

April 28, 1999

Secretary
Federal Communications Commission
The Portals
445 Twelfth Street S.W.
Washington, DC 20554

RE: FCC DOCKET MM 99-25 (aka RM-9208 & RM-9242)

Dear Commissioners and Commission Staff:

Attached are the Written Comments of THE AMHERST ALLIANCE in FCC Docket MM 99-25: the Commission's Proposed Rule for establishing a Low Power Radio Service (LPRS).

We wish to make 3 points, all of which are procedural:

1. Per a cautious interpretation of the Commission's procedural rules, we have enclosed 15 COPIES plus the original.
2. We are also filing these Comments ELECTRONICALLY. The physical copies are being submitted as a "backup" AND for your convenience as readers. We ALSO note, however, that the Charts in Appendices C and D may be more readable in the physical version than in the electronic version.
3. Because they address 35 specific issues in some detail, while also providing
4 Appendices that contain original research, our Written Comments are unavoidably quite lengthy. We currently plan to submit, well before the June 1 deadline, ADDITIONAL COMMENTS which offer a more compact OVERVIEW.

We thank the Commission for taking action in this VITALLY IMPORTANT area.

Sincerely,

Don Schellhardt
National Coordinator
THE AMHERST ALLIANCE
45 Bracewood Road
Waterbury, CT 06706
Capistrano@earthlink.net
203/591-9177

TABLE OF CONTENTS

For Written Comments
Of

THE AMHERST ALLIANCE

Re:

Creation Of A Low Power Radio Service

FCC Docket MM 99-25; RM-9208 & RM-9242

PAGE

INTRODUCTION

1

EXECUTIVE SUMMARY

3

POLICY RECOMMENDATIONS

OF THE AMHERST ALLIANCE

10

LP-100 Stations:

1. License LP-100s
11
2. Establish MODIFIED Primary Service Status
14
3. Allow 250 Watt Consortia With FULL Primary Service Status
14

LP-10 Stations:

4. License LP-10s
15
5. Establish MODIFIED Primary Service Status
18

6. LP-10 FM And LP-10 AM

18

AMHERST ALLIANCE TABLE OF CONTENTS

(MM 99-25; RM-9208 & RM-9242)

PAGE

7. Limiting LP-1000 Stations To Low Population Density Areas
19
8. Possible Need For "Transitional" Tiers
20

9.	Rural Areas, Small Cities And "Urban Islands"	
	29	
Airing Of Commercials By LPRS Stations:		
10.	Allow Both Commercial-Free AND Commercial-Airing Stations	31
11.	Define "Non-Commercial" As "Non-Profit"	
	32	
12.	Local Ownership Requirements	
	37	
13.	Investment In LPRS By Existing Broadcasters	
	38	
14.	Restrictions On Size, Income And Outside Control	
	38	
15.	Restrictions Proposed By RM-9208 Petitioners	
	40	
16.	Prohibition Of Multiple LPRS Station Ownership	
	44	
17.	Renewability Of LPRS Licenses, Using A "Public Interest" Standard	45
18.	"Public Interest" Standard For License Applicants	
	48	
19.	Channel Spacing Requirements	
	50	
20.	Part-Time, Time-Sharing Stations	
	50	
21.	Emergency Alert System (EAS) Requirements	
	51	
22.	Unlicensed Broadcasting And Retroactive Amnesty	
	56	
23.	Local Content Requirements	
	56	
Possible Syndication Of Materials Developed By LPRS Stations:		
24.	Allow Syndication And/Or Donation To Other LPRS Stations	
	59	
25.	Allow Syndication To Other Institutions	
	59	

- 26. "Grandfathering" Of Existing Class D Stations
60
- 27. Special Case-By-Case Adjustments
60
- 28. Self-Regulation Organizations For LPRS Stations
61
- 29. Possible Conversion of TV Channel 6
66
- 30. Possible Implementation Of Digitalization
67
- 31. Development Of DIGITAL Low Power Radio
67
- 32. Possibility of Light Wave Broadcasting
68
- 33. Placement of "Non-Commercial" LPRS Stations On The FM Band 70

The Continuing Importance Of Constitutional Issues:

- 34. Ban On New Stations Transmitting At 100 Watts Or Less
71
- 35. Mandatory Auctions
72

THANK YOU, FCC
73

CONCLUSIONS
73

APPENDICES

APPENDIX A: SPECIAL BACKGROUND INFORMATION ON ON LP-1000s,
LP-100s AND LP-10s

APPENDIX B: POTENTIAL RESIDENTIAL AUDIENCES IN THE 50 LARGEST
U.S.A. CITIES

APPENDIX C: SIZING BROADCAST COVERAGE AREAS TO REACH A
"TARGET" LISTENER LEVEL

APPENDIX D: AMHERST'S PROPOSED TRI-TARGETING APPROACH

UNITED STATES OF AMERICA
Before The
FEDERAL COMMUNICATIONS COMMISSION
445 Twelfth Street S.W.
Washington, DC 20554

(In The Matter of
99-25

MM

(Creation of a Low Power
(Radio Service
9242

RM-9208
RM-

WRITTEN COMMENTS OF THE AMHERST ALLIANCE

Responding to the January 28, 1999 issuance
Of a Notice of Proposed Rulemaking in FCC Docket
No. MM 99-25(aka RM-9208 & RM-9242), THE AMHERST
ALLIANCE hereby submits Written Comments on the
Commission's Proposed Rule to establish a Low Power
Radio Service (LPRS).

THE AMHERST ALLIANCE is a citizens' group
which advocates greater diversity in media
ownership and media programming.
-2-

At the moment, we are focusing on the
licensing of Low Power Radio stations. We are also
supporting the FCC Staff's Recommendation for
divestiture of certain acquired radio stations.
In the future, we may address mandatory auctions
and/or other issues involving media regulation.

Amherst has Members across the nation, from
Florida to Alaska, including groups as well as

individuals. Less than a third of our Members are aspiring LPRS broadcasters. Nor does the National Coordinator of our group, Don Schellhardt, aspire to become an LPRS broadcaster.

Thus, most of our Members are NOT motivated by financial and/or vocational self-interest. They are motivated by the PUBLIC interest. However, whether our Members are aspiring broadcasters or "just" concerned citizens, we see ourselves as patriots. We believe free communications and a representative democracy are ultimately inseparable.

-3-

EXECUTIVE SUMMARY

Because our Written Comments address 35 different issues, while also including 4 Appendices of original research on the interaction of LPRS power ceiling Tiers with population density, the Comments are of necessity longer than optimal.

We plan to file separately, before June 1, ADDITIONAL Comments, which provide an OVERVIEW of our outlook. The Executive Summary is a "READER'S DIGEST version" of the details in THESE Comments.

In most cases, the Executive Summary provides ONLY "thumbnail sketches" of "bottom line" policy recommendations. For further details, and/or rationales, please refer to the general text.

1. LP-100 stations should be established and licensed, as proposed by the Commission.

2. LP-100 stations should be awarded a MODIFIED version of Primary Service Status. They should be: (a) protected against being "bumped" by other stations; BUT ALSO (b) prevented from "bumping" other stations themselves.

-4-

3. Where LP stations broadcast at 250 watts or more, they should enjoy FULL Primary Service Status. That is, they SHOULD be able to "bump" 250 watt translator stations. Smaller LP stations should also enjoy this status IF they form a CONSORTIUM, with other LPRS stations, which: (a) broadcasts common programming; and (b) serves adjoining geographical areas; with (c) a cumulative coverage area equal to 250 watts or more.

4. LP-10 stations should be established and licensed, as contemplated (but not actually proposed) by the Commission.

5. LP-10 stations, like LP-100 stations, should be awarded MODIFIED Primary Service Status. As with the LP-100 stations, this Status would protect LP-10 stations from being "bumped" but would not allow them to "bump" others.

6. LP-10 stations should be allowed access to both FM and AM frequencies. That is, the Commission should license both LP-10 AMs and LP-10 FMs. The LP-10 Tier will be particularly suitable for LP-10 stations if the Commission also adopts our request to allow part-time, time-sharing stations into the LP-10 Tier. (See Recommendation #20.)

7. LP-1000 stations should be restricted to areas with relatively low to moderate population density. Specifically, we favor restricting them to areas where their potential residential audience is 250,000 or less: that is, where the population density, in the Broadcast Coverage Area, averages 1,000 people per square mile or less. Alternative routes to the same goal might involve barring LP-1000s from the top 50 media markets OR restricting them to areas where less than 80% of the spectrum is being used by stations with (Full or Modified) Primary Service Status.

8. Our research, as reflected in Appendix C, suggests that the 3 Tiers of LP-10, LP-100 and LP-1000 may leave some "gaps" where one Tier does not provide a sufficiently large audience

-5-

while the next Tier provides an audience that is too large. These gaps could be addressed by creating Transitional Tiers -- such as 50 watts/100 feet and 250 watts/100 feet -- AND/OR by allowing the LP-10 and LP-100 height ceilings to rise as population density falls. (Appendix D explores these options.) Since zoning laws may impede higher towers, "transitional" wattage levels may be the easier solution.

9. In any case, we urge the Commission to adopt the general principle that Broadcast Coverage Areas should be allowed to increase as population density decreases. Without SOME inverse linkage between power levels and height limits on the one hand, and population density on the other, there will ALWAYS be an economic incentive for broadcasters to prefer large urban areas over other possible markets. The current policy of geographically uniform coverage areas only encourages the continuation of under-service to small cities and rural areas. ALSO, it continues the economic incentives for spectrum congestion in

large urban areas, thus making it more difficult for urban NEIGHBORHOOD stations to find room for their signals.

10. While there should be a place in the LPRS for commercial-free stations, it is imperative for the Commission to allow airing of commercials by those stations which choose to follow this path. The SURVIVAL of some LPRS stations may depend on their legal ability to air commercials.

11. The right to air commercials does NOT necessarily require a related right to turn a profit. THE AMHERST ALLIANCE is WILLING TO ACCEPT a "non-commercial" Low Power Radio Service IF: (a) "non-commercial" is defined to mean "non-profit"; and (b) this "non-commercial" status will protect LPRS stations from being included in mandatory license auctions.

12. LPRS station owners should be required to live within reasonable proximity of the communities they serve. The principal residence should preferably be within the Reception Contour, but in no event more than 25 miles from the station.

-6-

13. Existing broadcasters should NOT be allowed to invest in LPRS. Neither should subsidiaries or agents of ANY parent company.

14. LPRS should be "Citizen's Radio". The LPRS market should be limited to: (a) individuals; (b) the smallest of small businesses; and (c) the smallest of small non-profits. Size and income criteria should be used to assure that licenses are only awarded to, or acquired by, individuals -- OR very small institutions.

15. For institutions, the second and third groups, the FCC should use as a starting point the proposal offered by Don Schellhardt, Nick Leggett and Judith Fielder Leggett in the REVISED Version of their RM-9208 proposal. Schellhardt and the Leggetts would limit licenses to institutions with gross yearly income of \$100,000 or less AND net assets of \$200,000 or less. (Amherst would raise these figures to \$200,000 and \$500,000, respectively, AND exclude from assets the station itself, related equipment and equity in a PRINCIPAL residence.) LPRS stations could grow past these limits AFTER licensing, but not before. Schellhardt and the Leggetts would also combat OUTSIDE CONTROL by banning station reliance on any single institution for more than 20% of its financing, grants, sales or other forms of cash flow.

16. To prevent the creation of LPRS "chains", and/or the absorption of LPRS stations into "chains" in other industries, LPRS licenses should be strictly limited to one station per licensee, nationwide.

17. Contrary to a policy that the FCC is apparently contemplating, LPRS licenses SHOULD be made renewable after 7 years. The LPRS is NOT a "public access channel" on Cable TV: it is A FIELD OF OPPORTUNITY in which people and communities may invest, and risk, a major portion of their resources. The possibility of license renewal should not be denied them before they even have a chance to show what they can do!! Where the law permits, the FCC should tie license renewal primarily to a "public interest" standard: that is, a finding that the station

has indeed served the public during its years of operation.

