny, as well as with the statements made in NAB's earlier Petitions to Deny this application. Those statements are true and correct to the best of my knowledge, information and belief.



Kenneth Springer

11/13/92

Date



Notary
November 13, 1992


My Commission Expires February 28, 1994

CERTIFICATE OF SERVICE

I, Brenda Fillman, do hereby certify a true and correct copy of the foregoing "National Association of Broadcasters' Petition to Deny" was sent, via first class mail, on this date, November 13, 1992, to the following:

Martin Rothblatt
Chairman & CEO
Satellite CD Radio, Inc.
Techworld Plaza, Suite 750
800 K Street, N.W.
Washington, D.C. 20001-8000

Peter K. Pitsch, Esquire
Pitsch Communications
2300 N Street, N.W.
Suite 600
Washington, D.C. 20037
Counsel for Satellite CD Radio, Inc.


Brenda Fillman

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

In the Matter of)
Amendment of the)
Commission's Rules with) Dkt. No. 90-357
Regard to the Establishment)
and Regulation of New Digital)
Audio Radio Services)

**OPPOSITION OF THE NATIONAL ASSOCIATION OF BROADCASTERS
TO MOTION OF SATELLITE CD RADIO FOR EXPEDITED
ISSUANCE OF NOTICE OF PROPOSED RULEMAKING FOR
BSS-SOUND IN THE 2310-2360 MHz BAND**

The National Association of Broadcasters ("NAB")^{1/} hereby opposes the request of Satellite CD Radio ("SCDR") for the issuance, on an expedited basis, of a Notice of Proposed Rule Making to allocate BSS (Sound) frequencies in the 2310-2360 MHz band ("SCDR Motion").^{2/}

I. INTRODUCTION

Satellite CD Radio requests this "expedited" rule making to allocate frequencies for satellite-only digital radio, just as before it has requested, on equally early and premature bases, similar allocation of spectrum, as well as "conditional" grants of its digital radio satellite applications, first in one band, then in another.

NAB has opposed these similar requests of SCDR. We have done so because they were premature, both procedurally and substantively, and because they

^{1/} NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

^{2/} SCDR Motion for Expedited Issuance of Notice of Proposed Rulemaking for BSS-Sound in the 2310-2360 MHz band, filed March 26, 1992, in Dkt. No. 90-357.

were potentially prejudicial to sound policymaking for the future of radio in the United States. We oppose the instant request for the same and similar reasons. For the convenience of the Commission, we hereby attach our prior comments on these matters and incorporate herein by reference the content of those comments.

II. IT WOULD BE PREMATURE AND PREJUDICIAL TO SOUND POLICYMAKING TO ALLOCATE, AT THIS TIME, SATELLITE-ONLY FREQUENCIES FOR DAB.

Satellite CD Radio, not surprisingly, has renewed its requests for spectrum allocation for and authorization of its proposed satellite-delivered DAB service. At first blush, and for the first time, it might appear that SCDR's requests are timely. This might appear so because the World Administrative Radio Conference ("WARC") has concluded and the United States has received from that Conference an allocation in the 2310-2360 MHz band for BSS(Sound).

But, for the Commission to now allocate satellite-only DAB frequencies would be piecemeal, premature policymaking that well could prejudice the development of a coherent vision for the future of digital radio in the United States.

The world course for digital radio, satellite and terrestrial, is not by any means clear. The United States' course for this new service, including the question of appropriate long term spectrum, is equally uncertain and undeveloped. Digital audio technology, while well advanced, is still developing. To make an unnecessary leap to allocate satellite DAB frequencies and authorize unplanned satellite service makes no sense and is being pushed only by one fledgling applicant.

NAB cannot see the wisdom in granting SCDR's request and we do not believe the Commission will let itself be led down this path.

A. World-Wide And International DAN Issues Still Are Under Study And Subject To World Planning.

While the WARC has achieved an international agreement, or compromise, position for a world-wide DAB allocation at L-band, the future of DAB service world-wide is yet uncertain and subject to change and to future planning and study. Many countries have taken exceptions to the WARC DAB allocation.

Thus WARC-92 resolutions^{3/} direct CCIR to conduct further study on many, many technical issues. And WARC-92 Res. COM4/W proposes a Planning Conference within the next five or six years, designed to implement a BSS(S) (Broadcast Satellite Sound Service) and terrestrial digital service in a flexible and equitable manner.

Immediate institution of DAB service was not contemplated, nor seen as ripe, by WARC. But to accommodate administrations wanting to initiate service before the world Planning Conference, WARC authorized "interim" BSS service in the top 25 MHz only of authorized bands, subject of course to proper coordination with neighboring countries. (This was done primarily to accommodate Canada, which has a well developed, agreed on and announced course for DAB service.)

^{3/} Addendum and Corrigendum to the Final Acts of the World Administrative Radio Conference (WARC-92), COM4/W, COM5/10, Res.GTPLEN/2 and Resolution 703.

