This section replaces old §§ 22.400 and 22.401. As proposed, we are adding a new paragraph providing that developmental authorizations may be granted for stations to provide a trial period during which it can be determined on an individual transmitter basis whether excessive interference will result. The vast majority of developmental authorizations now issued under Part 22 are for this purpose.

§ 22.403 General limitations.

This section restates old § 22.404, paragraphs (a), (b), (c) and (e). We adopt it as proposed. We are moving the prohibition on rendition of communications service for hire to new § 22.409. The purpose of this prohibition is to prevent the establishment of a subtantial base of subscribers who become dependant on a new type of public mobile service that we might subsequently decide not to authorize on a regular basis. The vast majority of developmental authorizations now issued under Part 22 are for trial period operation of individual transmitters within a system, and for these the prohibition on providing service for hire is waived. For example, see old § 22.501(a)(5)(ii). In its new location in Part 22, this prohibition will apply only to developmental authorizations issued for experimentation leading to the potential development of a new public mobile service.

§ 22.409 Developmental authorization for a new public mobile service or technology.

This section replaces old §§ 22.402, 22.403, 22.404(d), 22.405, 22.406, and 22.407. We adopt it as proposed.

§ 22.411 Developmental authorization of 43 MHz paging transmitters.

This new section incorporates most of the provisions of old § 22.501(a)(5), which concern interference caused by these paging stations to broadcast TV receivers. The provisions of § 22.501(a)(5)(i) are not included because they became obsolete when low band two-way service was discontinued on June 30, 1988. This rule also incorporates conditions in the standard letter we have used when authorizing 43 MHz transmitters. As in the proposed rule, the type of form that licensees must file in order to obtain a regular authorization at the end of the two year developmental period is changed from FCC Form 489 to FCC Form 600. We did this for two reasons. First, in this order we are revising our rules and forms to provide that all applications filed on a form (regardless of whether they are classified as major or minor) must be on FCC Form 600, and all notifications filed on a form must be on FCC Form 489. Under the old rules, we required FCC Form 489 to be used for certain application purposes, including the instant case. Second, under new § 22.123(b), applications for regular authorization of facilities operating under a developmental authorization are classified as major. This classification is particularly appropriate in view of new § 22.165, under which licensees may add 43 MHz paging transmitters to an existing system without obtaining prior approval from or even notifying the Commission. Although such transmitters are subject to the provisions of this section (see new § 22.165(d)(2)), affected parties (such as TV stations or viewers) have no opportunity to formally protest the establishment of such transmitters until the licensee applies for regular authority at the end of the developmental period. We examine all filings on FCC Form 600 as soon as they are received to determine whether they are major and thus must be listed in a public notice. We wish to avoid having to do the same thing with filings on FCC Form 489. Consequently, any filings that are major should be on FCC Form 600. Licensees affected by the change from FCC Form 489 to FCC Form 600 are advised that the application filing fee may be different.

§ 22.413 Developmental authorization of 72-76 MHz fixed transmitters.

This section incorporates the provisions of old § 22.501(f)(1)(ii) and of the standard letter we have used when authorizing 72-76 MHz transmitters. The old rule provided that the Commission could issue a regular authorization rather than a developmental one for 72-76 MHz fixed stations "collocated" with TV Channel 4 or 5 transmitters. To check this, the Mobile Service Division staff would look for matching geographical coordinates, or other evidence that the fixed station antenna is side mounted on the TV tower. As a practical matter, it only matters that the fixed antenna is close to the TV antenna. Consequently, we proposed and are adopting a maximum of 50 meters for the exemption from developmental authorization (see new § 22.413(b)(3)).

§ 22.415 Developmental authorization of 928-960 MHz fixed transmitters.

This section incorporates the provisions of old § 22.501(g)(3)(ii) and provides additional procedures consistent with the other sections in this subpart.

§ 22.417 Developmental authorization of meteor burst systems.

This section incorporates the provisions of old § 22.601(g)(8) and provides additional procedures consistent with the other sections in this subpart. As

with new § 22.411 above, we changed the required form from FCC Form 489 to FCC Form 600, for the same reasons.

Subpart E - Paging and Radiotelephone Service

§ 22.501 Scope.

This section states how the rules in this subpart are applied. We adopt it as proposed.

§ 22.507 Number of transmitters per station.

We adopt this rule with certain modifications. We proposed this new rule to serve two purposes. First, we proposed to eliminate the use of multi-channel transmitters in the Paging and Radiotelephone Service. This proposal received extensive comment and is discussed in the Report and Order. Consistent with the decision on that issue there, we deleted the phrase "at each location where that channel is" from paragraph (a).

Second, we proposed to codify our policies concerning the number of transmitters authorized together as a station. In particular, we proposed that transmitters authorized together as a station (thus sharing the same call sign) must be operationally related (i.e., work together as part of a system). Transmitters that operate independently and are widely separated geographically would be authorized as separate stations (having different call signs). The proposed rule also provides that the Commission may (1) if necessary for administrative reasons, break up large wide-area systems into two or more authorizations; and (2) upon request of an applicant consolidate separately authorized stations, if appropriate under the guidelines in this section.

Our long standing policy has been to authorize all base transmitters of each licensee in a given geographical area according to the following convention: we authorize each licensee's transmitters on the one-way paging channels (see new § 22.531) together as a station and each licensee's transmitters on the one- and two-way mobile channels (see new § 22.561) together as station. The proposals for this rule section were intended to address two types of administrative problems that have arisen in recent years: combining authorizations and authorizing very large wide-area systems.

Licensees applying for system expansion facilities over the years have often marked their applications to indicate a request for a "new station" instead of an "additional facility for an existing station." Doing this usually results in the added facility being authorized as a new station and assigned a new call sign, rather than being included in the existing authorization with the existing call sign. Also, systems have been expanded by merging them with nearby, separately-authorized systems, sometimes through assignments of authorizations. As a result of this type of licensing activity, some licensees' wide-area systems now have several different call signs assigned to various individual transmitters and groups of transmitters within the system. Because transmitting all of these call signs to identify the system would waste air time, we have routinely waived the station identification rule to allow licensees to transmit just one of its assigned call signs. In this Report and Order, we amend the station identification rule to eliminate the need to routinely waive it (see discussion of new § 22.313(c)(3), supra).

Despite our willingness to waive the station identification rule, licensees have occasionally requested that we combine their separate authorizations into one. We have attempted, when resources have been available, to honor these requests. There are, however, two limitations inherent in the computer data base management system (DBMS) we have used since the early 1980's that cause merging two authorizations to be very costly in terms of resources, subject to errors, and, in some cases, impossible.

First, the computer DBMS limits each station authorization to no more than 99 locations. Consequently, it is impossible to combine authorizations where the resulting combined authorization would have more than 99 locations. Second, there is no software function to easily transfer records from one authorization to another. This means that to merge authorizations or process a partial assignment of authorization, our staff must delete all the affected records from one authorization, then retype all the data back into the computer under the other authorization. Because of the significant amount of resources required to do this, when application processing fees were reinstituted, a category was added to the fee schedule entitled "combining call signs" (see old § 1.1105). The old fee schedule also indicates that FCC Form 489 should be filed for a request to "combine call signs." There are no instructions or check boxes on the FCC Form 489, however, that are relevant to requests to "combine call signs." Furthermore, there have never been any Part 22 rules addressing or providing for this type of administrative action. As a result, when a licensee has filed a FCC Form 489 (as indicated in the fee schedule) requesting a merger of authorizations that either is impossible or has come during a time when resources to process it have not been available, questions have arisen as to what basis the Commission has to defer or deny the request.

The computer systems and software that the Mobile Services Division uses are currently being updated and replaced by more modern systems. We intend to redesign the paging data base to remove the 99 transmitters per station limitation. While this number of transmitters was considered adequate when the previous computer DBMS software was designed, the current trend in paging systems is toward nationwide and regional wide-area systems, and the largest of these have more than 99 transmitters. Therefore, we adopt our proposal that there be no limit to the number of transmitters that a station may comprise. As with magnetic filings, however, we will not be able to implement this provision until the new computer software is in place. Accordingly, we are adding a Note following paragraph (b) indicating that until further notice, a station may comprise up to 99 transmitters.

As proposed, we adopt language in paragraph (b) indicating that the Commission may consolidate separately-authorized stations upon request of the licensee, if appropriate under this section. Consistent with our decision to use FCC Form 600 for all requests requiring a Commission action, we are specifying the use of FCC Form 600 for combining authorizations (and making appropriate changes to that form and to the fee schedule). Finally, we are adding languge to clarify the meaning of the phrase "operationally related transmitters."

§ 22.509 Procedure for mutually exclusive applications. [PROPOSED]

In the Notice, we proposed to adopt a § 22.509 to govern processing of mutually exclusive applications in the Paging and Radiotelephone Service. Subsequently, in the Transition Notice, we proposed to adopt rules providing for the use of competitive bidding procedures for initial applications for all commercial mobile services. Because the proposals and issues raised in the the latter proceeding have superceded our original proposal, we are not adopting the proposed § 22.509. However, see related new §§ 22.541 and 22.717.

§ 22.511 Construction period for the Paging and Radiotelephone Service.

This section replaces the first sentence in old § 22.43(a)(2). Joint Commenters recommend we revise the proposed rule to provide that, when the release of a Public Notice listing the grant of an application post-dates the grant date by 30 days or more, the licensee has one year from the Public Notice date to complete construction. We reject this suggestion. Public Notice normally follows the grant date by two or three weeks, at most. The one-year construction period is ample time for licensees to complete construction of facilities, even considering this two to three week delay.

§ 22.513 Channel availability. (proposed)

This proposed section was made obsolete by confilcting proposals in the Further Notice. It therefore was not adopted.

§ 22.515 Permissible communications paths.

This section replaces old § 22.509 paragraphs (a), (b)(1) and (b)(3). Service to mobile stations aboard surface vessels is no longer considered to be incidental service.

§ 22.529 Application requirements for the Paging and Radiotelephone Service.

