

Before the
Federal Communications Commission
Washington, D.C. 20554

CC Docket No. 88-411

Amendment of Sections of Part 22
of the Commission's Rules in the
Matter of Airborne use of
Cellular Telephones and the Use of
Cell Enhancers in the Domestic
Public Cellular Radio Service.

REPORT AND ORDER

Adopted: December 12, 1991; Released: December 30, 1991

By the Commission:

I. INTRODUCTION

1. On September 2, 1988, we released a Notice of Proposed Rule Making (Notice)¹ seeking comments on proposed rules to prohibit the airborne use of cellular telephones and to allow the use of cellular "enhancers." We received 19 comments and six reply comments filed by engineering consultants, product manufacturers, telecommunication corporations, and trade associations.² In addition, the Commission recently received correspondence from the Federal Aviation Administration (FAA) concerning the use of cellular telephones in aircraft.³ After carefully considering the FAA's position and the comments⁴ submitted in this proceeding, we are adopting rules to prohibit the use of cellular telephones in airborne aircraft. We will, however, permit the on-ground use of cellular telephones, subject to airline or FAA policies or regulations, and the installation of cellular telephones in aircraft. Furthermore, we will allow for the authorization of cell enhancers or repeaters on a regular non-developmental basis.

II. CELLULAR TELEPHONES IN AIRCRAFT

A. Background

2. To satisfy the public radio-telephone needs in the 1970's, the Commission allocated spectrum for air-ground service.⁵ Subsequently, the Commission allocated spectrum for the cellular radio service. *See, e.g., Cellular Communications Systems*, 86 FCC 2d 469 (1981), *modified*, 89 FCC 2d 58 (1982) (Reconsideration Order), *further modified*, 90 FCC 2d 571 (1982) (Further Reconsideration Order), *appeal dismissed sub nom. U.S. v. FCC*, No. 82-1526 (D.C. Cir. March 3, 1983). As consumer demand for cellular service grew, demand for variants of mobile service developed, *e.g.*, authority to use cellular telephones in airplanes, helicopters, balloons and other airborne vehicles.⁶ In addition, the FAA contacted the Commission on several occasions requesting an interpretation of the Commission's rules concerning the use of cellular telephones in aircraft. In an effort to provide

guidance concerning airborne use of cellular telephones under our rules, the staff issued a Public Notice (Mimeo No. 0200) on October 11, 1984, stating that "[t]here are no cellular frequencies available for air-ground service, and persons owning, installing, or operating airborne cellular units will be subject to enforcement action." This Rule Making was initiated to codify this policy and to clarify rules concerning the use of cellular telephones in aircraft.⁷

3. Specifically, the Notice proposed amending Section 22.911 of the rules, "Permissible communications," to state that cellular mobile stations or portable units may not be installed or operated in aircraft, balloons or any other vehicle capable of airborne operation. The prohibition against the use of cellular telephones in aircraft, the Notice explained, was based on the Commission's concern that such use could cause serious interference to transmissions at other cell locations within the system and to cellular systems in adjacent markets.

B. Discussion

4. The commenting parties distinguish between use of cellular telephones in aircraft on the ground and use of such telephones in airborne aircraft. They overwhelmingly agree that the use of cellular telephones in airborne aircraft could cause interference to cellular operations in one or more systems due to the greatly increased transmitting range of such cellular units. However, most parties support the use of cellular telephones while the aircraft is on the ground. They point out that cellular telephones used in aircraft on the ground have the same transmitting range as other ground-based cellular telephones and therefore do not create a long range interference risk. They argue that commercial airline passengers who are faced with substantial ground delays after boarding their flights should be permitted to use their portable cellular telephones for business and personal purposes as long as the aircraft remains on the ground.

