

ORAL ARGUMENT SCHEDULED FOR NOVEMBER 28, 2000

In the
**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

Nos. 00-1054 and 00-1100

NATIONAL ASSOCIATION OF BROADCASTERS, *et al.*,

Petitioners,

v.

FEDERAL COMMUNICATIONS COMMISSION
AND THE UNITED STATES OF AMERICA,

Respondents,

ON PETITIONS FOR REVIEW OF AN ORDER OF
THE FEDERAL COMMUNICATIONS COMMISSION

Brief for Intervenors Supporting Respondents

**UNITED CHURCH OF CHRIST, OFFICE OF COMMUNICATION; NATIONAL
COUNCIL OF THE CHURCHES OF CHRIST, COMMUNICATION COMMISSION;
GENERAL BOARD OF GLOBAL MINISTRIES OF THE UNITED METHODIST
CHURCH; DEPARTMENT FOR COMMUNICATION OF THE EVANGELICAL
LUTHERAN CHURCH IN AMERICA; AND LIBRARIES FOR THE FUTURE**

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September 29, 2000

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Parties

All parties appearing before the Federal Communications Commission and in this Court are listed in Petitioners' and Supporting Intervenors' brief.

Ruling Under Review.

In the Matter of Creation of A Low Power Radio Service, Report and Order, MM Docket No. 99-25, 15 FCC Rcd 2205; 65 Fed. Reg. 7615 (2000).

Related Cases.

By order of the Judicial Panel on Multidistrict Litigation dated March 6, 2000, and order of this Court dated March 17, 2000, this case has been consolidated with a petition originally filed by Greg Ruggiero in the United States Court of Appeals for the Second Circuit that was transferred to this Court as *Ruggiero v. FCC*, No. 00-1100 (D.C. Cir. docketed Mar. 16, 2000). Counsel are not aware of any related cases pending before this or any other Court.

Corporate Disclosure Statement

Intervenors have no parent companies, subsidiaries, or affiliates that have issued shares to the public.

The United Church of Christ, Office of Communication ("UCC") is a non-profit corporation. It is the national instrumentality of the United Church of Christ, charged by the Church constitution to conduct a ministry in the mass media. The United Church of Christ has 1.4 million members and nearly 6,000 congregations in every state and in Puerto Rico.

The National Council of Churches of Christ in the U.S.A. is the nation's leading

organization in the movement for Christian unity, with 35 Protestant and Orthodox member denominations including more than 50 million adherents in nearly 140,000 congregations nationwide.

The General Board of Global Ministries ("GBGM") is the global mission agency of The United Methodist Church and its 8.5 million members in the United States and 1.4 million members in Africa, Europe and the Philippines.

The Department for Communication of the Evangelical Lutheran Church in America coordinates the communication work of this 5.1 million member church. Areas of responsibility include news, video, radio, publications, World Wide Web, telephone, and programming for radio and television.

Libraries for the Future is a national nonprofit organization that works to achieve equal access to the information and knowledge essential for a democratic society. LFF mobilizes private and public support for programs with libraries, schools and community partners to improve information access, literacy and media skills.

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**Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations*, 69 F.C.C.2d 240, 248-51 (1978). 7,8

Creation of A Low Power Radio Service, Report and Order, MM Docket No. 99-25, 15 FCC Rcd 2205; 65 Fed. Reg. 7615 (2000). *passim*

Educational Information Corporation, 6 FCC Rcd 2207 (1991). 11, 16

Grandfathered Short-Spaced FM Stations, 12 FCC Rcd 11840 (1997) 10-11

**Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments*, BC Docket 80-90, 94 F.C.C.2d 152 (1983) 9-11, 18-19

Noncommercial Educational FM Broadcast Stations, Notice of Proposed Rulemaking, 41 Fed. Reg. 16973, 16975 (1976) 9

Policies Regarding Detrimental Effects of Proposed New Broadcast Stations on Existing Stations, 3 FCC Rcd 638 (1988). 19

Review of the Commission's Regulations Governing Television Broadcasting; Television Satellite Stations Review of Policy and Rules, 14 FCC Rcd 12,903 (1999). 18

Technical Streamlining NPRM, 13 FCC Rcd 14,849 (1998) 7

Others

Ahrens, Frank, "Political Static May Block Low Power FM," *Washington Post* (May 15, 2000). 3

Brazil, Eric, "Static Over FCC Plan to Give Little Guy a Voice," *San Francisco Examiner*

(July 9, 2000). 2

Fisher, Marc, "The Great Radio Rebellion, The Turned Off Fight Back," *Washington Post* (June 2, 1998). 17

<http://www.fcc.gov/mmb/asd/bickel/d-aside.html> (visited August 25, 2000). 8

<http://www.microradio.org/mission.htm> (visited Aug. 25, 2000). 2

Janssen, Mike, "Low Power, High Hopes," *Current* (May 22, 2000). 3

Minority Commercial Broadcast Ownership in the United States: August 1997 - August 1998
<http://www.ntia.doc.gov/opadhome/minown98/main.htm> (visited Aug. 26, 1999) 17

Powell, Michael, "Letting Go of the Bike" A Holiday Parable on Communications Mergers in a Season of Competition, Practising Law Institute, Washington, DC (December 10, 1998). . 19

Powell, Michael, "Local Competition..." Association of Local Telecommunications Services Convention, Las Vegas, NV (December 2, 1998). 19

* Authorities upon which we chiefly rely are marked with an asterisk.