This section replaces portions of old § 22.15. We adopt it as proposed.

ONE-WAY PAGING OPERATION

§ 22.531 Channels for one-way operation.

This section replaces several paragraphs in old § 22.501. Joint Commenters recommend using the term "lowband" to refer to the low VHF (35 MHz and 43 MHz) channels, and the term "guardband" to refer to the four high VHF (152 MHz and 158 MHz) channels.

The vernacular terms "lowband" and "guardband" are not as precise as the official terms we use, but are commonly used by technicians and others in the land mobile industry. We added language indicating that the low VHF channels are sometimes referred to as "lowband" channels, and the high VHF channels are sometimes referred to as "guardband" channels.

§ 22.535 Effective radiated power limits.

This rule applies the provisions of old §§ 22.505 and 22.506 to stations operating on the one-way paging channels. The proposed rule combined the various inter-related power limit provisions into one section. We proposed one substantive change. Currently, the antenna height power limit applicable to any given transmitter is a function of the average height above average terrain of the site. We proposed instead that the antenna height power limit for each transmitter be a function of the predicted coverage of that transmitter. This proposed method of equalizing coverage and limiting interference potential is better

because it takes into account not only the surrounding terrain but also the orientation and directivity, if any, of the antenna (and tower) relative to the terrain.

In regard to the method for height-power limits set forth in paragraph (c) of the proposed rule, SSI contends that although it can be readily determined whether a given power level complies, the method is "unworkable" for determining the maximum power that could be authorized for a given antenna at a given location. We disagree. In fact we have developed a simple personal computer program that uses an iterative process to determine the maximum power that could be authorized for a given location and antenna height above average terrain under the proposed rule. We will make this program available to the public through our normal distribution methods.

PageNet opposes the continued application of basic and height-power limits to 931 MHz paging stations. It recommends that all 931 MHz paging transmitters be allowed to operate with 3500 Watts at any antenna height, provided that the applicant demonstrates that no-channel interference will result from such operations. We proposed to do this in CC Docket No. 93-116, Amendment of Part 22 of the Commission's Rules Pertaining to Power Limits for Paging Stations Operating in the 931 MHz Band in the Public Land Mobile Service (Notice of Proposed Rule Making), 8 FCC Rcd 2796 (1993). The majority of commenters in that proceeding favored this approach. Accordingly, we are adopting this proposal and we are changing paragraphs (b) and (c) to make them applicable only to the VHF paging channels.

AK Peters proposes that language be included in the rule indicating whether radials that are excluded from average terrain calculations are to be included in the calculation of the arithmetic mean value. The mean should be calculated, says AK Peters, using only cardinal radials where the service contour distance occurs entirely over land. We do not adopt this suggestion. Radio waves generally propagate with less loss over water. Excluding over-water cardinal radial distances from the average would result in higher powers. Therefore, the potential for interference to stations beyond the water area would be further increased. We will, however, allow exclusion of radials that are mostly (i.e., 90% or more) over water, to avoid unnecessarily reducing transmitting power for transmitters located along coastlines.

§ 22.537 Technical channel assignment criteria.

This new rule replaces old §§ 22.15(b)(2)(i) and 22.504, which specified procedures for determining interference between co-channel stations. Also, in regard to 931 MHz paging stations, the proposed rule contains two tables that combine and replace the tables in old §§ 22.502(c), 22.503(d) and 22.504(b)(2). As proposed, the rule would replace the existing Carey Report procedures with mathematical formulas for determining service areas and interfering contours of stations. We proposed to replace the Carey Report procedures with mathematical formulas because formulas produce essentially the same results but are much easier to use. In addition, use of mathematical formulas eliminates the ambiguity inherent in visually reading the field strength curves in the Carey Report. The proposed rule also contains a paragraph (a)(3) that would establish two new requirements for grant of a channel assignment: (1) that the area or population to be served by a proposed transmitter be substantial; and (2) that service gained would exceed that lost as a result of agreements to accept interference. These new requirements are intended to discourage applications proposing impractically small or interference-riddled systems. The only purpose of such applications is to delay or block the expansion of a competitor's system on the same channel. Use of our administrative procedures for such anti-competitive purposes is not in the public interest.

The commenters generally support our proposal to discontinue reliance on Carey Report procedures, although some condition this support on assurance that the mathematical formulas produce results that closely approximate those of the Carey Report procedures. Bell Atlantic notes that, in some cases, there appear to be noticable differences in interfering contour distances determined by the two methods. It recommends that we conduct a comprehensive analysis and request further specific comment on this issue. In reply comments, Comp Comm, Inc. (Comp Comm) submitted alternative formulas it believes are better than the proposed formulas in providing greater accuracy for stations using very high antenna heights. AK Peters recommends that contours be derived from data for interstation radials as well as the eight cardinal radials. Joint Commenters recommend we clarify whether overlap determinations will be made solely upon the basis of the eight cardinal radials or on the inter-station radials. Comp Comm points out that we omitted the 0.1 watt ERP floor that is used with the similar cellular formulas in the parameter limits in proposed paragraphs (c)(2) and (d)(2).

Comp Comm recommends that we not adopt the proposed new requirements aimed at preventing applications for small or interference-riddled systems. Comp Comm argues that it is necessary to use field strength ratios to determine service area gains and losses when evaluating cases involving the acceptance of interference. Because the proposed rule defines service and interfering contours in terms of radial distances from transmitter sites rather than median field strengths, there would be no technical basis, Comp Comm claims, upon which to make such determinations.

MetroCall of Delaware and Telocator both suggest that we require applicants for initial and stand-alone 931 MHz paging facilities to propose sufficient antenna height and transmitting power to justify the minimum 20 mile service radius and 50 mile interfering radius that is accorded by both the old and proposed rule, or alternatively, to reduce the service and interfering radii specified in the proposed tables for stations operating with technical facilities less than the equivalent of 1000 Watts at 1000 feet antenna height above average terrain.

After consideration of the comments, we attempted to refine each of the proposed service contour formulas to track even more closely the results produced using the Carey Report procedures. Then we comparatively analyzed the proposed and refined service contour formulas as well as the alternative service contour formulas submitted by Comp-Comm. The analysis shows that, for some categories and antenna heights, the refined formulas represent an improvement in Carey-tracking accuracy over their counterpart proposed formulas, but for other categories and antenna heights, the proposed formulas are already optimized and no further refinement is possible. Both the proposed and refined service contour formulas tracked the Carey report curves over the primary ranges of interest much more accurately than the formulas submitted by Comp-Comm. In addition, the Comp-Comm formulas are more complex and would be somewhat more difficult to use. The Comp-Comm formulas come closer to the Carey curves only for extraordinarily high antenna heights (610 and 1524 meters), which is the advantage Comp-Comm claims for them. However, we do not agree that improvement at very high antenna heights at the expense of accuracy in the primary ranges of interest is a good trade-off. There are very few, if any, stations authorized at such high heights, and it is not clear that the Carey Report propagation model itself, much less any formulas that could be derived from it, is an adequate tool to predict interference in these high altitude cases. Our goal here was not to find an elaborate propagation model that would fit all situations, but rather to replace the relatively subjective Carey Report procedures with a more objective and less burdensome equivalent that would work well in most situations.

Although in our analysis, we did observe small differences between the distances produced by the proposed and refined formulas and those derived from the curves in the Carey Report, these differences are so small that they would not necessitate any significant changes in the technical parameters of proposed systems. Furthermore, these differences in contour distances will not result in interference because they represent a neglible difference in field strength. For these reasons, we adopt the formulas, some as proposed and some as refined. As suggested by Bell Atlantic, we may in the future revisit the subject of interfering contour formulas, with the goal of developing a single, simple formula for all antenna heights to replace the two simple formulas we adopt here. We are adding the 0.1 Watt ERP minimum limits referred to by Comp Comm, which we inadvertantly left out of the proposed rule.

With regard to the use of data in addition to that for the eight cardinal radials, we are clarifying this point in new paragraphs (c)(3) and (d)(3). In general, service and interfering contours are determined by calculating distances along the eight cardinal radials using actual data and using linear interpolation as a function of angle to determine distances in other azimuths. To resolve disputed cas, however, such as ions against which a petition to deny has been filed alleging impermissible contour overlap, the following procedure may be used: Contour distances are calculated using actual data along the inter-station radial and along sufficient radials at azimuths above and below the inter-station radial at 2.5° intervals to clearly show whether overlap occurs.

In regard to the suggestion that we require that 931 MHz stations be operated with sufficient power and/or antenna height to "justify" the 32.2 km (20 mile) service area, we did not propose this and do not believe it is necessary at this time. We may consider additional changes to our system for assigning paging channels in the 931 MHz frequency range in a future proceeding.

Also, we are adopting the new requirements aimed at discouraging applications for impractically small or interference-riddled systems. These requirements will not affect the vast majority of applications. We will use them only to weed out obviously questionable technical proposals, where we can not determine that the public interest would be served by a grant of the application. For example, we might question a proposal for a facility that would have a service area totally enveloped by interfering contours

of existing non-operationally related stations (even though the applicant agrees to accept such pervasive interference). We disagree with Comp Comm that specified desired-to-undesired signal ratios are needed in order to use these requirements. In disposing of any case that is so close that the disposition of it could hinge on such a detailed field strength analysis, we would probably accord the applicant the benefit of the doubt. Moreover, setting forth detailed technical standards under which the new requirements would operate could encourage parties to file frivolous petitions to deny, defeating the rule's purpose. These types of applications are infrequent now, and should be virtually eliminated by this rule. Accordingly, we believe that a case-by-case approach is in the public interest.

§ 22.539 Additional channel policies.

This rule replaces old §§ 22.16(c), 22.516, and 22.525. The proposed rule would maintain the current practice of authorizing one channel per application cycle, except that licensees would be required to provide service to the public on each authorized channel before applying for an additional channel. This subject received significant attention in the comments and is discussed in the Report and Order.

§ 22.541 Procedures for mutually exclusive 931 MHz paging applications.