-7-

18. Where the law permits, a "public interest" standard should ALSO be used in AWARDING the LPRS licenses in the first place. For litigation limitation AND the FCC's administrative convenience, we can accept a reasonable, comprehensive decision-making formula if it weights key values and honors diversity.
19. Where necessary to accommodate an LPRS station, the 2nd and 3rd adjacent channel spacing requirements should be eliminated.
20. Part-time, time-sharing stations should be allowed in the LP-10 Tier. Further, this policy should apply to both the FM and AM frequencies. (See Recommendation #6.) Such part-time operations may be the only route to initial market entry for many individuals with limited means and/or education. However, the time-sharing arrangements should be voluntary.
21. Despite the cost of \$1,000 to \$1,500 per station, the Emergency Alert System (EAS) should be mandatory for LP-1000 stations and LP-100 stations. The potential contribution of LPRS stations, in the case of disasters in general and large-scale disasters in particular, is simply too great to allow these stations to "lie fallow". However, financial assistance for EAS costs, from emergency preparedness agencies or similar institutions, would be most helpful to LPRS stations. Also, we reluctantly recommend that, for economic reasons, LP-10 stations should be exempted from EAS completely. At the same time, an examination of the American Radio Relay League system of "ham" radio volunteers might provide a model for ways in which LP-10 stations -- and other LPRS stations -- can prepare for emergency situations at little or no financial cost.
22. As contemplated by the Commission, unlicensed broadcasters should not be penalized for any unlicensed broadcasting which occurred on or before February 23, 1999: that is, earlier than 10 days after publication of the LPRS Proposed Rule in THE FEDERAL REGISTER.

-8-

23. We see a "one to a customer" licensing policy as the single best way to promote significant local programming content. Next in importance are requirements that LPRS stations must be owned by individuals or SMALL and LOCAL entities. IF any minimum requirements for local programming content are adopted, any such restrictions should be: (a) very modest in scope; and (b) carefully targeted toward the goal of preventing LPRS stations from becoming mere "fronts" for syndicated material and/or central feed sources. While we do NOT want to see LPRS stations reduced to translators, "satellators" OR corporate satellites, it is vital that local content requirements not be so onerous as to boost costs prohibitively, and/or hinder creativity, and/or violate the First Amendment.

24. Nothing in the LPRS regulations should prohibit or discourage LPRS stations from syndicating and/or donating original material to other LPRS stations. Syndication could become a major source of income for some LPRS stations, creating a powerful economic incentive for quality and creativity in an industry where most income growth currently flows from corporate acquisitions and the exclusion of competitors.
25. Nothing in the LPRS regulations should prohibit or discourage LPRS stations from syndicating original material to institutions other than other LPRS stations.
26. Existing Class D stations should be "grandfathered" and protected from possible displacement by new LPRS stations. Such Class D stations should also have the option of converting to an LPRS license, with priority over all competing applicants for their frequency AND Modified Primary Service Status (as discussed in Recommendations #2 and #5).
27. Where it can be demonstrated -- through a clear preponderance of the evidence -- that topography, man-made structures and/or other factors inhibit the signal range that could normally be expected, LPRS applicants

-9-

and/or licensees should be able to obtain from the FCC a compensatory adjustment of the normally applicable wattage and height limitations for their Tier. Any such adjustment should be limited to the degree needed to assure the appropriate Protected Contour for that particular Tier.

28. We do not object to the formation of self-regulation organizations by those who CHOOSE to be a part of them, BUT Membership in such organizations should not be made mandatory. IF the Commission DOES decide to make Membership mandatory for all LPRS stations, it should AT LEAST do the following: (a) allow MULTIPLE ORGANIZATIONS, so that LPR stations of one ideological stripe are not forced to be accountable to LPRS stations with a different ideological stripe; AND (b) prohibit self-regulation organizations from asserting any control whatsoever over a station's programming content and/or internal management.
29. We commend the Commission for raising the possibility of converting TV Channel 6 for use by LPRS stations. There may be great merit in this possibility -- but we advise the Commission not to pursue it in the immediate future, since its complexity might bog down the entire LPRS rulemaking. We recommend instead that the conversion of TV Channel 6 should be considered in the context of any Notice of Inquiry, and/or any Proposed Rule, which addresses possible Digitalization Implementation.
30. With respect to possible Digitalization Implementation, we incorporate by reference the December 22, 1998 and

February 12, 1999 filings by THE AMHERST ALLIANCE in Docket RM-9395. If the Commission does opt for Digitalization Implementation, we urge it to protect the newly licensed LPRS stations from possible displacement. To this end, we ask the Commission not to proceed with a Proposed Rule on Digitalization Implementation until AFTER it has decided the nature and parameters of the LPRS.

-10-

31. We apprise the Commission that aspiring LPRS broadcasters are now beginning to explore possible actions to develop DIGITAL Low Power Radio.
32. LPRS activists are also exploring LIGHT WAVE broadcasting.
33. "Non-commercial" LPRS stations should not be limited to one small corner of the FM Band.
34. We remind the Commission that The RM-9208 Petitioners, and others, have asserted that the current ban on stations transmitting at or below 100 watts is unconstitutional under the Fourteenth Amendment ("equal protection of the laws"). THE AMHERST ALLIANCE shares this assessment. In addition, The Committee for Democratic Communications of the National Lawyers' Guild has asserted that this ban violates the First Amendment ("freedom of speech"). ALL of these assertions have been placed On The Record through filings in Docket RM-9208.
35. We further remind the Commission that The RM-9208 Petitioners, and others, have asserted that mandatory auctions ALSO violate the Fourteenth Amendment. THE AMHERST ALLIANCE shares this assessment. As with Recommendation #32, this assertion is also On The Record through filings in Docket RM-9208.

POLICY RECOMMENDATIONS
OF THE AMHERST ALLIANCE

Set forth below, in greater detail, are Policy Recommendations of THE AMHERST ALLIANCE to the FCC.

-11-

These Recommendations were developed by our LPRS Task Force. Then they were reviewed and revised by both The Amherst Coordinators and the full Amherst Membership. Thus, these views are the

CONSENSUS of Amherst's HIGHLY DIVERSE Membership.

LP-100 Stations

1. LP-100 stations should indeed be established and licensed, as proposed by the FCC.

During the 1998 proceedings in Dockets RM-9208 and RM-9242, 100 watts was the "consensus" recommendation, within most of the Low Power Radio movement, as THE Basic Standard for LPRS stations. Some LPRS advocates wanted downward adjustments to cover compact urban neighborhoods, and/or upward adjustments to cover rural areas, but 100 watts was by far the most popular choice as the starting point for any subsequent adjustments. 100 watts was recommended as the "general rule" in filings by
-12-

Americans for Radio Diversity, the Committee for Democratic Communications and numerous individuals. 100 watts is also the second highest Tier (below 250 watts) in the Community Radio Coalition's Petition to the FCC.

FURTHER, 100 watts is compatible with the upper Tier of the REVISED RM-9208 proposal by Don Schellhardt, Nick Leggett and Judith Fielder Leggett. Tier Two of the revised proposal calls for licensing of Low Power stations with a 5-mile "transmission radius" (perhaps a forerunner of the Commission's proposed "Protected Contours"). Under

typical conditions, this is the transmission radius for a 100 watt station with a 200-foot tower (although other combinations of wattage and HAAT will also work).

There is a good reason for this consensus. 100 watts is popular because it is a workable power

-13-

level, in MOST urban environments, for the kind of station most LPRS advocates are seeking: a station that is SMALL enough to be oriented toward community concerns, "niche market" programming and originality, but still LARGE enough to be financially sustainable and the source of a decent standard of living for its owner(s) and staff.

This goal is a delicate balance -- and one that is NOT achieved easily. Most LPRS advocates (though not all) appear to agree that 100 watts strikes this balance best, MOST of the time.

If the Commission consults Appendices A, B, C and D, the Commission can see for itself the estimated impact of LP-100 stations in various areas. In MOST of the areas where MOST of our Americans live, 100 watts and 100 feet -- LP-100 -- is the choice that works best.

-14-

For the OTHER areas, OTHER Tiers are

needed. In fact, in Recommendation #8, we advocate AN ADDITIONAL TIER at 250 watts/100 feet, and perhaps another one at 50 watts/100 feet.

2. In addition, the FCC should establish Primary Service Status for LP-100 stations. In this regard, we will happily accept a MODIFIED Primary Service Status -- under which LP-100 stations would be protected from "bumping" but would not be able to "bump" others.

In advocating MODIFIED Primary Service Status, our goal is institutional survival, not empire-building. We know the FCC might not want 100 watt LPRS stations (let alone 10 watt LPRS stations!) to be "bumping" 250 watt translators. This WOULD NOT HAPPEN with a MODIFIED Primary Service Status.

3. We DO believe that FULL Primary Service Status should be available for LP stations which broadcast at 250 watts or more. We also recommend

-15-

FULL Primary Service Status for any CONSORTIUM of smaller LP stations that COLLECTIVELY: (a) broadcast common programming 24/7; (b) over adjoining geographical areas; that form (c) a total coverage area equal to 250 watts or more.

LP-10 Stations

4. LP-10 stations (ranging from 1 watt to 10 watts) should indeed be established and

licensed, as contemplated -- but not actually proposed -- by the Commission.

There are several good reasons to establish and license LP-10 stations. We can present most of these reasons by beginning with the phrase "LP-10 is the only ... "

(A) LP-10 is the only opportunity that some people, with limited means and/or education, will EVER have to start a career in radio.

-16-

(B) LP-10 is the only opportunity that some neighborhoods, local ethnic groups, local political groups and local artists will EVER have to create and hear -- over the air -- the news, views, culture and/or arts that matter profoundly to them.

(C) LP-10 is the only opportunity for hobbyists -- and others -- to "test the waters" for future operations that could have a larger scale and/or a less tentative presence. Experiments in the LP-10 Tier could provide station owners with the experience to decide whether to pursue careers in broadcasting, creation and syndication of original material, candidacies for public office and/or other goals linked to mass communication.

(D) LP-10 is the only Tier where it is easy to justify allowing a sizable number of part-time, time-sharing stations. Some potential station owners, including some community groups

wishing to serve a neighborhood, MUST broadcast
-17-

part-time or not at all. For them, the LP-10 Tier is essential -- BECAUSE part-time, time-sharing arrangements are essential.

(E) We expect that many LP-10 stations will lose money, or barely break even, which is why we also expect that many of them will need part-time hours of operation and/or some kind of subsidy from their listeners. In one Northwest village of 3,000 people, municipal taxes will fund an LP-10 station.

HOWEVER, we note that LP-10 stations COULD BE self-supporting, or even lucrative, in areas with EXTREMELY high population density. At a minimum, LP-10 stations (meaning stations with a Protected Contour of 2 miles) should be very viable in New York City (23,000 people per square mile), San Francisco (16,000 people per square mile) and Boston or Philadelphia (12,000 people per square mile). Other cities may be financially fertile as well. On this point, see Appendices A, B, C and D.
-18-

5. In addition, the FCC should establish Primary Service Status for LP-10 stations. As in Recommendation #2, we ask only for a MODIFIED Primary Service Status -- under which LP-10s would be shielded from possible "bumping" but would not be able to "bump" stations themselves.

LP-10 FM & LP-10 AM

6. We note that the Commission has not proposed opening any of the AM spectrum to LPRS stations. We ask the Commission to change this policy, at least in the case of LP-10 stations.

We anticipate that many of the potential LP-10 stations will be too new, and/or too strapped financially, to broadcast around the clock. The AM spectrum, while posing some difficulties for full-time stations, might be an ideal home for small, part-time stations.

We urge the FCC to make this option available.
-19-

Limiting P-1000 Stations To Low Population Density Areas

7. The LP-1000 stations proposed by the Commission should be limited to areas with low to moderate population density. We strongly recommend limiting LP-1000s to areas where their total potential audience (not counting commuters) will not exceed 250,000 people -- that is, to areas in which the population density is 1,000 people per square mile or less.

For additional information on this point, and related points, please see Recommendation #8 and Appendices A, B, C and D.

In particular, Appendix C shows that, even at 1,000 people per square mile, an LP-1000 station

exceeds the optimal potential audience size by 2.5 to 1. At 3,000 people per square mile (the City of Denver), the ratio is 6.0; at 6,000 (the City of

-20-

Minneapolis), 7.6; at 9,000 (the District of Columbia), 11.4 -- and at 23,000 (New York City), it is 27.8 times the optimal potential audience.