GLOSSARY

CEMA	Consumer Electronics Manufacturers Association
LPFM	Low Power FM Radio
NAB	National Association of Broadcasters
OET	FCC Office of Engineering and Technology
Docket 80-90	<i>Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments</i> , BC Docket 80-90, 94 F.C.C.2d 152 (1983).
Rappaport Report	Dr. Theodore S. Rappaport, P.E., "Technical Analysis of the Low Power FM Service" (August 26, 1999), submitted as an attachment to UCC <i>et al.</i> Reply Comments (filed Nov. 15, 1999).
adjacent channel interference protection	The "cushions" surrounding broadcast transmissions to protect them from interference. Under the FCC's regulatory scheme, there can be co-channel, first, second, or third adjacent protections.

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INTRODUCTION

UCC *et al.* participate in this case on behalf of the millions of listeners represented by its constituent organizations, and through this participation, represent interests of radio listeners across the United States. Many members of UCC *et al.* currently provide social services to their communities, in the form of soup kitchens, children's initiatives, community centers, and much more. Thus, UCC *et al.* seek to improve the public's access to information about local affairs and issues to

improve and strengthen communities and to increase participation in local electoral decisions. UCC *et al.* seek to ensure that, "[i]t is the purpose of the First Amendment to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail It is the right of the public to receive suitable access to social, political, esthetic, moral and other ideas which is crucial here." *Red Lion v. FCC*, 395 U.S. 367, 390 (1969). The new service created in the Federal Communications Commission's recent *Low Power Radio Order*, 15 FCC Rcd 2205 (2000) ("*Low Power Radio Order*" or "*Order*") provides an historic opportunity to reach all people who are in a small locale, regardless of their ethnic background, income, or technical proficiency.

UCC *et al.* have made significant efforts to ensure that members of the public will have sufficient legal and technical support to apply for, and operate, low power radio stations. Under a grant from the Ford Foundation, the United Church of Christ has established the Microradio Implementation Project ("MIP"). The MIP's mission is to assist faith groups, community organizations, multicultural/multiracial populations, linguistic groups, and other non-profit civil sectors or municipally minded entities in establishing non-commercial low power FM stations. *See* <http://www.microradio.org/mission.htm> (visited Aug. 25, 2000) (JA1065). Other members of UCC *et al.* are also actively working to inform the public of this exciting new opportunity.

The effort to reach out to a rich and diverse array of potential applicants and their listener communities has thus far yielded positive results. Over 700 applicants sought LPFM licenses during the first filing window in May 2000. These applications demonstrate the amazing variety of uses to which low power radio stations may be put. For example, in Visalia, CA, three applicants—a county food bank, a church organization called Too Big to Stop, and the local Kiwanis Club all have applied for licenses. *See* Eric Brazil, "Static Over FCC Plan to Give Little Guy a Voice," *San*

Francisco Examiner (July 9, 2000) (JA1054). The MIP is assisting applicants who are located everywhere from Silicon Valley to rural Kansas. Other applicants include an African-American environmental justice organization in Georgia, senior citizens in Arizona, and young Latino organization, the Mount Pleasant Radio Club, in Washington, DC. See Mike Janssen, "Low Power, High Hopes," *Current* at A1 (May 22, 2000) (JA1063); Frank Ahrens, "Political Static May Block Low Power FM," *Washington Post* at A1 (May 15, 2000) (JA1048).

The next filing window, which will last from August 28 until September 1, 2000, will bring with it a whole new wave of applicants ready to take advantage of the spectrum made available for their use by the *FCC's Low Power Radio Order*. Many of these potential applicants first became aware of the future new service when they heard they should contact the FCC to express support for its Low Power Radio proposal. The proceeding conducted below is thus the product of extraordinary participation by ordinary Americans.

UCC *et al.* participated extensively in the proceedings before the Federal Communications Commission ("FCC" or "Commission").¹ Respondents have thoroughly addressed the arguments set forth by Petitioners, the National Association of Broadcasters ("NAB"). In supporting the position of Respondents, therefore, UCC *et al.*'s pleading provides a concise analysis on a few key points to supplement the record. UCC *et al.* express no view with respect to Petitioner Ruggiero's claims.