In the Further Notice, we proposed several processing procedure changes that would apply to applications for 931 MHz paging facilities. Our decision is discussed in the Report and Order, and is reflected in this new rule.

§ 22.551 Nationwide network paging service.

This section replaces old § 22.527. Because all nationwide channels have been assigned, the initial application requirements for network organizers are no longer needed and have been removed.

§ 22.553 931 MHz channels assignable North of Line A.

We added this informational rule which incorporates the U.S.-Canada agreement regarding the assignment of 931 MHz channels near the border.

§ 22.559 One-way paging application requirements.

This new section sets forth the requirements that are peculiar to applications for one-way paging operation in the Paging and Radiotelephone Service. We adopt this rule as proposed.

ONE-WAY OR TWO-WAY MOBILE OPERATION

§ 22.561 Channels for one-way or two-way mobile operations.

This section replaces several paragraphs in old § 22.501. AK Peters suggests that the term "public land mobile service" in the first sentence would be made obsolete by the proposed radio service title changes and recommends that the phrase should be changed to "Paging and Radiotelephone Service." We disagree and are not changing this because we are not referring to the formal title of the service here, but rather using a generic term to mean any allowable usage of the channels.

§ 22.563 Provision of rural radiotelephone service upon request.

This rule replaces old § 22.501(c). AK Peters questions whether the proposed rule was intended to require that stations operating on any of the channels listed under new § 22.561 be subject to the requirement that rural radio service be made available upon request, or whether this requirement would apply only to stations operating on channels that were originally reserved for wireline common carriers.

We adopt the proposed rule with one modification. We see no reason why this rule should not apply to all channels that are available in both the Paging and Radiotelephone and Rural Radiotelephone Services. We originally added the requirement to provide rural radiotelephone service on request when we removed the rule that had divided these channels into two groups -- one for wireline common carriers and the other for radio common carriers. See Elimination of the Separate Frequency Allocation Structure in the Public Land Mobile Service (Rule Section 22.501), 99 FCC 2d 311 (1984). Our concern then was that the radio common carriers would quickly use up former wireline channels that the wireline common carriers (who typically provide rural radiotelephone service) had been holding in reserve for future rural radiotelephone service needs. Recent filings by BETRS interests indicate that the problem of possible conflicting uses of the 450 MHz paired channels remains a concern. This provision, however, as existing and proposed, does not and would not require that licensees use BETRS, only that they provide some type of rural radiotelephone service upon demand. The record in this proceeding is not sufficient on this topic for us to conclude that the existing requirement should either be strengthed or eliminated.

As for the modification, we note that, as a consequence of our decision in Flexible Allocation, these paired channels are now being used mostly for

paging operations. Because paging systems typically use the mobile half of the channel pair for control purposes, these systems are generally incapable of providing any two-way radiotelephone service, including rural radiotelephone service. For such systems, there is no practical way to comply with the existing or new rule. Therefore, we modified the proposed rule such that only systems which provide two-way mobile service are required to provide rural radiotelephone service on request.

§ 22.565 Transmitting power limits.

This rule applies the provisions of old §§ 22.505 and 22.506 to stations operating on the one and two-way mobile channels. The proposed rule combined the various inter-related power limit provisions into one section. As with new § 22.535, the antenna height power limit for each transmitter will now be a function of the predicted coverage of that transmitter. See to our discussion of § 22.535 for the reasons for this change. Also, in connection with our refinement of the mathematical formulas in new § 22.567, we made corresponding adjustments to the specified average service contour distances in the height power rule – from 41.8 to 41.6 kilometers for VHF channels and from 30.6 to 30.7 kilometers for UHF channels.

§ 22.567 *Technical channel assignment criteria.*

This new rule is essentially the same as new § 22.537, except that it applies to one and two-way mobile operation rather than one-way paging operation. It replaces old §§ 22.15(b)(2)(i) and 22.504, which specified procedures for determining interference between co-channel stations. As with new § 22.537, the proposed rule would replace the existing Carey Report procedures with mathematical formulas for determining service areas and interfering contours of stations. It would also establish two new requirements for grant of a channel assignment: (1) that the area or population to be served by a proposed transmitter be substantial; and (2) that service gained would exceed that lost as a result of agreements to accept interference (new paragraph (a)(3)). The purpose of these proposals is the same as set forth in our discussion of new § 22.537, supra.

We are adding a new paragraph (g) containing provisions designed to permit one and two-way mobile operation channel assignments in a manner that protects co-channel BETRS facilities from interference. These provisions are largely based on assumptions about BETRS facilities made by IMM in the technical analysis submitted with its comments. This analysis suggests a separation of 110 miles between typical co-channel BETRS central office stations, based on a median field strength of 30 dBμV/m at the subscriber station (IMM derived distances from our UHF TV curves in Part 73 of our rules) and a carrier to interference ratio of 23 dB. The analysis also suggests a separation of 140 miles between a typical BETRS central office station and a typical paging base transmitter. We differ with IMM only in that we consider the assumed reliable service range of a UHF two-way mobile to be 30.7 kilometers (19 miles) rather than 24.1 kilometers (15 miles). Accordingly, we find the typical spacing between a two-way base transmitter in the Paging and Radiotelephone Service and a BETRS central office station should be 231.7 kilometers (144 miles) rather than 225.3 kilometers (140 miles). Although these calculations are based on UHF facilities, the new paragraph will apply to both VHF and UHF facilities. At this time, there are no VHF BETRS facilities. In the event that BETRS equipment is developed for the VHF frequency range, we will consider any necessary adjustments to the technical parameters at that time.

For the purpose of determining whether there is predicted interference to protected BETRS facilities from a proposed one- or two-way mobile service base or fixed transmitter, new paragraph (g) provides that BETRS central office stations are considered to have a circular "service contour" with a radius of 40 kilometers (25 miles), and that the distance to the interfering contour from a proposed one- or two-way mobile service base or fixed transmitter is calculated by a mathematical formula that produces results compatible with IMM's suggested separations for all stations (not just typical stations). For determining interference from a BETRS facility to mobile receivers associated with a proposed one or two-way mobile service base transmitter, the BETRS facility is treated as a base station in the Paging and Radiotelephone Service, i.e., service and interfering contours are calculated using the appropriate formulas in paragraphs (c) through (f). In most cases, there will not be interference from a BETRS facility to a one or two-way mobile service facility.

Paragraph (h) contains provisions proposed to replace the policies established in Flexible Allocation governing assignment of mobile channels to base and fixed stations.

§ 22.569 Additional channel policies.

This rule replaces old §§ 22.16(a) and (b) and 22.516. It would eliminate traffic load requirements and establish the general policy to assign no more than two channels in an area to a carrier per application cycle. This subject received significant

attention in the comments and is discussed in the Report and Order.

§ 22.571 Responsibility for mobile stations.

This rule replaces old § 22.514. We are eliminating proposed paragraph (a) as unecessary and combined paragraph (b) into the introductory text.

§ 22.573 Use of base transmitters as repeaters.

This rule replaces old § 22.517. We adopt it as proposed.

§ 22.575 Use of mobile channel for control transmitter.

This rule replaces old § 22.518. We are modifying the language slightly to clarify that this section applies only for control stations with no more interference potential than a mobile station.

§ 22.577 Grandfathered dispatch service.

This rule replaces old § 22.519. We note that the Congress recently amended the Act to allow the Commission to remove prohibitions on the provision of dispatch service by common carriers. Until this matter is considered in a notice and comment rule making, we adopt the rule essentially as proposed. We are adding references to FCC Form 489 in paragraph (b) and FCC Form 600 in paragraph (d) to clarify that these forms are required.

§ 22.579 Operation of mobiles across U.S.-Canada border.

This rule replaces old § 22.509(e). We adopt it as proposed.

§ 22.589 One-way or two-way application requirements.

This new section sets forth the requirements that are peculiar to applications for one-way or two-way mobile operation in the Paging and Radiotelephone Service. We add a provision for protected BETRS facilities, in accordance with our modifications of new § 22.567; otherwise, we adopt this rule as proposed.

POINT-TO-POINT OPERATION

§ 22.591 Channels for point-to-point operation.

This section replaces the channel listings in old § 22.501(e), (f), and (m). We adopt this rule as proposed, but add a note indicating (1) that the 2100-2200 MHz band has been allocated to broadband PCS under Part 24 (originally Part 99) of our rules (ET Docket No. 92-9, 7 FCC Rcd 6886 (1992)); and (2) referencing new § 22.602.

§ 22.593 Effective radiated power limit.

This section replaces old § 22.501(f)(2) and (m)(5). We adopt it as proposed, except that for the microwave channels, the radiated power is limited consistent with the provisions of Part 21.

§ 22.599 Assignment of 72-76 MHz channels.

This section replaces old § 22.501(f)(1). We adopt it as proposed.

§ 22.601 Assignment of microwave channels.

This section replaces old §§ 22.100(d) and 22.501(e). We adopt it as proposed.

§ 22.602 Transition of the 2110-2130 and 2160-2180 MHz channels to emerging technologies.

This section replaces old § 22.50, which was added to Part 22 since the Notice in this proceeding was adopted. There are no substantial changes to the language of the old rule.

§ 22.603 488-494 MHz fixed service in Hawaii.

This section replaces old § 22.501(m). We adopt it as proposed.

POINT-TO-MULTIPOINT OPERATION

§ 22.621 Channels for point-to-multipoint operation.

This section replaces the channel listings in old § 22.501(g) and (k). We update the list to add channels that have been removed from trunked mobile operation.

§ 22.623 System configuration.

This section replaces the portions of old § 22.501(g)(1) and (k)(6) concerning system configuration and channel selection. We adopt it as proposed.

§ 22.625 Transmitter locations.

This section contains all existing restrictions on the locations of point-to-multipoint transmitters. These location restrictions, which were previously mixed in with power restrictions in old § 22.501, are necessary

to prevent co-channel interference or to protect television reception. We adopt it as proposed.

§ 22.627 Effective radiated power limits.

