

EX PARTE OR LATE FILED

LAW OFFICES  
GOLDBERG, GODLES, WIENER & WRIGHT  
1229 NINETEENTH STREET, N.W.  
WASHINGTON, D.C. 20036

HENRY GOLDBERG  
JOSEPH A. GODLES  
JONATHAN L. WIENER  
HENRIETTA WRIGHT  
MARY J. DENT  
DANIEL S. GOLDBERG  
W. KENNETH FERREE  
THOMAS G. GHERARDI, P.C.  
COUNSEL

(202) 429-4900  
TELECOPIER:  
(202) 429-4912

RECEIVED

February 6, 1995

FEB 6 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

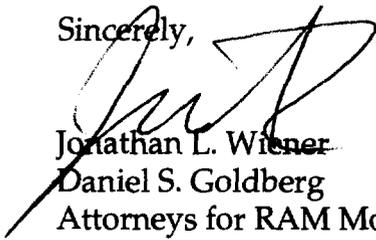
DOCKET FILE COPY ORIGINAL

Re: PR Docket No. 89-553, 93-144 and GN Docket No. 93-252  
Ex Parte Presentation

Dear Mr. Caton:

The attached *ex parte* submission is a Joint Presentation prepared by RAM Mobile Data USA Limited Partnership and Geotek Communications, Inc. regarding future technical and auction rules for the 900 MHz specialized mobile radio service. Please be advised that copies of the attached materials were sent today to Regina Keeney, Gerald Vaughn, Ralph Haller, Daniel B. Phythyon, Rosalind K. Allen, David Furth, Gregory Rosston, Amy Zoslov and Peter A. Tenhula. Two copies of said materials are hereby submitted for the public record in this proceeding pursuant to 47 C.F.R. § 1.1206(a)(1).

Sincerely,

  
Jonathan L. Wiener  
Daniel S. Goldberg  
Attorneys for RAM Mobile Data USA  
Limited Partnership

Attachments

cc (by hand delivery with attachments):

Regina Keeney	Gregory Rosston
Gerald Vaughn	Amy Zoslov
Ralph Haller	Peter A. Tenhula
Daniel B. Phythyon	Michael S. Hirsch
Rosalind K. Allen	Steven T. Apicella
David Furth	

No. of Copies rec'd  
List A B C D E

082

**JOINT PRESENTATION BY  
RAM MOBILE DATA USA LIMITED PARTNERSHIP  
AND GEOTEK COMMUNICATIONS, INC.**

Re. Proposed Technical and Auction Rules for 900 MHz SMR Service

RAM Mobile Data USA Limited Partnership ("RMD") and Geotek Communications, Inc. ("Geotek") hereby jointly present to the Commission proposed technical rules, as well as suggested auction procedures, for the 900 MHz specialized mobile radio ("SMR") service. Two copies of this presentation have been submitted to the Secretary's office pursuant to 47 C.F.R. § 1.1206(a)(1).

As the Commission is aware, RMD and Geotek are keenly interested in the outcome of the above-referenced proceedings and, as such, have each made submissions regarding the development of future technical and auction rules for 900 MHz SMRs. While these submissions differ in certain respects (in part reflective of the different kinds of services that RMD and Geotek offer), RMD and Geotek always have shared one overriding goal: the expeditious adoption of final technical rules for 900 MHz SMRs which, in turn, would allow the Commission to commence with Phase II licensing in the near future. 900 MHz SMR licensees have been held in limbo for over five years as a result of licensing delays. The inability to implement long-standing business plans and to build-out existing systems places 900 MHz SMR providers at a distinct competitive disadvantage *vis-a-vis* other commercial mobile radio services licensees already licensed on a wide-area basis and, moreover, undermines the public interest in the rapid deployment of high quality, innovative mobile services.

In an effort to hasten the licensing of 900 MHz SMRs, RMD and Geotek have met to develop a joint proposal for final technical rules and auction procedures.