Statement of Facts: The Receiver Studies in Context

¹ Intervenors were joined by the Civil Rights Forum and Consumers Union when they appeared before the FCC.

As long as Americans have radio service, we will always have interference. The question has always been, not whether one station or one service interferes with another, but how much and under what circumstances. Congress created the Federal Communications Commission to make these determinations. Interference would only be eliminated if Congress or the FCC were to decide to curtail substantially the number of radio stations from which each locality in the United States benefits from today. Thus, the FCC must always balance among competing needs, changes in technology, and limited spectrum availability.

The Low Power Radio proceeding initiated some of the most intense analysis of radio reception technology in recent times. Although radio engineers and manufacturers have extensive experience with radio receiver performance, data regarding the relationship between FCC interference standards and consumer satisfaction with radio performance were not available.

Therefore, interested parties sought to obtain data that would reveal the current state of radio reception. As part of our participation before the Federal Communications Commission, UCC *et al.* hired an wireless propagation expert from Virginia Tech University, Dr. Theodore S. Rappaport.²

Four receiver studies were conducted. First the staff of the FCC's Office of Engineering and Technology kicked off the process by performing an initial study "to produce independently developed data for the public record." Office of Engineering and Technology, Federal Communications Commission, Project TRB-99-3 at 2 (July 1999) ("OET Study") (JA253). The National Lawyers Guild, the National Association of Broadcasters, and the Consumer Electronics Manufactur-

² Dr. Rappaport is the James S. Tucker professor of electrical engineering at Virginia Tech, and has been on the faculty for 12 years. He received his engineering degrees from Purdue University and in 1992 was recipient of the National Science Foundation (NSF) Presidential Faculty Fellowship. In 1990, he founded Virginia Tech's Mobile and Portable Radio Research Group, and is the author or co-author of more than 10 books in the field of wireless communications.

ers Association each also conducted receiver studies (JA292). Seventy-six radios were tested overall. Building on these efforts, Dr. Rappaport conducted an intense review of the receiver studies and a computer simulation based on the FCC's licensing data and interference prediction data on behalf of UCC *et al.*³ Dr. Theodore S. Rappaport, P.E., "Technical Analysis of the Low Power FM Service" (August 26, 1999), submitted as an attachment to UCC *et al.* Reply Comments (filed Nov. 15, 1999) ("Rappaport Report") (JA726).

The raw data acquired from these studies was, in fact, a test showing by real-world example, the level of performance most consumers expect of their radios. As it turns out, despite NAB's and CEMA's fervent wishes to the contrary, the American public finds acceptable radio reception that radio engineers may find to be mediocre. Ordinary listeners are particularly forgiving of the cheapest radios on the market. Thus, the NAB's contention—that the public will be unhappy with the type of reception they will receive after low power radio is introduced—is entirely without basis and this fact is proven by its *own study*.

The various studies could not agree upon a technical standard that would accurately capture interference-free in the mind of the typical consumer. *Order* at ¶94 (JA952). But agreement on such a number is not necessary. The commercial market in radios provided the answer. No matter what each study claimed to find, each one used radio receivers that are widely purchased and used by customers today, and thus, by definition, are acceptable to consumers. They were acceptable to

³ Dr. Rappaport performed extensive analysis to estimate the number of listeners who would be served by a new LPFM service. First, Dr. Rappaport provides an estimate of the average number of listeners served by a typical LPFM station. Second, through an extensive computer modeling effort, Dr. Rappaport and his staff estimated the number of channels, possible locations, and interference and coverage contour radii for LPFM transmitters at 3 power levels in the 60 markets studied by the Commission. Rappaport Report at 55.

consumers whether they performed "badly" or "well" according to radio engineers.

SUMMARY OF ARGUMENT

UCC *et al.* conduct a detailed comparison of the FCC's prior decisions with respect to low power Class D stations and second and third adjacent channel protection. The FCC *Low Power Radio Order* is fully consistent with these decisions. The *Low Power Radio Order* shows that the FCC built on many years of experience with interference protections and various classes of service when it developed this most recent new service.

NAB's technical claims were correctly rejected by the agency. The NAB accuses the FCC staff study of technical flaws of which the NAB itself is guilty. NAB submitted technical data that were rife with overstatements, omissions, and misrepresentations. If the FCC had adopted CEMA's and NAB's technical conclusions, its decision would be vulnerable to the very attacks the NAB now directs toward it. Instead, the FCC correctly looked at all studies and thus obtained a balanced overview of the performance of all radios.

Finally, UCC *et al.* show that the FCC more than adequately balanced the benefits and potential harms of the low power radio service. NAB largely ignores the benefits to focus on the harm, both to specific categories of listeners and the public in general. UCC *et al.* show that members of the public did express an interest in listening to new sources of radio programming.