This section contains all existing restrictions on the effective radiated power of point-to-multipoint transmitters. These power restrictions, which were previously mixed in with location restrictions in old § 22.501, are necessary to prevent co-channel interference or to protect television reception. We adopt it as proposed.

470-512 MHZ TRUNKED MOBILE OPERATION

§ 22.651 470-512 MHz channels for trunked mobile operation.

This section replaces the channel listings in old § 22.501(j). We updated the list to delete channels that have been converted to point-to-multipoint operation.

§ 22.653 Eligibility.

This section replaces old § 22.501(j)(1). We adopt it as proposed.

§ 22.655 Channel usage.

This section replaces old § 22.501(j)(2) and (12). We adopt it as proposed.

§ 22.657 Transmitter locations.

This section contains all existing restrictions on the locations of 470-512 MHz base stations used for trunked mobile operation. These location restrictions, which were previously mixed in with power restrictions in old § 22.501, are necessary to prevent co-channel interference or to protect television reception. We adopt it as proposed.

§ 22.659 Effective radiated power limits.

This section contains all existing restrictions on the effective radiated power of 470-512 MHz base stations used for trunked mobile operation. These power restrictions, which were previously mixed in with location restrictions in old § 22.501, are necessary to prevent co-channel interference or to protect television reception. We adopt it as proposed.

Subpart F - Rural Radiotelephone Service

§ 22.701 Scope.

This section states how the rules in this subpart are applied. We adopt it as proposed.

§ 22.702 Eligibility.

This section comprises the eligibility provisions of old §§ 22.600 and 22.601(a)(4). The latter reference is to the existing requirement that only local exchange carriers that have been state certified to provide basic exchange telephone service (or others having state approval to provide such service) in the pertinent area are eligible for Basic Exchange Telephone Radio System (BETRS) authorizations. See Basic Exchange Telecommunications Radio Service 3 FCC Rcd 214, 217 at paras. 26-27 (1988). This requirement was erroneously omitted in the text of the proposed rule and marked for removal in the NPRM rule cross reference.

§ 22.703 Separate rural subscriber station authorizations.

This section incorporates the subscriber station provisions of old § 22.600. We adopt it as proposed.

§ 22.705 Rural radiotelephone system configuration.

This section replaces old § 22.606. We adopt it as proposed.

§ 22.709 Rural radiotelephone application requirements.

This section replaces old §§ 22.608 and 22.609 and portions of old § 22.15. We adopt it essentially as proposed, but we add criteria to paragraph (d) for BETRS applications. We also add a new paragraph (e) requiring, for applications requesting more than two channels, an exhibit showing (1) the probability of blocking for the proposed service, including the calculations and data used to derive it, and (2) the impact on current and projected future demand for public paging, two-way mobile and rural radiotelephone services.

§ 22.711 Provision of information to applicants.

This section replaces old § 22.609(e). We adopt it as proposed.

§ 22.713 Construction period for rural radiotelephone stations.

This section replaces old § 22.43(a)(2) as applicable to rural radiotelephone stations. We adopt it as proposed.

§ 22.715 Technical channel assignment criteria for rural radiotelephone stations.

This section refers the reader to new § 22.567, which contains technical channel assignment criteria affecting both services to which the channels listed in § 22.725 are allocated. Because new § 22.567 is somewhat lengthy, we decided to cross reference it rather than to repeat it here. We adopt it as proposed.

§ 22.717 Procedure for mutually exclusive applications in the Rural Radiotelephone Service.

This section essentially provides that mutually exclusive applications in the Rural Radiotelephone Service are to be processed using a first-come, first-served procedure. The reasons for this rule are given in the Report and Order.

§ 22.719 Additional channel policy.

In the NPRM, we proposed the same additional channel policy for Rural Radiotelephone Service as for one-way and two-way mobile operation in the Paging and Radiotelephone Service. See 7 FCC Rcd 3658,3671 (1992). This proposal received significant opposition in the comments and is addressed in the Report and Order. Consistent with our decision there, we are adding this new section for the Rural Radiotelephone Service instead of applying the Paging and Radiotelephone Service policy. This section provides that no more than two channel pairs may be assigned to new rural radiotelephone central office stations unless there are more than eight rural subscriber stations to be served. Additional channel pairs may be assigned, however, provided the need for these additional channel pairs is established and fully justified in terms of achieving the required grade of service for basic exchange service, and the applicant demonstrates that after assignment of the requested channels, there would still be ample spectrum available in the area to meet realistic estimates of current and projected future demand for paging, two-way mobile, and rural radiotelephone services. In the case of conventional rural radiotelephone central office stations, the applicant must explain why BETRS technology is not being used instead of additional channel pairs.

CONVENTIONAL RURAL RADIOTELEPHONE STATIONS

§ 22.725 Channels for conventional rural radiotelephone stations.

This section replaces old § 22.601(b). We adopt it as proposed, except that the reference in paragraph (c) is corrected to read § 22.729 rather than § 22.719.

§ 22.727 Transmitting power limits.

This new section sets forth the transmitting power limits for conventional rural radiotelephone stations. Although the old rules did not provide power limits specifically for rural radiotelephone stations, our policy has been to apply old §§ 22.505 and 22.506 (the power limits for two-way operation) when necessary. This section incorporates the relevant portions of new § 22.565, which replaces these two old sections.

§ 22.729 Meteor burst propagation modes.

This section replaces old § 22.601(g). We adopt it as proposed.

§ 22.731 Emission limitations.

This section replaces old § 22.604(b). We adopt it as proposed. It should be noted that old §§ 22.604(a) and 22.605(c) have been combined into new § 22.357, and that the audio filter requirements of old § 22.605 have been superseded by the emission mask requirements of new § 22.359.

§ 22.733 Priority of service.

This section replaces old § 22.607. We adopt it as proposed.

§ 22.737 Temporary fixed stations.

This section replaces old § 22.610. We adopt it as proposed.

BASIC EXCHANGE TELEPHONE RADIO SYSTEMS

§ 22.757 Channels for basic exchange telephone radio systems.

This section incorporates paragraph (c) and other provisions of old § 22.601. Because of a lack of any licensing activity on the 816-865 MHz channels, we requested comment in the NPRM as to whether these channels are useful for BETRS or whether they should be reallocated for another purpose. Most

commenters addressing this question indicated that these channels are of no use for BETRS, however, one commenter stated that the channels should remain available for possible future use. The lack of interest in these channels apparently stems not only from the location restrictions that protect Part 90 radio systems, but also from the fact that the two manufacturers of BETRS equipment have not designed BETRS equipment for any frequency range other than 454-459 MHz. However, because we have received requests for additional spectrum for BETRS from USTA and others, we retain the 816-865 MHz BETRS allocation for the present.

§ 22.759 Power limit for BETRS.

The commenters indicate that BETRS central office transmitters are generally operated at low powers. IMM uses 24 Watts ERP for its technical analysis. To be consistent with the 40 km service radius we are according to BETRS central office transmitters, we are limiting the ERP of BETRS central office transmitters to the equivalent of 24 Watts ERP at 152.4 meters HAAT per radio frequency (RF) channel (as determined by the formula: $ERP_W = 557{,}418 \div h_m^2$). BETRS transmitters also are to be limited to an absolute maximum of 3500 Watts ERP per UHF channel and 1400 Watts ERP per VHF channel.

Subpart G - Air-ground Radiotelephone Service

§ 22.801 Scope.

This section replaces old § 22.1100 and states how the rules in this subpart are applied. We adopt it as proposed.

§ 22.803 Air-ground application requirements.

This new section replaces portions of old §§ 22.13 and 22.15 applicable to air-ground services, without substantive change. We are not adopting the rules in proposed § 22.803 concerning procedures for mutually exclusive applications, because the proposals concerning processing of mutually exclusive applications for all commercial mobile radio services in the Transition Notice supercede our original proposal.

GENERAL AVIATION AIR-GROUND STATIONS

§ 22.805 Channels for general aviation ground stations.

This section replaces old § 22.521(a). We adopt it as proposed.

§ 22.809 Transmitting power limits.

This section incorporates the power limits in old § 22.521(c) and a new minimum power for ground stations. We are clarifying paragraph (a) by adding the phrase "except as provided in § 22.811." Otherwise, we adopt it as proposed.

§ 22.811 Idle tone.

This section is the idle tone requirement of old § 22.521(c). We adopt it as proposed.

§ 22.813 Technical channel assignment criteria.

This section replaces the channel allotment table in old § 22.521(b). The purposes of the old channel allotment table were to insure that nationwide in-route service would be possible, that channels would be initially allotted according to the level of air traffic activity, that co-channel interference would not occur for aircraft at low and moderate altitudes, and that each ground station would have a substantial service volume. However, under the previous system, changes to the table could be accomplished only through rule making procedusimilar to those used for FM broadcast channel allotments. Because the allotment of Air-ground Radiotelephone Service channels does not involve the same considerations under Section 307(b) of the Act as does allotment of FM broadcast channels, the use of rule making procedures to amend the air-ground table has proven to be unduly burdensome to licensees and has discouraged full development of the service. Furthermore, under the old system, only one carrier could obtain an authorization to operate air-ground transmitters at any given location, even where more than one channel was allotted to a location. The reason for this policy was to prevent interference on the common signaling channel (454.675/459.675 MHz), however, it also ensured that each carrier in a location had a monopoly on service at that location, and it sometimes resulted in channels allotted to a location going unused (if the licensee authorized to use one or more other channels at that location chose not to apply for them). In addition, the unused allotments precluded use of the affected channels at other nearby locations. Advancement of technology and operating experience have now shown that the common signaling channel can be successfully shared by multiple licensees at a location.

