
I. Synopsis of the Notice of Proposed Rulemaking

1. In this Notice of Proposed Rulemaking, we propose to replace or relax our ban on airborne usage of 800 MHz cellular handsets as well as propose other steps to facilitate the use of wireless handsets and devices, including those used for broadband applications, on airborne aircraft in appropriate circumstances.

2. In 1991, the Commission adopted its prohibition on using 800 MHz cellular phones while airborne. The rule prevents the airborne use of cellular phones carried onboard by passengers or crew members, as well as use of cellular equipment that might be installed permanently, on both private and commercial aircraft. The ban was adopted in order to guard against the threat of harmful interference from airborne use of cellular phones to terrestrial cellular networks. While Personal Communications Services (PCS) under part 24 and Wireless Communications Services (WCS) under part 27 are not subject to an airborne use prohibition by Commission rules, regulations promulgated by the Federal Aviation Administration (FAA) prohibit the use of all types of mobile telephones, as well as other portable electronic devices (PEDs), on aircraft, unless the aircraft operator has determined that the use of the PED (including mobile/cellular telephones) will not interfere with the aircraft’s aviation navigation and communication systems. Thus, while our objective is to relax our Commission’s prohibition on the airborne use of cellular telephones, any steps we ultimately take will leave the use of personal electronic devices (including cellular and other wireless handsets) aboard aircraft subject to the rules and policies of the FAA and aircraft operators.

3. We believe that allowing the use of wireless handsets during flight has the potential to benefit homeland security, business, and consumers by adding to future and existing air-ground communications options, including broadband applications. We thus believe that the removal or modification of the Commission’s cellular airborne prohibition will benefit public safety and homeland security personnel in need of an air-to-ground communications link in case of an emergency situation. It should also provide enhanced flexibility for service providers to meet the increasing demand for access to mobile telephone and mobile data services and encourage the deployment of innovative and efficient communications technologies and applications. Because of these potential benefits, we tentatively conclude that our current blanket prohibition on airborne cellular use should be modified, and we seek comment on ways to ensure that this can be accomplished without creating the potential for harmful interference to terrestrial cellular networks. We believe that taking action that will lead to more opportunities for service and less regulation for cellular licensees, yet which guards against harmful interference to terrestrial wireless communications, serves the public interest.

4. Accordingly, we believe that section 22.925 of our rules should be replaced with a more flexible policy, and we seek comment on whether the proposals detailed below are appropriate substitutes for the current ban on airborne cellular use.

A. Use of Wireless Handsets Controlled by Onboard Pico Cells

5. One promising technological approach that could support non-interfering airborne use of wireless handsets is to control handset operation through use of airborne “pico cells.” In effect, an airborne pico cell is a low power cellular base station installed in the aircraft for the purpose of communicating with (and controlling the operations of) cellular handsets or other cellular devices brought on the aircraft by passengers and crew. Thus, a pico cell is analogous to an in-building wireless system (like those used in large buildings, malls, etc.) for use in the aircraft. The cellular signal travels from the cellular handset to the pico cell.
which then relays the call to the ground via a separate air-to-ground link, e.g., via a satellite band or the 800 MHz Air-Ground band.

6. The pico cell concept has the potential to address concerns of interference from airborne handsets to terrestrial cellular base stations because the pico cell would not use the cellular band to provide the air-ground link between the pico cell and the public switched telephone network or the Internet. Instead, airborne use of cellular frequencies would be limited to communication inside the aircraft between the cellular handset and the pico cell, while the air-ground link would be provided on a non-cellular band that would not threaten interference to terrestrial-based cellular networks. In addition, interference to terrestrial cellular stations would be prevented because the airborne pico cell would minimize handset power levels by instructing handsets to operate at their lowest power setting. In contrast, without a ready pico cell on the aircraft, airborne handsets would normally operate at their highest power setting in an attempt to reach base stations located far away on the ground, potentially causing interference to terrestrial cellular networks. Consequently, we also seek comment on whether we would need to mandate that the pico cell cover a specific set of technologies so that all handsets on board aircraft are controlled by the pico cell.