While we recognize that LP-1000s have higher capital and regulatory costs than LP-100s, and therefore require higher revenues than LP-100s, this range of ratios is ridiculous.

Possible Need for "Transitional" Tiers

8. We stress at the outset that the 3 Tiers proposed or contemplated by the Commission would be a major step forward from the STATUS QUO -- even if adopted "as is". With Modified Primary Service Status for LP-10s and LP-100s, as well as a ban on LP-1000s in major media markets, the power ceiling portion of the MM 99-25 proposal would be EXCELLENT.

-21-

Nevertheless, at the risk of "gilding the lily", we note there remains room for some "fine tuning". We refer the FCC to the patterns found in

Appendix C -- and, less clearly, in Appendix B.

The patterns we see suggest the emergence of "gaps" between the Tiers. These "gaps" are levels of population density at which one Tier produces potential audiences that are too small (threatening a station's financial stability) -- while the next Tier produces potential audiences that are too large (undercutting the economic incentives for a community and/or "niche market" focus, while also presenting the prospect of "unjust enrichment"). Even recognizing that LP-10s need less revenue than LP-100s, while LP-1000s need more, these gaps are larger than they should be.

(A) LP-10 TO LP-100. The first of these gaps emerges in Appendix C at population density levels

-22-

ranging from roughly 9,000 people per square mile (District of Columbia) to roughly 8,000 people per square mile (Buffalo). Assuming that 10,000 people are an optimal listenership for full-time LPRS stations -- AND making certain other assumptions about the rise in achievable audience share as population density falls -- Appendix C shows that the optimal Broadcast Coverage Area for a station in the District of Columbia is 22 square miles.

Taking 7,500 to 12,500 listeners as an optimal RANGE (with 10,000 listeners as mid-point), an optimal LPRS station in the District should be

covering between 16 and 28 square miles. However, an LP-10 station (meaning an LPRS station with a Protected Contour of 2 miles) covers only 13 square miles. By contrast, an LP-100 station, with a Protected Contour of 3.5 miles, covers 38 square miles: 35% more than the UPPER end of the optimal range -- and 70% more than the mid-point.

-23-

Different numbers, but a similar pattern, can be seen at the population density level of 8,000 people per square mile: the approximate conditions in the City of Buffalo. At this population density level, according to Appendix C, the optimal Broadcast Coverage Area is 25 square miles (or, rather, a RANGE of roughly 19 square miles to roughly 31 square miles). Again, however, the choices are LP-10 (13 square miles, or 48% below the mid-point of the optimal range) or LP-100 (38 square miles, or 52% above the mid-point).

(B) LP-100 TO LP-1000. The second of the gaps -- between the LP-100 and LP-1000 Tiers -- is much larger. It becomes visible at roughly 1,500 people per square mile (the approximate population density for Virginia Beach) and continues down to 200 people per square mile (the approximate average for the State of Illinois).

At the Virginia Beach population density of 1,500 people per square mile, the optimal coverage mid-point is 74 square miles. However, LP-100s cover only 38 square miles (49% below the optimal mid-point) while LP-1000s cover 250 square miles (238% above the optimal mid-point).

Slowly, as population density declines, the optimal coverage mid-point drifts toward LP-1000. By the time we reach the population density level of 300 people per square mile (the approximate average for Western Massachusetts, from Amherst to the New York line), the optimal coverage mid-point is halfway: 145 square miles, compared to 38 for LP-100s and 250 for LP-1000s. Then the drift accelerates, putting the mid-point at 206 square miles where density is 200 people per square mile.

LP-1000, with its Broadcast Coverage Area of 250 square miles, is optimally sized for the narrow window between 200 people per square mile and 150

-25-
people per square mile (with the latter being the approximate average for rural Maryland).

At 100 people per square mile, NONE of the Tiers can provide optimal coverage. LP-1000s, covering 250 square miles, come closest -- but the optimal coverage mid-point is 400 square miles.

On The Other Hand, at THIS level of population density, traditional Class A licenses are likely to be much easier to come by.

(C) CAUTIONARY NOTE. We add that the Appendix C calculations are based upon a few key assumptions -- regarding which reasonable people may differ. These assumptions have been reviewed by Amherst Members with broadcasting experience, being found reasonable by several reviewers and unreasonable by one. Because these assumptions are spelled out clearly in the Appendix, it should be easy for the FCC to vary the assumptions and note the results.

-26-

We suspect, however, that changing these assumptions, UNLESS the changes are radical, will mostly alter the population density levels at which gaps appear, rather than actually closing the gaps.

(D) POSSIBLE CAUSE OF THE GAPS. We speculate that these distortions occur because the FCC's proposed wattage levels move upward while the HAAT limits are held constant. Thus, a station cannot "move" within a Tier by adjusting its tower height: it must move to another Tier entirely if it needs more coverage.

For example, a potential LPRS station that would not be sustainable at 100 watts/100 feet must jump all the way to 1000 watts/100 feet: a level at which the Broadcast Coverage Area may be too large to motivate innovative and/or "niche market" programming. Simply allowing an LP-100 station to

add 100 feet to its tower might produce a more optimal audience. ALTERNATIVELY, an optimal
-27-

audience might be produced by keeping the tower at 100 feet but raising the power level to 250 watts.

In short, the "niches" in the Commission's Tier structure are too far apart.

(E) POSSIBLE SOLUTIONS. IF the Commission is interested in "fine tuning" its generally excellent structure of Tiers, it can fill the gaps by either letting HAAT limits vary with population density -- OR creating WATTAGE-BASED Transitional Tiers.

(1) Regarding THE FIRST GAP, between LP-10 (13 square miles) and LP-100 (38 square miles), LP-10s could rise to 150 feet (20 square miles) at 9,000 people per square mile. However, zoning may prevent this, since the "Gap" occurs in crowded areas.

A BETTER OPTION is a Transitional Tier at 50 watts and 100 feet (26 square miles) for the same population density zone.

(2) Regarding THE SECOND GAP, between LP-100 (38 square miles) and LP-1000 (250 square miles), the Commission could allow LP-100 towers to rise to 200 feet (79 square miles) in areas with 1,500 people per square mile or less.
-28-

OR the FCC could issue licenses for 250 watts and 100 feet (61 square miles) at 1,500 people per square mile or less.

At even lower density levels, the FCC could license 250 watts and 200 feet (129 square miles) AND/OR 100 watts and 328 feet (125 square miles).

Thus, the gaps could be filled by creating more ELEVATION choices OR more WATTAGE choices. However, zoning laws might make height increases

difficult to achieve in small town and suburban areas ("The Second Gap") -- and IMPOSSIBLE to achieve in crowded urban areas ("The First Gap").

EITHER approach would make a good proposal even better, but WATTAGE-BASED Transitional Tiers would do MORE good -- because they would avoid the risk of local zoning controversies.

On another point, we note our assessment that "The Second Gap" is the more serious problem. If only one "Gap" is addressed, "The Second Gap" (between LP-100 and LP-1000) merits priority.
-29-

(F) AMHERST'S PROPOSAL IN APPENDIX D. Appendix C is based on ONE listenership "target" for all 3 Tiers. In Appendix D, Amherst proposes separate targets for EACH of 3 different kinds of stations.

Rural Areas, Small Cities and "Urban Islands"

9. As a GENERAL principle, we urge the FCC to calibrate its wattage and/or height ceilings so that they rise as population density falls. This policy will help the two extremes of rural areas, small towns and small cities on the one hand -- plus "urban island" neighborhoods, lost in a sea of metropolitan area demographics, on the other.

With respect to currently under-served areas, geographically sensitive wattage and height limits -- coupled with the natural attraction of higher audience shares in less crowded markets -- may

reduce or reverse the market's current "tilt"
toward siting stations in large metropolitan areas.
-30-

It is ironic, but fitting, that stations hoping to serve URBAN neighborhoods will benefit from an increase of radio industry interest in smaller cities, small towns and rural areas. If the current economic incentives to serve large metropolitan areas are neutralized -- or even reversed -- through the judicious structuring of LPRS power ceilings, there will be less competition for LPRS licenses WITHIN the larger urban areas.

Neighborhood-oriented urban stations, which CANNOT relocate unless their neighborhoods do, will HAVE to stay where they are. However, since SOME stations CAN be induced to choose less populated areas, those stations which remain in larger cities will face less competition for licenses.

The number of urban neighborhood stations could be GREATLY increased IF the FCC: (a) creates an LP-10 Tier that (b) offers both AM and FM licenses AND (c) is open to part-time stations.
-31-

Airing Of Commercials By LPRS Stations

10. We consider it imperative that the Commission allow LPRS stations to air commercials.

Without this ability:

(A) Many LPRS stations will face much greater difficulty in supporting themselves financially.

(B) Many small businesses will be denied the benefit of access to radio advertising they can actually afford.

(C) In some cases, neighborhoods served by these businesses will also suffer -- or, more precisely, will continue to suffer. Dollars that might have been spent at small, local businesses will continue to be spent instead at chain restaurants, chain department stores, "cookie cutter" shopping malls and other "absentee owner" operations. If the FCC does not allow LPRS stations to air commercials, the FCC will be turning its back on a precious opportunity to keep more dollars within the communities where they were earned.

-32-

(D) Even the larger businesses, which can afford to advertise on conventional stations, will lose the benefit of possible cuts in their advertising rates.

IF commercial-airing LPRS stations are licensed, thereby bringing new competitive pressures to bear for the first time, they could cause a considerable drop in conventional station advertising rates.

(E) In at least some cases, consumers will lose the benefit of prices for products and services that would otherwise drop due to lower advertising costs.

Having said all this:

11. We are willing to accept a "non-commercial" LPRS: (a) IF this status exempts LPRS stations from mandatory auctions; and (b) IF the regulatory term "non-commercial" is clearly defined to mean "non-profit" rather than "commercial-free".

Auctions are, of course, "the elephant in the

living room". If they did not exist, with
"non-commercial" operation as a legally viable

-33-

way to become exempt from them, we might be asking
for an unfettered ability to make profits. Under
the circumstances, however, most of our Members are
willing to settle for the ability to cover their
reasonable costs (including the payment of decent
salaries).

In other words, most of the aspiring LPRS
broadcasters in THE AMHERST ALLIANCE are willing to
accept "non-profit" status -- no stocks, no
dividends -- IF they can avoid auctions and STILL
air the commercials they believe they need.

It is no exaggeration to say that some of
our aspiring LPRS broadcasters view the right to
air commercials as a survival issue.

A total ban on commercials would be A Death
Knell for their dreams.

At the same time, most of the aspiring LPRS
broadcasters are simply seeking to pursue a

-34-

vocation they love while still maintaining a decent
-- not lavish, but decent!! -- standard of
living for themselves, their families and their
employees. Most of them could make more money,
and in some cases considerably more money, by

doing something else.

However, they want to do broadcasting: LPRS broadcasting. They want to do it for their communities, they want to do it for voices that are now excluded from the airwaves -- and they want to do it for their own expression and fulfillment.

The aspiring LPRS broadcasters within Amherst remind Don Schellhardt, their National Coordinator, of farmers he has met.

A Nebraska farmer once told him this:

"Farming isn't a business. Farming is a way of life. You don't farm so you can make money.

You make money so you can keep on farming."

-35-

Most of the aspiring broadcasters in Amherst could relate to this statement.

That is why the aspiring Amherst broadcasters are willing to limit their advertising revenues to the level needed to cover their REASONABLE station operation expenses -- including a decent salary for themselves and members of their staff.

Please remember that even non-profit stations need sources of cash flow. Given this universal need, WHY NOT allow commercials?

Proponents of a totally commercial-free LPRS assert that dependence on corporate advertising will jeopardize the impartiality of an LPRS

station, but what makes them think it is morally superior to rely on foundations or government agencies or political groups for support? Do not THESE sources of cash flow have THEIR OWN agendas?

-36-

Are ANY of these groups REALLY less of a danger to "impartiality" than "the paying customers"?

Indeed, reliance on a foundation or a political group may often mean LESS independence for a station than reliance on advertising. After all, with some exceptions, a business just wants radio ads that will bring in customers. A foundation or a political group typically wants to change the way the world is run.