I. TECHNICAL RULES.

A copy of the proposed final technical rules that RMD and Geotek jointly support are attached hereto as Appendix A. These rules reflect, among other things, the following matters of agreement:

First, with respect to proposed coverage requirements, Geotek now agrees with RMD that an MTA licensee should be required to provide coverage to 1/4 of the population in its licensed service area within three years of the date of license grant, and to 1/3 within five years. While greater coverage may be expected in some of the more densely populated MTAs, taking into account the nature of the service offered at 900 MHz SMR and some of the more rural MTAs, both now agree this to be the most sensible minimum standard.

Second, RMD and Geotek agree that incumbent licensees should receive protection based upon an area (detailed below) defined by the coverage of the incumbent licensee's contiguous base stations licensed or subject to pending license application prior to August 10, 1994. Protecting sites subject to pending license application, as well as sites that already have been licensed, is essential and received overwhelming support in the Petitions for Reconsideration filed in connection with the Commission's Third Report and Order, GN Docket No. 93-252, PR Docket Nos. 93-144 and 89-553 (September 23, 1994).<sup>1</sup> Petitioners pointed-out that affording protection to 900 MHz sites subject to pending application prior to August 10, 1994, is wholly consistent with the Commission's decision to process pending 800 MHz SMR applications received by the close of business on August 9, 1994.<sup>2</sup>

Third, if the Commission does not base protection on sites subject to pending application as well as licensed by August 9, 1994, RMD and Geotek urge that the rules also permit an incumbent to construct sites on a protected basis within the DFA areas to which they previously have been licensed, as reflected in the attached proposed rules. This will give those licensees whose wide area plans were effectively put on hold by delay in Commission processing some ability to operate on a wide area basis. RMD and Geotek recognize, however, that a protected area corresponding to previous DFA boundaries necessarily complicates the proposed technical rules. Further, if the Commission establishes incumbent protected areas based upon sites licensed and subject to pending application as of August 9, 1994, matters that RMD and Geotek urge are of critical importance, the additional protection based on the original DFAs may only marginally benefit incumbent licensees who operate wide area systems. Accordingly, while the attached proposed

---

<sup>1</sup> See, e.g., Petition for Reconsideration and Request for Clarification submitted by the American Mobile Telecommunications Association at 6-7 (December 21, 1994); and, Petition for Reconsideration and Clarification submitted by the Personal Communications Industry Association at 13-14 (December 21, 1994).

<sup>2</sup> Id.

rules incorporate DFA protection, if the other protections proposed are granted, RMD and Geotek understand that the benefits of administrative simplicity may justify the elimination of the protected DFA concept.

Finally, RMD's initial proposed 900 MHz technical rules provided the Commission with alternative methods to calculate the boundaries of areas within which incumbents would be entitled to protection and to locate new sites: either in terms of fixed mileage or field strength limits. After discussions with Geotek, RMD is now persuaded that, in the interests of operational and administrative simplicity, such areas should be measured in terms of fixed mileage distances. Thus, the attached rules use the mileage equivalents of an originally-licensed site's 22 and 40 dBu contours to determine, respectively, an incumbent licensee's "Incumbent Operating Area" and "Incumbent Protected Area."<sup>3</sup>

## II. AUCTION PROCEDURES.

RMD and Geotek agree that the following procedures are most appropriate for the prospective 900 MHz SMR MTA auction:

First, in the event that the Commission determines to auction licenses for ten-channel blocks in which incumbent operations already are located (a notion which RMD and Geotek each opposes), the Commission should not subject encumbered licenses to bidding credits for non-incumbents. Applying bidding credits to encumbered licenses would place incumbents at a disadvantage when bidding on blocks needed to complete the build-out of their systems and, notwithstanding the Commission's unjust enrichment rules, would give rise to the potential for insincere bidding, as a bidder with a credit could purchase a license essential to the completion of an incumbent's existing system and then, through an arrangement with the incumbent (*e.g.*, a management agreement), seek to "resell" the license to the incumbent at a higher price. Applying credits to encumbered channel blocks would also create a patchwork of service areas because incumbents would be less likely to obtain blocks used by their existing facilities; this, in turn, would undermine the Commission's objective of creating wide-area SMR systems.

