DOCKET FILE COPY ORIGINAL

Before the

Federal Communications Commission

Washington, D.C. 20554

ORIGINAL

RECEIVED

AUG 2 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	) MM Docket No. 99-25
	) RM-9208
Creation of a Low	) RM-9242
Power Radio Service	)

To: The Commission

COMMENTS OF SAGA COMMUNICATIONS, INC.

Saga Communications, Inc., ("Saga") by its attorneys, herewith files its Comments on the *Notice of Proposed Rule Making,* 14 FCC Rcd 2471, released February 3, 1999 ("*NPRM*"). Time for filing comments on the *NPRM* has been extended to August 2, 1999.

Introduction

Saga is a publicly-traded company which, directly or through subsidiaries, is the licensee of 26 FM stations and 14 AM stations.[1] Many of Saga's stations are located in medium-size markets. The Commission proposes the creation of a new low power radio service on the FM band that would result in the allotment of three new classes of stations: (1) stations operating with 1000 watts effective radiated power ("ERP") with antennas at a maximum 60 meters (197 feet) above average terrain ("HAAT"), to be known as "LP1000" stations; (2) stations operating with 100 watts ERP at a maximum 30 meters (98 feet) HAAT, to be known as "LP100" stations; and (3) stations operating with 1-10 watts ERP at a maximum 30 meters HAAT, to be known as "Microradio" stations. If implemented, LPFM would result in new stations being authorized in markets where

[1] Saga is also the licensee of commercial television stations.

No. of Copies rec'd 0+4
List ABCDE

Saga operates radio stations.[2] Saga, in these comments, shows why this proceeding should be terminated, or if not terminated, why it should be substantially scaled back from the sweeping proposal described in the *NPRM.*

A. The Commission Should Not Create LPFM

No showing of actual need for LPFM is set forth in the *NPRM.* The 13,000 inquiries from the public cited at *NPRM* ¶10 as an attempt to demonstrate public need is apparently the sum of the 1,000 "hits" per month on the Commission's World Wide Web site (See *NPRM* fn 26). That "13,000 inquiries" figure is inherently unreliable since it may include "hits" from persons who oppose LPFM and multiple "hits" from the same users. The Commission dismisses without explanation or justification the use of increasingly available internet access to satisfy whatever demand there might be from those with an interest in broadcasting. With audio streaming technology, there is no

---

[2] Appendix D to the *NPRM* provides the results of the Commission's investigation into the feasibility of a low power radio service. That appendix analyzed sixty communities of various sizes throughout the United States. Twenty cities were chosen within each of three population "tiers." Saga operates stations in five of the sixty sample markets. The following illustrates the Commission's belief that as many as 124 new stations could be allotted just in the five markets chosen by the Commission where Saga has stations:

City	LP1000 Stations	LP100 Stations (Translators Not Protected)
Columbus, OH	9	36
Milwaukee, WI	6	18
Des Moines, IA	10	19
Springfield, MA	4	14
Manchester, NH	1	7

reason a person with the desire to broadcast a specialized format could not do so very inexpensively over the internet, and with no adverse impact on spectrum (See *infra*). The Commission should re-examine this alternative before authorizing LPFM.

B. Spectrum Management: If LPFM Is Created, It Should Be a Noncommercial Service

At *NPRM* ¶24, the Commission seeks comment on whether the LPFM service should be restricted to noncommercial applicants. If the Commission decides to create LPFM, it should be a strictly noncommercial service. Based on Saga's experience in the broadcasting industry, Saga does not believe that mini radio stations operating with 1 kilowatt ERP with maximum antenna heights of 60 meters HAAT could realistically compete with established commercial stations operating with up to 100 Kw ERP and antennas up to 150 meters HAAT. Throughout the Commission's history, low powered commercial stations have aspired to greater power levels.[3] The rationale has typically been that the weaker stations could not effectively compete with higher powered stations. The Commission, in response to such pleas, increased Class A stations from 3 kW ERP to 6 kW ERP, in most cases.