Given this, which group is REALLY more likely to interfere with a station's programming?

As for consumers, most of them are not natural fans of commercials. However, commercials would still probably beat telethons, and other fund raising appeals, if a popularity contest were held.

ALSO, as we noted earlier, competition from commercial-airing LPRS stations -- IF the Commission allows them!! -- will exert downward pressure on conventional station advertising rates.

-37-

To the extent these advertising rates drop, many companies will enjoy reduced "overhead". In a

competitive economy, at least SOME of these savings are likely to reach consumers in the form of lower prices for products and services.

Local Ownership Requirements

12. LOCAL OWNERSHIP REQUIREMENTS should be put in place for LPRS stations.

We urge the Commission to require that any LPRS station owner(s) must have a PRINCIPAL residence within reasonable proximity of the station -- PREFERABLY within the Reception Contour, but in no event more than 25 miles away.

We stress that local residency requirements MUST BE SUPPLEMENTED by restrictions on the size, income and outside control of an LPRS station. SMALL and local is good: LARGE and local is not.

-38-

Investments In LPRS By Existing Licensed Broadcasters

13. As contemplated by the Commission, EXISTING licensed broadcasters should be prevented from acquiring, OR otherwise investing in, LPRS stations. If new LPRS stations need "outside expertise", they can find it in abundance among those the existing broadcasters have laid off.

Restrictions On Size, Income and Outside Control

14. IN ADDITION to prohibiting possible

investments in LPRS stations by existing licensed
broadcasters, the Commission should ALSO establish
SIZE, INCOME AND OUTSIDE CONTROL RESTRICTIONS for
those who seek LPRS licenses.

That is: Large institutions in general --
NOT just existing licensed broadcasters -- should
be barred by law from the Low Power Radio market.

-39-

This policy should apply to large NON-PROFIT
entities as firmly as it applies to corporations.
Low Power Radio should be a frontier -- where
individuals and small institutions can "run free".
It is from EXACTLY such frontiers that much of
America's innovation and inspiration has
traditionally come.

REGARDLESS of whether profit-making individuals
or institutions are allowed to own and/or operate
LPRS stations, only SMALL institutions, or private
individuals, should be allowed to acquire LPRS
licenses. The FCC should require that licenses may
ONLY be granted to -- or acquired by: (a)
private individuals; OR (b) organizations falling
below specific thresholds for net income AND net
assets. The FCC should ALSO limit the degree to
which any LPRS stations may rely upon ANY single
institution for loans, grants, advertising revenue
or other forms of cash flow.

-40-

Restrictions Proposed By The RM-9208 Petitioners

15. As the starting point for such a policy, we urge the Commission to consider the restrictions on size, income and outside control that were proposed by Don Schellhardt, Nick Leggett and Judith Fielder Leggett -- the RM-9208 Petitioners -- in their REVISED version of the RM-9208 proposal.

We do NOT regard this approach as flawless. There may be better ways to achieve the same goals. However, this is the best approach we have seen SO FAR -- and we ask the FCC to view it as an ILLUSTRATION of what must be done.

To this end, we incorporate by reference the May 7, 1998 Reply Comments of The RM-9208 Petitioners in FCC Docket No. RM-9208. The size, income and outside control restrictions are discussed on Page 75 and on pages 62 through 64.

-41-

(A) On page 63, the Petitioners assert "any size, control and/or local ownership restrictions should be IDENTICAL for both businesses and non-profits. Large is large and small is small, whether the institution involved lives on fund raising and grants or advertising and profits."

(B) On page 63, The Petitioners also say:

We suggest limiting institutional entry to organizations, whether profit-making or not, which have:

\$200,000 or less in GROSS annual revenues
AND
\$100,000 or less in NET assets

We recommend measuring gross income, rather than net income, in order to circumvent -- or at least discourage -- possible games with "creative accounting" and/or the Tax Code.

AMHERST ADDS that the income and asset limits may be too low. \$200,000 and \$500,000 may be more realistic, AT LEAST in high cost areas.

-42-

Also, AMHERST WOULD EXCLUDE FROM NET ASSETS the station itself, the related equipment AND/OR equity in an owner-occupied PRINCIPAL residence.

(C) On page 64, the RM-9208 Petitioners urge restrictions to block DIRECT OR INDIRECT CONTROL OF LPRS STATIONS by outsiders. An "ineligible source" is ANY institution (corporate OR non-profit) that would not qualify, under the size and income criteria in (B), to acquire a license directly.

Otherwise eligible microstations should be barred IF they are subject to excessive influence or control by those too large to apply for licenses themselves. Licenses should not be granted to, AND purchases of licensed microstations should not be allowed for, institutions meeting these criteria:

More than 10% of the stock, or other instrument of control, is held by an ineligible source
OR

More than 20% of GROSS REVENUE is received
in any form (grants, government funding,
sales, whatever) from an ineligible source
OR

-43-

More than 20% of financing is received from
an ineligible source (adjustable to 40% in
the case of a bank with absolutely no direct
or indirect financial interest, of any kind,
in any form of broadcasting)
OR
Any combination of the above

AMHERST ADDS that, if the FCC is troubled by
the possible administrative burden of determining
whether a source is "ineligible", the FCC can limit
determinations of "ineligibility" to cases which
involve applying for licenses, renewing licenses OR
acquisition of an LPRS station's existing license.

For purposes of restricting a station's
reliance on "ineligible" institutions for various
forms of cash flow, the same basic results can be
achieved by simply prohibiting excessive reliance
on ANY single institution, whether small or not.

Where determinations of "ineligibility" MUST be
made, we agree with this recommendation on page 64:

-44-

In determining what constitutes an
"ineligible source", we ask the Commission
to trace the ownership and primary influence
to "the ultimate point of control" -- even
if this means following a trail of stock
through 8 dummy corporations or looking
beyond who owns the stock to who CONTROLS
the stock.

AMHERST NOTES that these restrictions would apply ONLY to INSTITUTIONS (whether corporate OR non-profit) and NOT to individuals. AMHERST ADDS that the revenue and assets criteria should apply ONLY "at the starting gate". Once a station has a license, it should be able to "grow past the caps".

Prohibition Of Multiple LPRS Station Ownership

16. Only one LPRS station should be licensed per owner (with FCC monitoring and enforcement, as mentioned above, to block "backdoor ownership" schemes). This should apply NATIONWIDE.

-45-

Licenses should be awarded to PARENT COMPANIES (and non-profit equivalents) ONLY. INDIVIDUAL licensees should be PRINCIPALS. No one should be able to gain multiple licenses by acting through subsidiaries, affiliates, franchisees or agents. Media giants (including NPR), evangelical networks, product-promoting retailers and others may try.

Renewability Of LPRS Licenses, Using A "Public Interest" Standard

17. LPRS licenses should be RENEWABLE after their initial terms expire.

The LPRS is NOT Public Access Cable. Some people want to MAKE A LIVING in Low Power Radio.

Others want to serve a cause, and/or a community, that gives meaning to their lives. Many, in BOTH groups, will invest much of their life savings.

Please do not force them to build their hopes on sand.

-46-

Please leave them a fighting chance to renew their licenses.

In the case of NON-COMMERCIAL licenses, where the use of auctions is NOT required, the Commission should approve or deny LPRS license renewals primarily on the old-fashioned basis of whether or not a particular station has been serving "the public interest" effectively.

We are aware that TOTALLY CASE-SPECIFIC determinations, based on evaluating the level of service to "the public interest", can be very time-consuming AND can also be breeding grounds for lawsuits. For the sake of litigation limitation, AND ALSO for the Commission's administrative convenience, Amherst can accept a reasonable and comprehensive DECISION-MAKING FORMULA that weights key values and honors diversity.

Regarding the latter point, suppose there are 2 "slots" for LP-100s in a suburb. If the first

-47-

"slot" goes to a commercial-airing station, a commercial-free station should have extra points

in competing for the next "slot", OR vice versa.
Of course, OTHER forms of diversity must ALSO be considered in this process: religious versus secular, political versus entertainment and so on.

We realize that the contemplated policy on renewability MAY be motivated by the prospect that Digitalization could PERHAPS displace some LPRS stations from their frequencies. While we hope such displacement can be minimized, or avoided entirely, most aspiring LPRS broadcasters would rather cope with the possibility of frequency relocation, AND/OR become digital themselves, than see their licenses limited to a fixed term.

IF renewability is too much of a commitment for the FCC at this time, the FCC should at least:

- (a) keep the decision on renewability OPEN for now;
- (b) provide CLEAR guidance to LPRS station owners

-48-

regarding the kind of broadly defined results, from individual LPRS stations AND from the LPRS as a whole, that the Commission is seeking; and (c) decide about renewability AFTER the LPRS stations have had time to gain a collective "track record" (perhaps on a "date certain" 3 to 5 years away).

"Public Interest" Standard
For License Applicants

18. In the discussion directly above, we assert that license renewal should be based on a

"public interest" standard wherever the law allows.

We urge the Commission to adopt the same policy with respect to the initial LPRS license APPLICATIONS. As in the case of LPRS license RENEWAL, discussed in Recommendation #17, we COULD accept a decision-making FORMULA if it weights key values and honors diversity.

-49-

Frankly, we wish it were legally possible to utilize a "public interest" standard for ALL radio station applications and ALL radio station renewals. This standard is far more equitable -- and, from the standpoint of the larger society, far more EFFICIENT -- than auctions, lotteries or "first come, first served".

We recognize that Congress and the President, through legislation adopted in 1996, have "tied the Commission's hands" to a major extent. We expect to see these statutory directives repealed, and/or struck down as unconstitutional by a court, within the next 5 to 10 years.

In the meantime, the Commission can practice "damage control". Where the law DOES allow a deviation from mandatory auctions, we urge the Commission to make the most of its discretion.

Channel Spacing Requirements

19. Where necessary to accommodate an LPRS station, the 3rd and 2nd adjacent channel spacing requirements should be eliminated. We see no inherent interference problems AND we note this action will help to make the LPRS more compatible with IBOC Digitalization (if the FCC adopts it).

The FCC should be aware (and probably is) that efforts are now being made, within the Low Power Radio community, to assemble funding and expertise for one or more technical studies in this area.

Part-Time, Time-Sharing Stations

20. The Commission should permit licensing of part-time LP-10 stations which voluntarily time-share a frequency. This policy will greatly facilitate access to LP-10 licenses for newcomers to radio and/or others with limited resources.

Emergency Alert System (EAS) Requirements

21. We recommend strongly that LPRS stations should be required to participate, with appropriate equipment, in the Emergency Alert System (EAS).

We reluctantly recommend exempting the LP-10 Tier, where capital costs must be held to the lowest possible level that is reasonable. However,

we favor including LP-1000s and LP-100s in the EAS.

We take this stand because we believe in the value of the Emergency Alert System (EAS) and the value of emergency preparedness in general. We believe LPRS stations are able to make a special contribution during natural OR man-made disasters.

Being compact, mobile and sometimes linked to private generators, many of these LPRS stations might be able to "ride out" a large scale disaster, or at least return to the air with relative speed.

-52-

Conventional stations are more frequently fed by vulnerable power lines, with limited generator backup, and have equipment which cannot be moved as easily to locations of relative safety.

The comparatively "survivable" LPRS stations would certainly be valuable in relatively "routine" emergencies, such as hurricanes and tornadoes. Indeed, as meteorologists develop an increasing ability to generate "pinpoint" weather forecasts and reports, almost down to a block-by-block level, stations that focus on a specific community could become very effective conduits for carrying such highly localized information to the people who need it most. Residents of such areas could "get in the habit" of tuning in a local LPRS station -- for news about their specific

community -- whenever weather conditions, or other conditions, seem disruptive or threatening.

-53-

However, the GREATEST contribution of LPRS stations might be made during and after disasters that dwarf hurricanes and tornadoes in the damage that they do. Planning for such "super-disasters" has become increasingly imperative for prudent government and corporate officials.