We proposed the rules in this section (together with those in new § 22.817) to replace the allotment table and its associated procedures and policies. These rules are designed to further the following goals: (1) to maintain nationwide in-route coverage, by prohibiting the future assignment of more than half of the channels in any general geographic area; (2) to limit co-channel interference for aircraft flying at low

and moderate altitudes, by maintaining spacing between co-channel ground stations; (3) to establish and preserve competition among air-ground carriers, by allowing the possibility of multiple providers at any location and by preventing any one carrier from obtaining exclusive use of more than half of the channels in any general geographic area; and (4) within the constraints of the first three goals, to allow flexibility in ground station locations to meet demand for general aviation air-ground radiotelephone service, by eliminating the allotment table and the requirement for rule making proceedings to amend it.

In general, the comments support the proposed rule. However, IMM opposes adoption of the proposed air-ground technical channel assignment criteria because it believes that the 454 MHz air-ground channels should be reallocated for use by BETRS. IMM requests that we not implement the air-ground rule before we consider a petition filed by USTA, et al., requesting that the Commission allow shared use of 454 MHz air-ground channels by BETRS. Adopting the new criteria, IMM argues, would promote the expansion of air-ground service on the 454 MHz channels at a time when IMM believes the Commission should be discouraging such expansion. IMM believes that the newer 800 MHz air-ground systems will make the 454 MHz stations obsolete.

We adopt the rule as proposed. Although sharing of the air-ground spectrum with BETRS may be technically feasible in some areas, we believe that air-ground licensees who have been constrained for many years by the outdated allotment table and burdensome administrative procedures should have an opportunity to optimize their channel assignments and ground station locations under the new rules before we consider the impact that sharing with BETRS would have. We also believe that BETRS licensees should utilize the spectrum already allocated for BETRS in the VHF and 800 MHz ranges before seeking to displace the licensees of an established mobile service. We do not agree that a manufacturer's decision to offer BETRS equipment in only one frequency range, and not in the other two ranges already allocated for BETRS, is sufficient justification to allocate more mobile spectrum in the 454 MHz range for BETRS use.

§ 22.815 Construction period for general aviation ground stations.

This section contains the provision of old § 22.43(a)(2) as applicable to these stations. We adopt it as proposed.

§ 22.817 Additional channel policies.

This new section is similar to new § 22.539. Its purpose is explained in our discussion of new § 22.813, supra. We adopt it as proposed.

§ 22.819 AGRAS compatibility requirement.

This section replaces old §§ 22.522 and 22.523 and serves to update our rules to specify the compatibility standard now in use by the vast majority of ground stations. Global Wulfsberg, in informal comments, advises that a few ground stations are still using the older standard, and that the phase-out date for the older standard should be 1996 rather than 1994. We made this change.

§ 22.821 Authorization for airborne mobile stations.

This section replaces old §§ 22.9(c)(2) and 22.15(i)(3). It requires separate authorizations for mobile stations using the 459 MHz channels. It also requires airborne mobile subscribers to file FCC Form 409 in order to obtain such an authorization. We adopt it as proposed.

COMMERCIAL AVIATION AIR-GROUND SYSTEMS

§ 22.857 Channel plan for commercial aviation air-ground systems.

This section replaces old §§ 22.1105 and 22.1107(a). Although the Commission allocated this portion of the 800 MHz spectrum for air-ground use so that telephone service could be provided to passengers on commercial aircraft, GTE and some other commenters objected to the proposed wording stating this fact. Their concern is that we are somehow trying to prevent these systems from also serving general aviation aircraft. This is not the case, and we are adding language to clarify that commercial aviation air-ground systems may serve any type of aircraft. However, the most important difference between the older air-ground stations using the 454 MHz allocation and the relatively new air-ground systems utilizing the 800 MHz allocation is that the former are prohibited from serving commercial airline passengers (because of insufficient traffic capacity to provide a satisfactory service), while the latter were created expressly for the purpose of providing service to commercial airline passengers. Although the newer systems have more traffic capacity, we do not expect them to supplant the older stations in the near term, because of the substantial installed base of customers and investment in the older system and because the two services are focused on different portions of the aviation market at this time. If and when usage of the general aviation air-ground systems declines significantly in favor of other alternatives, we could

then consider the reallocation of the 454-459 MHz channels for BETRS or other uses.

§ 22.859 Geographic channel block layout.

This section replaces old § 22.1109. Discrepancies in the geographical coordinates in the proposed rule were pointed out by the commenters. We have corrected them; otherwise, we adopt this section as proposed.

§ 22.861 Emission limitations.

This section replaces old § 22.1111. We adopt it as proposed.

§ 22.863 Transmitter frequency tolerance.

This section replaces old § 22.1113. The commenters pointed out our inadvertant error in specifying 10 ppm instead of 0.1 ppm and 0.2 ppm. We have corrected these errors; otherwise we adopt this section as proposed.

§ 22.865 Automatic channel selection procedures.

This section replaces old § 22.1115. We adopt it as proposed.

§ 22.867 Effective radiated power limits.

This section replaces old § 22.1117. We adopt it as proposed.

§ 22.869 Assignment of control channels.

This section replaces old § 22.1119. We adopt it as proposed.

§ 22.871 Control channel transition period.

This section replaces old § 22.1121. We removed paragraph (a) from the proposed rule because the date in that paragraph, July 9, 1993, has passed, and the licensee of the experimental system notified the Commission that the requirements of that paragraph have been met. Otherwise, we adopt the rule as proposed.

§ 22.873 Construction period for commercial aviation air-ground systems.

This section replaces old § 22.43(e). We adopt it as proposed.

§ 22.875 Commercial aviation air-ground system application requirements.

This section replaces old § 22.1102. We removed paragraph (c)(4) from the proposed rule because system capacity is affected by the occupancy level of the other systems and can not be accurately projected. Otherwise, we adopt this section as proposed.

Subpart H - Cellular Radiotelephone Service

§ 22.900 Scope.

This section replaces old § 22.900 and states how the rules in this subpart are applied. We adopt it as proposed.

§ 22.901 Cellular service requirements and limitations.

This section consolidates rules that require cellular licensees to provide service to subscribers in good standing, including roamers (old § 22.911), other rules related to service provided by cellular carriers (old §§ 22.914 and 22.912(c)), and provisions for alternative cellular technologies and auxiliary service (old § 22.930). Since the NPRM was released, we have adopted rules (old § 22.914(a)) governing resale of cellular service (See Report and Order in CC Docket No. 91-33, 7 FCC Rcd 4006 (1993), and amended old § 22.930 to eliminate the notification requirement and to specifically authorize PCS as an auxiliary service (See Amendment of the Commission's Rules to Establish New Personal Communications Services, (Second Report and Order), 8 FCC Rcd 7700 (1993). These recent rule changes are incorporated into this new section.

USTA opposes the proposal to eliminate the restriction in old § 22.930 limiting fixed service to BETRS because it alleges this would infringe upon state authority. It claims that whenever a cellular operator offers fixed service, it is offering exchange service and that determinations as to who should be granted entry into telephone exchange service are reserved to the States under Sections 2(b) and 7 of the Communications Act. (47 U.S.C. Sections §§152(b) and 157).

USTA's concerns are unfounded. It is well established that Section 2(b) of the Act does not prohibit the Commission from licensing radio common carrier services. Section 2(b) allows the States to regulate certain aspects of intrastate commerce, such as the rates charged for intrastate calls by cellular radio or local telephone companies. The Commission may preempt State regulations when the interstate and intrastate aspects of a service are inseparable and state regulations would thwart or impede federal policies. See, e.g., Louisiana Pub. Serv. Comm'n v.

FCC, 476 U.S. 355, 375 n.4 (1986) and California v. FCC, 905 F.2d 1217 (9th Cir. 1990). Section 7 of the Act, which USTA cites, states in Section 7(a): "It shall be the policy of the United States to encourage the provision of new technologies and services to the public." Thus, the relevant law gives us full authority to determine which entities should be licensed for fixed services. Further, our NPRM in this proceeding observed that "[c]arriers desiring to provide an incidental fixed service must comply with state certification requirements, if any." 7 FCC Rcd at 3672. We note that under old § 22.930, we routinely grant waivers of the rule where appropriate. Thus, we are simply codifying our previous practice to avoid needless waiver requests.

§ 22.903 Conditions applicable to former Bell operating companies.

This section replaces old § 22.901(b), (c), and (d). NewVector proposes removal of the requirement in paragraph (d) that former Bell Operating Companies file copies of interconnection agreements as this would result in duplication of filings required under old §§ 22.913, 22.923, and proposed § 22.953(a)(5)(x). We reject this proposal because the interconnection filings required by paragraph (d) are different from the interconnection submissions required for FCC Form 401s by other sections of our Rules, such as new Section 22.953(a)(5)(x). If, when filing an FCC Form 401, it so happens that an interconnection document required by our processing rules, such as § 22.953(a)(5)(x), is identical to a document already submitted to the Commission pursuant to new §22.903 of the Rules, the applicant can incorporate by reference the document filed pursuant to § 22.903.

§ 22.905 Channels for cellular service.

This section replaces, in old § 22.902, paragraph (a), the introductory text of paragraph (b), paragraphs (b)(1), (b)(2), and (c). We remove proposed paragraph (c) because it is redundant with new § 22.352. We also remove the word "authorized" from paragraph (b) as unnecessary and possibly confusing in view of our decision in this proceeding to eliminate the requirements that licensees notify the Commission of cell sites that do not affect the CGSA. These cell sites, while authorized (licensees should not operate any unauthorized cell sites), may not be listed on any authorization.

§ 22.907 Coordination of channel usage.

This section replaces and simplifies old § 22.902(d). We are removing some unnecessary language from proposed paragraph (b), and add the words "by letter" to clarify that licensees should not file an FCC form for this purpose.

§ 22.909 Cellular markets.

This section defines the cellular market areas and references public notices that list them and the counties they comprise. Bell Atlantic suggests that the rule include the title and date of the public notices to assist in identifying them. We have made this change.

§ 22.911 Cellular geographic service area.

This section replaces old § 22.903, which has been amended several times in CC Docket No. 90-6 since the NPRM was released. We incorporated these amendments in the new rule.