7. The ability of pico cells to minimize handset power levels thus may enable us to remove or relax section 22.925. Accordingly, we propose to permit cellular handsets to be used in airborne aircraft so long as they are operating under control of a pico cell (installed in accordance with FAA rules) that will instruct the handsets to operate at a sufficiently low power setting so as to not interfere with airborne or terrestrial systems. We ask commenters whether we should adopt technical rules regarding the onboard operation of pico cells using 800 MHz cellular spectrum. For example, if an airborne pico cell were to fail, how should our regulations address the risk of airborne cell phones beginning to search for a terrestrial base station and transmitting at maximum power? We seek comment generally on the viability of this and other potential technological advancements, and we solicit any other ideas or suggestions that commenters believe would increase flexibility for cellular licensees, while avoiding interference to airborne and terrestrial systems. As we have been mainly concerned with potential interference to terrestrial systems, we also recognize the aviation safety concerns that form the basis of the FAA’s prohibition on mobile phone use. Consequently, we ask commenters to address whether we should adjust the Commission’s permissible out-of-band and spurious emission limits on cellular handsets in order to ensure that aircraft systems are not affected by unwanted emission from cell phones.

8. We also ask that commenters address the issue of who should have rights to operate on 800 MHz cellular spectrum in an airborne pico cell environment. As a threshold matter, we propose that cellular licensees should have the right to operate pico cell systems on their licensed frequencies. Because, however, such pico cell operations would be airborne and transitory, rather than permanently located in any particular licensee’s terrestrial service area, and in principle would access a wide range of cellular frequencies, we seek comment on how these rights should be apportioned or shared among such licensees. We also seek comment as to how interference protection would be provided to terrestrial operations. As one example of how this might work, any 800 MHz cellular licensee, regardless of the location of their service area and the flight path of the aircraft, would be authorized to install a pico cell that operates on these frequencies within the aircraft. Under this approach, the cellular licensee would be responsible for the proper operation of the pico cell and would be in a position to remedy any interference to ground systems. Similarly, a group of licensees might operate the pico cell.

9. We also seek comment on whether any parties besides, or in addition to, cellular licensees should have rights to airborne use of this spectrum—either under a secondary market arrangement (e.g., a spectrum lease)—or under a separate authorization. For example, should the owner of a particular aircraft be able to install and operate a pico cell without leasing spectrum usage rights or partnering with a cellular carrier? Should a third party, other than the aircraft operator, be authorized to install and operate the pico cell? If we adopted a third party approach, what should the parameters or extent of such third party rights be, and what interference protection obligations would such third parties have to terrestrial cellular licensees? Should such rights be granted solely on a secondary basis to that of terrestrial cellular systems in order to ensure that terrestrial cellular systems are protected from interference?

10. We also ask commenters address whether pico cells should be individually licensed or subject to some form of “blanket” license or individual registration. Under any of these pico cell scenarios, we stress that protecting terrestrial cellular systems from harmful interference remains a paramount concern. We also believe that to ensure that terrestrial cellular systems can obtain prompt relief in the event of harmful interference from airborne operations, our rules should provide for clear identification of the particular entity or entities responsible for airborne pico cell operations, as well as for complying with other Commission rules and policies relating to airborne use of cellular frequencies.

11. In addition, we seek comment on whether the pico cell proposal outlined above should apply to part 90 operations, or some subset of part 90 consumer equipment (such as consumer handsets operated by SMR licensees), which is subject to a separate airborne limitation for part 90 land mobile (including SMR) handheld and operation of many consumer devices such as those operated by Nextel. Although the current part 90 technical and operational limitations are more permissive than the current 800 MHz cellular ban, our proposal would represent additional flexibility for airborne part 90 operation.

12. Similarly, we seek comment whether, and the extent to which, our pico cell proposal should apply to part 24 and part 27 services. In this connection, we note that many telephones today are dual band phones, capable of operating in both cellular and PCS frequencies. We ask that commenters address whether this should affect our decision here. Although there is currently no Commission limitation on operation of part 24 PCS or part 27 WCS devices in airborne aircraft, they are subject to FAA restrictions on PEDs, and as a result, the airborne use of part 24 and part 27 devices, as well as the effect of such use on terrestrial systems, have generally not been at issue. We seek comment, however, on whether it would be beneficial to adopt rules for pico cell operations in part 24 and part 27 bands in the event that the FAA modifies its policies. Keeping in mind our goals of increased flexibility and interference-free operations, would adopting such rules unnecessarily reduce the flexibility afforded to licensees in these bands, or would it provide a useful framework for the development of airborne applications in these bands to the extent technical and business considerations dictate?
B. Other Airborne Uses of 800 MHz Cellular Spectrum