On the other hand, many schools and colleges have historically operated low power FM stations for the purpose of serving their campuses and surrounding communities. Since educational and non-profit entities do not have to compete for advertisers, they do not need to be so concerned with the power of their facilities. And, special interest groups who have an interest in operating LPFM stations would be able to

---

[3] See, for example, *FM Broadcast Stations (Power Increase for Class A Stations)*, 66 RR 2d 1475 (1989).

satisfy their creative urges without having to compete for advertising dollars with larger, more powerful, better financed stations. Therefore, the LPFM stations, if created, should be limited to noncommercial operations.

C. LPFM Should Be a Secondary Service

The Commission should only authorize LPFM if the new stations are required to (a) protect all existing and proposed full-power and secondary facilities and (b) terminate operations if the LPFM stations cause interference to such facilities. The same rationale should be adopted that is expressed in Section 74.1203 of the Rules. That section requires FM translators, which are secondary stations, to terminate operations if they cause interference to (1) the transmission of any authorized broadcast station; (2) the reception of the input signal of any other translator or booster; or (3) the direct reception by the public of the off-the-air signals of any authorized broadcast station. "Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the FM translator or booster station, regardless of the quality of such reception, the strength of the signal so used, or the channel on which the protected signal is transmitted."[4] This standard has worked well in the FM translator world since it protects the listening public's rights to hear stations even when the listener is not within the protected contour of the station.[5] So, LPFM stations should be given "secondary"

---

[4] Title 47 C.F.R. §74.1203.

[5] Recently, one of Saga's subsidiaries was required to terminate operations of a translator that caused interference to the reception of a full power radio station some 60 miles distant. The translator is authorized to operate with 30 watts. At that power level, Saga received complaints from listeners to the distant station. In an attempt to cure the problem, Saga's technicians reduced the power to 0.5 watt, but listeners still complained

status similar to the status of FM translators.

D. LPFM Stations Should Be Required to Protect All Authorized Stations

As noted above, in the allocation process, the Commission should require LPFM stations to demonstrate that they would meet all spacing requirements to existing stations, including FM translators and boosters.

E. Non-transferability

If LPFM is to become a reality, eligibility for the stations should be limited to those would-be broadcasters who wish to satisfy the perceived demand for new voices and program services to serve the public. Purity of motive of such operators can be ensured if the Commission eliminates the motive for profiteering from LPFM stations by specifying that LPFM licenses will not be transferable to other parties. LPFM licenses could be issued to the original applicants who could operate the stations for their entire license terms. However, should the original licensees lose interest in operating their stations, the licenses would terminate, and other entities with such interests could apply to use the frequencies. However, in no case could retiring LPFM broadcasters receive any compensation in connection with their relinquishment of the LPFM licenses.

F. The Commission Is Apparently Without Authority to Create LPFM

Title 47 U.S.C.§1 (Communications Act of 1934, as amended) sets forth the purposes of the Act and the creates the FCC. That purpose is "regulating...commerce in

---

of interference to reception of the distant station. This is a "real-world" example of the havoc that will result if the Commission authorizes LPFM as a primary service. Since even a very low power LPFM station could obliterate reception to stations that may be far away from the listener, but on whose programs the listener has come to rely.

communication...so as to make possible, to all people of the United States...world-wide wire and radio communication *service*...[emphasis added]." The key word is "service." The Commission's *NPRM* on the other hand, decries that "consolidation [of the broadcasting business] may have a significant impact on small broadcasters and potential new entrants into the radio broadcasting business by driving up station prices, thereby exacerbating the difficulty of entering the broadcast industry and of surviving as an independent operator." The Commission should not be usurping the role of the Small Business Administration. It is not the FCC's purpose to expend its resources in providing business opportunities. It is the FCC's purpose to ensure that people have radio service. The LPFM proposal would have a counter effect. It would eliminate service that people currently rely on in favor of LPFM stations without much hope of success in the name of encouraging new business opportunities.