Thus the DAB situation world-wide is just unfolding and no DAB service, with the possible exception of Canada's, is contemplated before the end of the decade. The DAB situation is just unfolding as to technology, as to spectrum, as to sharing and as to service plans. Ideas are just becoming proposals, are just being tested, scrutinized, adapted, scrapped and reformulated. But for Canada, the countries of the world, including the United States, are at a very early stage in DAB development and planning.

For the United States to rush unnecessarily to judgment by allocating frequencies thereby tying up spectrum that should be remain open for future development of policy and planning and bilateral considerations,^{4/} makes no sense, given the world-wide situation and given the uncertainty of the U.S. course for digital radio service.

B. An Overall Policy For U.S. DAB Service Should Be Developed Prior To Any Piecemeal Allocations Or Authorizations.

As NAB has said before, we believe that the Commission is not sure of the road it wishes to follow for digital radio, not sure of the policies and

^{4/} Canada has made clear through industry representations and has underscored by WARC-92 Footnote 751 that, in Canada, the use of the band 2300-2438.5 MHz by Canada's aeronautical mobile service for telemetry has priority over other uses by the mobile services and that it will not allow interference to this use by other (i.e. United States) administrations. Thus any U.S. DAB satellite service will run into unmovable opposition from Canada because of expected interference. Similarly, Canada's plans for satellite (or terrestrial) DAB service at L-band must be coordinated with the U.S. and our current use of L-band for military telemetry. Clearly, bilateral negotiations and pressures will occur over the next couple of years that will affect U.S. policymaking for DAB. That process should not be complicated or stymied by the premature authorization of piecemeal U.S. DAB satellite-only service.

structures it wishes to propose for a digital service, not sure whether terrestrial digital radio might not best be first planned before satellite service is authorized.

We again urge the Commission to recognize that these issues need to be developed and considered and preliminarily decided before any satellite service is authorized. Thus, consideration of allocation of frequencies and authorization of satellite DAB service must only be made in the context of planning the overall future course of digital radio for the United States.

That, we submit, is too important and great a task to be done on the "expedited" basis SCDR urges. SCDR would have the Commission rush to judgment with an allocation and authorization of DAB satellite service, while the rest of the world is still studying and planning the technical and service issues DAB presents, while technology is still developing, and while U.S. policy is undeveloped.

It would have the Commission do so before consideration is given to whether and how DAB should develop as an upgrading and expansion of the existing radio services, much as HDTV is being planned as a new generation of a mature U.S. television service. SCDR would have the Commission allocate frequencies and authorize satellite service before there has been sufficient technical development, much less consideration, of transmission and reception formats and systems, even though a "single technical standard" seems appropriate not only for this country, but on a world-wide basis. The U.S. can lead world markets, as it will inevitably do, only when it is sure of its own vision for the future.

And SCDR would have the Commission expeditiously allocate S-band spectrum before the United States has reviewed its spectrum situation in the wake of WARC and the unanimous view of the world, save for India and the U.S., that the

L-band, not the S-band, should be used for DAB, and before there have been any post WARC bilateral discussions with our neighbors Canada and Mexico over a seeming impasse as to coordination for each country's DAB plans. NAB would suggest that some forbearance is now called for, rather than the unneeded rush to judgment advocated by one entrepreneur with an unrealistic, to our minds, business plan for satellite DAB service.^{5/}

While SCDR's allocation and authorization would be premature to the reasoned, careful, overall planning and policy-making DAB requires, it would also be prejudicial to the development of that policy. It would "occupy" valuable spectrum with an unintegrated piece of an undeveloped plan. It would set the course for satellite development, irrespective of potential later policy determinations to develop DAB primarily as an expansion of present radio services. It would prejudice and complicate later U.S. efforts to join with the rest of the world in DAB frequency location and technical standards. As we have said before, all these critical policy decisions and considerations cannot be made on a "clean slate" given the requested allocation and authorization of satellite-only DAB service. And, as we have indicated, there is no pressing need or reason to so rush ahead with unconsidered action in so important an area.

III. THERE IS NO NEED FOR EARLY ALLOCATION OR AUTHORIZATION OF DAB SERVICE.

Not only would the requested allocation and authorization of a satellite-only DAB service be premature and prejudicial, there is no need for such

^{5/} See various NAB Comments, here appended, for criticism of SCDR's shifting and unrealistic business plans.

early, piecemeal action. As we have mentioned, DAB implementation is not expected anywhere in the world before the end of the decade, except for Canada, which will need to first coordinate with the U.S. As we have also mentioned, WARC-92 decided to convene a Planning Conference to "plan" future DAB service and sharing plans. Pursuant to WARC-92 Res.COM4/W, interim service prior to the planning conference can be introduced only in the upper 25 MHz of an allocation. Thus the U.S. could only authorize the requested satellite service in 25 MHz, not the requested full 50 MHz, and thus, only the "early," and perhaps not the best able, applicant or two can now be authorized.