Although the NAB claims that small commercial broadcasters may be harmed by new low power radio stations, this claim ignores the FCC's decision to make low power radio stations completely noncommercial, thus mitigating competition in the advertising market. Moreover, the FCC's approach to competition for listeners is completely consistent with the FCC's move toward relying on markets, rather than regulation, to serve the public interest.

ARGUMENT

I. The FCC's Low Power Radio Decision is Consistent With FCC Precedent

The NAB claims that the FCC's *Low Power Radio Order* is an "about face" from its prior decision. NAB Br. at 14. In fact, the NAB's own statement of facts demonstrates that approximately every twenty years, the FCC has reexamined the current state of reception and transmission technology and the radio market and revised its policies as necessary to best serve the listening public in light of the changed circumstances. NAB Br. at 5-7.⁴ Ironically, if the NAB's position were in fact the law, the FCC would have been forced to retain its 1940 decision to utilize only co-channel and first adjacent protection, a position which the NAB opposes today.

A. The FCC's Decisions With Respect to Class D Stations Are Strikingly Similar to Decisions in the *Low Power Order*.

For 30 years, between 1948 and 1978, the Commission licensed low watt stations, called Class D stations. Similar to the new low power radio service, these stations were noncommercial educational stations, and were designed to encourage use of the broadcast spectrum. In 1978, the Commission decided to stop licensing new Class D stations. *See generally Technical Streamlining NPRM*, 13 FCC Rcd 14,849 at ¶59 (1998).

The NAB alleges that the reasoning behind the FCC's 1978 decision is contrary to the FCC's recent decision in the *Low Power Radio Order*. NAB Br. at 14-15. As Respondents easily show, the FCC must by no means ignore 20 years of development in technology and the industry since

⁴ Under the NAB's accounting, this continual assessment is evident: In 1940, the FCC adopted co-channel and first-adjacent channel protections; in 1947, the FCC added second and third adjacent channel protections; in 1962, the FCC altered the second and third adjacent channel protections, using a different technical criteria to establish the protections. In 1983, the FCC altered again second and third adjacent channel protections when adding hundreds of new stations. *Id.*

1978. Resp. Br. at 27-28.⁵ Regardless, the NAB vastly overstates the FCC's findings at that time and ignores the lessons the FCC learned from its experience with Class D stations.

Most important, the FCC did not eliminate all Class D stations in 1978, it stopped licensing new

⁵ As the Commission stated in 1978, it must make a mixed judgment of fact and policy by examining "anew" each request for a new or modified service to determine what will serve the public interest at that time. 69 F.C.C.2d at 243.

⁶ It also retained Class D stations without change in Alaska. *Id.* at 250, ¶ 28.

only after applicants seeking 100 watt stations have an opportunity to apply in order to favor stations with a larger service area. *Order* at ¶11 (JA922). The FCC has also required LPFM stations to operate a minimum of 36 hours per week and grants a preference to applicants who commit to broadcasting at least 12 hours per day. *Id.* at ¶¶182, 143 (JA987,972). The low power service is a modified secondary service. *See id.* at ¶¶62-67 (JA941-943). Finally, as the Class D stations were encouraged to do, the low power stations will be placed along the entire FM spectrum, both that reserved for noncommercial use and that open for commercial use. *Id.* at ¶58 (JA939).

As Respondents explained, changed circumstances altered the FCC's decision with respect to efficient spectrum allocation. Now that prior FCC policies have successfully grown the FM service from 1250 stations in the 1960s to more than 8000 today, new low power stations may now efficiently claim spectrum—small gaps that exist between full power stations—that would otherwise be wasted. *See generally* Resp. Br. at 27-29. This is consistent with the FCC's vision in 1978. Even as it was considering whether limit Class D stations in some way, the FCC stated these stations could be "used to fill in gaps where more powerful stations could not be put." *Noncommercial Educational FM Broadcast Stations, Notice of Proposed Rulemaking*, 41 Fed. Reg. 16973, 16975 (1976).

B. The FCC Has Previously Added New Services and Reevaluated Interference Protections on Second and Third Adjacent Channels.

The FCC's decision in the Low Power Radio Order is one in a long series of FCC decisions determining whether it has "overprotected" some broadcasters at the expense of new services. Although the NAB attempts to neutralize adverse precedent in advance, the fact remains prior FCC decisions, particularly some of those cited by NAB such as *Docket 80-90* and the *Grandfathered Stations Order*, are consistent with the *Low Power Radio Order*.

NAB cites some Commission statements in *Docket 80-90* for the proposition that the FCC believes third-adjacent protection is sacrosanct. NAB Br. at 6, 17. *Docket 80-90*, however, can more appropriately be understood as supporting the FCC's judgment that chances of small increases in interference should not block the addition of new radio stations into the FM band.