---

<sup>3</sup> See *Ex Parte* Presentation of RMD, PR Docket Nos. 89-553, 93-144 and GN Docket No. 93-252 (December 19, 1994). In §90.7 of RMD's initial proposed rule, "Incumbent Operating Area" was defined, in part, as being coterminous with the 60 mile radii around an incumbent's originally-licensed base stations located in areas identified in §90.621(b) where the minimum mileage separation distance is 105 miles. That calculation was in error and should have been 65 miles. The attached proposed rules incorporate this change.

Second, in light of the expected low license values of 900 MHz licenses relative to licenses for PCS and 800 MHz SMRs, as well as the comparatively low coverage requirements proposed herein, if the Commission adopts bidding credits for certain designated entities, bidding credits should be relatively low in reference to other CMRS services. Thus, RMD and Geotek support bidding credits, on unencumbered ten-channel blocks, of 10% for small businesses (defined as an entity with net worth not in excess of \$6 million), and 15% for minority- and women-owned businesses. A small business owned by a woman or minority would be eligible for a 25% bidding credit.

Third, given the number of MTAs and the lack of fungibility among licenses, it may not be practical to hold a simultaneous auction of all of the MTA licenses. With the primary goal being expedition, RMD and Geotek suggest that the Commission may wish to consider auctioning licenses on an MTA-by-MTA basis (starting with the most densely populated MTA and ending with the least densely populated MTA) or auctioning all of the MTA licenses in a given region simultaneously, such regions being analogous to those used for regional narrowband PCS.

### III. CONCLUSION.

RMD and Geotek hope that their ability to propose a consensus solution helps the Commission to expedite the promulgation of 900 MHz SMR technical and auction rules and, finally, allows 900 MHz SMR Phase II licensing to move forward. RMD and Geotek jointly state, as urgently as they know how, that it is time to do so.

Attachment

## **APPENDIX A**

1. Section 90.7 is amended by adding the definitions for "Incumbent DFA Area," "Incumbent Operating Area," "Incumbent Protected Area" and "Incumbent Wide Area License" following the definition for "Harmful interference," "Major Trading Area" following the definition for "Line C," and "MTA license" following the definition for "Mobile station" to read as follows:

### **§ 90.7            Definitions**

\*\*\*\*\*

*Incumbent DFA Area.* An area coterminous with the boundaries of the Designated Filing Area within which an incumbent licensee was previously licensed.

\*\*\*\*\*

*Incumbent Operating Area.* An area coterminous with the aggregate of the 45 mile radii (or 60 mile radii for those base stations in areas identified in §90.621(b) where the minimum mileage separation distance is 105 miles) of an incumbent licensee's contiguous base stations that were licensed or subject to pending application prior to August 10, 1994, in the same ten-channel block in the 896-901/935-940 MHz band.

\*\*\*\*\*

*Incumbent Protected Area.* An area coterminous with the aggregate of the 25 mile radii (or 40 mile radii for those base stations in areas identified in §90.621(b) where the minimum mileage separation distance is 105 miles) of an incumbent licensee's contiguous base stations that were licensed or subject to pending application prior to August 10, 1994, in the same ten-channel block in the 896-901/935-940 MHz band.

\*\*\*\*\*

*Incumbent Wide Area License.* A license issued under §90.781.

\*\*\*\*\*

*Major Trading Areas (MTAs).* A total of 51 licensing regions based on the Rand McNally 1992 *Commercial Atlas & Marketing Guide*, 123rd Edition, at pages 38-39, with the following exceptions and additions:

- (1) Alaska is separate from the Seattle MTA and is licensed as a single MTA-like area separately.

- (2) Guam and Northern Mariana Islands are licensed as a single MTA-like area.
- (3) Puerto Rico and the U.S. Virgin Islands are licensed as a single MTA-like area.
- (4) American Samoa is licensed as a single MTA-like area.

\*\*\*\*\*

*MTA-based or MTA license.* A license authorizing the right to use a specified block of SMR spectrum within one of the 51 Major Trading Areas.