13. We also seek comment on ways that the 800 MHz cellular spectrum might be used as a communications pipe between airborne aircraft and the ground. We believe that it is possible to achieve the goal of increasing flexibility for cellular licensees without exposing terrestrial-based cellular networks to harmful interference. In this connection, we note that cellular infrastructure has changed greatly since 1991 when the airborne cellular use ban was first adopted and that promising technical innovations have occurred in the areas of power control, filter design, and antenna design that may assist the industry in resolving potential interference without a Commission-mandated ban on airborne use. Therefore, we seek comment on the possibility of relying on a long-term, industry-initiated solution to govern airborne use.

14. More particularly, we seek comment on whether the prohibition on airborne cellular use could be replaced by an industry-developed standard that would allow 800 MHz cellular licensees to offer airborne cellular service in accordance with a set of technical and operational limitations widely agreed to by the affected licensees. We believe that licensees have a strong incentive to develop such standards because of the flexibility in deployment and service offerings that airborne services could bring. We also note that organizations such as the Telecommunications Industry Association and the Electronic Industries Alliance have led, and continue to lead, successful efforts to develop technical and operational standards for introduction of new and additional technologies and services into already occupied spectrum by industry consensus, as opposed to government mandate. Should such consensus be reached with respect to airborne cellular operations, we would independently evaluate the standard and modify our rules and policies regarding airborne cellular use accordingly. Commenters should discuss the difficulties, as well as any solutions, to this approach. Commenters should also offer any other suggestions as to how the industry, rather than the Commission, can develop a regime that enables interference-free airborne cellular use.

15. In addition to the foregoing, we request comment on whether we should allow any cellular licensee to provide cellular service to airborne units on a secondary basis, subject to a set of conservative technical limitations. We believe that the potential for harmful interference to terrestrial networks can be successfully managed by a combination of technical limitations, including power control, antenna design, and diversity in antenna polarization. In this connection, we believe the record demonstrates that airborne transmissions at or below 0 dBm (1 milliWatt) power to the airborne antenna input are generally undetectable by ordinary cellular terrestrial base stations under all circumstances. We thus believe that the cellular service proposed here should be subject to specific, conservative technical criteria so that the transmitter power at the input to the airborne antenna is limited to 0 dBm (1 milliWatt). Although such a conservative power limit is sure to prevent harmful interference to terrestrial base stations, it may not be sufficient to facilitate real-world air-to-ground communications. Therefore, we propose that if directional or smart antennas, or diversity in antenna polarization is used, the 0 dBm limit may be increased by the amount of isolation provided by such methods.

16. We seek comment on how to quantify the effect of different types of isolation. For example, if cross-polarization isolation is employed, how much greater than 0 dBm should be allowed? Are there quantifiable factors already being employed in the industry? Or, do commenters believe that any isolation factor should be determined on a case-by-case basis? If so, commenters are requested to suggest any guiding principles that would aid our analysis and expedite consideration and agreement upon such isolation factors. In seeking to optimize the secondary use contemplated under this proposal, we also ask that commenters address whether we should limit the amount of cellular spectrum that may be used for secondary air-to-ground operations, as well as whether the number of secondary users should be limited. We note that this proposal is currently limited to 80 MHz cellular spectrum because the record in this proceeding has focused on the 800 MHz band. If commenters believe that it is appropriate to include other spectrum bands and services, they should provide technical data in support.

17. We believe that this approach may increase the opportunities for carriers to offer, and the general public to receive, airborne cellular services and thereby result in concomitant benefits for both licensees and consumers. We seek comment on this proposal and ask whether there are any other technical or operational rules that we might adopt that will further the goal of enabling airborne cellular service on a secondary basis, as described here, that will not cause harmful interference to cellular terrestrial stations and/or users.