In *Docket 80-90*, the Commission considered a series of technical changes that successfully added hundreds of new FM stations to the airwaves, despite doomsday predictions of the demise of the radio industry. *Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments*, BC Docket 80-90, 94 F.C.C.2d 152 (1983) ("*Docket 80-90*"). The debate centered on whether these changes would cause listener dissatisfaction. While the FCC strengthened some protections, it rejected other requests, noting:

The new stations contemplated herein would not adversely affect that primary service, but they would provide local service (or local fulltime service) to communities that are precluded under our current rules. In this manner, the percentage of the population enjoying primary aural service and the number of communities with local stations may be increased. On balance, therefore, we believe that *the provision of new primary service and first and/or second local service is a higher priority than the preservation of service beyond that normally protected service areas of existing stations.*

Docket 80-90, 94 F.C.C.2d at 164, ¶ 31 (emphasis added).

NAB specifically cites the Commission's decision to add "guardband" protections in *Docket 80-90* as supporting its contention that third adjacent protection is necessary for the new low power stations that are, in some cases, 1,000 times smaller than the full power stations which were added in 1983. NAB Br. at 6. This particular portion of 1983 decision, however, was grounded almost entirely in concerns about mobile receiver protection. 94 F.C.C.2d at 169, ¶46. As the modern data submitted in the LPFM proceeding by NAB and all other parties showed, however, automobile receivers are now the most resilient to interference of all the radios in use today. *Order* at ¶98

(JA954). Additional protection based on concern for these receivers now appears outdated.

Like *Docket 80-90*, the recent *Grandfathered Stations Order* demonstrates that the Commission has long accepted the principle that interference protections are not iron-clad, but should yield under the proper circumstances. See *In re Grandfathered Short-Spaced FM Stations*, 12 FCC Rcd 11840 (1997) ("*Grandfathered Stations Order*"). In the *Grandfathered Stations* proceeding, the FCC considered what steps it should take to address modifications by stations that were originally authorized to operate without regard to second and third adjacent channel protections.⁷ The FCC decided to provide "the utmost in flexibility for this class of stations" and once again eliminated second and third adjacent protections for those stations. 12 FCC Rcd at 11841, 11849.

Attempting to neutralize what it surely recognizes as adverse precedent, the NAB argues that the FCC's *Grandfathered Stations Order* itself provides no support for the Commission's decision in the *Low Power Radio Order*. NAB Br. at n.10. To the contrary, the Commission relied upon its experience with those stations to bolster its conclusions about the needs of the listening public. The FCC stated that these full power stations, which operate without second and third adjacent pro-

⁷ The balancing principles in the *Grandfathered Stations Order* were enunciated in *In re Educational Information Corporation* ("*EIC*"), 6 FCC Rcd 2207 (1991). In *EIC*, the Commission closely examined its policy concerning waivers for second-adjacent and third-adjacent channel protection for non-commercial educational stations in the FM band. See *EIC*, 6 FCC Rcd at 2208. After considering the importance of the educational service, the need for broad deployment of a variety of offerings, and congestion within the service, the Commission altered its standards for waiving second and third adjacent protections. It decided to consider waiving second-adjacent channel and third-adjacent channel protection where: (1) the interference would be confined to a very small area, and (2) the interference on second-adjacent and third-adjacent channels would possibly result in a *replacement* of service, rather than a *denial* of service. The factors listed by the Commission in *EIC* as justifying waiver of second-adjacent channel and third-adjacent channel protection fully apply to the *Low Power Radio Order*. The Commission concluded it could not easily meet the demand for new service, concluded that interference would be confined to a small area, and low power radio service will in the worst case scenario, replace service, not reduce it.

tections yielded few, if any, complaints about interference by the listening public. *Order* at ¶¶73-74 (JA946). Thus, the Commission concluded that the small risk of interference was outweighed by improved service. *Id.* (JA946). The Commission properly cited this authority and its past experience demonstrating *no complaints* of interference as a basis for relaxing second-adjacent and third-adjacent channel protections in the LPFM service.

Although NAB attempts to portray Commission precedent as rigidly preserving a consistent set of adjacent channel protections, this is not the case. Rather, the Commission has consistently weighed the utility of second-adjacent channel and third-adjacent channel protection, balancing the public interest of providing the proposed service with the potential for harmful interference.

II. NAB's and CEMA's Technical Studies and Conclusions Arguments Were Deeply Flawed and Thus Correctly Rejected by the Agency.

A significant portion of the debate in this proceeding was a consequence of varying technical analysis and studies considered by the FCC. As Respondents explain, while each study might have had its own limitations, some significant and some minor, the overall picture from *all the studies combined* was surprisingly consistent and presented a balance of all receivers in use today. Resp. Br. at 32-33, 35; *Order* at ¶99 (JA955)("[W]e believe there is sufficient consistency in the study results to support some decisions in this matter, particularly with regard to the need for 3rd-adjacent channel protection.").