For example, the geological history of Southern California earthquakes suggests that the Los Angeles area is 30 years overdue for an earthquake of 8.0 or higher on the Richter scale. This is more than 10 times the power of the 6.9 Loma Prieto quake, which destroyed some neighborhoods in San Francisco and caused the collapse of an overpass in Oakland. (The Richter scale numbers are orders of magnitude, meaning that a quake rated 7 has 10 times the punch of a quake rated 6 -- and a quake rated 8 has 10 times the punch of a quake rated 7.)

-54-

At the human end of disaster scenarios, it is becoming progressively more probable that some terrorist groups will acquire the ability to detonate nuclear weapons in American cities (if

they have not acquired it already). One career arms control inspector, returning to America from duty in Iraq, recently estimated the odds of a terrorist nuclear explosion in the United States at 50-50 over the next 10 years.

Since a massive earthquake or a THERMONuclear explosion could disrupt infrastructure -- and trigger life-threatening situations -- over tens of thousands of square miles, radio stations that can "unplug from the infrastructure", and/or change locations quickly, might be "worth their weight in gold" during such "super-disasters".

In light of these concerns, we would happily extend EAS requirements down to LP-1 IF the costs (\$1,000 to \$1,500) were not such a huge obstacle

-55-

for the aspiring owners of small LPRS stations. Indeed, some of our Members believe that the costs are too high to justify the coverage of even LP-100 stations (although theirs is a minority opinion).

IF the costs of EAS were subsidized by grants and/or low-interest loans -- provided by emergency preparedness agencies and/or foundations and/or similar institutions -- the use of EAS would be embraced throughout the Amherst community.

In the meantime, for struggling stations, perhaps others can illuminate less expensive paths than EAS. For decades, the American Radio Relay League (ARRL) has worked with the FCC, and its own

Membership, to turn "ham" radio operators into heroes and heroines during countless disasters. Perhaps the "hams" can teach us how ALL of the LPRS stations can be integrated, AFFORDABLY, into the nation's emergency preparedness network.

-56-

Unlicensed Broadcasting And Retroactive Amnesty

22. The Commission should proceed with its contemplated policy toward unlicensed broadcasting and retroactive amnesty. That is, unlicensed broadcasters should NOT be penalized if they stopped broadcasting when ordered to do so AND/OR if they stopped broadcasting on or before February 22, 1999 (10 days from the date the FCC's Proposed Rule was published in THE FEDERAL REGISTER).

Amherst will not defend or encourage any unlicensed broadcasts that occur after this date.

Local Content Requirements

23. Proposals by some for local content requirements pose an agonizing tradeoff for most Amherst Members. On One Hand, we have a powerful and instinctive aversion to ANYTHING which impedes the free speech of LPRS stations AND/OR intrudes

-57-

upon their operational autonomy (for reasons other

than normal spectrum management). On The Other Hand, we know that -- without safeguards -- many LPRS stations could be used as "fronts" for larger corporations (or large non-profits). LPRS stations could be turned into translators, satellators OR satellites (of the corporate type).

Amherst believes that the BEST way to prevent this is through limits on LPRS license eligibility.

In descending order of priority (that is, the MOST IMPORTANT proposal first), we rank possible licensing restrictions as follows:

1. Limit LPRS licenses to "one to a customer". For corporations, this should mean PARENT COMPANIES (or non-profit equivalents) ONLY. For individuals, this should mean PRINCIPALS ONLY.
2. Set size, income and outside control restrictions, as discussed in Recommendations #14 and #15.
3. Set local residency requirements, limiting LPRS licenses to station owners living in

-58-

or near the station -- PREFERABLY within the Reception Contour, but in no event more than 25 miles away.

IF these recommendations (especially "one to a customer") are rejected by the Commission, OR if the Commission determines that they do not provide adequate safeguards, THEN local programming content requirements should be considered.

IF local content requirements are considered at all by the FCC, these requirements should be:

- (a) very modest in scope; and (b) narrowly targeted

to prevent stations from becoming mere "fronts" for the airing of material produced by larger entities.

For example, use of ALL central source feeds, COMBINED, could be "capped" at 49% of programming AND/OR use of any SINGLE central source feed could be "capped" at 25% of programming.

We favor such a MODEST AND TARGETED approach because "local content requirements" will surely
-59-

translate into government-mandated expenditures of time and money by LPRS licensees. IF the mandate for expenditures becomes TOO demanding, then LPRS applicants with fairly humble resources may be effectively precluded from competing for licenses.

Possible Syndication Of Materials Developed By LPRS Stations

24. Any local content requirements should NOT apply to any materials which LPRS stations develop and DONATE AND/OR SYNDICATE TO EACH OTHER.

Syndication of original material could become a major source of influence and/or income for LPRS stations. It could also be a way to the mainstream for innovative, but potentially popular, material.

25. As a logical corollary to allowing sales, donations or exchanges among LPRS stations, nothing in the new regulations should prevent LPRS stations from syndicating material to LARGER institutions.

"Grandfathering"
Of Existing Class D Stations

26. We support keeping all "grandfathered" Class D stations on the air. We also support giving each of these stations the option of converting its current license to an LPRS license, with priority over all competing applications for the use of their frequency.

During 20 years of growing domination of radio by Big Business and Big Government, these "grandfathered" stations have remained beacons of hope, opportunity and independent thought. America would be foolish indeed to toss them aside now.

Special Case-By-Case Adjustments

27. In cases where the normal signal range is shown to be substantially diminished by topography, man-made structures and/or other factors beyond a licensee's control, such licensees (and/or license

-61-

applicants) should be able to obtain an adjustment of the wattage and elevation limits that normally apply to stations in their Tier.

Any such adjustments should be limited to the facts of each particular case AND based upon a clear preponderance of the evidence. IN ADDITION, any such adjustments should not exceed the level needed to bring a station to parity with the

Protected Contour available to other stations in the same Low Power Tier.

Possibility of Self-Regulation Organizations For LPRS Stations

28. It is our understanding that certain other groups and/or individuals in the Low Power Radio movement may propose establishment of one or more self-regulation organizations for LPRS stations. Under this concept, the FCC would allow stations to join such a self-regulation

-62-

organization. Thereafter, in some areas, the station would be regulated by its peers.

To their credit, the advocates of this concept envision a totally VOLUNTARY arrangement.

So long as the arrangement REMAINS totally voluntary, we do not object to it. Still, we are concerned that the FCC might MANDATE participation for the sake of administrative convenience.

Should that be the choice, most of us in Amherst would choose NO self-regulation over MANDATORY self-regulation.

We reserve the right to change our minds on this matter in future years, as our broadcaster Members gain more experience with the actual working environment of an LPRS industry. For now, however, there are TWO MAJOR REASONS why most Amherst broadcasters would prefer to avoid being

part of a self-regulation organization.

In DESCENDING order of priority:

-63-

(A) The aspiring broadcasters in our ranks tend to be entrepreneurial and individualistic. They recognize the need for regulation of radio, particularly on matters of spectrum allocation, but within the limits of the public interest they seek the maximum reasonable operating autonomy.

Future Amherst broadcasters fear that self-regulation groups could easily grow an ADDITIONAL layer of regulation instead of an ALTERNATIVE layer of regulation. At least for now, they want ONE regulator -- and they want it to be the FCC.

(B) The Low Power Radio movement encompasses diverse ideological AND operational territory. On the Left, we have "anti-profit, all-volunteer collectives". On the Right, we have people seeking Class A licenses under another name, presumably to avoid mandatory auctions -- or at least narrow the number of eligible bidders.

-64-

THE AMHERST ALLIANCE straddles the Center of the movement.

Like our peers on the Left, we want to keep LPRS stations "community-sized". We see no need for, and in fact we see great harm from, allowing

LP-1000 stations into major urban areas. Also, we ADAMANTLY oppose allowing any LP-1000 to "bump" any LP-100 or any LP-10, anywhere.

Like our peers on the Right, we consider it imperative to allow the airing of commercials (although, as noted earlier, we are willing to air them as "non-profits" if necessary).

We feel we hold a "middle ground" where the needs of the larger society AND the ambitions of individuals can BOTH be served. We like it here.

Unfortunately, putting ALL of the LPRS broadcasters into a SINGLE organization might involve too much mixing of oil and water.

-65-

Speaking bluntly, we believe there is room for -- and perhaps even a need for -- having SOME "anti-profit, all-volunteer radio collectives" on the air. However, with all due respect to our comrades, we do NOT want to see Marxists overseeing the programming content of entrepreneurs.

Nor do we wish to be yoked together with LP-1000 station owners who would like to have our Amherst stations for dinner.

Looking Left AND Right, we prefer the Center.

IN LIGHT OF THESE CONCERNS, we have the following requests to the Commission:

- (i) Please do not establish self-regulation regulation organizations unless Membership

in them is COMPLETELY voluntary.

- (ii) If Membership IS made mandatory, in spite of our recommendation to the contrary, please allow us a CHOICE by chartering MULTIPLE organizations. One possible dividing line would be "commercial-airing stations" versus "commercial-free", perhaps with LP-1000s in a world of their own.

-66-

- (iii) In any case, please do not give ANY such organization control over programming content OR internal station management.

Possible Conversion Of TV Channel 6

29. The FCC was wise to raise this option.

However, because this is a NEW AND COMPLEX possibility, we do not advocate it at this time.

Our biggest reservation about IMMEDIATE action is the concern that inclusion of Channel 6 conversion could slow down the entire LPRS rulemaking.

However, we agree with the Commission that there may be merit in the concept. We advise the FCC to consider the conversion of TV Channel 6 as part of any Proposed Rule, and/or Notice of Inquiry, regarding Digitalization Implementation. This is one of several ways through which the FCC could avoid -- or at least reduce the scope of -- station elimination via Digitalization.

-67-

Possible Implementation Of Digitalization

30. Whether the FCC ultimately chooses IBOC Digitalization, Eureka-147 Digitalization or NO Digitalization at all, the FCC should be careful not to displace the LPRS stations it has just put on the air. As ONE precaution, the FCC should not issue a PROPOSED rule to implement Digitalization until it knows the details of a FINAL Rule on LPRS.

We incorporate, by reference, our December 22, 1998 Written Comments and our February 12, 1999 Corrective Supplemental Comments in Docket RM-9395.

Development of
DIGITAL Low Power Radio

31. We know that, during the first decade of the 21st century, Digitalization may begin to render analog stations obsolete - or even extinct.

We hope that the Commission will adopt relaxed
-68-

channel spacing requirements, and consider the possible conversion of TV Channel 6, as ways to reduce the degree of disruption for LPRS stations.

Nevertheless, we also realize there are things WE must do as well. One of them is development of DIGITAL Low Power Radio.

We hereby put the Commission on notice that the Low Power Radio community in general, and THE AMHERST ALLIANCE in particular, are committed to pursuing this option. We do not know how far we can progress, without outside help, but we have

STARTED the journey toward this goal.

The Possibility of
Light Wave Broadcasting

32. Some Amherst activists have recently begun to explore the potential of LIGHT WAVE BROADCASTING, on infrared frequencies, as a Low Power Radio technology for the 21st century.

-69-

Among other forums, light wave broadcasting has been discussed in QST: the ARRL magazine.

We refer the FCC to "The Micrometer Bands" by Emil Pocock, W3EP, in the May 1999 department, "The World Above 50 MHz". (See pages 78 and 79.)

We are not "sold" on light wave broadcasting, but we ARE intrigued.

Of course, many potential obstacles can be identified. They include conducting Research, Development and Demonstration (RD&D); assuring affordability; perhaps developing more portable equipment; and addressing the need (at least at present) for special receiving equipment.

On The Other Hand, the frequencies involved are "wide open" and unregulated: a true frontier!!

Further, at least with respect to the INITIAL RD&D projects, RD&D costs seem to be within the reach of everyday Americans who band together (for example, in a class or a club on a college campus).

-70-

In any event, before THIS century is out, we wish to notify the FCC that we have an interest in light wave broadcasting. To the extent we can, we claim "first dibs" on the 10 micrometers wavelength (aka the 30 Terahertz frequency).

Eric Pocock's QST article suggests that infrared communications, at a wavelength of about 10 micrometers, may be quite effective because there is little absorption of the signal by water vapor and carbon monoxide in the atmosphere. At this wavelength, the signal loss is less than 0.1 dB per kilometer of signal path. Across most of the infrared band, signal losses are much higher.