5. The key technical feature of the cellular radio service is frequency reuse, *i.e.*, using the same frequency several times among different cells within a market. If a cellular telephone is used in an airborne aircraft, it will have a much greater transmitting range than a land-based cellular telephone and its signal will be received at a multiplicity of cell locations within the market, causing harmful operational interference. Furthermore, because a cellular telephone is capable of operating on all of the assigned cellular frequencies, serious interference could occur to cellular systems in other markets as well. We agree that the need for noninterference in all cellular transmissions outweighs the benefits that would be realized by allowing the public to use cellular service in airborne aircraft.⁸ Therefore, as proposed in the Notice, we will codify our present policy and amend Section 22.911 to prohibit the use of cellular telephones in airborne aircraft. *See Appendix B.*

6. On November 27, 1989, the Associate Administrator for Airways Facilities at the FAA sent a letter to the FCC, stating that the FAA objected to the use of cellular telephones in aircraft whether the aircraft is on the ground or in the air.⁹ He stated that cellular phones may interfere with aircraft systems.¹⁰

7. On September 19, 1991, the Associate Administrator filed a second letter stating that the FAA had reassessed its position and no longer supports a total ban on the use of cellular phones aboard aircraft that are on the ground.

Instead, the FAA is developing operational guidelines "to restrict cellular telephones to use at the gate and during an extended wait on the ground if authorized by the captain."

8. The record generally supports a finding that there are public interest benefits to allowing the use of cellular telephones in aircraft while on the ground. However, the FAA has joint jurisdiction with the FCC regarding the use of telecommunications devices on airplanes. Because the FAA has raised concerns that cellular telephones may, under certain circumstances, cause interference with aircraft systems and there is a need for further testing in this area to assess this potential risk, we will defer to the FAA on aircraft operations to establish regulations for use of cellular telephones on aircraft on the ground.¹¹ The FAA is addressing this issue by developing operational guidelines to restrict cellular telephones to use at the gate and during extended waits on the ground when authorized by the captain. We applaud these efforts to establish reasonable guidelines to protect airline safety while permitting some uses of cellular telephones on aircraft while on the ground.

9. In addition, the majority of the commenters state that we should permit telephones to be installed on aircraft provided that these telephones are used only when the aircraft is on the ground. These parties indicate that there are a number of legitimate reasons why a cellular telephone may be installed in a private aircraft. For example, CTIA indicates that cellular telephones installed in helicopters and other aircraft which land in areas where public telephone facilities are not available could be used for ground-based communications by rescue services, news teams, businesses and others.

10. COM/NAV and the National Telephone Cooperative Association support the Commission's proposal to prohibit the installation of cellular units on aircraft because an overall ban is the only way to ensure that cellular telephones are not used in the air. Furthermore, COM/NAV believes that a ban is not burdensome because alternative means of communication are available, both in aircraft and in airport facilities.

11. The Notice proposed to prohibit the installation of mobile stations or portable units in aircraft. However, no information or evidence has been presented showing that the installation of cellular telephones in aircraft would cause interference to cellular transmissions.¹² Moreover, the record indicates that cellular telephones may be particularly useful in private aircraft and that there is a legitimate need to have cellular telephones installed in such aircraft. While we share COMNAV's concern that cellular telephones should not be used in an aircraft that is airborne, we have concluded, as discussed above, that cellular telephones may be used on the ground subject to FAA regulations. Thus, a general prohibition on the installation of cellular telephones in aircraft is overreaching. Cellular telephone users who willfully or repeatedly violate our rules prohibiting the airborne use of cellular telephones are subject to strict remedial action which includes monetary forfeitures (*see* Section 503 of the Act, 47 U.S.C. Section 503) in addition to action by the FAA.¹³ We find this an adequate means to limit the kind of conduct about which COMNAV is concerned.

12. Accordingly, we also add language to our rules that will generally allow the installation of cellular mobile telephones aboard aircraft. *See* Appendix B. Where telephones are installed, however, we will require that a

notice be posted adjacent to the telephones stating that: "The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations."¹⁴ We believe that this notice is necessary to inform all cellular telephone users aboard aircraft that the use of cellular telephones while airborne is prohibited. Finally, Section 22.911(a)(1) will require that all cellular telephones on board aircraft, including portable installed units, must be turned off once the aircraft is airborne. We believe that the public interest requires this limitation to assure that no incoming telephone calls are received. Incoming telephone calls could cause the mobile unit to transmit automatically, thereby creating the same interference as if the calls originated in the airborne aircraft. Moreover, any call permissibly underway during periods on the the ground must be terminated once the aircraft is airborne. Of course, the airline, pilot or FAA may require a customer to cease using a cellular telephone at any earlier point in accordance with their own policies.

13. We emphasize that the rules which we adopt today with regard to the use of cellular telephones on board aircraft are subject to FAA guidelines. Therefore, neither cellular carriers nor their subscribers can demand to use cellular service aboard aircraft if the FAA has proscribed such use, and any use is specifically subject to all FAA regulations.