NAB claims that technical studies conducted by it and the Consumer Electronics Manufacturers Association ("CEMA") determined that the FCC's low power radio proposal was not technically sound. NAB Br. at 8, 18. NAB audaciously claims that the FCC staff study was untrustworthy even as it puts forward its own studies which suffer from *identical* flaws. The NAB also ignores other

significant flaws in its own and CEMA's studies which rightly caused the FCC to remain skeptical of their conclusions.

The NAB criticizes the OET study for selecting an unrepresentative sample of radios, NAB Br. at 19, when neither CEMA's study nor NAB's used representative samples of radios. Like OET, CEMA over represented better-performing radios. For example, based on CEMA's sales data Dr. Rappaport found that, while 16.8 % of all radios in use today are table radios (such as clock radios), *none* of CEMA's sample radios were table radios. Rappaport Report at 29, n.29 (JA757); CEMA Study at Appendix R, submitted as an attachment to CEMA Comments (Aug. 2, 1999). Similarly, CEMA over-sampled component radios—43.8 percent of its sample included component radios, while only 15.4 percent of radios in use today are component radios. Rappaport Report at 28, Table 4 (JA756). On the other hand, NAB overweighted the poorer radios—only 24 % of NAB's sample was comprised of the lowest-performing "personal" radios, such as walkman radios. Rappaport Report at 30, Table 5 (JA758).

Dr. Rappaport found that these flaws could have been remedied easily, but they were not. Dr. Rappaport proposed alternate numbers of test radios and weighting factors as two simple ways to adjust the studies to be more representative. *See* Rappaport Report at 30, 31, Tables 6, 7 (JA758,759).

The NAB attempts to distract from its study's own flaws in performance benchmarks by groundlessly attacking the OET study's performance measures. NAB Br. at 20-21. The NAB Receiver Study used an audio quality benchmark—a 50 dB S/N ratio—that most radios do not meet and most listeners do not need. In fact, *fifty-four percent* of the radios the NAB tested did not meet its own performance standard in the lab in the *absence of any interference*. Rappaport Report at 36-

37; *Order* at ¶97 (JA954) ("We . . . fail to see how 50 or 45 dB can be an appropriate measure when most radios do not perform at this level, even in the absence of any interference . . .").

NAB's critique of OET's use of harmonic distortion as opposed to signal to noise ratio, NAB Br. at n.13, was more than adequately addressed by the Commission. In several detailed paragraphs, the Commission explained that while different reasons can support use of each measure of performance, in its view, harmonic distortion was superior for this analysis. *Order* at n.148 (JA953).⁸ Furthermore, in addition to the above critique, the Commission explained thoroughly its rejection of the 50 dBu S/N standard. It found that the audio criteria suggested by NAB and CEMA were not appropriate for today's FM radio service, because "[w]hile a 20dB D/U ratio yields a *monophonic* audio S/N of about 50 dB, according to an earlier study by NAB, for *stereophonic* transmissions, the 20 dB protection ratio yields an audio S/N of only about 30 dB." *Order* at ¶96 (JA954) (emphasis original).

The NAB's other major technical submission, its Mapping Study, was fraught with even more significant flaws:

- The study significantly overestimated the number of people who will receive interference by double, triple and quadruple counting individual listeners.
- The maps were based on the worst receiver results alone.
- The study over represented interference by completely excluding car radios, the best-

⁸ The Commission acknowledged that harmonic distortion measurements is relatively less sensitive, but found that "the change in distortion is well within the resolution capability of the measuring equipment." The Commission further explained that measuring distortion provides "an advantage over S/N measurements in that they measure the effect of interference on audio output in the presence of the desired signal's modulation, thus capturing any audio intermodulation effects that might be caused by interaction of the desired and interfering signals. S/N measurements, in contrast, require that the desired signal's modulation be removed to measure the interference component, thus missing any opportunity to capture this effect." *Id.* at n.148 (JA953).

performing radios.

- The NAB invented a fictional "worst radio" to produce maps for a radio that does not exist.
- The NAB failed to provide enough underlying technical information to allow an objective review of its results, and did not provide a map of current levels of interference that would act as a control and would allow comparison between projected LPFM interference and current levels.

UCC *et al.* Reply Comments at 13-14 (JA689-690); Rappaport Report at 32-34 (JA760-761); *Order* at ¶92 (JA952).

After his review of their studies, Dr. Rappaport concluded that the NAB and CEMA studies were "conducted inappropriately and presented with unfair bias against LPFM." Rappaport Report at 25. The NAB could find no meaningful fault with Dr. Rappaport's analysis. Although NAB submitted Further Reply Comments allegedly finding a few flaws in that analysis. Further Comments of the NAB, MM Docket No. 99-25 (filed Jan. 5, 2000) (JA892), UCC *et al.* responded in full to these minor points. UCC *et al.* Response to NAB Further Comments, MM Docket 99-25 (Jan. 10, 2000), attachment to *Ex Parte* Letter from Cheryl A. Leanza to Magalie Roman Salas (filed Jan. 11, 2000) (JA909). If the NAB found fault with other portions of Dr. Rappaport's conclusions, it has not presented those concerns to the Commission for its consideration.