BellSouth suggests that we (1) remove the 75% coverage requirement; (2) indicate that service is presumed within any "dead spots" revealed by alternative propagation studies; (3) define "unserved area" as any area not covered by a CGSA where the five-year build-out period has expired. Some commenters noted that we omitted the 0.1 Watt minimum power requirement from proposed paragraph (a)(4).

We agree that the rule requiring certain MSA licensees to maintain a CGSA that covers 75% or more of the area or population of the MSA is no longer necessary. Through our recently established unserved area licensing procedures, eligible entities may apply for any significant areas left unserved by these MSA licensees at the end of their five-year build-out periods. Accordingly, we remove the 75% coverage requirement. Also, we are restoring the "dead spot" language and the 0.1 Watt ERP minimum, both of which appear in old § 22.903. BellSouth's suggestion regarding the definition of "unserved areas" is incorrect. An unserved area is a geographical area where there is no CGSA on a channel block. The fact that the initial cellular licensee on a channel block in a market has, for five years, an exclusive right to expand its CGSA into unserved area in its market does not make that unserved area "served." Until an area is within a CGSA, it is considered unserved.

We are adding more detail concerning alternative propagation submissions under paragraph (b). These criteria for alternative propagation submissions were set forth in our Second Report and Order in CC Docket No. 90-6, 7 FCC Rcd 2449 (1992). We received several submissions that did not meet these criteria, however, with the result that the staff had to request additional information or deny the applications for modification of CGSA. We believe that including all criteria and

requirements for alternative propagation submissions in this section makes them more accessible to persons who prepare such submissions.

In our Memorandum and Opinion on Reconsideration in CC Docket. No. 90-6, 8 FCC Rcd 1363 (1993), we added a paragraph (f) to old § 22.903 to codify our policy in regard to interference protection afforded to the service of cellular systems within their CGSAs. We include this paragraph as new § 22.911(e).

§ 22.912 Service area boundary extensions.

This section replaces old § 22.903(d) governing service area boundary (SAB) extensions. SAB extensions are areas that are within the service area boundary of a cell, as determined in accordance with new § 22.911(a), but are outside of the cellular market boundary. NewVector and BellSouth note that the subject of de minimis SAB extensions should be included in this section, as well as contract SAB extensions and unserved area system extensions. We agree. We restore the missing paragraph addressing de minimis extensions. Also we are modifying some of the language in this section to reflect the clarifications of old § 22.903 that were made in CC Docket No. 90-6 since the NPRM was released.

§ 22.913 Effective radiated power limits.

This section replaces old §§ 22.904 and 22.905. We proposed to eliminate the existing provision which exempts cellular base transmitters from the height-power limit where coordination with all co-channel systems within 75 miles is carried out. We reasoned that, in light of our decision to increase the maximum power limit from 100 to 500 Watts in Liberalization of Technology and Auxiliary Service Offerings in the Cellular Radio Service (Auxiliary Cellular Order), 3 FCC Rcd 7033 (1988), recon., 5 FCC Rcd 1138 (1990), this exemption was no longer necessary.

The majority of commenters addressing this proposal favor retention of the height-power exemption. They argue that this provision allows carriers flexibility to use larger cells in rural areas where the probability of interference is low, and thus build out their systems efficiently and economically. We are persuaded by these arguments to retain the existing provision which exempts cellular base transmitters from the height-power limit where the licensee has coordinated the higher operating power with all affected co-channel carriers within 121 kilometers (75 miles). Exercise of this exemption has not thus far resulted in interference, and retaining it is consistent with our overall policy of encouraging carriers to coordinate technical operating parameters.

Some of the commenters noted that the distance specified in proposed paragraph (b), 41.5 kilometers (26 miles), is inappropriately small for the Gulf of Mexico market and slightly too large for all other markets. These commenters are correct. We recalculated using 152.4 meters antenna HAAT and 500 Watts ERP and found that the distances should be 79.1 kilometers (49 miles) for the Gulf of Mexico MSA cellular systems and 40.2 kilometers (25 miles) for all other cellular systems. We are modifying paragraph (b) accordingly.

§ 22.915 Modulation requirements.

This section replaces old §§ 22.906 and 22.907(a). We remove the words "frequency modulated" from paragraph (a) because other forms of angle modulation can be used. Otherwise, we adopt this rule section as proposed.

§ 22.917 Emission limitations for cellular.

This section replaces old § 22.907(b) through (j). We adopt it as proposed.

§ 22.919 Electronic serial numbers.

The purpose of this new section is to deter cellular fraud by requiring that the Electronic Serial Number (ESN) unique to each cellular phone be factory set, inalterable, non-transferable, and otherwise tamper-proof and free of fraudulent manipulation in the field. This subject received substantial attention from the commenters and is discussed in the Report and Order.

§ 22.923 Cellular system configuration.

This section replaces paragraph (c) and the introductory text of paragraph (a) of old § 22.911. NewVector and Bellsouth suggest that the use of cellular repeaters should be mentioned in this section. We agree and modify the rule to provide that base transmitters communicate with mobile stations "directly or through cellular repeaters." Also, we substitute the word "transmitters" for "stations" for consistency with the rest of Part 22.

§ 22.925 Prohibition on airborne operation of cellular telephones.

This section replaces old § 22.911(a)(1). We adopt it as proposed.

§ 22.927 Responsibility for mobile stations.

This section replaces old § 22.912(a) and (b). Bell Atlantic objects to the language in paragraph (a) that imposes on cellular carriers the responsibility for installation, proper maintenance, and repair of mobile equipment they provide for use by their subscribers. Bell Atlantic contends that cellular customer premises equipment (CPE) providers should not be treated differently from other CPE providers. McCaw recommends that we omit language referring to the receipt of service pursuant to tariff provisions because cellular carriers do not file federal tariffs, and many states do not require the filing of tariffs by cellular operators.

Old § 22.912(a) provides that cellular carriers are normally responsible for proper installation, repair, and maintenance of mobile equipment unless the subscriber provides the equipment. Upon further consideration, we find that this existing requirement is no longer needed. Mobile equipment owned by the subscriber (not the carrier) appears to be the rule rather than the exception. We leave it to consumers to determine the arrangements they prefer for installation, repair, and maintenance of equipment they own. Therefore, we remove proposed paragraph (a) and consolidate the remaining provisions of this section.

As to tariff submissions, our recent CMRS Order, supra, specifically directs mobile radio common carriers not to submit any tariffs with this agency. See 9 FCC Rcd 1411 at 1479-81. Our directive in that order was made pursuant to recent amendments made to Sections 3(n) and 332 of the Act.

§ 22.933 Cellular system compatibility specification.

This section replaces old § 22.915. NewVector and Bellsouth argue that the rule limits flexibility in implementing new technologies by requiring that cellular systems conform to existing compatibility requirements. NewVector recommends adding language providing that services provided pursuant to new § 22.901(d) are exempt from the compatibility specifications. This rule should not be misinterpreted as limiting the implementation of new technology. We are adding the suggested language.

§ 22.935 Procedures in comparative renewal proceedings.

The Notice in this proceeding proposed to revise old § 22.916 which delineates expedited hearing procedures for cellular applications. Specifically, we proposed to delete paragraphs (a)(1)-(4), which are applicable only to the top-30 cellular markets, and retain the procedures in paragraphs (b)(5)-(b)(9) for comparative renewal hearings. Because our other hearing procedures for comparative renewal hearings are contained in old § 22.942 of our rules, we have decided, in the interest of simplicity and continuity, to combine the provisions of old § 22.942 with the provisions of proposed § 22.935 under new § 22.935.

The proposed rules contained in Appendix B of the NPRM did not include any rules governing the conduct of comparative renewal proceedings, except for proposed § 22.935. Such rules had been recently adopted in Amendment of Part 22 of the Commission's Rules Relating to License Renewals in the Domestic Public Cellular Telecommunications Service (Report and Order), 7 FCC Rcd 719 (1992), (Cellular Renewal Proceeding). Those rules include, inter alia, old § 22.40(b) concerning the transfer or assignment of cellular licenses, old § 22.917(g) concerning the financial qualifications of any applicant that files a competing application against the renewal application of an incumbent cellular licensee, old § 22.940 concerning other basic qualifications standards for such competing applicants, old § 22.941 concerning criteria for obtaining a renewal expectancy and for comparing the applicants, old § 22.942 concerning hearing procedures for comparative hearing proceedings, and old §§ 22.943-45 concerning procedures for settling comparative renewal proceedings. Old §§ 22.941 and 22.942 were revised by our Memorandum Opinion and Order on Reconsideration in CC Docket No. 90-358, 8 FCC Rcd 2834 (1993), petitions for recon. pending. Old §§ 22.944-45 were superseded by old §§ 22.927 and 22.929, which were adopted in our Third Report and Order and Memorandum Opinion and Order on Reconsideration in CC Docket No. 90-6, 7 FCC Rcd 7183 (1992). All of the foregoing rules are still in effect, except as noted above. Appendix B of this Report and Order contains the substance of these rules, even though the rule numbers have been changed.

§ 22.937 Demonstration of financial qualifications.

This section replaces old § 22.917 and sets forth uniform financial requirements for applications for authority to operate new cellular systems, pursuant to Unserved Areas, 6 FCC Rcd 6185 (1991). The new rule applies to all applications for new cellular systems, except that any initial authorizations subject to further selection procedures will be governed by the rules in effect at the time the applications were filed, pursuant to new § 22.959.

NewVector states that if we did not intend to change substantially the nature of the costs that an assignee or transferee must be able to cover, we

should amend the introductory paragraph to be consistent with current rules regarding transfers and assignments of constructed cellular systems. We agree and have amended the relevant language. NewVector argues, in addition, that paragraph (g) should be broadened to include pro forma transactions. We agree and modify the relevant language, which is now contained in paragraph (h).

§ 22.939 Site availability requirements for applications competing with cellular renewal applications.

This new section contains the provisions of old § 22.940. There is no substantive change.

§ 22.940 Criteria for comparative cellular renewal proceedings.

This new section contains the provisions of old § 22.941. There is no substantive change.