As we have also mentioned, the state of technological development is not presenting a pressing "need" for early DAB implementation. To the contrary, technology can benefit and in fact needs more time for development. The one "developed" DAB transmission system is currently being tested rigorously in Canada in the agreed-on world-wide DAB frequency band, L-band, for which it was not designed, but to which it may well be adapted. In the U.S., other transmission systems are in the relatively early, not-yet-prototype, stages. So too is exploration of the possibilities of "in-band" technology at an early stage.^{6/}

^{6/} The NAB is encouraging the development of "in-band" DAB technology for both AM and FM radio. But we are not certain whether an in-band solution is either technically or economically feasible in either the short or long run. Thus a DAB system that would require more spectrum may be needed to deliver a terrestrial digital radio service. And it is possible that L-band spectrum could become available in the United States. The United States can unilaterally, if it so chooses, drop its footnote reserving S-band for U.S. DAB services and join the world in L-band DAB operation. Thus, the NAB has indicated to the FCC, the State Department and NTIA, by letter dated April 24, 1992, its earlier-stated position that, should L-band frequencies be made available for DAB in this country, U.S. terrestrial broadcasters may need access to such spectrum to provide digital radio service to the American public.

Nor is there a "need", as was suggested by SCDR,^{7/} for the United States to have specific licensees to "consummate the coordination process" with Canada or Mexico. SCDR's citation in suggesting the need for licensees was to the Final Decision in the AMSC proceeding, Docket No. 84-123. This reference and citation is not relevant to SCDR's position. The AMSC case involved a specific and unusual situation where the Commission indicated its need to approve a consortium operation for mobile satellite services and, in that context, where other international administrations were proposing international MSS services, the Commission perceived a need to select an operating company to "stake its claim" to MSS spectrum or lose out by the time a normal licensing proceeding would have concluded. That was an unusual situation that is not present here. No satellite system anywhere in the world is being proposed for the 2310-2360 MHz band. It is allocated for fixed and mobile service and in much of Region 2 it is used for telemetry. Thus, when and if there is a domestic allocation for DAB in that band, applicants can file and be processed in accordance with then existing processing procedures. Applicants who are successful in obtaining their permit can then ask the U.S. to commence the coordination process. Thus, there is no compelling need whatsoever for the early selection of a licensee in this situation.

Furthermore, SCDR's claims that immediate action will promote U.S. competitiveness seem wrong. In reality, premature Commission action could impose on the U.S. an incompatible system with incompatible receivers. Because

^{7/} SCDR Motion, supra at fn. 6.

the 2310-2360 MHz allocation is unique to the U.S. and India,^{8/} any satellite service in Europe, Africa, or Asia would use different receivers than those used with an American system at S-Band. Consequently U.S. manufacturers would not be able to export their domestic receivers to a foreign market. By the same token, foreign manufacturers would be required to build a separate receiver for the American market. And, SCDR's claim that 90% of a DAB radio's cost is in the digital circuitry^{9/} does nothing to further the case for an early NPRM. U.S. industry and international standardization processes are underway and any U.S. government action in advance of those results could fatally sentence the U.S. to a peculiar digital system that is incapable of being exported. Further, there is no reason to assume that any resulting licensee will necessarily use digital circuitry of American origin. SCDR, for example, has lately advertised their system as being a "bent-pipe" system capable of working with many DAB transmission systems.^{10/} In summary, it is difficult to see how "American competitiveness" will in any way be furthered by a premature NPRM.

It would appear that the only "pressing need" for an early (and premature) allocation and authorization of satellite DAB service is that peculiar to SCDR and its apparent need for a license in order to remain more than an idea whose time has not yet come.

8/ WARC-92, Addendum to the Final Acts, footnote 750B at p. 20.

9/ Motion for Expedited Issuance of Notice of Proposed Rulemaking for BSS-Sound in the 2310-2360 MHz band at p. 2.

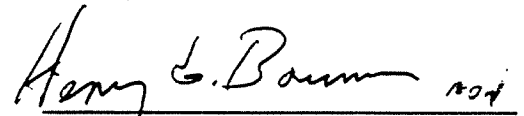
10/ Opposition of Satellite CD Radio to Petitions to Deny Applications of Satellite CD Radio, p. 6.

IV. CONCLUSION

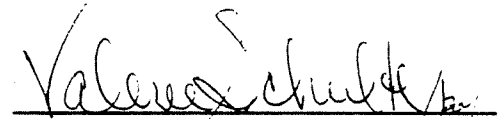
For the reasons stated herein and in the attached Appendix, NAB urges the Commission to reject the request of Satellite CD Radio for early issuance of a rule making to allocate satellite-only DAB frequencies in the 2310-2360 MHz band. The Commission, we are confident, will agree that it must first develop policies for the future structure and shape of digital radio in the United States before it allocates spectrum for and authorizes a digital radio satellite system.