G. LPFM Would Convert the FM Band into a Latter-Day Citizens Band

Effective December 1947 the Commission created the "citizens band"[6] From the institution of the Citizens Radio Service, the Commission emphasized that the service was designed for both business and personal uses, particularly where other means of communication were not available.[7] In *Personal Radio Services,* 53 RR 2d 1479 (1983),

---

[6] See *Report* in Docket 6651, released January 16, 1945.

[7] In *Citizens Radio Service*, 27 Fed. Reg. 11500, published November 22, 1962, the commission issued a notice of proposed rule making to clarify the permissible and prohibited communications and use of citizens band radios. In *Citizens Radio Service*, 4 RR 2d 1519 (1964), the Commission revised its rules to state clearly the limitations on use of such stations. The purpose of the clarification was to attempt to beat back "hobbying activities by licensees [that] have continued to increase to the point that the

the Commission eliminated all individual station licenses in the citizens radio service. This was done, over objections from commenters who felt that the FCC's licensing function was valid, to result in "significant cost savings and in substantial administrative savings." The Commission was confident that its equipment rules and its enforcement arm would maintain order. What was the result? Today, the citizens band is unusable. Saga invites any reader of this pleading to obtain a citizens band transceiver operating with no more than 4 watts (12 watts SSB peak envelope power[8] -- no license required) and try to communicate with anyone. A listener will hear only noise and general chaos on the band. When words can be made out, they are generally profane or indecent. Saga fears the same fate awaits the FM band if the FCC's LPFM proposal becomes reality. Permitting so many potential broadcasters on the FM band can only lead to the same result -- the FCC throwing up its hands and leaving its equipment rules and enforcement arm to deal with the problem. Once that happens, however, America's commercial FM system - the envy of the world - will be irreparably destroyed.

H. The Commission Should Not Implement LPFM Until the Current Backlog of FM Channels Has Been Eliminated

Since acceptance of new FM applications was frozen following *Bechtel v. FCC*, 957 F2d 873 (D.C. Cir. 1992), and *Bechtel v. FCC II*, 10 F.3d 875 (D.C. Cir. 1993), the FCC has routinely allotted new FM channels to various communities, but has deferred the

---

utility of the service for its original purposes has been substantially impaired. Title 47 C.F.R. §95.404 promulgated pursuant to authority in Section 307(e)(1)(A) made citizens band licenses unnecessary.

[8] Title 47 C.F.R.§95.410.

opening of "filing windows" until a future unspecified date. The freeze has been in effect since November 26, 1997[9]. Since that date many FM channels have been allotted and are currently vacant, but the public will not be permitted to apply for them until the freeze is lifted. Therefore, the Commission should not implement LPFM until after all window periods have expired for the filing of applications on those frozen allotments and the auctions have been held to determine the permittees. Many of the allotments are in small to medium markets where the majority of LPFM stations would probably allotted. Persons desiring radio stations could apply for those full-power FM stations.[10] If these vacant-but-not-yet-applied-for channels satisfy the perceived "need" for new radio opportunities, the "need" to be filled by LPFM will have become moot.

I. The Impact of LPFM on Digital Radio Service

The Commission has before it a proposal to launch a CD-quality digital radio service.[11] The digital signal would be superimposed on the existing analog channels of FM stations (the so-called "in-band-on-channel" or "IBOC" proposal). Currently tests are underway to determine whether the IBOC signals can coexist with the analog signals. At

---

[9] See *Notice of Proposed Rulemaking - Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, et al.*, 12 FCC Rcd 22363 (1997).

[10] Pursuant to Title 47 C.F.R. §73.211(a)(i), the minimum effective radiated power for Class A FM stations is 0.1 kW (100 watts). This is well within the range of powers the Commission is considering for LPFM stations, so persons desiring radio stations would not have to make more substantial outlays to construct a new Class A FM station than a LPFM station.