II. Procedural Matters

A. Initial Regulatory Flexibility Analysis

18. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice of Proposed Rulemaking provided in paragraph 27 of the item. The Commission will send a copy of the Notice of Proposed Rulemaking, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the Notice of Proposed Rulemaking and IRFA (or summaries thereof) will be published in the Federal Register.

1. Need for, and Objectives of, the Proposed Rules

19. In this Notice of Proposed Rulemaking, we propose to replace or relax the ban on airborne usage of 800 MHz cellular handsets as well as propose other steps to facilitate the use of wireless handsets and devices, including those used for broadband applications, on airborne aircraft in appropriate circumstances. Section 22.925 of the Commission’s rules currently prohibits the airborne use of 800 MHz cellular telephones, including the use of such phones on commercial and private aircraft. We believe that allowing controlled use of cellular handsets and other wireless devices in airborne aircraft will promote homeland security and will benefit consumers by adding to future and existing air-ground communications options that will provide greater access for mobile voice and broadband services during flight.

20. In particular, this Notice of Proposed Rulemaking proposes to permit the airborne operation of standard, “off the shelf” wireless handsets so long as the handsets are operating at their lowest power setting under control of a “pico cell” located on the aircraft. It also seeks comment on ways that the 800 MHz cellular spectrum could be used to provide a
discuss the total estimated numbers of the above size standards and others, we
1,500 or fewer employees. Below, using and Cellular and Other Wireless
Telecommunications Carriers, Paging, and (3) satisfies any additional criteria
is not dominant in its field of operation; "small business," "small organization," and "small governmental
jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern," under the Small Business Act. A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).

23. In this section, we further describe and estimate the number of small entity licensees and regulatees that may be affected by our action. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission publishes in its Trends in Telephone Service report. The SBA has developed small business size standards for wireline and wireless small businesses within the three commercial census categories of Wired Telecommunications Carriers, Paging, and Cellular and Other Wireless Telecommunications. Under these categories, a business is small if it has 1,500 or fewer employees. Below, using the above size standards and others, we discuss the total estimated numbers of small businesses that might be affected by our actions.

24. Cellular Licensees. The SBA has developed a small business size standard for wireless firms within the broad economic census category “Cellular and Other Wireless Telecommunications.” Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total that operated for the entire year. Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more. Thus, under this category and size standard, the great majority of firms can be considered small. According to the most recent Trends in Telephone Service data, 719 carriers reported that they were engaged in the provision of cellular service, personal communications service, or specialized mobile radio telephony services, which are placed together in the data. We have estimated that 294 of these are small, under the SBA small business size standard.

25. Lower 700 MHz Band Licenses. We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues exceeding $40 million for the preceding three years. A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $15 million for the preceding three years. Additionally, the lower 700 MHz Service has a third category of small business size standards for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years. The SBA has approved these small size standards. An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six EAGs) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, 489 claimed small business, and 329 won a second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses. Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.

26. Upper 700 MHz Band Licenses. The Commission released a Report and Order authorizing service in the upper 700 MHz band. This auction, previously scheduled for January 13, 2003, has been postponed.

27. Broadband Personal Communications Service (PCS). The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined “small entity” for Blocks C and F as an entity that has average gross revenues of $40 million or less in the three previous calendar years. For Block F, an additional classification for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years. These standards defining “small entity” in the context of broadband PCS auctions have been approved by the SBA. No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F. On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 46 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events, concerning Auction 305, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. In addition, the Commission does not generally track subsequent business size changes, and in the context of assignments or transfers, unjust enrichment issues are implicated.
28. Narrowband PCS. The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of $40 million or less. Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses. To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order. A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million. A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $15 million. The SBA has approved that had revenues of no more than $15 million in the 800 MHz and 900 MHz bands. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band. The SBA has approved that had revenues of no more than $15 million in the 800 MHz SMR band and qualified as small businesses under the $15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

29. Specialized Mobile Radio (SMR). The Commission awards “small entity” bidding credits in auctions for SMR geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than $15 million in each of the three previous calendar years. The Commission awards “very small entity” bidding credits to firms that had revenues of no more than $3 million in each of the three previous calendar years. The SBA has approved that had revenues of no more than $3 million in each of the three previous calendar years. The SBA has approved this small business size standard for the 900 MHz Service. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the $15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the $15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band. A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.

30. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band. The SBA has approved that had revenues of no more than $40 million in the 800 MHz SMR band. The 800 MHz SMR band claimed status as small business.

31. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than $15 million. One firm has over $15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is established by the SBA.

32. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a “very small business” as an entity with average gross revenues of $15 million for each of the three preceding years. The SBA has approved these definitions. A small or very small entity is defined as an entity with average gross revenues for the three preceding years of not more than $40 million. A very small entity is defined as an entity with average gross revenues for the three preceding years of not more than $15 million.

33. The Notice of Proposed Rulemaking does not propose any reporting, recordkeeping, or other compliance requirements. However, we seek comment on what, if any, requirements may arise as a result of our discussion in the Notice of Proposed Rulemaking.

34. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.

35. Regarding our proposal to allow pico cells to control 800 MHz cellular telephones while airborne, we anticipate no adverse impact on small businesses. Currently, cellular telephone use is prohibited by section 22.925 of our rules. Relaxing or removing this restriction will generally result in increased opportunities for all sorts of businesses, including small businesses.

36. More specifically, we propose to grant cellular licensees authority to operate pico cell systems on their licensed frequencies. In the event that we ultimately determine that eligibility should be limited solely to cellular licensees, we recognize that other entities, including small business entities, would not be able to take advantage of the increased market opportunities for air-to-ground voice services. Cellular small business licensees, however, would benefit from increased flexibility and increased...
ability to offer services. As an alternative approach, we seek comment in this NPRM as to whether the rights to operate such systems should be available to other (non-cellular) entities. Should we determine that the public interest would be served by opening up eligibility, small businesses that are not cellular licensees could benefit from increased market opportunities.

37. Similarly, we seek comment on whether our pico cell proposal should apply to non-cellular operations under parts 24 (PCS), 27 (WCS), and 90 (SMR and other land mobile radio) of our rules. Regarding licensees regulated under parts 24 and 27, there is currently no Commission rule restricting airborne use of wireless handsets. Consequently, on one hand, if we were to include these services in our proposal, it could be construed that the flexibility of all licensees, including small businesses, would be reduced. On the other hand, mobile units covered under these license rules are currently prohibited by the FAA to be used in aircraft while airborne. We also note that such devices may not be able to connect with ground stations above certain altitudes due to the great distances. Accordingly, to the extent that this proceeding leads to the permissible and viable airborne operation of wireless devices using part 24 and part 27 spectrum, we believe all entities could benefit. Regarding land mobile licensees under part 90, our rules limit the airborne use of mobile units. Our proposal to relax these limitations will, therefore, result in increased opportunities for both large and small businesses.

38. We also seek comment on the practicality of an industry-initiated agreement that sets forth technical and operational standards that would allow cellular carriers to provide air-to-ground services while ensuring no harmful interference to terrestrial cellular systems. We believe that no adverse impact on small entities would result from such an industry consensus. To the contrary, small businesses will be able to participate in the industry-initiated process and take advantage of increased opportunities to offer service to aircraft.

39. Finally, regarding our decision to seek comment on whether cellular licensees should be able to offer service to airborne wireless units on a secondary basis, subject to conservative technical and operational rules, we anticipate no adverse impact on small entities. In fact, were we to ultimately adopt rules contemplated by this policy, small businesses would benefit from increased opportunities and flexibility to serve their clients.

6. Federal Rules That May Duplicate, Overlap or Conflict With the Proposed Rules

40. 14 CFR 91.21, 121.306, 125.204, and 135.144.

B. Initial Paperwork Reduction Act of 1995 Analysis

41. This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, therefore, it does not contain any proposed information collection burden “for small business concerns with fewer than 25 employees,” pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

42. Pursuant to applicable procedures set forth in §§ 1.415 and 1.419 of the Commission’s rules, 47 CFR 1.415 and 1.419, interested parties may file comments on or before April 11, 2005, and reply comments are due May 9, 2005. Comments and reply comments should be filed in WT Docket No. 04-435. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding.