Respectfully submitted,

**NATIONAL ASSOCIATION OF
BROADCASTERS**



**Henry L. Baumann
Executive Vice President &
General Counsel**



**Valerie Schulte
Sr. Associate General Counsel**

**Ken Springer
Staff Engineer
NAB Science & Technology**

May 28, 1992

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

In the Matter of)	
)	
Applications of)	File Nos. 8-DSS-AMEND-92
Satellite CD Radio Inc.)	9-DDS-AMEND-92
for Authority to Construct)	
Launch and Operate a Digital)	
Audio Radio Satellite System)	

**NATIONAL ASSOCIATION OF BROADCASTERS'
REPLY TO OPPOSITION OF SATELLITE CD RADIO, INC.
TO PETITIONS TO DENY**

The National Association of Broadcasters ("NAB") has filed with regard to the above-referenced application a Petition to Deny echoing the issues it raised in a Petition to Deny Satellite CD Radio's ("SCDR") earlier, now amended, application. Satellite CD has filed a brief and, we believe, unresponsive and unpersuasive Opposition to our Petition. NAB hereby submits an even briefer reply to Satellite CD Radio's Opposition. Succinctly put, we rest on our previous submissions and arguments and on the common sense of the Commission not to conditionally authorize this application. We specifically raise and respond to only a few points needing further reply.

First, NAB sees no point to rearguing its position that it would be premature and prejudicial to grant the instant application before essential questions

regarding DAB have been resolved by the Commission. Suffice it to say, policy decisions about DAB, including the question basic to the instant grant of whether a satellite DAB system is in the public interest, have not yet been considered by the Commission. These decisions need to be resolved in a rulemaking context and not assumed and prejudged in an application context. Whether or not there will even be an international allocation for satellite DAB in the 2300 MHZ band is not yet determined.

Second, Satellite CD contends that NAB is wrong in its assertion that SCDR's proposed service would not be available to a sizable percentage of the U.S. population because it will serve only suburban and rural areas and because south-facing windows (or more complicated receiving apparatus) will be required for reception of its signal. Yet SCDR admits that its proposed system will "not provide service inside buildings or in the shadow of tall buildings." SCDR claims that the system is "designed as a mobile system."^{1/} However, a recent technical study performed by the Jet Propulsion Laboratory (JPL) concluded that a satellite system such as the one proposed by SCDR would require a link margin of 17 dB to provide mobile coverage in an urban environment.^{2/} SCDR's proposal would not provide

1/ Id.

2/ See Golshan, Direct Broadcast Satellite-Radio System Trade-Off Study, Satcom Quarterly, October 1991 at 7 (Figure 2, showing required margin for urban mobile reception at 2.3 GHz is approximately 17 dB).

this margin.^{3/} So, the SCDR system won't work in the streets of large cities in the shadow of buildings, won't work in automobiles in an urban area and won't provide service inside buildings. One is left to wonder where exactly SCDR *will* provide coverage in an urban area?

As to whether SCDR's system requires a south-facing window for fixed reception, other than a conclusory statement that "NAB's allegations are false,"^{4/} SCDR does not even address this issue, and with good reason. SCDR admits that it will not provide service inside buildings and, to receive the signal, the home listener must mount an antenna on a window. However, given the proposed satellite locations, the window must face south to receive the signal.^{5/} Thus, urban dwellers and residents of condominiums, apartments, townhouses, or detached houses without a south-facing window will be excluded.

Satellite CD also contests NAB's assertion that SCDR's system design will not enable a reasonably-priced receiver to be widely made and marketed because of a required "low 2 dB noise figure." It asserts that satellite receivers operating with a 2 dB noise figure are well within the state-of-the-art. While a 2 dB noise figure might be within the "state-of-the-art," the issue here is, rather, whether

^{3/} Amendment to Applications and Conditional Construction Permit to Provide Subscription Digital Radio Service at 2310-2340 MHz on a Multiple-Entry Basis, Technical Annex, p. 5, n. 5.

^{4/} Opposition of SCDR at 7.

^{5/} NAB Petition to Deny at fn. 3.

it will be affordable. GPS receivers, cited by SCDR, are far less complex than a satellite DAB receiver would likely be, yet they are still relatively expensive. And one wonders how SCDR can confidently claim the ability to predict low receiver prices without a DAB technical standard.

SCDR, in fact, claims compatibility with any terrestrial DAB format, many of which are still in the conceptual stage. SCDR should produce "detailed system engineering information" from a satellite *development* contract, if necessary, to support its claims.

Third, NAB has questioned SCDR's claim that its system will be compatible with any DAB format. Until now SCDR has represented its system as a particular DAB implementation with a specific modulation, coding, and data rate.^{6/} SCDR now claims that it is proposing a "bent pipe" transponder, capable of conveying a variety of modulation formats.^{7/} However, the Technical Annex supporting SCDR's request only provides a link budget for a system using Offset-QPSK modulation at 256 kbps with 1/2 rate Viterbi-compatible coding. If SCDR now proposes to work with other formats, it should provide technical information supporting these modes of operation.

^{6/} Amendment to Applications and Conditional Construction Permit to Provide Subscription Digital Radio Service at 2310-2340 MHz on a Multiple-Entry Basis, Technical Annex at 4.

^{7/} Opposition of SCDR at 6.