If the FCC had followed the advice counseled by NAB—accepting CEMA's and NAB's technical conclusions—the FCC's decision would be vulnerable to the very attacks the NAB now directs toward it. Instead, the FCC correctly looked at all studies and thus obtained a balanced overview of the performance of all radios.

III. Creation of Low Power Radio is Consistent with the FCC's On-Going Efforts to Serve the Public Interest.

As explained above, the Commission's decision this year is part of a decades-long progression of fine tuning developments in technology, the radio industry, and the Commission's assessment of the public interest. The NAB claims that the Commission incorrectly weighed the costs and benefits of the new low power radio service. To challenge the Commission's conclusions, the NAB must largely ignore the beneficiaries of this new service.

A. Many will Benefit from the New Service.

The NAB's contention that the FCC did not balance the costs and benefits of LPFM stems in some part from its inability to recognize that listeners will benefit from the new service. The NAB makes much of potential—and quite remote—harm to listeners outside of current broadcaster's protected contours and those who receive subcarrier services. Respondents correctly show that broadcasters can assert no claim to protection outside their protected contours and that the FCC fully considered the technical issues surrounding subcarrier services. Resp. Br. at 22-26.

In its rush to focus on harm, however, the NAB ignores the benefits a new low power radio service will bring to these listeners. The NAB ignores that more than 98.6 percent of listeners who may receive interference on a full-power broadcaster's channel will necessarily receive a new low power radio signal. Thus, from the perspective of the listening public, no net loss of service results. *See supra* note 7 (discussing the Commission's analysis with replacement service).

Moreover, the FCC did not begin consideration of this new service *sua sponte*. Over the years, many members of the public have supported low power radio services, whether they were the original Class D services or pleas for new services. The instant proceeding was the product of requests from the public. *See* Nickolaus Leggett, Petition for Rulemaking, RM-9208 (filed July 7, 1997) (JA68). Other requests had been received over the years. *See, e.g., In the Matter of Amend-*

ment of Part 74, Subpart E of the Commission's Rules Pertaining to FM Radio Broadcast Translator Stations, 98 F.C.C.2d 35 (1984) (rejecting petition of Moody Bible Institute for a low power radio service). The many petitioners and commenters have conducted their own analysis and believe they will benefit.

B. The Record Demonstrated that Listeners Desire Different Programming than Currently Offered.

The NAB claims that there is "virtually no evidence . . . that people want to listen" to new low power radio stations. NAB Br. at 32. The Government correctly shows that no such finding is necessary to support its decision to create a new low power radio service. Resp. Br. at 18-19. Contrary to NAB's contention, however, the public's dissatisfaction with current radio programming was evident from the record. UCC *et al.*'s members, for example, discussed full power broadcasters' declining commitment to locally oriented news and cultural programming and expressed its desire that the new low power service would provide new sources of it. *See* Comments of UCC *et al.* at 1-8 (JA574-581); *see also*, Low Power Radio Coalition Comments at 10 (filed Aug. 2, 1999) (JA337) (consumers complain that commercial radio does not reflect the music they would like to hear such as bluegrass, folk, or zydeco); Michigan Music is World Class Campaign Comments at 14 (JA344) ("it is impossible for an independent Detroit artist to gain airplay on a commercial, licensed Detroit radio station"); Comments of Prof. Robert McChesney at 2 (JA339) (radio has little to offer the poor); Comments of Civil Rights Organizations at 9 (JA323) (discussing lack of programming for racial, ethnic, or language minorities).

The NAB claims that increases in format diversity belie the need for new programming outlets. NAB Br. at 33. In making arguments about format diversity, and as explained by UCC *et*

al. below, the NAB continues to ignore the repeatedly-stated First Amendment goals pursued by the Commission.⁹ See UCC *et al.* Reply Comments at 32-33 (JA708-709).

An evaluation of diversity must focus on source diversity not format diversity. The Commission has recently stated:

Some question whether diverse outlets and sources lead to diverse viewpoints, or whether our rules are necessary to promote diversity, suggesting that commonly owned outlets can produce diverse viewpoints equally as well as separately owned outlets. We disagree with these arguments. As the Commission stated when it adopted the newspaper/broadcast cross-ownership rule, ". . . it is unrealistic to expect true diversity from a commonly-owned newspaper combination. The divergency of their viewpoints cannot be expected to be the same as if they were antagonistically run."

See *Review of the Commission's Regulations Governing Television Broadcasting; Television Satellite Stations Review of Policy and Rules*, 14 FCC Rcd 12,903 at ¶22 (1999) (footnote omitted).