Placement of "Non-Commercial" LPRS Stations On The FM Band

33. We do not believe "non-commercial" LPRS stations should be limited to one small corner of the FM Band. Such a limitation is NOT consistent

-71-

with the programming and ownership diversity that this Proposed Rule is striving to encourage.

The Continuing Importance Of Constitutional Issues

34. The FCC should bear in mind that the current ban on LOW POWER RADIO -- that is, the ban on new licenses for stations broadcasting at 100 watts or less -- has generated Constitutional

controversy. Don Schellhardt, Nick Leggett and Judith Fielder Leggett -- the RM-9208 Petitioners -- have asserted on the FCC record that the ban violates the FOURTEENTH Amendment to the U.S. Constitution ("equal protection of the laws").

THE AMHERST ALLIANCE shares this assessment.

Also, the National Lawyers' Guild Committee for Democratic Communications, and others, have asserted the ban violates the FIRST Amendment ("freedom of speech").

-72-

With these assertions clearly on the record at the FCC, Constitutionally grounded lawsuits are a possibility IF the Commission's final regulations do not establish a meaningful Low Power Radio Service that offers everyday Americans a real opportunity for access to the airwaves.

35. The Constitutionality of MANDATORY AUCTIONS, under the FOURTEENTH Amendment, has ALSO been challenged on the record. This claim has been made in Docket RM-9208 filings by Don Schellhardt, Nick Leggett and Judith Fielder Leggett. Filings by others have seconded this assertion.

THE AMHERST ALLIANCE seconds it now.

We urge the Commission to urge Congress to repeal the mandatory auctions language that was placed on the statute books in 1996. Pending repeal, the FCC should avoid imposing auctions in

every case where the statute allows it to do so.

-73-

THANK YOU, FCC

All of us in THE AMHERST ALLIANCE recognize that the Commission's Proposed Rule is A Giant Step forward -- and, with current political conditions, a genuine Profile In Courage.

We thank the Commission for taking this historic step.

CONCLUSIONS

For the reasons set forth herein, we urge the FCC to adopt the recommendations of THE AMHERST ALLIANCE regarding the Proposed Rule, in Docket MM 99-25 (aka RM-9208 & RM-9242), to create the LPRS.

-74-

Respectfully submitted,

Don Schellhardt

National Coordinator,
THE AMHERST ALLIANCE

For THE AMHERST ALLIANCE

Capistrano@earthlink.net

203/591-9177

45 Bracewood Road
Waterbury, CT 06706

Dated: _____
April 28, 1999

APPENDIX A:

SPECIAL BACKGROUND INFORMATION ON LP-1000s, LP-100s & LP-10s

The geography and demography of America is EXTREMELY diverse. The FCC needs to take this factor into account as it sets wattage and elevation ceilings for the Tiers of the proposed Low Power Radio Service.

An LP-1000 station, for example, serves a broadcast coverage area of roughly 250 square miles. (8.9 miles of Protected Contour squared is 79.2 square miles, and then 72.9 times pi, or 3.14, is 249.7 square miles -- which we will "round off" to 250)

In a statistically typical part of Alaska, 250 square miles means -- 250 people. (250 times Alaska's average population density of 1 person per square mile)

In New York City, by contrast, 250 square miles means a potential audience of 5,748,000 people -- NOT counting commuters. (250 times New York City's average population density of 22,700 persons per square mile)

In accordance with the laws of mathematics, the same pattern applies with respect to smaller stations, although the numbers at both ends are lower. For example, an LP-100 station covers 38 square miles: 38 people in statistically typical Alaska and 836,000 people in New York City.

For LP-10s, with a 2-mile Protected Contour, the coverage area is 13 square miles -- and the contrast is 13 people versus 286,000 people. Even a 1-watt station, with a 50-foot tower and a Protected Contour of .6 miles, could reach 26,000 people in New York City.

PLEASE NOTE THAT OUR BROADCAST COVERAGE AREA ESTIMATES ARE BASED ON THE "BOTTOM LINE" PROTECTED CONTOURS.

We recognize that normal signal ranges can be substantially diminished by man-made structures, topography and/or other factors beyond the control of an LPRS licensee.

Thus, for example, when we refer to an "LP-10", we mean a station with 10 watts and a 100-foot tower OR whatever ALTERNATIVE COMBINATION of wattage and height will produce a Protected Contour of 2 miles.

In any case, a flat standard for each Tier -- a standard which is blind to geography -- will produce "micro audiences" (if not SUB-ATOMIC audiences) in central Utah or the Alaskan interior, while producing truly enormous audiences in the largest metropolitan areas.

There are times when, as William Blake observed:
"One law for the lion and the lamb is oppression."

That is, admittedly, an overstatement in this context. Geographically uniform wattage and height limits may not constitute "oppression" -- BUT they ARE less than fully equitable.

APPENDIX A-3

Flat ceilings perpetuate the marketplace bias toward siting large stations in large metropolitan areas -- while small cities and rural areas are under-served. If the prospect of higher AUDIENCE SHARES in such areas can be coupled simultaneously with higher wattage and elevation ceilings, as a full or partial offset to the lower population density, then the current "urban tilt" in the radio industry can be eased -- or even reversed. A number of Low Power broadcasters might then be drawn away from major urban areas to America's smaller cities and towns.

Ironically, URBAN NEIGHBORHOODS will also benefit from this trend. If more aspiring LPRS station owners are drawn to small cities and rural areas, there will be LESS COMPETITION FOR LPRS LICENSES IN THE CITY. Urban neighborhood-oriented stations cannot relocate unless their neighborhoods do -- BUT they can still reap the benefits of a more rational pattern of radio resources in America.

Of course, the number and vitality of urban neighborhood stations will ALSO depend GREATLY upon whether the FCC: (a) establishes and licenses a Tier of LP-10 stations; (b) protects LP-10s from "bumping"; (c) licenses both AM and FM LP-10s; AND (d) opens the LP-10 Tier to part-time operations.

Various methods could be used to "fine tune" Tiers

for geography. FOR EXAMPLE, LP-1000 stations should be limited to areas where their potential audience will not exceed 250,000 people. (This means areas -- such as the City of Jacksonville -- where the population density is at or below 1,000 people per square mile.)

APPENDIX A-4

AS ANOTHER OPTION, spectrum scarcity could be used as a criterion: for example, LP-1000s could be limited to areas where Primary Service stations occupy less than 80% of the available spectrum.

ALTERNATIVELY, the FCC could simply ban LP-1000s from the top 50 media markets (though this standard may be less precise than others).

The specific mechanism is less important than the overall goals of the policy, which are:

(1) Preventing the "unjust enrichment" of LP-1000 station owners, at the DIRECT expense of aspiring (but displaced) LP-100 and LP-10 station owners, in large metropolitan areas;

AND

(2) Shifting the emphasis from UNIFORM WATTAGE AND ELEVATION CEILINGS to A MORE UNIFORM RANGE OF POTENTIAL AUDIENCES -- thereby giving the market a reason to increase the number of Low Power stations in small cities and rural areas, while easing the level of competition over licenses in or near large urban areas.

For more information on the interaction of Protected Contours with population density, please see Appendices B,C and D.

THE AMHERST ALLIANCE

DJS/djs

3/19/99

APPENDIX B:

POTENTIAL RESIDENTIAL AUDIENCES

IN THE 50 LARGEST U.S.A. CITIES

(Ranked In Order Of
Population Density)

LP-10 Broadcast Coverage Area: 13 square miles

LP-100 Broadcast Coverage Area: 38 square miles

LP-1000 Broadcast Coverage Area: 250 square miles

See NOTES At The Bottom Of This Chart

1. NEW YORK CITY
22,700 people/square mile (sm)

LP-10: 286,000

LP-100: 836,000

LP-1000: 5,478,000

2. SAN FRANCISCO
15,700/sm

LP-10: 204,000

LP-100: 596,000

LP-1000: Entire city (724,000)
PLUS 202 square miles of surrounding area

APPENDIX B-2

3. BOSTON & CHICAGO (Tie)
12,200/sm

LP-10: 158,000

LP-100: 464,000

LP-1000: (Boston) Entire city (574,000)
PLUS 203 square miles of surrounding area

LP-1000: (Chicago) Entire city (2,784,000)
PLUS 32 square miles of surrounding area

5. PHILADELPHIA
11,700/sm

LP-10: 152,000

LP-100: 445,000

LP-1000: Entire city (1,586,000)
PLUS 124 square miles of surrounding area

6. MIAMI
10,600/sm

LP-10: 138,000

LP-100: Entire city (359,000)
PLUS 4 square miles of surrounding area

LP-1000: Entire city (359,000)
PLUS 214 square miles of surrounding area

APPENDIX B-3

7. BALTIMORE
9,200/sm

LP-10: 120,000

LP-100: 350,000

LP-1000: Entire city (736,000)
PLUS 170 square miles of surrounding area

8. WASHINGTON, DC
8,900/sm

LP-10: 116,000

LP-100: 338,000

LP-1000: Entire city (607,000)
PLUS 182 square miles of surrounding area

9. LONG BEACH (California)
8,600/sm

LP-10: 112,000

LP-100: 327,000

LP-1000: Entire city (429,000)
PLUS 200 square miles of surrounding area

APPENDIX B-4

10. BUFFALO
8,000/sm

LP-10: 104,000

LP-100: 304,000

LP-1000: Entire city (328,000)
PLUS 211 square miles of surrounding area

11. LOS ANGELES
7,500/sm

LP-10: 98,000

LP-100: 285,000

LP-1000: 1,868,000

12. DETROIT
7,200/sm

LP-10: 94,000

LP-100: 274,000

LP-1000: Entire city (1,028,000)
PLUS 107 square miles of surrounding area

13. OAKLAND (California)
6,900/sm

LP-10: 90,000

LP-100: 262,000

LP-1000: Entire city (372,000)
PLUS 196 square miles of surrounding area

APPENDIX B-5

14. PITTSBURGH

6,600/sm

LP-10: 86,000

LP-100: 251,000

LP-1000: Entire city (376,000)
PLUS 195 square miles of surrounding area

15. MILWAUKEE & ST. LOUIS (Tie)
6,500/sm

LP-10: 85,000

LP-100: 247,000

LP-1000: (St. Louis) Entire city (397,000)
PLUS 189 square miles of surrounding area

LP-1000: (Milwaukee) Entire city (628,000)
PLUS 154 square miles of surrounding area

17. CLEVELAND
6,400/sm

LP-10: 83,000

LP-100: 243,000

LP-1000: Entire city (506,000)
PLUS 171 square miles of surrounding area

APPENDIX B-6

18. MINNEAPOLIS
6,200/sm

LP-10: 81,000

LP-100: 236,000

LP-1000: Entire city (368,000)
PLUS 191 square miles of surrounding area

19. CINCINNATI
4,700/sm

LP-10: 61,000

LP-100: 179,000

LP-1000: Entire city (364,000)
PLUS 172 square miles of surrounding area

20. SAN JOSE
4,300/sm

LP-10: 56,000

LP-100: 163,000

LP-1000: Entire city (782,000)
PLUS 69 square miles of surrounding area

APPENDIX B-7

21. AUSTIN & TOLEDO (Tie)
4,000/sm

LP-10: 52,000

LP-100: 152,000

LP-1000: (Toledo) Entire city (333,000)
PLUS 156 square miles of surrounding area

LP-1000: (Austin) Entire city (466,000)
PLUS 134 square miles of surrounding area

23. SACRAMENTO
3,800/sm

LP-10: 49,000

LP-100: 144,000

LP-1000: Entire city (369,000)
PLUS 152 square miles of surrounding area

24. FRESNO & SEATTLE (Tie)
3,600/sm

LP-10: 47,000

LP-100: 137,000

LP-1000: (Fresno) Entire city (354,000)
PLUS 151 square miles of surrounding area

LP-1000: (Seattle) Entire city (516,000)
PLUS 105 square miles of surrounding area