III. CELL ENHANCERS

A. Background

14. The Notice also proposed rules that would allow the routine licensing of cell "enhancers" or "boosters," devices that receive, amplify and retransmit the signals of a particular cell site and its mobile units to and from areas of poor coverage. Cell enhancers, commonly used under developmental authority since 1985, have proven to be a cost effective alternative to adding one or more new cell sites to correct problems of poor coverage, thus avoiding the need to reconfigure existing cells. Because the devices have proven successful in solving problems of poor coverage without any documented cases of interference, we believed that it would be in the public interest to adopt new rules governing their use.

B. Discussion

15. The commenters overwhelmingly support the Commission's proposal to allow the use of cell enhancers on a regular basis rather than pursuant to developmental authority. They agree that these devices offer an economical means of improving service to licensees' existing coverage areas and they suggest that the Commission permit the use of all cell enhancers, consistent with the technical requirements adopted for the cellular service in *Amendment of Parts 2 and 22 of the Commission's Rules to Permit Liberalization of Technology and Auxiliary Service Offerings in the Domestic Public Cellular Radio Telecommunications Service*, 3 FCC Rcd 7033 (1988) ("*Auxiliary Cellular Services Order*"), *recon.*, 5 FCC Rcd 1138 (1990).

16. Subsequent to the release of the Notice, we adopted new rules which allow cellular licensees the option of utilizing new and innovative technologies in the provision of cellular service. In the *Auxiliary Cellular Services Order*,

3 FCC Rcd at 7034, we stated that the cellular industry will be able to use spectrum more efficiently and provide better service to subscribers through the use of nonconventional equipment. In accordance with the requirements of Section 22.930, adopted in our *Auxiliary Cellular Services Order*,¹⁵ a cellular licensee may currently use cell enhancers not subject to the restrictions specified in our Notice.

17. Accordingly, in view of our flexible cellular rules, the use of cell enhancers will not be limited to the restrictions proposed in our Notice. Rather, cell enhancers will be subject to the same technical limitations specified in Section 22.930 (c) of the rules. Therefore, cell enhancers will be subject to the height-power limitations provided in Sections 22.904 and 22.905. In addition, the emission requirements of Section 22.907 will apply, but only to the extent that those emissions fall outside the specific cellular frequency bands licensed to the operator, i.e., band A or band B. Because cell enhancers may now operate at the same power limits as regular cell site transmitters, they will be used both to fill in areas of poor coverage associated with an existing cell site and as a more economical way to increase coverage in new locations.¹⁶ In view of this broader application of these devices, a more apt descriptive definition is necessary. Accordingly, we will name them "cellular repeaters." See Appendix B.

18. All cellular repeaters must be type-accepted before being used.¹⁷ Applications for type-acceptance should be filed pursuant to Parts 2 and 22 of the rules, and should include a report of measurements pertaining to frequency range, maximum output power and modulation techniques. For those cellular repeaters utilizing linear amplifiers, the application for type-acceptance must contain test data demonstrating that any third order intermodulation products remain within the limits prescribed by Section 22.907 of the rules.

19. Applications for cellular repeaters will be considered on the same basis as applications for conventional cell site transmitters. Licensees proposing to operate a cellular repeater where the 39 dBu contour¹⁸ does not extend beyond the authorized Cellular Geographic Service Area (CGSA) may notify the Commission by filing FCC Form 489, pursuant to the requirements of Section 22.117(b) of the rules. Licensees proposing to use a cellular repeater where the 39 dBu contour extends beyond the authorized CGSA must file an FCC Form 401 application and obtain prior Commission authorization before commencing operation.¹⁹ The information accompanying each application should be identical to the information submitted when applying for a conventional cell site facility, with an additional exhibit indicating that the application is for a cellular repeater. Filing fees are identical to an application for a cell site in accordance with Section 1.1105 of the Commission's rules.

20. In our Notice we proposed that any licensee using a cellular repeater notify all other carriers operating within the same Metropolitan Statistical Area (MSA), New England County Metropolitan Area (NECMA) or Rural Service Area (RSA), specifying the use and location of the repeater. A number of commenters opposed this requirement, claiming that it would be disadvantageous to disclose such information to their competitors. Because cellular repeaters must be type-accepted and are subject to the same power and emission limitations as standard cellular base stations, we find no reason to treat a cell

repeater differently than a regular cellular base station. Therefore we will not require this notification. However, cellular repeaters will be subject to the standard frequency coordination procedures described in Section 22.902(d) of the rules.