See also *Associated Press v. United States*, 326 U.S. 1, 20 (finding that "[the First Amendment] rests

⁹ Even if format diversity were relevant, the data the NAB submitted to the FCC describes only negligible increases. Specifically, NAB cites a 0.2% increase in number of formats across all markets since 1997. See NAB Comments at 6, Attachment B (JA368, 449). This figure is insignificant, particularly in light of the fact that the number of stations increased during this same period. See *Minority Commercial Broadcast Ownership in the United States: August 1997 - August 1998* <http://www.ntia.doc.gov/opadhome/minown98/main.htm> (visited Aug. 26, 1999) (JA1067). In addition, NAB's method of counting formats, see NAB Comments at 7 (JA369), further undermines its analysis. By considering a station that offers adult contemporary programming and urban programming as distinct from stations offering *either* (but not both) of these formats, NAB has lost sight of the needs of listeners. In this context, a reporter from *The Washington Post* recently evaluated the effects of consolidation on listeners, concluding,

[W]hat's already clear is that the listener is the loser. In recent months, I have asked executives at several big radio companies to cite examples of the new diversity of programming they had promised. Not a one came up with anything but slight variations on the standard, bland "adult contemporary" music formats that dominate the dial.

Marc Fisher, "The Great Radio Rebellion, The Turned Off Fight Back," *Washington Post*, June 2, 1998, at D1 (JA1060).

on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public").¹⁰

NAB's argument ignores that inherent in most commenters' desire to obtain a broadcast license is a determination that members of their communities would listen to a new station. Few organizations, particularly the civic and cultural organizations who participated before the FCC, would find the expense and time commitment of running a low power radio station worthwhile if no one would listen. *See* discussion of *Docket 80-90*, *supra*, Resp. Br. at 18-19.

C. Claims that the Low Power Radio Service Should Not Have Been Authorized Because It Will Harm Current Full Power Stations Economically are Groundless.

The NAB claims that small current broadcasters may be harmed economically by the new low power radio service. This concern ignores that the FCC decided to limit all low power licenses to noncommercial status. *Order* at ¶17 (JA924). Thus, the competitive pressures in terms of advertising are largely mitigated.

Moreover, the FCC has been moving steadily, sometimes under pressure from Congress, toward policies which promote competition—preferring that the economic market select the programming outlets that will succeed or fail.¹¹ *See, e.g., Docket 80-90*, 94 F.C.C.2d 152 ("Our

¹⁰ For example, three stations owned by a single company might put three different radio formats on the air, they will inevitably share financial goals. It is unlikely that any of the three commonly-owned stations will run a news story that will offend a local advertiser or run counter to the interests of a corporate parent.

¹¹ Commissioner Powell, ironically, has been perhaps the Commission's most outspoken on this point, deriding the Commission for attempting to shield corporations from the unpredictability of the free market. *See, e.g.,* Commissioner Michael Powell, "Letting Go of the Bike" A Holiday Parable on Communications Mergers in a Season of Competition, Practising Law Institute, Washington, DC (December 10, 1998) (JA1071); "Local Competition..." Association of Local Telecommunications Services Convention, Las Vegas, NV (December 2, 1998) (JA1077).

experience is that the public generally benefits from program diversity brought about by increased competition."); Pub. L. No. 104-104, Sec. 202, 110 Stat. 110 (1996). As explained in the docket below, arguments that the FCC should protect current broadcasters against "ruinous competition" smack of the long-discredited *Carroll Doctrine*. Comments of Civil Rights Organizations at 3-4 (JA320-321). The *Carroll Doctrine* allowed a broadcaster to oppose grant of a new license if it could show proof of detrimental economic effect to itself, and thus a likely reduction in service to the public. *Policies Regarding Detrimental Effects of Proposed New Broadcast Stations on Existing Stations*, 3 FCC Rcd 638 (1988). The Commission found that, after thirty years of the doctrine's existence, no broadcaster had ever made a showing of harmful competition sufficient to block authorization of a new service. *Id.* at 639. In ending the *Carroll Doctrine*, the Commission concluded that the theory of "ruinous competition" had long been rejected by economists, and that "[c]ompetitors may severely injure each other to the great benefit of the public." *Id.* at 640.

Arguments that new competitors will harm the public interest have no place in modern regulatory analysis. Tiny, noncommercial radio stations will not harm the radio industry, which has now become more profitable than ever.

Conclusion

For the reasons enunciated herein, the Petitioner NAB's arguments should be rejected and the Commission's *Low Power Radio Order* should be affirmed.

Respectfully submitted,

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CERTIFICATE OF LENGTH

I hereby certify, pursuant to Fed. R. Civ. P. 32(a)(7), that the foregoing initial brief of Intervenor UCC *et al.* contains 6,107 words as measured by Corel Word Perfect 6.1.

Cheryl A. Leanza

September 29, 2000