§ 22.941 System identification numbers.

We proposed this new section to codify our existing policies and procedures in regard to assigning and coordinating the use of system identification numbers (SID codes) required by the cellular compatibility specification. We proposed to require licensees to notify us of the use of additional SID codes by filing FCC Form 489, rather than by letter, and to charge a fee for this service. As an alternative, we also suggested that this coordination function could just as well be performed by an industry organization rather than by the Commission.

Unfortunately, no organization offered to take over the SID code coordination function. NewVector stated that it believes that the Commission should be responsible for this function. McCaw recommends that this rule section provide that each SID code assigned to a cellular system may only be used by other cellular systems pursuant to an agreement between the two.

We will continue to assign and coordinate SID codes, and we adopt our proposal to require licensees to notify us of the use of additional SID codes using FCC Form 489. This will entail a processing fee of $ 75 per notification (see fee schedule in § 1.1105). We agree with McCaw that the use of one system's SID code should be allowed only pursuant to an agreement between the two, and we add the necessary language to paragraph (b).

§ 22.942 Limitations on interests in licensees for both channel blocks in an area.

This rule replaces old § 22.902(b)(5). There is no substantive change.

§ 22.943 Limitations on assignment of cellular authorizations.

This rule replaces existing rules, such as old § 22.920, governing the assignment of cellular authorizations.

As initially proposed, paragraph (b) of Section 22.943 would have prohibited the sale, transfer, assignment or other alientation of any application to operate a new cellular system in a Rural Service Area (RSA). NewVector and BellSouth recommend adding language to paragraph (b) that would extend the ban on the sale, transfer, or other alienation of any application to operate a new cellular system to unserved area applications. We have already adopted this recommendation in another rule making proceeding which revised old § 22.922 in 1992. See Amendment of Section 22.922 of the Commission's rules to permit limited transfers and assignments of applications in Rural Service Areas (Report and Order), 7 FCC Rcd 7539 (1992). Thus, the existing version of old § 22.922(a) contains the general prohibition against the sale, transfer or other alienation of any interest in an RSA application and provides for several exceptions to that general prohibition. In addition, old § 22.922(b) applies the provisions of old § 22.922(a) to unserved area applications. Clearly, the prohibitions contained in § 22.922 pertain to applications which have not been granted, whereas the subject matter of § 22.943, as adopted today, concerns limitations on the assignment of cellular authorizations. In this light, the language of § 22.922 will now be contained in a separate rule, namely, new § 22.944 of our Rules.

§ 22.945 Ownership and other interest in applicants.

This rule replaces old § 22.921. We adopt this rule as proposed.

§ 22.946 Service commencement and construction periods for cellular systems.

This rule replaces old § 22.43(c) concerning the construction periods and other service initiation requirements for cellular systems. The proposed rule reflects the existing requirements, but unfortunately after further examination, we find that it also contains errors and is somewhat confusing. Like many of the cellular rules, much of the confusion results from the fact that often different rules apply to cellular licensees depending upon when they applied for an initial license. We have simplified paragraph (b) of new §22.946 to clarify the construction period for specific facilities.

Proposed § 22.946(a)(2) requires a licensee to notify the Commission using FCC Form 489 when it has commenced providing service to the public. GTE recommends adding language to the effect that the foregoing FCC Form 489 must be mailed no later than 15 days after service begins to be consistent with proposed § 22.142(b). We agree and have added such language. Southwestern Bell requests that we state that if a new cellular system consolidates with another cellular system, the consolidation will, in itself, be considered compliance with the commmencement of service requirement. This request would bypass the requirement that an initial cellular system have at least two unaffiliated customers by the end of its construction period. We do not perceive this requirement as onerous. Therefore, the request is denied.

§ 22.947 Five year build-out period.

This section replaces paragraphs (a)(1)(i) and (f) of old §§ 22.31, 22.925, and 22.926. Per our discussion of new § 22.99, supra, we will now refer to the five year "build-out" period, rather than the five year "fill-in" period, and have retitled this section accordingly. We proposed to consolidate our rules concerning the five year build-out period for first-in-market cellular systems with rules concerning partitioned markets in which the first licensee has allowed one or more additional carriers to establish independently authorized cellular systems within the market during the five year build-out period.

NewVector and Bellsouth recommend revision of proposed paragraph (a) to replace the reference to unserved area with the phrase "area where the licensee's CGSA does not extend." Apparently, they believe that unserved area cannot exist in a market until after the five year build-out period has expired. We do not change the language as suggested because, as explained in the discussion of new § 22.99, supra, unserved area means area where there is no CGSA, without regard to the five year build-out period. There usually is some unserved area on each channel block in each market during the five year build-out period, however, paragraph (a) affords the first-in-market licensee on that channel block an exclusive right to expand its system into the unserved area during its five year build-out period. It does this by stating that the Commission will not accept any applications for new cellular systems in this unserved area during the five year build-out period (other than those filed pursuant to a partitioning agreement), not by deeming the unserved area to be served.

Bell Atlantic and BellSouth recommend that paragraph (b) of the proposed rule should be clarified to indicate that some partitioned markets resulted from market settlements. We agree. BellSouth recommends that the rule explicitly state that the additional licensees in partitioned markets must file system information updates (SIU). This suggested revision is unnecessary, because the rule clearly requires the licensee of "each system" to file an SIU. We remove the requirement in paragraph (c), however, for licensees to submit an updated channel usage chart. We have found that these charts are not necessary for the unserved area licensing process. We also change the last sentence in paragraph (c)(1) to clarify that the date on the SIU map must be a date when the depictions on the map were accurate, regardless of when the map is revised or prepared.

§ 22.949 Unserved area licensing process.

This section replaces old §§ 22.31(a)(1)(ii) and (b)(2)(iii), 22.33(b), 22.902(b)(3) and (b)(4), and 22.918(c). We proposed to consolidate in this section rules governing the two phase unserved area application process. Our proposed rule inadvertantly omitted several of the Phase I and Phase II processing rules in old § 22.902(b)(4), e.g., the rule allowing a Phase I cellular unserved area licensee to file one major application to modify its authorization before the Phase II process begins. We include most of these overlooked Phase I rules as new paragraphs (a)(3) and (a)(4) and Phase II rules as new paragraph (b)(3).

NewVector recommends that we include the provisions of old § 22.918(c)(2) in this section. Old § 22.918(c)(2) provides that (1) the Commission will accept minor amendments to Phase II initial cellular applications, and that (2) if an applicant files a major amendment to a Phase II application which eliminates existing mutual exclusivity without creating new mutual exclusivity, the filing date (which is used for the first come, first served selection process) would remain the same, rather than changing to the date the amendment was received. In regard to the first provision, it is unnecessary to add it here because the general provisions of new § 22.122 allow applicants to amend Phase II applications as a matter of right. The second provision concerning the filing date stems from old § 22.23(g), which encouraged the amendment of applications to resolve mutual exclusivity by disallowing the filing of competing applications against applications so amended. The public benefit of old § 22.23(g) was in avoiding the costs and delays associated with conducting comparative hearings. As we will rarely conduct hearings under the modified procedures, we do not need this provision. We incorporated the other provisions of old § 22.918(c) as new paragraph (d).

§ 22.951 Minimum coverage requirement.

This section replaces old § 22.924(a)(1) and the introductory text of old § 22.902(b)(4)(B). We add the provision of the latter reference, as it was omitted from the proposed rule.

§ 22.953 Content and form of applications.

This section replaces old § 22.924(b) and (c), which set forth the requirements for applications for authority to operate new unserved area systems. Several of the required items for new system applications, such as the certification page and most of the exhibits, are unnecessary to process applications for authority to operate modified systems. Previously, we have not had a rule listing the requirements for applications to operate modified systems. For the sake of completeness and to avoid confusion, we add a paragraph (b) which lists the items from paragraph (a) that are needed for modified system applications, and provides that the rest of the items in paragraph (a) may be omitted from applications to operate modified systems.

§ 22.955 Canadian condition.

This new section sets forth the text of the license condition required by international agreement for cellular systems having transmitting located facilities within 72 kilometers (45 miles) of the U.S.-Canadian border. We adopt it as proposed.

§ 22.957 Mexican condition.

This new section sets forth the text of the license condition required by international agreement for cellular systems having transmitting located facilities within 72 kilometers (45 miles) of the U.S.-Mexican border. We adopt it as proposed.

§ 22.959 Rules governing processing of applications for new systems.

This new section allows us to remove various old rule sections that were relevant only to the processing of the initial MSA and RSA applications. The majority of these applications have been processed.

Subpart I - Offshore Radiotelephone Service

§ 22.1001 Scope.

This section states how the rules in this subpart are applied. We adopt it as proposed.

§ 22.1003 Eligibility.

This section replaces old § 22.1000. We removed the redundant word "licenses".

§ 22.1005 Priority of service.

This section replaces old § 22.1008. We adopt it as proposed.

§ 22.1007 Channels for offshore radiotelephone systems.

This section replaces most of old § 22.1001. We adopt it as proposed.

§ 22.1009 Transmitter locations.

This section contains the transmitter location restrictions in old § 22.1001(d). We adopt it as proposed.

§ 22.1011 Antenna height limitations.

This section contains the antenna height limitations in old § 22.1001(d)(5). We adopt it as proposed.

§ 22.1013 Effective radiated power limitations.

This section contains the effective radiated power limitations in old §§ 22.1001(d) and 22.1002. We adopt it as proposed.

§ 22.1015 Repeater operation.

This section combines and clarifies the provisions of old §§ 22.1001(d)(7) and 22.1005(c). We adopt it as proposed.

§ 22.1025 Permissible communications.

This section replaces paragraphs (a) and (b) of old § 22.1005. We adopt it as proposed.

§ 22.1031 Temporary fixed stations.

This section replaces old § 22.1006. We adopt it as proposed.

§ 22.1035 Construction period.

This section contains the construction period provided in old § 22.43(a)(2). We adopt it as proposed.

§ 22.1037 Application requirements for offshore stations.