21. Finally, we note that on May 24, 1988, the staff issued a Public Notice (Report No. CL-88-113) stating that all current developmental authorizations for cell enhancers, all of which are for service within existing CGSAs, would be extended until the Commission developed standards for their use on a non-developmental basis. Existing developmental authorizations for cellular repeaters will expire one year from the effective date of this *Report and Order*. There will be no grandfathering, so that all such equipment must be replaced with type-accepted cellular repeaters and licensees must submit an FCC Form 489 to obtain permanent authorization for their equipment, as required by Section 22.117 of our rules.

IV. CONCLUSION

22. The rules adopted in this *Report and Order* codify our present policy prohibiting the use of cellular telephones on board airborne aircraft. In addition, the new rules permit the on-ground use and installation of cellular telephones in aircraft subject to FAA rules and guidelines. Finally, consistent with the Commission's decision in the *Auxiliary Cellular Service Order*, we are adopting rules governing the use of cellular repeaters.

V. ORDERING CLAUSES

23. Authority for the rule changes adopted herein is contained in Sections 1, 4(i) and (j), and 303(r) of the Communications Act of 1934, as amended. 47 U.S.C. Sections 151, 154(i), 154(j) and 303(r).

24. Accordingly, IT IS ORDERED that Part 22 of the Commission's rules IS HEREBY AMENDED as set forth in Appendix B below.

25. IT IS FURTHER ORDERED that the rule changes made herein WILL BECOME EFFECTIVE 60 days from the date of publication in the Federal Register.

26. For further information, contact Michael Ferrante ((202) 653-5560) or Dan Abeyta ((202) 632-6450), Mobile Services Division, Common Carrier Bureau.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

APPENDIX A

Parties Commenting on Notice of Proposed Rule Making

ALLTEL Mobile Communications, Inc. (ALLTEL)

Antenna Specialists Co.

ASTRONET Corporation (ASTRONET)

Bell Atlantic Mobile Systems, Inc. (Bell Atlantic)

BellSouth Corporation
 Cellular Telecommunications Industry Association (CTIA)
 COM/NAV Marine, Inc. (COM/NAV)
 GTE Corporation
 McCaw Cellular Communications, Inc. (McCaw)
 National Business Aircraft Association
 National Telephone Cooperative Association (NTCA)
 NYNEX Mobile Communications Company
 PacTel Cellular (PacTel)
 Providence Journal Telecommunications, Inc. (Providence)
 Peninsula Engineering Group, Inc. (Peninsula Engineering Group)
 Southwestern Bell Mobile Systems, Inc. (Southwestern Bell)
 Telecommunications Industry Association
 Telocator
 U S West NewVector Group, Inc. (NewVector)

Reply Comments

Cellular Telecommunications Industry Association
 GTE Corporation
 McCaw Cellular Communications, Inc.
 NYNEX Mobile Communications Company
 Southwestern Bell Mobile Systems, Inc.
 Telocator

Additional Parties Commenting on FAA Letter of November 27, 1989

Air Transport Association
 Aloha Airlines
 American Airlines
 Cincinnati Microwave Communications
 Delta Air Lines, Inc.
 Eastern Airlines
 General Cellular Corporation
 International Air Transport Association
 Northwestern Airlines
 Pan Am World Airways
 Rollins, Inc.
 Sky Cell Corporation
 TWA
 Air Transport Association of America
 Federal Aviation Administration
 Aircraft Owners and Pilots Association
 Airline Pilot Association

APPENDIX B AMENDED RULES SECTION

Title 47, Part 22 of the Code of Federal Regulations is amended as follows:

Part 22 - Public Mobile Service

1. The authority citation for Part 22 continues to read as follows:

Authority: Sections 4, 303, 48 Stat., as amended, 1066, 1082; (47 U.S.C. 154, 303).

2. Section 22.2 is amended by adding a new definition in alphabetical order to read as follows:

Section 22.2 Definitions.

* * * * *

Cellular Repeater. A fixed station in the Domestic Public Cellular Radio Telecommunications Service which retransmits the transmissions of a particular cell site, with or without frequency translation.

