

April 28, 1999

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

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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,



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Of
THE AMHERST ALLIANCE

Re:
Creation Of A Low Power Radio Service
FCC Docket MM 99-25; RM-9208 & RM-9242

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

(In The Matter of

MM 99-25

(Creation of a Low Power
Radio Service

RM-9208
RM-9242

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.

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.

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.**
-

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
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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.

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.

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.

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

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.
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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.

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

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

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.

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

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.

(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

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.

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.

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

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.

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

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.

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

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.

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

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.

- (i) 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.

- (ii) 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.

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.

(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.