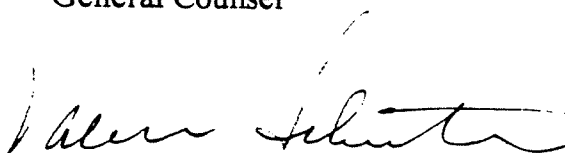
SCDR has failed to respond satisfactorily to or resolve the issues raised by NAB in its Petitions to Deny. We believe the Commission, should it decide in its rulemakings to authorize a satellite DAB system, will require any satellite DAB service to design a system that not include a sizable percentage of the listening public and that will require only reasonably priced receivers. Satellite CD should not be allowed to burden the Commission with the task of redesigning SCDR's system later or "ordering SCDR to change its technical parameters."^{8/}

Respectfully submitted,

NATIONAL ASSOCIATION OF
BROADCASTERS



Henry L. Baumann
Executive Vice President &
General Counsel



Valerie Schulte
Sr. Associate General Counsel

Kenneth D. Springer
Staff Engineer
NAB Science & Technology

February 4, 1992

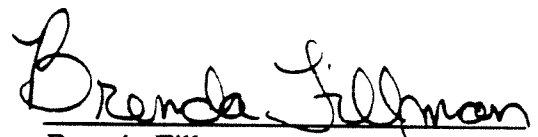
^{8/} Opposition of SCDR at 8.

CERTIFICATE OF SERVICE

I, Brenda Fillman, do hereby certify a true and correct copy of the foregoing "National Association of Broadcasters' Reply to Opposition of Satellite CD Radio, Inc. To Petitions To Deny" was sent, via first class mail, on this date, February 4, 1992, to the following:

Martin Rothblatt
Chairman & CEO
Satellite CD Radio, Inc.
Techworld Plaza, Suite 750
800 K Street, N.W.
Washington, D.C. 20001-8000

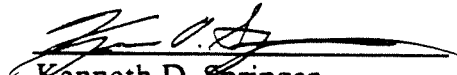
Peter K. Pitsch, Esquire
Pitsch Communications
2300 N Street, N.W.
Suite 600
Washington, D.C. 20037
Counsel for Satellite CD Radio, Inc.


Brenda Fillman

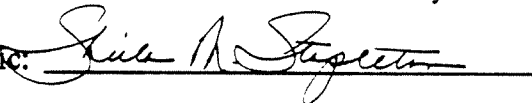
AFFIDAVIT

I, Kenneth D. Springer, hereby state as follows:

I am Digital Communications Engineer, National Association of Broadcasters ("NAB"). I have read and am familiar with the statements made in NAB's Reply to Opposition of Satellite CD Radio, Inc. to Petitions to Deny, as well as with the statements made in NAB's earlier Petition to deny this application. Those statements are true and correct to the best of my knowledge, information and belief.


Kenneth D. Springer

Subscribed and sworn before me this 4th day of February, 1992.

Notary Public: 

My Commission Expires _____, 1992

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

In the Matter of)
)
Applications of) File Nos. 8-DSS-AMEND-92
Satellite CD Radio Inc.) 9-DDS-AMEND-92
for Authority to Construct)
Launch and Operate a)
Digital Audio Radio)
Satellite System)

NATIONAL ASSOCIATION OF BROADCASTERS'
PETITION TO DENY

The National Association of Broadcasters ("NAB"),^{1/} pursuant to §309(d)(1) of the Communications Act of 1934, as amended, and §73.3584(a) of the Commission's rules, hereby petitions the Commission to deny the above-referenced request of Satellite CD Radio, Inc. ("Satellite CD") for conditional authority to begin construction of a satellite system.

I. INTRODUCTION

Satellite CD Radio has filed an amendment to its applications and its request for a conditional construction permit for a satellite system to provide digital audio radio service in the United States. This amendment essentially

^{1/} NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

would change Satellite CD's pending proposal to one in the 2300 MHz band and to one operating solely on a subscription, non-advertising basis.

NAB filed a Petition to Deny the application amended by the instant request. NAB opposes this amended request for precisely the same reasons that we opposed the earlier applications, as we mention briefly below. We therefore attach our prior Petition and incorporate herein by reference the contents and arguments of that filing.

II. IT WOULD BE PREMATURE AND PREJUDICIAL TO GRANT THIS REQUEST BEFORE PRELIMINARY ESSENTIAL QUESTIONS REGARDING DAB HAVE BEEN RESOLVED.

NAB believes that arguments against granting a conditional construction permit for a satellite system to provide digital radio are well understood and accepted by the Commission. We believe that the Commission is not sure of the road it wishes to follow for digital radio, not sure of the policies and structures it wishes to propose for a digital service, not sure whether terrestrial digital radio might not best be first planned before satellite service is authorized. We believe that the Commission recognizes that these issues need to be developed and considered and preliminarily decided before any satellite construction is begun.

As we said in our earlier-filed Petition, it is not only premature to consider granting construction

authority, even conditional construction authority, but it well could prejudice consideration of the issues awaiting decision to make a premature grant of construction authority. The Commission will be unlikely later to ignore a grant of construction authority in evaluating the yet undecided issues and in making critical decisions as to the future and shape of digital radio in the United States. These critical decisions, as we said earlier, could not be made "on a clean slate" if the instant grant is made.