* * * * *

3. Section 22.904 is revised to read as follows:

Section 22.904 Power limitations.

Stations in this service shall not be permitted to exceed the effective radiated power indicated below.

	Watts (ERP)
Base stations	500
Mobile stations	7
Auxiliary test stations	7
Cellular Repeaters	500

4. Section 22.911 is amended by adding paragraph (a)(1) to read as follows:

Section 22.911 Permissible communications.

(a) * * *

(1) Cellular telephones shall not be operated in airplanes, balloons or any other aircraft capable of airborne operation while airborne. Once the aircraft is airborne, all cellular telephones on board such vehicles must be turned off. The term "airborne" means the aircraft is not touching the ground. Cellular telephones may be installed in aircraft. A cellular telephone which is installed in an aircraft must contain a posted notice which reads: "The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations."

5. Section 22.912 is amended by adding new paragraph (c) to read as follows:

Section 22.912 Responsibility for operational control and maintenance of mobile stations.

(c) A cellular carrier may either refuse or terminate service to a subscriber, in accordance with any applicable local requirements for timely notification, for using a cellular telephone in an airborne aircraft in violation of Section 22.911(a)(1).

6. Section 22.930 is amended by adding a last sentence to paragraph (d) to read as follows:

Section 22.930 Special provisions for alternative cellular technologies and auxiliary services.

(d) * * * For purposes of this paragraph, cellular repeaters will be treated as a cellular facility.

APPENDIX C

FINAL REGULATORY FLEXIBILITY ANALYSIS

I. Need and purpose of this action:

With respect to the use of cellular units in aircraft, the rule adopted clarifies our policy in this area and prevents a potential interference source. As for the use of cell repeaters, our objective is to facilitate the rapid introduction of advanced cellular technologies in the Domestic Public Cellular Radio Telecommunications Service.

II. Summary of the issues raised by the public comments in response to the Initial Regulatory Flexibility Analysis:

No comments were raised in response to the Initial Regulatory Flexibility Analysis. Several parties suggested modification or clarifications to the proposals set forth in the Notice. As a result of these comments, we have adjusted our proposals as appropriate.

III. Significant alternatives considered:

The regulatory burdens we have retained are necessary to carry out our duties under the Communications Act of 1934, as amended. We will continue to examine alternatives in the future with the objective of eliminating unnecessary regulations and minimizing any significant economic impact on small entities. A copy of the Report and Order shall be sent to the Chief Counsel for Advocacy of the Small Business Administration.

FOOTNOTES

¹ Amendment of Sections of Part 22 of the Commission's Rules in the Matter of Airborne Use of Cellular Units and the Use of Cell Enhancers in the Domestic Public Cellular Radio Service, Notice of Proposed Rulemaking, 3 FCC Rcd 5265 (1988). Late-filed pleadings, and motions for acceptance thereof, were filed by the National Business Aircraft Association and NYNEX Mo-

bile Communications Company. These motions were unopposed and we grant them in the interest of obtaining a complete record upon which to base our decisions in this proceeding.

² See Appendix A for a listing of commenters and abbreviations used herein.

³ Letters from Associate Administrator for Airways Facilities, FAA, to Chief, Mobile Services Division, Common Carrier Bureau (November 27, 1989 and September 19, 1991). The public was made aware that the FAA had corresponded with the FCC concerning the use of cellular telephones in aircraft and several parties filed comments in response to the FAA's first letter. See Public Notice, "Notice to File Comments on FAA Concerns Regarding the Use Of Cellular Telephones in Aircraft" (December 18, 1989).

⁴ Although not all comments are discussed in this R&O, we have analyzed all of the arguments contained in the comments filed in this Rule Making proceeding.

⁵ Section 22.509(b)(2) of the Commission's rules specifically limits the operation of airborne mobile stations governed by Part 22 to the frequencies listed in Section 22.521. Section 22.521 also specifies the operating parameters of the air-ground radiotelephone service for common carriers, which utilizes certain frequencies in the 454 MHz band. Air-ground radiotelephone service provides a public radio service between a base station and airborne mobile stations.