[11] See *Public Notice*, DA 98-2244, released November 6, 1998. See also *Petition for Rule Making*, RM 3595.

minimum, the Commission should defer action on its LPFM proposal until the impact of LPFM on the development of IBOC digital radio can be assessed.

J. Interference Tests Must Be Conducted

One of the Commission's more radical ideas expressed in the *NPRM* is the notion that the current allotment scheme will not be adversely affected by ignoring the 2nd and 3rd adjacent channels when new LPFM stations are assigned. The reason for this extraordinary leap of faith is the realization that few stations can be allotted if the neighboring channels are not ignored. For example, *NPRM* Appendix D shows that 428 LP1000 stations could be assigned in the Commission's 60 sample cities if the 2nd and 3rd adjacent channels are ignored, but only 33 could be allotted with full interference protection. Thus, before the LPFM proposal can be considered further, the Commission should conduct transmission tests to determine the impact of ignoring the 2nd and 3rd adjacent channels on reception of other stations. If the tests confirm that significant portions of the population would lose service as a result of LPFM operations, then the 2nd and 3rd adjacency restrictions must be retained. However, only technical tests of working transmitters will answer these questions. Authorizing the operation of hundreds of new LPFM stations without knowing exactly what the physical impact on existing stations will be is unacceptable and imprudent. Attached hereto, and incorporated herein, is a Technical Statement providing additional technical information about these matters.

K. Enforcement Issues

The FCC has traditionally decried its limited resources in maintaining its enforcement responsibilities, relying on self-enforcement, in many cases. Authorizing

thousands of new LPFM stations would add to the Commission's enforcement burden. The Commission can be sure that its proposal to license the stations only to neophytes and former pirates will guarantee that the Commission will not be able to keep the stations on their assigned frequencies or operating at their authorized powers. The result may be that the Commission will find itself asking Congress for more money to cope with an enforcement crisis that can be avoided by not authorizing LPFM stations.

Conclusion

In short, LPFM is a terrible idea whose time should never come. The Commission should take a deep breath, muster up the courage, and admit that LPFM should never be created. Saga respectfully urges the Commission to terminate their proceeding without creating the LPFM service.

Respectfully submitted,

SAGA COMMUNICATIONS, INC.

By: _____
Gary S. Smithwick
Its Attorney

SMITHWICK & BELENDIUK, P.C.
1990 M Street, N.W.
Suite 510
Washington, D.C. 20036
(202) 785-2800

August 2, 1999

TECHNICAL STATEMENT
Creation of a Low Power FM Radio Service
MM Docket No. 99-25, (RM-9208, RM-9242)

Introduction

This Technical Statement is made in support of comments filed by Saga Communications, Inc., ("Saga") in its Comments in reply to the *Notice of Proposed Rule Making*, 14 FCC Rcd 2471, released February 3, 1999 ("NPRM").

The Commission has issued a Notice of Proposed Rule Making ("Notice") which proposes to create a new FM broadcast service. The enclosed comments address the proposal to add a Low Power FM Service ("LPFM") and incorporate this new service in the present FM frequency band. The undersigned is President of Bromo Communications, Inc., a technical consulting firm representing broadcast interests before the Federal Communications Commission for over thirty years. These comments are made on behalf of our client, Saga Communications, Inc. Our experience has covered many changes in the regulation of the broadcast industry, some good and some bad.

Opinion

It is our express opinion that the proposal as presented at this time is bad. A low powered service deserves consideration. However the plan which proposes to delete second and third adjacent channel protection to existing FM stations and in the light of technical changes proposed by In Band Digital FM is premature.

Create Interference to Squeeze In More Stations

In order for the Commission to clear enough spectrum space to add a significant number of LPFM stations, changes needed to be made in the exiting FM allocation structure. The Commission stated in its Notice that the present FM allocation structure would not allow enough LPFM possibilities especially in the larger cities.