III. THE PROPER POLICY EVALUATION OF THIS APPLICATION CANNOT BE MADE BEFORE THE COMMISSION'S DIGITAL RADIO POLICY HAS BEEN DEVELOPED.

NAB believes that the early granting of this request is so procedurally inappropriate that no other reasons, or more application-specific evaluations, need be considered or advanced or argued before denying this application. NAB mentions here but a few points about this specific application that serve to underscore the need for Commission policy for digital radio -- before any meaningful evaluation of such applications can be made.

First, Satellite CD Radio has claimed that its proposed satellite system is technically compatible with both the Eureka 147 and the USA Digital digital radio technical formats currently being advanced. Clearly any "granted" digital satellite system must be compatible with

the technical system chosen by the Commission as the "single system" for digital radio services, assuming that the single system approach is followed. But it is not apparent how the Satellite CD proposal is "compatible" with the Eureka or USA Digital systems, as Satellite CD does not propose operating with the same bit rate as those systems.

Second, it should be questioned whether grant of the instant application is in the public interest given that, under Satellite CD's proposal, it is unclear whether service would be available to a sizable percentage of the population. The technical annex to the Satellite CD application indicates that this satellite digital radio service will be available only for suburban and rural populaces, because the power proposed for the satellite will not be sufficient to penetrate urban areas.^{2/} So too will only those listeners in suburban and rural areas with south-facing windows (or perhaps with more complicated receiving apparatus) be able to receive the proposed Satellite CD -- signal.^{3/}

^{2/} Amendment of Applications and Conditional Construction Permit to Provide Subscription Digital Radio Service at 2310-2340 MHz on a Multiple-Entry Basis, Technical Annex, p. 5, n. 5.

^{3/} Id., p. 1 (indicating that Satellite CD proposes two satellites in geosynchronous orbit). At Northern U.S. points, a Southern exposure for an elevation angle of less than 35 degrees may be required. The link budget apparently includes no margin for building penetration. Id., p. 4.

Third, it should be questioned whether the Satellite CD system has been technically well-designed, enabling a reasonably-priced receiver to be widely made and marketed (an important consideration for a new service, and one which is using valuable spectrum). It appears that the system proposed by Satellite CD will require technically advanced receivers, operating at a low 2 dB noise figure. It is thus questionable whether cost-effective receivers could be made for this proposed system.

Finally, NAB notes that Satellite CD's averments to provide only subscription, non-advertising based digital radio service raise two issues against a grant. One is how a subscription-only service could be viable financially, given the cost of such a system and the obviously low revenue to be anticipated. The second is that an advertising based system would seem necessary to provide revenue and well could be later authorized to enable the viability of so important and visible a service as that which Satellite CD proposes.

IV. CONCLUSION

For the reasons stated herein and in the attached Appendix, NAB urges the Commission to deny the above-captioned Satellite CD request. The Commission, we are confident, will agree that it must first develop policies for the future structure and shape of digital radio in the

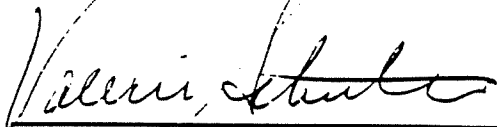
United States before it authorizes the construction of a digital radio satellite system.

Respectfully submitted,

NATIONAL ASSOCIATION OF
BROADCASTERS



Henry L. Baumann
Executive Vice President &
General Counsel



Valerie Schulte
Sr. Associate General Counsel

Kenneth D. Springer
Staff Engineer
NAB Science & Technology

January 17, 1992

CERTIFICATE OF SERVICE

I, Brenda Fillman, do hereby certify a true and correct copy of the foregoing "National Association of Broadcaster's Petition to Deny" was sent, via first class mail, on this date, January 17, 1992, to the following:

Martin Rothblatt
Chairman & CEO
Satellite CD Radio, Inc.
Techworld Plaza, Suite 750
800 K Street, N.W.
Washington, D.C. 20001-8000

Peter K. Pitsch, Esquire
Pitsch Communications
2300 N Street, N.W.
Suite 600
Washington, D.C. 20037
Counsel for Satellite CD Radio, Inc.


Brenda Fillman

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

In re)
)
SATELLITE CD RADIO, INC.)
) File Nos. 8-DSS-MISC-91(2)
For Conditional Authority to) 49/50-DSS-P/LA-90
Construct, Launch and Operate a) 58/59-DSS-AMEND-90
Space Station in the Satellite)
Sound Broadcasting Service)

NATIONAL ASSOCIATION OF BROADCASTERS'
PETITION TO DENY

The National Association of Broadcasters ("NAB"),^{1/} pursuant to § 309(d)(1) of the Communications Act of 1934, as amended, and § 73.3584(a) of the Commission's rules, hereby petitions the Commission to deny the above referenced request of Satellite CD Radio, Inc. ("Satellite CD") for conditional authority to begin construction of a satellite system. In support hereof, NAB respectfully states as follows:

I. PRELIMINARY MATTERS

A. Standing

NAB is a voluntary nonprofit incorporated association of radio and television broadcast stations and networks. NAB member radio stations are licensed to serve communities in virtually all areas of the United States. Satellite

^{1/} NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

CD's proposed private satellite sound broadcasting system will compete directly with NAB member stations for listening audience. Because the stations' revenues depend on the size of their listening audience, the loss of listening audience to Satellite CD will adversely affect the stations economically.^{2/} Thus, all such stations would have standing in this proceeding as individual parties in interest,^{3/} and NAB has standing as their trade association representative.^{4/}

B. Summary of NAB's Comments Addressing Satellite CD Petition and Application and the Notice of Inquiry.

In June 1990 Satellite CD Radio, Inc. submitted a Petition for Rule Making ("Petition") that sought to allocate spectrum for a hybrid space satellite and terrestrially-delivered digital audio broadcasting service.^{5/} The National

^{2/} "Since advertiser support is dependent upon the local station's programs being received by the public, the loss of any substantial number of viewers may cause a diversion of revenue from the local station with possible serious affect [sic] on the station" Rust Craft Broadcasting Co., 36 FCC 1556, 1561, 2 RR 2d 908, 915 (1964).

^{3/} FCC v. Sanders Brothers Radio Station, 309 U.S. 470 (1940).

^{4/} National Motor Freight Association, Inc. v. U.S., 372 U.S. 246 (1963) (association of motor carriers has standing to challenge agency order that will aggrieve individual members of the association); Hunt v. Washington Apple Advertising Commission, 432 U.S. 333, 343 (1977) (association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue their own right); United Telephone Co. of Ohio, 26 FCC 2d 417, 418, 20 RR 2d 602, 604 (1970) (association of common carriers has standing to file petition to deny where two of its members are in direct economic competition with applicant).

^{5/} See Public Notice, "Office of the Secretary: Petitions for Rule Making Filed," June 18, 1990; see also FCC July 9, 1990 Public Notice "Office of the Secretary: Petition for Rule Making Filed," acknowledging Satellite CD's filing of a June 22, 1990 supplement to request for rule making.

Association of Broadcasters that summer filed comments in response to the Satellite CD petition for rulemaking, asking that the FCC dismiss or simply defer consideration of the petition as premature and as infirm, as to both policy and technical matters.^{6/} Satellite CD filed an application to construct, launch and operate a DAB service.^{7/} NAB filed comments opposing the application, which addressed virtually the identical substantive issues in the petition. NAB has also filed comments in response to the FCC's Notice of Inquiry with regard to a Digital Audio Broadcasting ("DAB") service, there opposing the provision of a satellite delivered DAB service. Copies of the earlier NAB pleadings are attached hereto as Appendix I, and their contents and arguments are incorporated herein by reference. Most recently, Satellite CD filed a Request for Conditional authority to begin construction of a satellite DAB system. We strongly urge, for the reasons stated below, that the request be denied.

II. IT IS PREMATURE AND PREJUDICIAL IN THE EXTREME TO GRANT THIS REQUEST BEFORE PRELIMINARY ESSENTIAL QUESTIONS REGARDING DAB HAVE BEEN RESOLVED

Satellite CD requests authority to begin construction of its proposed DAB satellite system, with that authority to be conditioned on Satellite CD's "assumption of the entire risk that permanent authorization either may not be granted or be granted with technical or regulatory parameters different from

^{6/} See Comments of NAB (RM-7400), filed Aug. 20, 1990.

^{7/} See comments filed by NAB in Gen. File No. 49/50-DSS-P/LA-90, filed Nov. 30, 1990.

those proposed in its application." NAB maintains, however, that the risk here of early authorization is not just Satellite CD's risk. The risk is, rather, to the listening public, to other applicants for DAB service, to other parties in interest, to sound FCC processes and decision-making and ultimately, of course, to the public interest. For, here, to authorize early construction of a hundreds-of-millions of dollars system where the basic, preliminary questions of "if, where and how" have not yet been answered would seem to be pure folly.

A. It is Premature To Grant This Request Before On-going Proceedings Have Answered Critical Questions, Including Whether There Should Be a Satellite DAB Service.

While the real risk in granting this "early construction" request belong to the Commission and to the public interest, the "real" facts here are: 1) the Commission has as of yet made no decisions about the nature or shape of a DAB service, including the decision basic to Satellite CD's entire service, i.e. whether it is in the public interest to here authorize a satellite DAB service, 2) there are not as of yet any proposed rules for a DAB service, with the Commission's proceedings still at the Inquiry stage, and 3) there are still outstanding proceedings and undecided positions concerning the United States' preferred positions on DAB issues to be presented internationally at WARC '92.

The Commission has received comments in response to its Notice of Inquiry concerning DAB, but it has not made even the most basic decisions about a DAB service for the United States and has not yet considered, in proposed

rules, what form that service might take, what parties might be eligible to participate, whether the service should be limited to a terrestrial one, as NAB urges, how much spectrum should be devoted to such a service, where that spectrum should be, or a host of other issues basic to a DAB service. It could not be more premature for a construction permit, conditional or otherwise, to be issued.