43. Comments may be filed either by filing electronically, such as by using the Commission’s Electronic Comment Filing System (ECFS), or by filing paper copies. Parties are strongly urged to file their comments using ECFS (given recent changes in the Commission’s mail delivery system). Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/oet-file/ecfs.html. Only one copy of an electronic submission must be filed. In completing the transmittal screen, the electronic filer should include its full name, Postal Service mailing address, and the applicable docket or rulemaking number. WT Docket No. 04-435. Parties also may submit comments electronically by Internet e-mail. To receive filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, “get form <your e-mail address>.” A sample form and directions will be sent in reply.

44. Parties who choose to file by paper may submit such filings by hand or messenger delivery, by U.S. Postal Service mail (First Class, Priority, or Express Mail), or by commercial overnight courier. Parties must file an original and four copies of each filing in WT Docket No. 04-435. Parties that want each Commissioner to receive a personal copy of their comments must file an original plus nine copies. If paper filings are hand-delivered or messenger-delivered for the Commission’s Secretary, they must be delivered to the Commission’s contractor at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002–4913. To receive an official “Office of the Secretary” date stamp, documents must be addressed to Marlene H. Dortch, Federal Communications Commission. (The filing hours at this facility are 8 a.m. to 7 p.m.) If paper filings are submitted by mail through the U.S. Postal Service (First Class mail, Priority Mail, and Express Mail), they must be sent to the Commission’s Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 445 12th Street, SW., Washington, DC 20554. If paper filings are submitted by commercial overnight courier (i.e., by overnight delivery other than through the U.S. Postal Service), such as by Federal Express or United Parcel Service, they must be sent to the Commission’s Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 9300 East Hampton Drive, Capitol Heights, MD 20743. (The filing hours at this facility are 8 a.m. to 5 p.m.)

45. Parties may also file with the Commission some form of electronic media submission (e.g., diskettes, CDs, tapes, etc.) as part of their filings. In order to avoid possible adverse affects on such media submissions (potentially caused by irradiation techniques used to ensure that mail is not contaminated), the Commission advises that they should not be sent through the U.S. Postal Service. Hand-delivered or messenger-delivered electronic media submissions should be delivered to the Commission’s contractor at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002–4913. Electronic media sent by commercial overnight courier should be sent to the Commission’s Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 9300 East Hampton Drive, Capitol Heights, MD 20743.

46. Regardless of whether parties choose to file electronically or by paper, they should also send one copy of any documents filed, either by paper or by e-mail, to each of the following: (1) Best Copy & Printing, Inc., Portals II, 445 12th Street, SW., Room C7–B402, Washington, DC 20554, facsimile (202) 488-5563, or e-mail at http://www.bestcopyprint.com, and (2) Guy Benson, Mobility Division, Wireless Telecommunications Bureau, 445 12th
47 Comments, reply comments, and ex parte submissions will be available for public inspection during regular business hours in the FCC Reference Information Center, Federal Communications Commission, 445 12th Street, SW., Room CY–A257, Washington, DC 20554. These documents also will be available electronically at the Commission’s Disabilities Issues Task Force Web site, http://www.fcc.gov/df, and from the Commission’s Electronic Comment Filing System. Documents are available electronically in ASCII text, Word 97, and Adobe Acrobat. Copies of filings in this proceeding may be obtained from Best Copy & Printing, Inc., Portals II, 445 12th Street, SW., Room CY–B402, Washington, DC 20554, telephone (800) 378–3160, facsimile (202) 488–5563, or via e-mail at http://www.fcc@bcpiweb.com. This document is also available in alternative formats (computer diskette, large print, audio cassette, and Braille). Persons who need documents in such formats may contact Brian Millin at (202) 418–7426, TTY (202) 418–7365, Brian.Millin@fcc.gov, or send an e-mail to access@fcc.gov.

C. Ex Parte Rules Regarding the NRPM—Permit-But-Disclose Comment Proceeding

48. With regard to the NRPM, this is a permit-but-disclose notice and comment rule making proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in Commission rules. See generally 47 CFR 1.1202, 1.1203, and 1.1206.

III. Ordering Clauses

49. Pursuant to the authority contained in sections 1, 4(l), 11, and 303(f) and (y), 308, 309, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(l), 161, 303(f), (y), 308, 309, and 332, this Notice of Proposed Rulemaking is hereby adopted.

50. The Commission’s Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Part 22

Communications common carriers, Radio.