Three new classes of LPFM stations were proposed: LP1000, LP100 and a true micro-radio class limited from one to ten Watts. A 1000 Watt FM station with an antenna height of 60 meters is not a low power station. Many Class A FM stations currently on the air operate with less than 1,000 Watts. If the Commission feels it is necessary they could propose new Class A1 and A2 stations (similar to LP1000 and LP100) with full allocation spacing protection under the standard FM spacing provisions of Section 73.207 of the Commission's Rules.

2nd & 3rd Adjacent Channels

In order to make room for new LPFM stations, the Commission determined that third and possibly second adjacent channel protection to full service stations and to the new LPFM stations could be dropped. The Commission then establishes a double standard. The LPFM station would not protect the 2nd and 3rd adjacent channels but the full powered FM station would be required to continue to protect their 2nd and 3rd adjacencies. The Commission's reasoning was that newer "state of the art" receivers are better designed and could better reject the second and third channels. There are no studies showing that the newer receivers are able to reject 2nd and 3rd adjacent channels any better than their predecessors. Before adopting such a proposal, a study needs to be conducted into the rejection ability of FM receivers.

Example of 3rd Adjacent Channel Interference

The Commission stated that if the 3rd adjacent protection were dropped, that the potential interference would be minimal. They cited the example of potential interference from a 3rd adjacent channel station to an existing Class A FM station being 1.4 km or 0.9 miles. The Commission feels this is a small insignificant area. In the case of a large urban area with a large density of population, this LPFM would have a

significant impact on large population. It is safe to assume the LP1000 transmitter will be located so as to cover maximum population. Even more devastating is this example. The City of Clayton, Georgia is located in the Northeast Georgia Mountains. The city has two licensed facilities, one Class A FM and one daytime AM station. WRBN is the FM station with an antenna located about 2.5 miles north of the city on a mountain. The effective radiated power is reduced to 370 Watts due to the over height condition of the antenna (395 m HAAT). Clayton has a population of 2,000 persons. The city limits of Clayton extend one mile in all directions from the center of the community. Assume a LP1000 FM station is placed logically downtown near the center of the city. The LPFM station operates on the 3rd adjacent channel to the Clayton FM station. Using the Commission's own figures the LPFM station would interfere with the existing full power FM station over virtually the entire city of license (city limits 1.6 km, interference 1.5 km). Losing your entire city of license coverage to an interfering LPFM station could hardly be considered as minor. We show this example graphically in Exhibit #1. This exhibit agrees with the Commission that the area of interference is minimal when compared to the overall WRBN 70 dBu coverage area. In this case our concern is not as much the amount of interference but where it is located. Exhibit #2 shows this same information only in greater detail. The Clayton City Limits and the expected interference area is clearly shown.

Example Will Be Duplicated Across Country

There have been countless applications returned over the years by the Commission as unacceptable for filing because they would have created prohibited interference no matter how minimal the area.

Even if the interference area was smaller than the 1.4 km (0.9 miles) as predicted, the possibilities will be still be devastating especially to stations in smaller communities. This example will be duplicated time and time again across the country.

100 kHz Spacing - vs - 200 kHz Spacing

The Commission states that it may be possible to reduce the bandwidth of the LPFM service. However, they have questions about such an action and only engineering studies will provide the answers these questions. The Commission suggests that the bandwidth might be reduced by half of the present 200 kHz. Would this reduction of bandwidth require new receivers? If so, would the Commission be able to double the number of available channels? Only actual testing will answer such questions. The Commission turned a deaf ear to alternate proposals to utilize alternate spectrum for their LPFM for the reasons that new receivers would be required. However, the Commission was willing to consider special receivers if the bandwidth on the existing FM band were required.