This section replaces old § 22.1001(e). We adopt it as proposed.

Application Forms

We proposed to redesign our application and notification forms to a modular format. Since the release of the NPRM in this proceeding, we have proposed to consolidate existing FCC Forms 401 and 574 into a common form for all mobile and certain fixed services. In the Further Notice of Proposed Rule Making in GN Docket No. 93-252, we proposed this common form, and we will make the determination regarding consolidation of forms in that proceeding. We have, however, revised FCC Forms 489 and 490, which we use for notifications and assignments and transfer of control, to follow the modular format that we hope will ease transition to electronic and magnetic filing methods. These forms are attached, and may be used as soon as OMB clearance is obtained.

APPENDIX B

Final Rules

PART 1 - PRACTICE AND PROCEDURE

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

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

2. Section 1.420 is amended by revising the headnote and the text of paragraphs (a) and (b) to read as follows:

§ 1.420 Additional procedures in proceedings for amendment of the FM or TV Tables of Allotments.

(a) Comments filed in proceedings for amendment of the FM Table of Allotments (47 CFR §73.202) or the Television Table of Allotments (47 CFR §73.606) which are initiated on a petition for rule making shall be served on petitioner by the person who files the comments.

(b) Reply comments filed in proceedings for amendment of the FM or Television Tables of Allotments shall be served on the person(s) who filed the comments to which the reply is directed.

* * * * *

3. In the first sentence of the introductory text of Section 1.742, the phrase "Except as specified in § 22.6" is revised to read "Except as specified in Part 22".

4. Section 1.743 is amended by revising paragraph (a) and adding new paragraph (e) to read as follows:

§ 1.743 Who may sign applications.

(a) Except as provided in paragraph (b) of this section, applications, amendments thereto, and related statements of fact required by the Commission must be signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer or duly authorized employee, if the applicant is a corporation; or by a member who is an officer, if the applicant is an unincorporated association. Applications, amendments, and related statements of fact filed on behalf of eligible government entities such as states and territories of the United States, their political subdivisions, the District of Columbia, and units of local government, including incorporated municipalities, must be signed by a duly elected or appointed official who is authorized to do so under the laws of the applicable jurisdiction.

* * * * *

(e) "Signed," as used in this section, means an original hand-written signature, except that by public notice in the Federal Register the Common Carrier Bureau may allow signature by any symbol executed or adopted by the applicant with the intent that such symbol be a signature, including symbols formed by computer-generated electronic impulses.

5. Section 1.821 is revised to read as follows:

§ 1.821 Scope.

The provisions of §§ 1.822, 1.823, 1.824 and 1.825 apply as indicated to those applications for permits, licenses or authorizations in the Public Mobile Services, Multichannel Multipoint Distribution Service and Digital Electronic Message Service for which action may be taken by the Chief, Common Carrier Bureau pursuant to delegated authority.

6. Section 1.823 is amended by revising the headnote and paragraph (b) to read as follows:

§ 1.823 Random selection procedures for the Public Mobile services.

* * * * *

(b) * * *

(1) Public Mobile Services other than the Cellular Radiotelephone Service. Petitions to Deny and other pleadings may be filed against applications but are not reviewed prior to the random selection process. Petitions filed against tentative selectee applications are reviewed after the tentative selectee is announced.

(2) Cellular Radiotelephone Service, except unserved areas. * * *

(3) Cellular Radiotelephone Service, unserved areas. * * *

* * * * *

7. Section 1.1105 is amended by revising all table entries from 2. to 5.n. to read as follows:

Action	FCC Form No.	Fee amount	Fee Type Code	Address
2. Domestic Public Land Mobile Stations [Paging and Radiotelephone Service, Air-ground Radiotelephone Service]:				
a. Application for new or additional facility (per transmitter).	FCC 401 & FCC 159	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.

Action	FCC Form No.	Fee amount	Fee Type Code	Address
b. Application for major modification of an existing facility (per transmitter).	FCC 401 & FCC 159	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
c. Notification of additional transmitter (per transmitter).	FCC 489 & FCC 159	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
d. Major amendment of a pending application (per transmitter).	FCC 401 & FCC 159	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
e. Application for assignment of authorization or consent to transfer of control.				
(i) First call sign	FCC 490	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Each additional call sign	same as 2e(i)	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
f. Application for partial assignment of authorization (per call sign).	FCC 401 & FCC 159 & FCC 490	265.00	CMD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
g. Application for renewal (per call sign).	FCC 405 & FCC 159	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
h. Minor modification (per transmitter).				
(i) Notification of minor modification	FCC 489 & FCC 159	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Application for minor modification	FCC 401 & FCC 159	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
i. Request for special temporary authority (per channel/per location).	written request & FCC 159	230.00	CLD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
j. Application for extension of construction period (per authorization).	FCC 401 & FCC 159	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
k. Notification of commencement of service to subscribers (per notification).	FCC 489 & FCC 159	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
l. Application for new or modified auxiliary test transmitter (per transmitter).	FCC 401 & FCC 159	230.00	CLD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
m. Application for authority to provide commercial mobile service using broadcast station subcarriers (per application).	FCC 401 & FCC 159	115.00	CFD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.

Action	FCC Form No.	Fee amount	Fee Type Code	Address
n. Application for reinstatement [NO LONGER AVAILABLE].				
o. Application to combine separate authorizations (per call sign).	FCC 401 & FCC 159	230.00	CLD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
p. Application for new or modified standby transmitter (per transmitter/per location).	FCC 401 & FCC 159	230.00	CLD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
q. 931 MHz nationwide paging renewal [SEE 2g].				
r. Application for new, modified or renewal general aviation air-ground mobile license (per application).	FCC 409	45.00	CAD	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
s. Application for 932-932.5 / 941-941.5 MHz point-to-multipoint channels (per transmitter.	FCC 401 & FCC 159	265.00	CMP	Federal Communications Commission, 932/941 MHz Point-to-Multipoint Channels, Common Carrier Bureau, P.O. Box 358924, Pittsburgh, PA 15261-5924.
3. Cellular Systems [Cellular Radiotelephone Service]:				
a. Initial application for new cellular system.	FCC 401 & FCC 159	265.00	CMC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
b. Application for major modification.	FCC 401 & FCC 159	265.00	CMC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
c. Minor modifications.				
(i) Application for minor modification	FCC 401 & FCC 159	70.00	CDC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
(ii) Notification of minor modification or commencement of service to subscribers (per notification).	FCC 489 & FCC 159	70.00	CDC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
d. Application for full or partial assignment of authorization or consent to transfer of control.	FCC 490	265.00	CMC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
e. Application for renewal.	FCC 405 & FCC 159	45.00	CAC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
f. Application for extension of construction period.	FCC 401 & FCC 159	45.00	CAC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
g. Request for special temporary authority.	written request & FCC 159	230.00	CLC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.

Action	FCC Form No.	Fee amount	Fee Type Code	Address
h. Request to combine cellular geographic service areas (per system).	written request & FCC 159	60.00	CBC	Federal Communications Commission, Cellular Systems, P.O. Box 358135, Pittsburgh, PA 15251-5135.
4. Rural Radio [Rural Radiotelephone Service]:				
a. Application for new or additional facility (per transmitter).	FCC 401 & FCC 159	125.00	CGR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
b. Application for major modification of an existing facility (per transmitter).	FCC 401 & FCC 159	125.00	CGR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
c. Major amendment of a pending application (per transmitter).	FCC 401 & FCC 159	125.00	CGR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
d. Minor modifications.				
(i) Notification of minor modification (per transmitter).	FCC 489 & FCC 159	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Application for minor modification (per transmitter).	FCC 401 & FCC 159	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
e. Application for assignment of authorization or consent to transfer of control.				
(i) First call sign:	FCC 490	125.00	CGR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Each additional call sign:	same as 4e(i)	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(iii) Partial assignment of authorization (per call sign):	FCC 490 & FCC 401 & FCC 159	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
f. Application for renewal (per call sign).	FCC 405 & FCC 159	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
g. Application for extension of construction period (per application).	FCC 401 & FCC 159	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
h. Notification of commencement of service to subscribers (per notification).	FCC 489 & FCC 159	45.00	CAR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
i. Request for special temporary authority (per channel/per location)	written request & FCC 159	230.00	CLR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
j. Application for reinstatement [NO LONGER AVAILABLE].				

Action	FCC Form No.	Fee amount	Fee Type Code	Address
k. Application to combine separate authorizations (per call sign).	FCC 401 & FCC 159	230.00	CLR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
l. Application for new or modified auxiliary test transmitter (per transmitter).	FCC 401 & FCC 159	230.00	CLR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
m. Application for new or modified standby transmitter (per transmitter).	FCC 401 & FCC 159	230.00	CLR	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
5. Offshore Radiotelephone Service:				
a. Application for new or additional facility (per transmitter).	FCC 401 & FCC 159	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
b. Application for major modification of an existing facility (per transmitter).	FCC 401 & FCC 159	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
c. Fill-in transmitters [NOT AVAILABLE]				
d. Major amendment of a pending application (per transmitter).	FCC 401 & FCC 159	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
e. Minor modifications.				
(i) Notification of minor modification (per transmitter).	FCC 489 & FCC 159	45.00	CAF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Application for minor modification (per transmitter).	FCC 401 & FCC 159	45.00	CAF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
f. Application for assignment of authorization or consent to transfer of control.				
(i) First call sign:	FCC 490	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(ii) Each additional call sign:	same as 5f(i)	45.00	CAF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
(iii) Partial assignment of authorization (per call sign):	FCC 490 & FCC 401 & FCC 159	125.00	CGF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
g. Application for renewal (per call sign).	FCC 405 & FCC 159	45.00	CAF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
h. Application for extension of construction period (per application).	FCC 401 & FCC 159	45.00	CAF	Federal Communications Commission, Common Carrier Land Mobile, P.O. Box 358130, Pittsburgh, PA 15251-5130.
i. Application for reinstatement [NO LONGER AVAILABLE]				