APPENDIX B-8

26. SAN DIEGO
3,400/sm

LP-10: 44,000

LP-100: 129,000

LP-1000: 847,000

27. PORTLAND (Oregon)
3,200/sm

LP-10: 42,000

LP-100: 122,000

LP-1000: Entire city (437,000)
PLUS 112 square miles of surrounding area

28. COLUMBUS (Ohio) & OMAHA (Tie)
3,100/sm

LP-10: 40,000

LP-100: 118,000

LP-1000: (Omaha) Entire city (336,000)
PLUS 143 square miles of surrounding area

LP-1000: (Columbus) Entire city (633,000)
PLUS 47 square miles of surrounding area

APPENDIX B-9

30. DENVER
3,000/sm

LP-10: 39,000

LP-100: 114,000

LP-1000: Entire city (468,000)
PLUS 95 square miles of surrounding area

31. ATLANTA
2,900/sm

LP-10: 38,000

LP-100: 110,000

LP-1000: Entire city (394,000)
PLUS 116 square miles of surrounding area

32. ALBUQUERQUE

2,800/sm

LP-10: 38,000

LP-100: 107,000

LP-1000: Entire city (385,000)
PLUS 113 square miles of surrounding area

APPENDIX B-10

33. HOUSTON & DALLAS (Tie)

2,700/sm

LP-10: 35,000

LP-100: 103,000

LP-1000: 672,000

35. SAN ANTONIO & TUCSON (Tie)
2,600/sm

LP-10: 34,000

LP-100: 99,000

LP-1000: (Tucson) Entire city (405,000)
PLUS 94 square miles of surrounding area

LP-1000: (San Antonio) 647,000

37. NEW ORLEANS
2,500/sm

LP-10: 33,000

LP-100: 95,000

LP-1000: Entire city (497,000)
PLUS 51 square miles of surrounding area

APPENDIX B-11

38. MEMPHIS & PHOENIX (Tie)
2,200/sm

LP-10: 29,000

LP-100: 84,000

LP-1000: 548,000

40. EL PASO & INDIANAPOLIS (Tie)

2,100/sm

LP-10: 27,000

LP-100: 80,000

LP-1000: (El Paso) Entire city (515,000)
PLUS 3 square miles of surrounding area

LP-1000: (Indianapolis) 523,000

42. CHARLOTTE & TULSA (Tie)
1,900/sm

LP-10: 25,000

LP-100: 72,000

LP-1000: (Tulsa) Entire city (367,000)
PLUS 258 square miles of surrounding area

LP-1000: (Charlotte) Entire city (396,000)
PLUS 41 square miles of surrounding area

APPENDIX B-12

44. VIRGINIA BEACH & FORT WORTH (Tie)
1,500/sm

LP-10: 20,000

LP-100: 57,000

LP-1000: 374,000

46. HONOLULU & KANSAS CITY (Tie)
(NOTE: Honolulu data includes The City of Honolulu
AND Honolulu County)
1,400/sm

LP-10: 18,000

LP-100: 53,000

LP-1000: 349,000

48. NASHVILLE
(Nashville data includes Davidson)
1,000/sm

LP-10: 13,000

LP-100: 38,000

LP-1000: 249,000

APPENDIX B-13

49. JACKSONVILLE
900/sm

LP-10: 12,000

LP-100: 38,000

LP-1000: 224,000

50. OKLAHOMA CITY
700/sm

LP-10: 9,000

LP-100: 27,000

LP-1000: 174,000

APPENDIX B-14

NOTES

1. Except in the case of Honolulu, these estimates apply to the CITIES themselves. Sufficient data, on population and land area, was not available for calculating the population density of the METROPOLITAN AREAS surrounding these cities.
2. The population and land area data that WAS available comes from THE 1996 INFORMATION PLEASE ALMANAC.
3. The Broadcast Coverage Area estimates have been calculated on the basis of PROTECTED CONTOURS provided by the FCC in its MM 99-25 Proposed Rule. Since topography, man-made structures and other factors can inhibit the normal range of a radio signal, the Protected Contours have been the starting point for calculations. For example, an LP-10 is a 10-watt, 100-foot station OR whatever alternative combination of wattage and HAAT will yield a Protected Contour of 2 miles in a particular location.
4. The 50 largest CITIES (in terms of population) may not correspond identically to the 50 largest METROPOLITAN AREAS.
5. POPULATION DENSITY has been rounded to the nearest HUNDRED PEOPLE per square mile. Potential audiences (which do not include commuters) have been rounded to the nearest THOUSAND PEOPLE.

THE AMHERST ALLIANCE
DJS/djs
3/19/99

APPENDIX C:

SIZING BROADCAST COVERAGE AREAS
TO REACH A "TARGET" LISTENER LEVEL

The Chart Begins On Page APPENDIX C-5

AN EXPLANATION OF OUR ASSUMPTIONS

As another way of looking at the Low Power Radio Service Tiers proposed by the Federal Communications Commission, in Docket MM 99-25, we have attempted to calculate the size of Broadcast Coverage Area needed to reach a "target" number of listeners at a given level of population density.

Here are the ASSUMPTIONS which underlie this scenario. Readers may wish to vary the assumptions and note the difference in the results:

(A) THE "TARGET" LISTENER LEVEL is 10,000. A station is "on target" if it falls within 75% to 125% of this target (that is, if it can credibly pursue a goal of 7,500 to 12,500 listeners).

10,000 listeners was selected as the target because several people with LPRS experience have estimated informally that 4,000 to 5,000 listeners is the "subsistence" level for even a well-managed, "no frills" commercial-airing LPRS station. Since we want LPRS stations to operate at levels beyond "subsistence", we took the higher number -- 5,000 listeners -- and doubled it.

APPENDIX C-2

We view 10,000 listeners as A CREDIBLE GOAL for a station making wise decisions in an area with adequate opportunities for such growth. 10,000 listeners is not, and cannot be, a guarantee.

(B) ACHIEVABLE AUDIENCE SHARES are assumed to rise as population density declines. This assumption is made because the number of competing stations declines with population density.

Thus, for example, in Boston (with a population density of 12,000 people per square mile), the maximum achievable audience share is assumed to be 5%. Therefore, with our assumed target listener level of 10,000 people, the potential residential audience needs to be 200,000 people (or rather, since we have an assumed target RANGE, an audience of 150,000 to 250,000 people).

On The Other Hand, in the Nashville/Davidson area (with a population density of 1,000 people per square mile), the maximum achievable audience share is assumed to be 10%. Therefore, to reach our listenership level of 10,000, a much smaller pool of potential listeners is needed: specifically, 75,000 to 125,000 people (with 100,000 being the PRECISE target).

THE FINAL STEP is to divide the Target Residential Audience by the average population density per square mile. This yields the number of square miles of coverage needed to reach a potential audience of that size.

APPENDIX C-3

NOTES

POPULATION DENSITY has been calculated based on information, regarding the 50 largest cities, in THE 1996 INFORMATION PLEASE ALMANAC. For population density in other locations, calculations were based on population and land area data in THE 1998 RAND McNALLY ROAD ATLAS.

"PROTECTED CONTOURS", used to calculate Broadcast Coverage Areas for the 3 LPRS Tiers proposed or contemplated by the FCC, were drawn directly from the FCC's Proposed Rule in MM 99-25, aka RM-9208 & RM-9242.

OTHER TRANSMISSION RADII, used to calculate other possible Broadcast Coverage Areas, were drawn from publicly posted documents prepared by RODGER SKINNER of TRA Communications, the RM-9242 Petitioner. These transmission radii are posted at:

<http://www.concentric.net/~radiotv>

EXCEPT where otherwise noted, REFERENCES TO POPULATION DENSITY IN CERTAIN CITIES relate solely to the cities themselves -- NOT to the entire metropolitan areas.

POPULATION numbers have been rounded to the nearest THOUSAND PEOPLE. As for POPULATION DENSITY numbers, they have been rounded to the nearest hundred people in areas with 1,000 people per square miles or less. In other areas, they have been rounded to the nearest THOUSAND PEOPLE.

APPENDIX C-4

BROADCAST COVERAGE AREAS

For Tiers Proposed Or Contemplated By The FCC
(In FCC Docket MM 99-25, aka RM-9208 & RM-9242)

LP-10 (2-mile Protected Contour): 13 square miles
LP-100 (3.5-mile Protected Contour): 38 square miles
LP-1000 (8.9-mile Protected Contour): 250 square miles

POSSIBLE ADDED "TRANSITIONAL" TIERS

"A" = 50 watts/100 feet (2.9-mile transmission radius): 26 square miles
"B" = 250 watts/100 feet (4.4-mile transmission radius): 61 square miles
"C" = 100 watts/200 feet (5-mile transmission radius): 79 square miles
"D" = 250 watts/200 feet (6.1-mile transmission radius): 125 square miles
"E" = 100 watts/328 feet (6.5-mile transmission radius): 129 square miles
"F" = 250 watts/328 feet (8.1-mile transmission radius): 206 square miles
1000 watts/328 feet (11.5-mile transmission radius): 415 square miles

These Broadcast Coverage Areas have been computed in the classic manner: that is, pi (APPROXIMATELY 3.14) times the radius (the distance the signal travels in a single direction) squared. For example, with an LP-10, the Protected Contour is 2 miles. Squared, this is 2 times itself -- or 4 miles. Then, multiplying 4 miles times pi, this is a total coverage area of 12.56 square miles (which we have "rounded up" to 13 square miles).

In the Chart which follows, bold letters indicate that a particular proposed Tier, OR possible "Transitional" Tier, will yield a Credible Goal of 7,500 to 12,500 listeners (that is, 75% to 125% of the 10,000 listener target).

TT = Possible Transitional Tier.

APPENDIX C-5

People Per 1000w Square Mile 1000 At	Assumed Achievable	Coverage Area	BROADCAST COVERAGE		AREA (In Square Miles)	
			LP	TT?	LP	TT?
			10		100	
		Audience Share	Needed			
328 Feet						
23,000 250 415 (New York City)	5%		9		13	38
16,000 250 415 (San Francisco)	5%		13		13	38
12,000 250 415 (Boston)	5%		17		13	38
11,000 250 415 (Miami)	5%		18		13	38
9,000 250 415 (Washington, DC)	5%		22		13	A? 38 (26)
8,000 250 415 (Buffalo)	5%		25		13	A? 38 (26)
7,000 250 415 (Los Angeles) (NEW JERSEY Portion of METRO New York City Area) (ILLINOIS Portion of METRO Chicago Area)	5%		29		13	A? 38 (26)
6,000 250 415 (Minneapolis)	5%		33		13	A? 38 (26)

5,000		6%	33	13	A?	38
250	415					(26)
(Cincinnati)						
(NEW JERSEY Portion of METRO Philadelphia Area)						

APPENDIX C-6

People Per 1000w Square Mile 1000 At	Assumed Achievable	Coverage Area	LP	TT?	LP	TT?	LP
		Audience Share		10		100	
328 Feet							
4,000 250 (Austin) (METRO Los Angeles Area) (METRO Baltimore Area and MARYLAND Suburbs of Washington, DC) (CONNECTICUT Portion of METRO New York City Area)	7%		36		13		38
3,000 250 (Denver) (METRO New Orleans AND Baton Rouge Areas)	8%		42		13		38
2,000 B? 250 415 (Charlotte) (61) (METRO San Francisco & METRO San Jose: CALIFORNIA BAY AREA)	9%		56		13		38
1,500 B?C? 250 415 (Virginia Beach) (61; 79) (METRO Denver Area)	9%		74		13		38
1,000 D? 250 415 (Nashville/Davidson) (79; 125) (Approximate Statewide Average: NEW JERSEY)	10%		100		13		38 C?
900 C? 250 415 (Jacksonville) (79)	12%		93		13		38

800		14%	89	13	38
C?	250	415			
(Approximate Statewide Average: MASSACHUSETTS) (79)					
700		16%	89	13	38
C?	250	415			
(Oklahoma City)					
(79)					

APPENDIX C-7

People Per 1000w Square Mile 1000 At	Assumed Achievable	Coverage Area	LP TT? LP	TT?	LP
328	Audience Share	Needed	10	100	
Feet					
600	18%	93		13	38
C?	250	415			
(Approximate Statewide Average: CONNECTICUT) (79)					
500	20%	100		13	38
C? D?	250	415			
(Approximate Statewide Average: MARYLAND) (79; 125)					
(CONNECTICUT Minus METRO New York City Area)					
400	22%	114		13	38
D? E?	250	415			
(NEW JERSEY Minus METRO New York and Phil. Areas) (125; 129)					
300	23%	145		13	38
D? E?	250	415			
(WESTERN MASSACHUSETTS: Amherst to N.Y. Line) (125; 129)					
200	24%	208		13	38
F?	250	415			
(Approximate Statewide Average: CALIFORNIA) (206)					
(Approximate Statewide Average: ILLINOIS)					
150	24%	278		13	38
250	415				
(MARYLAND Minus METRO Baltimore Area and Suburbs of Washington, DC)					
100	25%	400		13	38
250	415				
(APPROX. LOWER 48 U.S.A. AVERAGE)					
(Approximate Statewide Average: LOUISIANA)					
(CALIFORNIA Minus METRO Los Angeles & Bay Area)					

(ILLINOIS Minus METRO Chicago Area)

50		33%	600	13	38
250	415				

(LOUISIANA Minus METRO New Orleans and Baton Rouge Areas)

20		50%	1,000	13	38
250	415				

(COLORADO Minus METRO Denver Area)

THE AMHERST ALLIANCE
DJS/djs
4/28/99

APPENDIX D:

AMHERST'S PROPOSED TRI-TARGETING APPROACH

The Chart begins on Page APPENDIX D-6

This Appendix incorporates all of the assumptions and notations in Appendix C. However, SOME NEW ELEMENTS have been added.