Why Not Use TV Channels 5 & 6

While we are questioning the possible need for a change in receivers why not re-open the discussion to an expansion of the FM band. For example, with the advent of digital TV, it is proposed to open up the lower portion of the VHF TV band (Channels 2-6) to other services. Consider the establishment a new LPFM service by using television channels 5 and 6. Channel 6 is adjacent to the FM band on its lower side. The Commission could add 60 additional LPFM 200 kHz (or 120 - 100 kHz) channels

within the spectrum space currently occupied by these two TV Channels. If only one Television channel (6) were used 30 new 200 kHz (60 new 100 kWz) channels could be created. This not only allows a separate service while not devastating the present FM band but, it would have a secondary effect by improving the interference problems that present educational FM stations have with TV Channel 6. FM receivers would only need to add the expanded FM frequencies similar to what was done for the new expanded AM band receivers (1610-1700 kHz).

Don't Go the Way of Class IV Stations

Please do not throw away time proven FM allocation technical provisions with a political decision. By allowing more and more interference, previous Commissions have the distinction of having destroyed the AM band. Here is a good example of a previous Commission acting without proof of technical backup and bowing to political pressure. Class C (formerly Class IV) AM stations originally operated with 250 Watts at night. It was proposed that all Class IV stations could increase power to 1,000 Watts at night. Since all Class IV stations would be increasing to 1,000 Watts nighttime the benefit would be better signals within their present limited coverage area. It was felt that the stations would maintain the same nighttime coverage area. There was no actual proof of this theory but it seem to make sense. There were several unpopular engineering skeptics of this theory. The licensees of the Class IV stations were very much in favor of increasing their nighttime power by four times. The technical considerations were put aside for politically popular reasons. Thus no studies were done. Class IV AM stations were allowed to increase power to 1 kW. This resulted in much more interference to the nighttime signals of Class IV stations. The nighttime signal did not improve but rather became subject to more interference. Due to this increased interference, virtually every

Class IV station lost about four miles of nighttime coverage. Our point of using this example is the fault of making a political decision without any studies to back up the popular theories Squeezing LPFM stations into the existing band is a political decision and needs much more study before making such far-reaching decisions.

Does The Commission Have Resources?

Does the Commission have the manpower and funds available to administer and police this new service? The Commission created the Citizen Band "CB" from the 27 mHz spectrum which was formally used by amateur operators. The Commission first tried to regulate the service making sure that all transmitters were licensed, on frequency and were operating with the proper power. The entire CB situation soon got out of hand as its popularity soared. It became a problem beyond the Commission's ability to regulate. Therefore, the Commission has taken the un-official position that as long as CB operators stayed within the designated CB channels about anything goes. That is the way it is today. The Commission does not have the manpower or resources to police the Citizens Band. Fortunately the Citizens Band is a small limited bit of isolated spectrum that can be left alone to interfere with itself. This type of condition cannot be tolerated in the FM Band. Imagine similar interference and language in the FM Band which is the world's most utilized frequency spectrum.

Summary

It is premature for the Commission to take this action. Do not repeat the errors of previous Commissions. Digital FM is in our near future. Testing is underway on three different types of digital systems. The Commission in this proposal admits it does not know the effects of the LPFM proposal on digital FM and neither does anyone else at this point. Once the digital development process is complete and a new standard is

established, the need for 2nd and 3rd interference protection can be determined. LPFM may be needed but unlike previous Commissions, take the time and do it right.

The legacy of this Commission could very well be the one that destroyed the FM band rather than the one that created LPFM.

Bromo Communications, Inc.