\*\*\*\*\*

2. Section 90.425 is amended by revising paragraph (e)(1) to read as follows:

\*\*\*\*\*

(1) Station identification will not be required for 929-930 MHz nationwide paging licensees, MTA-based SMR licensees, and 900 MHz SMR Incumbent Wide Area License grantees. All other CMRS stations will be required to comply with the station identification requirements of paragraphs (a) through (d) of this section.

\*\*\*\*\*

3. Subpart S is amended by adding a new heading following Section 90.659 to read as follows:

**RULES GOVERNING THE LICENSING AND USE OF MTA-BASED SMR SYSTEMS IN THE 896-901/935-940 MHz BAND**

4. A new Section 90.773 is added to Subpart S to read as follows:

**§ 90.773 MTA-Based SMR Service Areas.**

MTA licenses for SMR spectrum blocks in the 896-901/935-940 MHz band listed in Table 4B of Section 90.617(d) are available in 51 Major Trading Areas (MTAs) as defined in Section 90.7.

5. A new Section 90.775 is added to Subpart S to read as follows:

**§ 90.775 MTA-Based SMR System Operations.**

MTA-based licensees authorized in the 896-901/935-940 MHz band pursuant to Section 90.773 may construct and operate base stations using any frequency identified in their spectrum block anywhere within their authorized MTA, provided that:

- (a) The MTA licensee observes all of the following fixed mileage minimum distance separation criteria:

(1) 70 miles, or 105 miles in those geographic regions where 105 miles is the applicable fixed mileage separation criteria under §90.621(b), with respect to all co-channel stations that were licensed or subject to pending license application prior to August 10, 1994;

(2) 45 miles, or 65 miles in those geographic regions where 105 miles is the applicable fixed mileage separation criteria under §90.621(b), with respect to Incumbent Protected Areas; and,

(3) 70 miles with respect to Incumbent DFA Areas.

(b) The MTA licensee complies with any rules and international agreements that restrict use of frequencies identified in its spectrum block, including the provisions of §90.619 relating to U.S./Canadian and U.S./Mexican border areas.

(c) The MTA licensee limits its field strength at any location on the border area of its MTA service area in accordance with §90.779.

6. A new Section 90.777 is added to Subpart S to read as follows:

**§ 90.777 Construction Requirements.**

(a) MTA licensees in the 896-901/935-940 MHz band must provide service (with a signal level sufficient to provide adequate service) to at least one-fourth of the population in their licensed service area within three years of being licensed and one-third of the population in their licensed service area within five years of being licensed. Coverage is based on ten-channel blocks, with coverage being calculated as the aggregate coverage of any one or more of the licensed ten channels. A licensee is required separately to meet the coverage requirements for each ten-channel block in which it is licensed in a given MTA.

(b) Licensees must file maps and other supporting documents showing compliance with the respective construction requirement, within the appropriate three- and five-year benchmarks of the date of their initial license. Population is

defined as the 1990 population census. Licensees may elect to use the 2000 population census to determine the five-year construction requirement.

(c) Failure by any licensee to meet the requirements set forth in paragraphs (a) and (b) of this section will result in forfeiture of the license and the licensee will be ineligible to regain it.

7. A new Section 90.779 is added to Subpart S to read as follows:

**§ 90.779 Field Strength Limits.**

(a) Except with respect to an MTA licensee's obligation to provide interference protection to incumbent operations in accordance with §90.775(a)(1), (2) and (3), the predicted or measured field strength at any location on the border of the MTA service area shall not exceed 40 dBuV/m, unless the parties agree to a higher level.

(b) In order to avoid interference at or near the MTA borders, MTA licensees are required to coordinate in good faith their frequency usage with co-channel adjacent MTA licensees and, if applicable, other affected parties. In the event that the adjacent co-channel licensees (and any other affected parties) cannot coordinate their operations, and the Commission receives a complaint of interference resulting from the failure to coordinate, the Commission will mediate, and, if necessary, may impose, a coordination plan.