Satellite CD cites as precedent for its request the issuance of conditional construction permits in the Direct Broadcast Satellite ("DBS") service. The issuance of conditional permits there is not at all relevant to the situation with Satellite CD. There, the Commission had proposed, albeit interim, rules to give shape and direction to the new service. Before the conditional permits were issued, the Commission had adopted interim rules for DBS and, therefore, knew what it intended and what it wanted for this fledgling service.^{8/} Here, it knows none of that. It has proposed nothing. Satellite CD would have the Commission, essentially, grant it a waiver of licensing rules and technical requirements that are not yet set -- nor even proposed.

The Commission is in no position to grant the request here made. The course for DAB is not yet steady or sure enough for grants of construction authority -- grants that well may prejudice the issues awaiting decision and direction.

^{8/} See, Memorandum Opinion and Order. In re Application of Satellite Television Corporation for authority to Construct an Experimental Direct Broadcast Satellite System, File No. DBS-81-01, 91 FCC 2d 953 (1982).

B. Critical Issues Determining the Future of DAB in the United States, including Those of "If, Where and How", May Be Prejudiced By a Grant of the Request.

Should Satellite CD be permitted to begin construction of its proposed DAB satellite system, even at its own peril, the Commission will be unlikely later to ignore that grant in making the yet undecided but critical issues as to the future and shape of DAB in the United States.

Even, and most particularly, the basic issue of whether DAB in the United States should be a satellite service (or, as NAB maintains, whether DAB should be the long-needed "upgrading" of the U.S. terrestrial radio service, with available spectrum going to serve this "need") would be prejudiced by early construction of even the beginning stages of a satellite system. Critical rulemaking and decision making simply could not be made on a "clean slate".

Spectrum issues, similarly, would be prejudiced, once a satellite provider had begun to expend millions of dollars for a system designed for a particular spectrum location and premised on a minimum amount of spectrum space.

Other applicants, currently awaiting the outcome of the inquiry and the to-come rulemaking on DAB, would be prejudiced as to a grant, should spectrum be limited to that expected by Satellite CD. They would most certainly be denied the "leg-up" given Satellite CD.

Even the FCC's and the United States' positions for the upcoming WARC '92 international sessions allocating spectrum would be prejudiced and influenced by the presence of a conditional grant of authority to construct a

satellite DAB system. Such a grant puts the Commission behind a decision to authorize satellite DAB and to authorize it at a particular spectrum location. U.S. preparations for WARC are currently pending and those decisions, as well as those for U.S. implementation, should be given the room to be formulated, adjusted and advocated without the albatross of a premature, unripe grant affecting those positions.

To assert that a conditional grant to begin to construct a proposed system will likely prejudice critical decision making is only common sense. No decisions as to a U.S. DAB service have yet been made. No proposals have been proffered by the Commission. That much is clear. And, to expect prejudice of those decisions by an early grant is obvious and to be expected. As was said in a Commission case many years ago:

"Ordinary human experience tells us that these factors have a force which cannot always be set aside by the triers no matter how sincere their effort or intent. The Commission realistically concedes that if the grant is ultimately made to appellant rather than to intervenor, 2 1/2 or 3 years hence, the latter's market to dispose of its large temporary investment in a going television station is one man, i.e., the successful applicant. In that eventuality the losing party faces the problem of salvaging whatever he can on a distress market. To argue, as appellant does, that this may weigh in the balance of an otherwise close question is not a challenge to the good faith or integrity of the triers; it is a recognition that they are mortal men."^{9/}

9/ Community Broadcasting Co. v. FCC, 274 F.2d 753, 761 (1960).

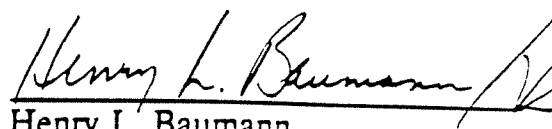
Once a grant is made, even conditionally, the Commission would be unlikely to decide issues contrary to Satellite CD's position. And it would be unlikely as well to later "pull the plug" on that particular applicant. To proceed with such a grant would be patently unfair to all involved, to both parties and to principles like the "public interest".

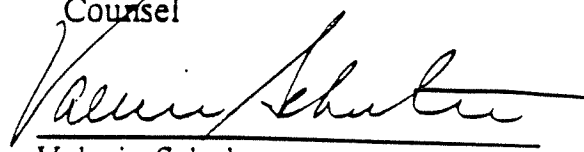
IV. CONCLUSION

For the reasons stated herein and in NAB's comments in preceding inquiries, NAB urges the Commission to deny the above-captioned Satellite CD request. To grant the request is against the public interest and undermines the ability to develop the best digital audio system possible.

Respectfully submitted,

NATIONAL ASSOCIATION OF
BROADCASTERS
1771 N Street, N.W.
Washington, D.C. 20036
(202) 429-5430


Henry L. Baumann
Exec. Vice President & General
Counsel


Valerie Schulte
Sr. Associate General Counsel

Amy Brett
Legal Intern

March 18, 1991