⁶ In an effort to satisfy the public's radiotelephone needs, the Commission recently adopted rules establishing an air-ground radiotelephone service that operates in the 849-851/894-896 MHz frequency bands. See Amendment of the Commission's Rules Relative to Allocation of the 849-851/894-896 MHz Bands, 5 FCC Rcd 3861 (1990), *recon.*, 6 FCC Rcd 4582(1991). This service is capable of operating while the aircraft is airborne or on the ground.

⁷ The Notice stated that we would continue to follow the guidelines set forth in the October 11, 1984 Public Notice pending the conclusion of this Rule Making proceeding.

⁸ We point out that Section 22.210 of our rules provides that during periods of emergencies, i.e., when normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, a licensee of any station in the Public Mobile Services may utilize that station for emergency communication service provided it complies with the requirements of Sections 22.210(a)-(e).

⁹ Letter from Associate Administrator for Airways Facilities, FAA, to Chief, Common Carrier Bureau (November 27, 1989).

¹⁰ On December 18, 1989 the Commission issued a Public Notice soliciting comments on the FAA letter. We received 23 comments and 5 reply comments. Twelve parties favor the on-ground use of cellular telephones in aircraft, arguing that the FAA position is not based on empirical evidence. Eleven comments were received from various airlines and aviation associations, all supporting the views expressed in the FAA letter.

¹¹ We note that Section 91.19 of the FAA's rules already governs the operation of all portable electronic devices on aircraft. 14 C.F.R. Section 91.19 This rule provides in pertinent part that the operation of any portable electronic device is not allowed on any United States registered aircraft unless the air carrier or commercial operator in the case of commercial aircraft or the pilot in command in the case of other aircraft determines that the use of such devices will not cause interference with the navigation or communication systems on the aircraft on which the devices are to be used.

¹² In addition, no evidence was presented showing that the installation and use of cellular telephones in aircraft might interfere with the air-to-ground radiotelephone system installed in the same aircraft because cellular service and air-to-ground radiotelephone service operate on different frequencies.

¹³ We note that a section 503 forfeiture proceeding against a non-licensee or non-applicant can only be initiated for a second violation, after issuance of a citation in connection with a first violation. 47 U.S.C. § 503(b)(5). *See also* Standards for Assessing Forfeitures, 6 FCC Rcd 4695 (1991).

¹⁴ *See* Section 22.911(a)(1) of the rules. In order to discourage violations of this rule, we adopt a new rule section that provides: "A cellular carrier may either refuse or terminate service to a subscriber, in accordance with any applicable local requirements for timely notification, for using a cellular telephone in an airborne aircraft" *See* Section 22.912(c). Violations of this rule are also punishable under Section 502 of the Act.

¹⁵ Section 22.930 specifies the application filing procedures and requirements concerning the use of devices employing new technologies and nonconventional equipment in the cellular radio service.

¹⁶ A number of commenters in our Notice request that the Commission act as expeditiously as possible to initiate an additional Rule Making proceeding to address the use of high-powered cell enhancers. However, the adoption of the *Auxiliary Cellular Services Order* obviates the need for such a proceeding. Accordingly, this request is dismissed as moot.

¹⁷ Several parties recommend that the Commission adopt rules allowing cell repeaters to be eligible for authorization through the notification procedures specified in Section 2.975 of the rules. We will adhere, however, to the authorization requirements for nonconventional equipment operating under Section 22.930 because of our need to identify equipment that may cause interference. As noted in *Auxiliary Cellular Services Order, supra*, type-acceptance will also serve to prevent the use and marketing of illegal equipment in the cellular radio service.

¹⁸ The 39 dBu figure set forth in Section 22.903 of the rules refers to the electric field strength by which a carrier's service area is defined. We recently released a Further Notice of Proposed Rule Making which addresses the issue of whether 39 dBu contours should continue to be used to represent reliable cellular coverage. *See* Rules for Unserved Areas (Further Notice of Proposed Rule Making), Mimeo # FCC 91-311, adopted September 30, 1991. Therefore, the rules that we adopt today will remain in effect pending the final decision in that proceeding.

¹⁹ Section 22.930(d) states that the 39 dBu contours of auxiliary service facilities will not be considered when demonstrating the 75 percent coverage requirement specified in Section 22.903. We will, however, modify Section 22.930 to allow the 39 dBu contour of a cell repeater, as calculated according to Section 22.903 of the rules, to be considered as part of a cellular system's coverage area, in the same way we consider conventional cell transmitters. *See* Section 22.903(d) in Appendix B.