8. Subpart S is amended by adding a new heading following Section 90.779 to read as follows:

**RULES GOVERNING THE LICENSING AND USE OF INCUMBENT WIDE AREA SMR SYSTEMS IN THE 896-901/935-940 MHz BAND**

9. A new Section 90.781 is added to Subpart S to read as follows:

**§90.781 Incumbent Wide Area License.**

A licensee of multiple contiguous base stations that were licensed or subject to pending application prior to August 10, 1994, in the same ten-channel block in the 896-901/935-940 MHz band may exchange its multiple site specific licenses with coverage in each MTA for a single license per MTA that gives it protection in the Incumbent Protected Area and Incumbent DFA Area and that authorizes construction, modification, relocation and operation (in accordance with §90.783) of base stations in the Incumbent Operating Area and the Incumbent DFA Area associated with such multiple contiguous base stations. A single license may give protection and authorize operations in more than one Incumbent Protected Area, Incumbent Operating Area and Incumbent DFA Area, provided that all such areas are located within a single MTA. If, however, a given Incumbent

Protected Area, Incumbent Operating Area or Incumbent DFA Area of an incumbent licensee is located in more than one MTA, the incumbent licensee shall obtain a separate Incumbent Wide Area License for each MTA in which a portion of the Incumbent Protected Area, Incumbent Operating Area, or Incumbent DFA Area is located.

10. A new Section 90.783 is added to Subpart S to read as follows:

**§90.783 Incumbent Wide Area SMR Operations.**

(a) An incumbent SMR licensee operating a wide-area SMR system pursuant to a license granted under §90.781 may construct, modify, relocate and operate base stations using any frequency identified in its licensed ten-channel spectrum block(s) anywhere within its Incumbent Operating Area(s) and Incumbent DFA Area(s), provided that:

(1) A base station's 22 dBuV/m contour does not extend beyond the applicable Incumbent Operating Area, unless such base station is located within the Incumbent DFA Area covered by the Incumbent Wide Area License.

(2) The incumbent licensee complies with any rules and international agreements that restrict use of frequencies identified in its spectrum block, including the provisions of § 90.619 relating to U.S./Canadian and U.S./Mexican border areas.

(b) The construction of new base stations, and/or the relocation or modification of existing base stations, within an Incumbent Operating Area shall not alter the contours of the Incumbent Protected Area or Incumbent Operating Area that are specified in an Incumbent Wide Area License.

(c) Notwithstanding paragraph (a)(1) of this section, an incumbent licensee and its adjacent MTA licensee can mutually agree on field strength limits other than those set forth in paragraph (a). Further, modifications that extend an incumbent's 22 dBuV/m contour beyond its Incumbent Operating Area are permissible so long as such expansion is *de minimis*, demonstrably unavoidable for technical reasons of sound engineering design, and coordinated in advance with the MTA licensee, unless such modifications are made to a base station located in the Incumbent DFA Area, in which case, under paragraph (a)(1) of this section, such modifications are also permissible.

(d) An incumbent licensee may seek Commission authority to construct and operate individual base stations outside of both its Incumbent Operating Area and Incumbent DFA Area, but such sites may only operate on a secondary basis.