William G. Brown
President

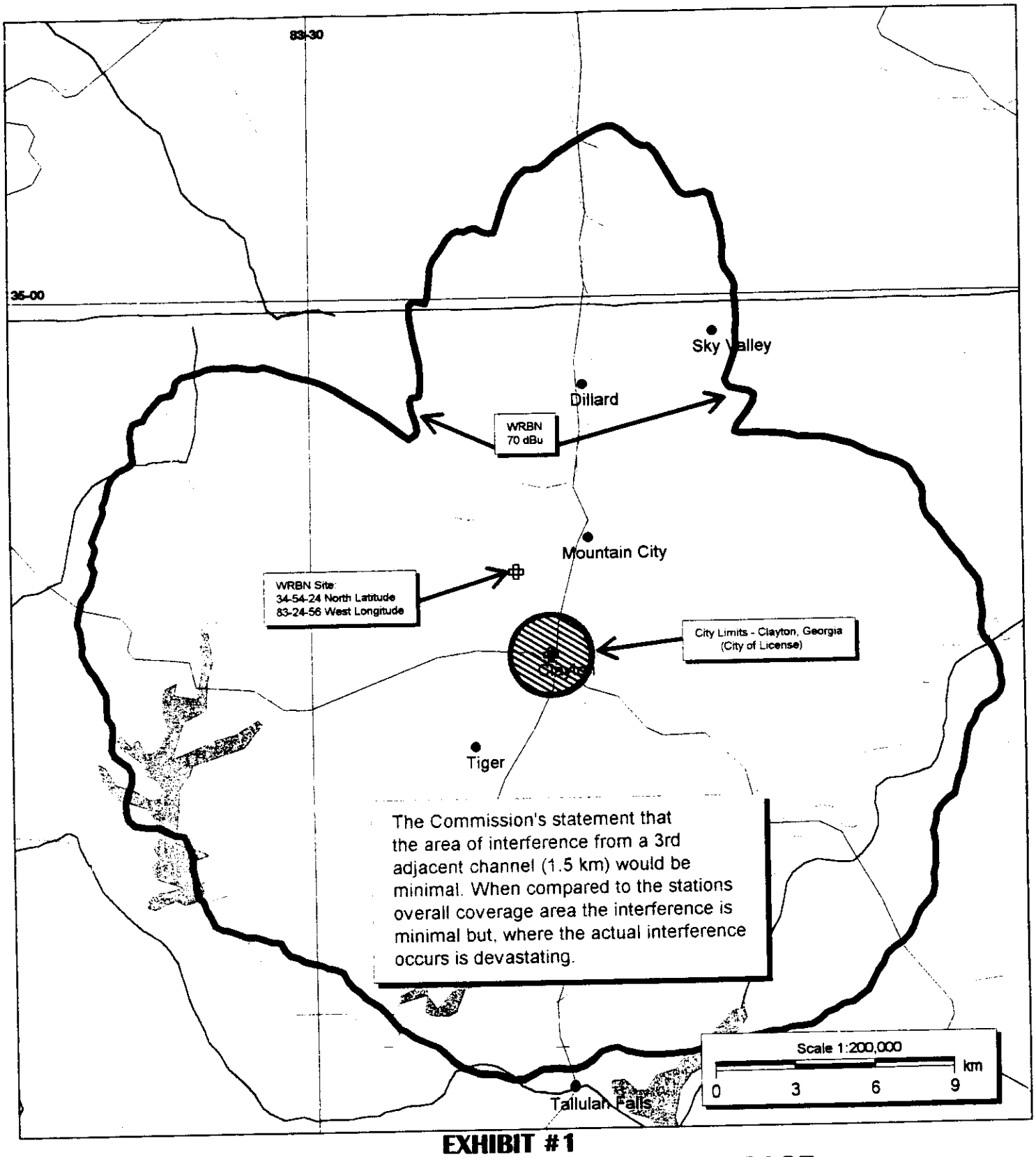

EXHIBIT #1

WRBN COMMUNITY OF LICENSE COVERAGE

COMMENTS OF SAGA COMMUNICATIONS, INC.

Creation of a Low Power FM Broadcast Service

MM Docket No. 99-25, RM-9208, RM-9242

Bromo Communications, Inc.