FIRST: Appendix C is based upon A SINGLE TARGET RANGE of listenership for all 3 of the Tiers that the FCC is proposing or contemplating in Docket MM 99-25. LP-100 listenership is assumed to be the standard for all.

Appendix D proposes 3 DIFFERENT TARGET RANGES: 1 for each Tier.

SECOND: Appendix C estimates how close each of the 3 Tiers would come, at varying levels of population density, to the Broadcast Coverage Area needed to reach the targeted range of listenership.

Appendix D proposes the establishment of NEW "TRANSITIONAL" TIERS to buttress the 3 Tiers which the FCC is already proposing or contemplating.

Such Transitional Tiers are designed to fill the "gaps" left, at certain levels of population density, when one of the originally proposed Tiers yields a potential residential audience that is too small while "the next Tier up" yields a potential residential audience that is too large. (These gaps are identified in Appendix C.)

Two different sets of Transitional Tiers are presented as options for the FCC. ONE SET keeps tower height constant while authorizing transitional WATTAGE levels (tied to population density) at 50 watts and 250 watts. THE OTHER SET keeps wattage constant -- at 10, 100 and 1,000 watts -- while allowing TOWER HEIGHT to rise, incrementally, as population density falls.

EITHER SET will fill most of the "gaps". However, the wattage-oriented Transitional Tiers offer the advantage of avoiding additional zoning controversies.

APPENDIX D-2

THIRD: Appendix C shows the existence of "gaps" by presenting Broadcast Coverage Areas in normal type (12-point Arial) when they DO NOT bring stations within the targeted range. Appendix C presents the same numbers in bold letters when the target ranges of listenership are indeed met by the applicable Broadcast Coverage Area(s).

Appendix D is designed for faster viewing -- since it is A PROPOSED SOLUTION TO THE PROBLEM rather than A PRESENTATION OF THE PROBLEM. To make the solution apparent to the reader more quickly, Broadcast Coverage Areas are listed ONLY if they bring an LPRS station within one or more of the target ranges. The few remaining "gaps" can be inferred.

EMERGENCE OF "GAPS" UNDER VARYING SCENARIOS

In APPENDIX C, which applies a SINGLE target range for listenership under THE 3 TIERS PROPOSED OR CONTEMPLATED BY THE COMMISSION, one or more "gaps" appear at 14 of the 26 population density levels that were examined. "Gaps" were found BETWEEN TIERS at 23,000 people per square mile (New York City); 9,000 (Washington, DC); 8,000 (Buffalo); 7,000 (Los Angeles); 2,000 (Charlotte); 1,500 (Virginia Beach); 1,000 (Nashville/Davidson); 900 (Jacksonville); 800 (Massachusetts average); 700 (Oklahoma City); 600 (Connecticut average); 500 (Maryland average); 400 (New York State average); and 300 (Western Massachusetts average).

In APPENDIX D, as noted earlier, the combination of TRI-TARGETING and TRANSITIONAL TIERS is sufficient to eliminate virtually ALL of these gaps.

NOTE: At population density levels of roughly 100 PEOPLE per square mile or less -- the approximate average for the "Lower 48" U.S.A. and the State of Louisiana -- NONE of the Commission's proposed Tiers, under ANY of the various scenarios, cover enough to meet the LP-100 "standard" target range of 7,500 to 12,500 listeners.

With TRI-TARGETING, the basic target range for LP-10 stations -- 2,500 to 7,500 listeners -- can be met down to 50 PEOPLE per square mile (Oklahoma average). However, it will take LP-1000 wattage and height to do it!

On The Other Hand, at THESE levels of population density, there may be much less competition for conventional Class A station licenses.

APPENDIX D-3

TARGET RANGES FOR LISTENERSHIP AT LOW POWER RADIO SERVICE STATIONS

TIER ONE -- MICRORADIO. The "Home Tier" is LP-10 (as contemplated, but not proposed, by the FCC). FOR LISTENERS, microradio is designed primarily to serve villages, small towns (including small suburbs) and urban neighborhoods. FOR STATION OWNERS, it is designed primarily to accommodate community groups, other civic organizations, artists, activists, "hobbyists" and/or newcomers in search of training, experience and exposure for a possible career in radio. Both full-timers and part-timers belong here -- and the latter should be able to seek AM frequencies if they wish.

MICRORADIO TARGET RANGE: 2,500 to 7,500 listeners. The PRECISE TARGET (mid-point) of 5,000 listeners is the level at which, according to some experienced broadcasters in THE AMHERST ALLIANCE, a WELL-RUN radio station can "subsist" financially.

TIER TWO -- STANDARD LOW POWER RADIO. The "Home Tier" is LP-100 (as proposed by the FCC). FOR LISTENERS, it is designed to offer a source of news, views, information, entertainment and/or other programming which cannot usually be found on conventional Class A stations. FOR STATION OWNERS, it is designed to provide an opportunity for upward mobility and/or the airing of programming that brings something new to the airwaves.

STANDARD LOW POWER RADIO TARGET RANGE: 7,500 to 12,500 listeners. The PRECISE TARGET (mid-point) of 10,000 listeners is twice the estimated "subsistence" level of 5,000 listeners.

TIER THREE -- SMALL MARKET LOW POWER RADIO. NOTE: THE AMHERST ALLIANCE believes that LP-1000 stations SHOULD be, and optimistically assumes that they WILL be, barred from the top 50 media markets. If permitted to enter these larger media markets, LP-1000s could displace dozens, or even hundreds, of LP-100s and LP-10s. LP-1000s would also garner potential audiences so large that these stations would be encouraged to function like conventional Class A stations, with "mass market" programming.

APPENDIX D-4

LP-1000 (as proposed by the FCC) is the "Home Tier" for Small Market Low Power Radio. FOR TYPICAL LISTENERS, IN AREAS OUTSIDE THE TOP 50 MEDIA MARKETS, it is designed to offer a source of news, views, information, entertainment and/or other programming which cannot usually be found on conventional Class A stations. FOR SOME OF THESE LISTENERS, IN SOME OF THESE AREAS, where there are few (if any) local stations on the dial, Small Market LPRS may also be a much-needed source of BASIC local news coverage and/or "mainstream" entertainment programming. FOR STATION OWNERS, it is designed to provide an opportunity for upward mobility and/or the airing of programming which brings something new to the airwaves. Also, as noted above, in SOME areas with few (if any) local stations, Small Market Low Power Radio may provide conventional programming that is currently available to listeners only through translators or "satellators" (if at all).

For the most part, the objectives above are VERY CLOSE to those for Standard Low Power Radio (LP-100). There is a reason for this. We envision LP-1000s as the rural, small town and small city equivalents of the "standard" LP-100 stations. OUTSIDE of the top 50 media markets, population may often be spread too thinly to make a typical LP-100 station financially sustainable. However, an FCC policy of limiting the largest Protected Contours to smaller media markets, coupled with the pre-existing prospect of much less competition (and thus higher audience shares) in smaller media markets, can turn LP-1000s into financially viable "Country Cousins" of the urban LP-100.

The ONLY exception, as noted above, may come in those areas where there are few locally based alternatives to the LPRS stations. In such areas, LP-1000 stations (and/or LP-250 stations, if authorized) may become a LOCAL source of CONVENTIONAL programming -- perhaps in competition with programming that is "piped in" over translators or "satellators". In other words, they may take the place of conventional Class A stations that: (a) have been driven off the air; OR (b) have left the area, physically or mentally.

TARGET RANGE: 10,000 to 15,000 listeners. The PRECISE TARGET (mid-point) is 12,500 listeners: 25% above the mid-point for the Standard Low Power Radio Stations.

This extra increment of POTENTIAL profitability will advance 2 goals:

APPENDIX D-5

- (1) Offsetting some or all of the higher capital costs of investment in an LP-1000 (and/or LP-250) station;

AND

- (2) Creating a financial incentive for potential licensees to choose an LP-1000 station in a small market (OR an LP-250 station in a small market, if the FCC agrees to authorize them in such markets) over an LP-100 station in a larger market -- thereby BRINGING MORE RADIO STATIONS TO UNDER-SERVED AREAS and simultaneously LEAVING MORE ROOM ON THE SPECTRUM FOR COMMUNITY-SIZED MICRORADIO IN CROWDED AREAS.

In the Chart which follows:

Information related to the 3 Tiers proposed or contemplated by the FCC is presented in normal type (Arial).

Information related to the proposed Transitional Tiers is presented in perpetua type.

(San Francisco -- AAS 5%)

12,000	9	13	26	17
22				

(Boston -- AAS 5%)

11,000	9	13	26	18
22				

(Miami -- AAS 5%)

9,000	11	13	26	22
28				

(Washington, DC -- AAS 5%)
APPENDIX D-7

	(M)			(L)				SMALL MARKET			
(S)	MICRO-RADIO LPRS			STANDARD LPRS				LPRS			
PD	OCA	LP	50w/10	OCA	LP	250w/100	100w/100	OCA	250w/200	100w/100	LP
200	328	1000		100				100	200		
ft.		ft.		ft.					ft.		
8,000	13	13	26		25						31
			M		L,						
					S						
(Buffalo -- AAS 5%)											
7,000	15	13	26		29	38					36
			M		L			S			
(Los Angeles -- AAS 5%)											
6,000	17	13	26		33	38					41
			M		L,			S			
					S						
(Minneapolis -- AAS 5%)											
5,000	17	13	26		33	38					41
			M		L,			S			
					S						
(Cincinnati -- AAS 6%)											
4,000	18					36	38				41
								L,			
								S			
(Austin -- AAS 7%)											
3,000	21		26		42	38		61	79		53

600 47 93 38 79
 116 125 129
 (CT Av. -- AAS 18%) M L
 S S

500 50 100 38 61 79 125
 125 129
 (CT w/o NYC Area -- AAS 20%) M M L S S

400 57 114 61
 143 125 129 M

L, L,
 (NJ w/o NYC & Phil. Areas -- AAS 22%) S
 S

APPENDIX D-9

PD	OCA	LP	50w/ 10	OCA 100	LP	250w/ 100	100w/ 100	OCA 100	250w/ 200	100w/ LP
200	328	1000								
ft.			ft.		ft.					ft.
300	73				145			61	79	181
125	129									
(Western MA = AAS 23%)					M			M		L
L										
(NOTE: 250w/328 feet = 206 S)										
200	104				208				79	260
125	129	250								
M										
M	M									
(IL & CA Av. = AAS 24%)										
S										
150	139				278					
348	125	129	250							
(MD w/o Balto/Wash. Area = AAS 25%)										M M
L										
(NOTE: 1000w/328 feet = 415 S)										
100	200				400					
500				250						
(LOWER 48 Av. = AAS 25%)										
M										
(CA w/o LA Area & Bay Area)										
(IL w/o Chicago Area)										
(NOTE: 250w/328 feet = 206 M)										
(NOTE: 1000w/328 feet = 415 L)										