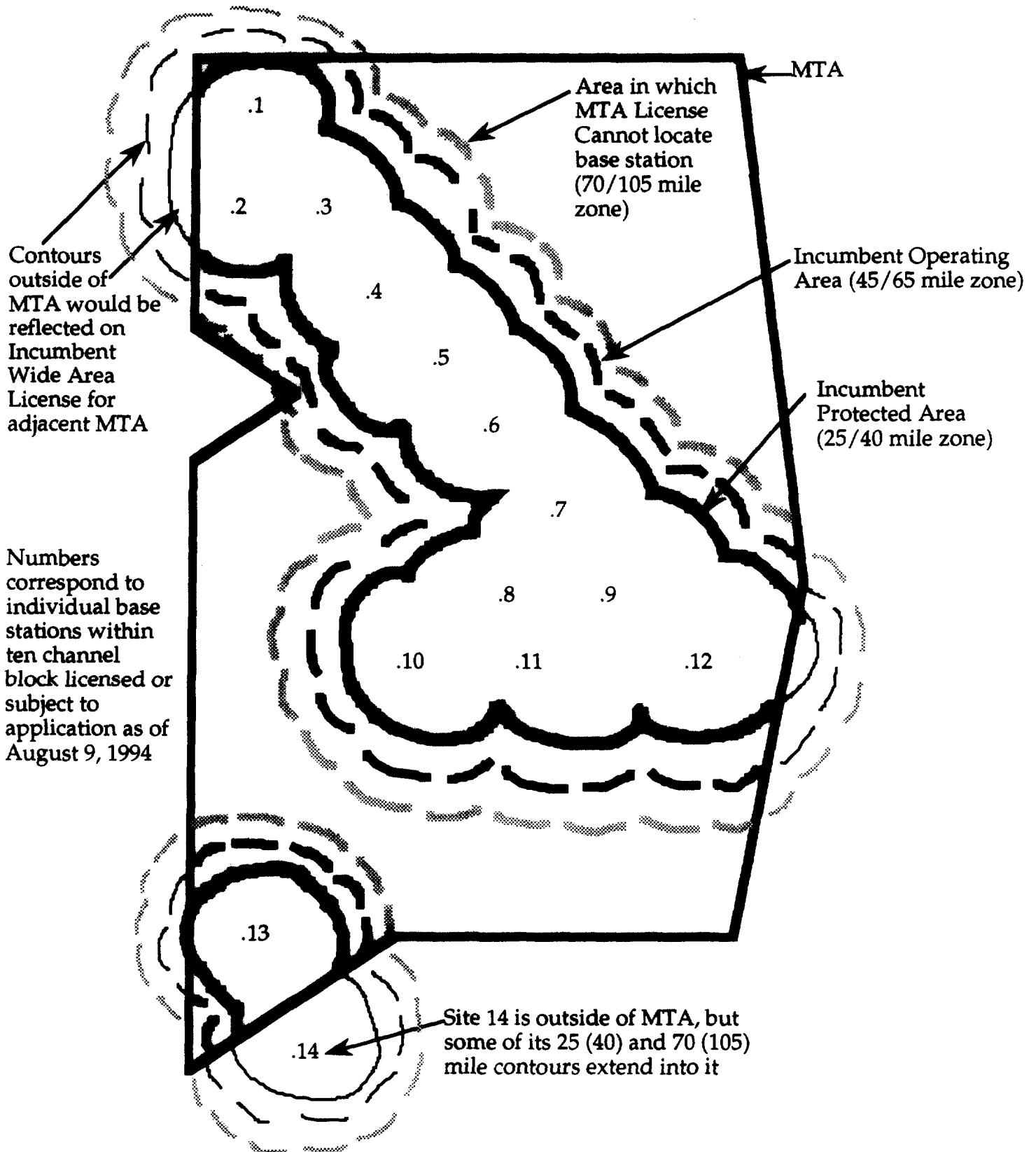
11. A new Section 90.785 is added to Subpart S to read as follows:

**§90.785 Frequency Block Consolidation.**

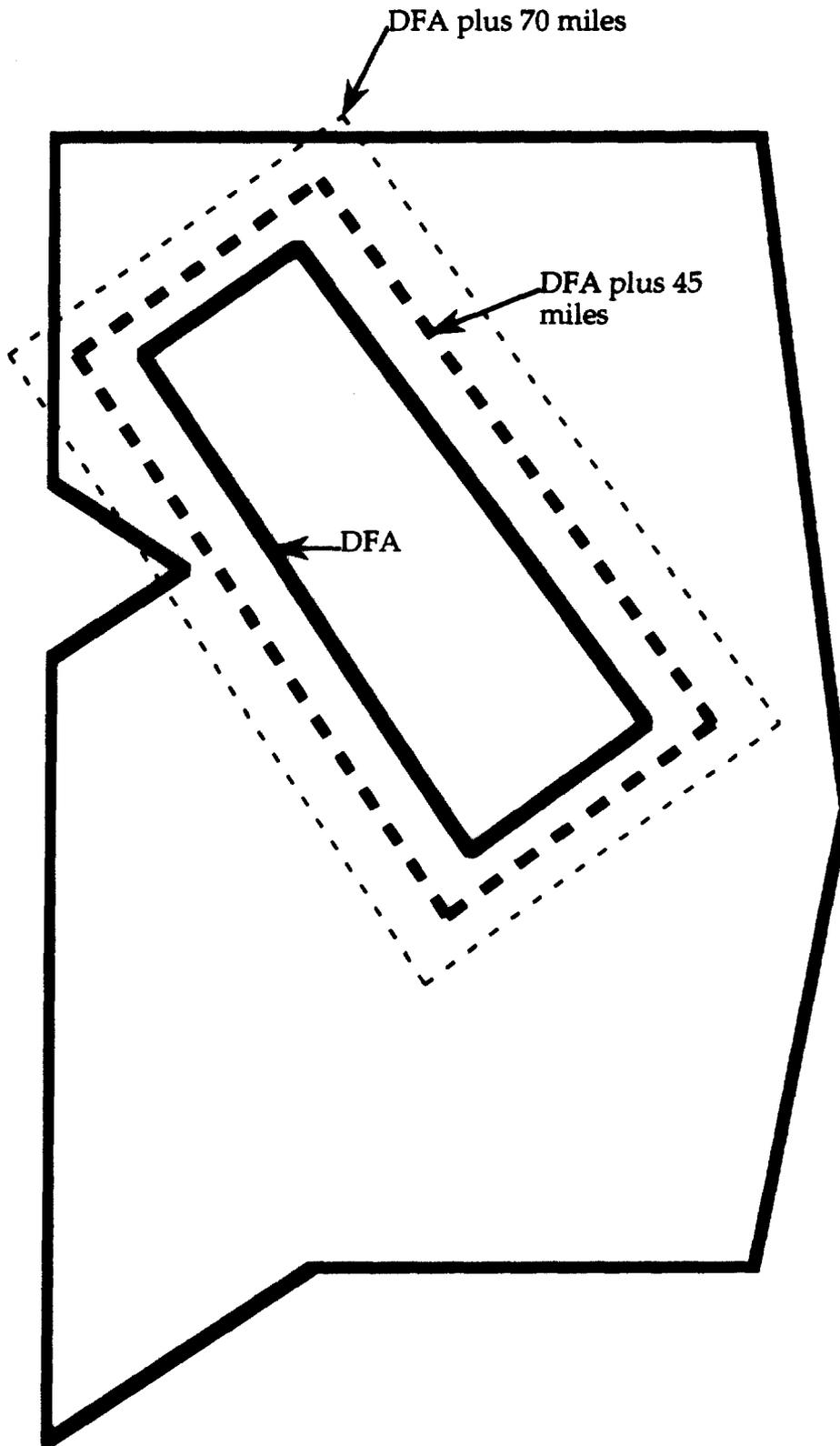
(a) Anytime prior to the date that the Commission releases the Public Notice(s) announcing the auction of MTA licenses in the 896-901/935-940 MHz band, an incumbent licensee may exchange its presently authorized ten-channel frequency block(s) for another ten-channel block, provided that its Incumbent Protected Area, Incumbent Operating Area and Incumbent DFA Area do not change.

(b) Licensees in the 896-901/935-940 MHz band may exchange ten-channel frequency blocks following the auction of MTA licenses in the 896-901/935-940 MHz band, provided that all affected parties consent to any such exchange.

**SAMPLE INCUMBENT WIDE AREA LICENSE AREA**  
(Based upon fixed mileage separation from sites licensed or subject to pending applications as of August 9, 1994)



SAMPLE DFA BOUNDARIES



**SAMPLE INCUMBENT WIDE AREA LICENSE AREA**

(Based upon fixed mileage separation from sites licensed or subject to pending applications as of August 9, 1994 and DFA borders)