Atlanta, Georgia

July 1999

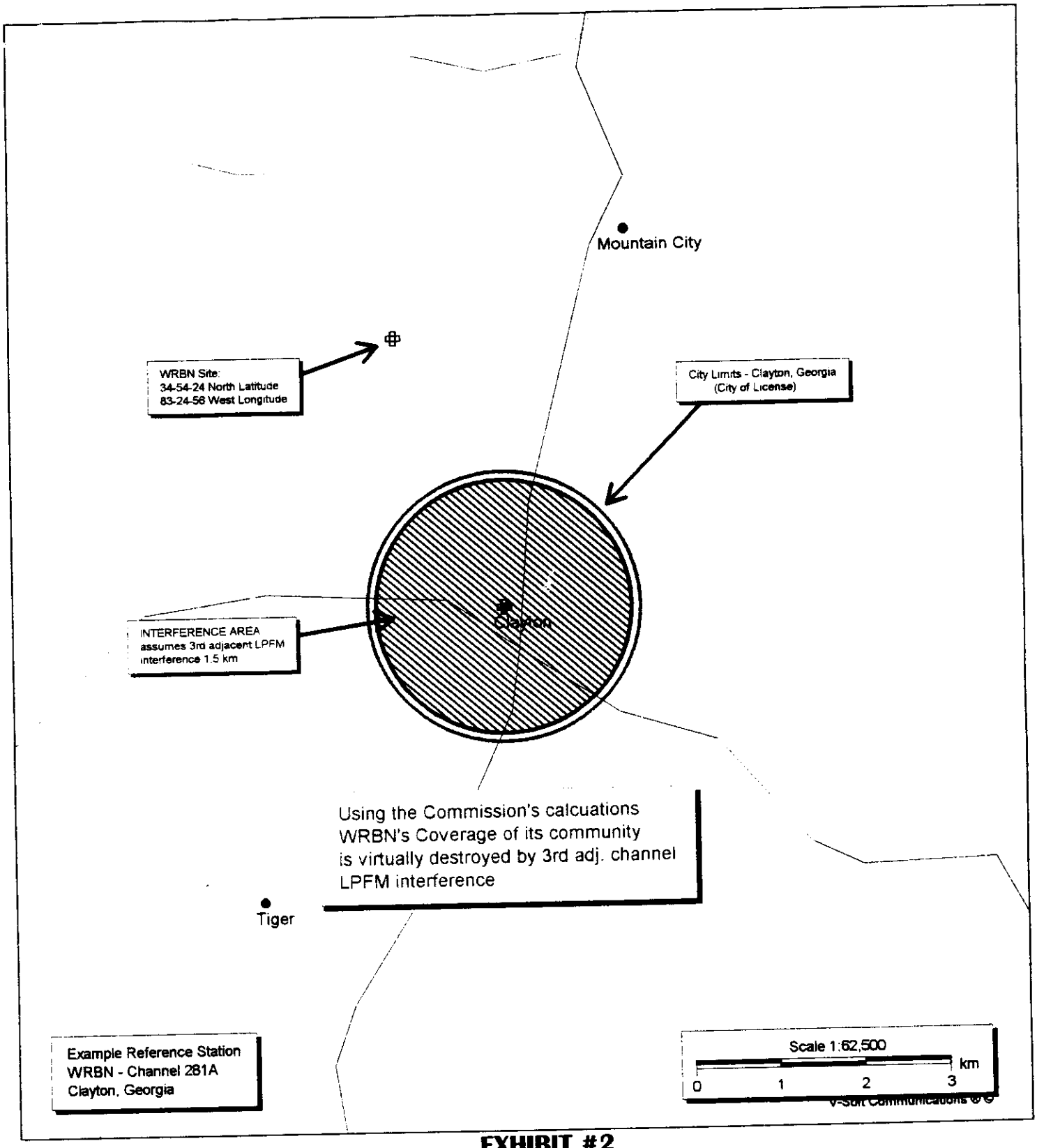

EXHIBIT #2

INTERFERENCE TO WRBN IN COMMUNITY OF LICENSE

COMMENTS OF SAGA COMMUNICATIONS, INC.

Creation of a Low Power FM Broadcast Service

MM Docket No. 99-25, RM-9208, RM-9242

Bromo Communications, Inc.

Atlanta, Georgia

July 1999