

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 22 of the Commission's Rules To Benefit the Consumers of Air-Ground Telecommunications Services	)	WT Docket No. 03-103
	)	
Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules	)	
	)	
Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service	)	WT Docket No. 05-42
	)	
Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804	)	File No. 0001716212
	)	

**OPPOSITION TO PETITION FOR RECONSIDERATION**

**I. INTRODUCTION**

Nextel Communications, Inc. (Nextel) opposes the petition for reconsideration that Space Data Corporation (Space Data) filed against the Federal Communications Commission's *Air-to-Ground Order*.<sup>1</sup> Space Data demands that the Commission reverse its decision to prohibit terrestrial operations in the 800 MHz air-to-ground (ATG) spectrum and wants to rewrite the rules to permit high-altitude balloons to offer ATG service.<sup>2</sup> Space Data does not offer the Commission any compelling reason to change its conclusions; therefore, the Space Data petition should be denied.

---

<sup>1</sup> Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, *Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 4403 (2005) ("*ATG Order*").

<sup>2</sup> Petition for Clarification and Reconsideration of Space Data Corporation, WT Docket No. 03-103 (May 13, 2005) (*Space Data Petition*).

## II. DISCUSSION

In its Petition, Space Data proposes a radical rewrite of the rules governing the ATG band. The Commission specifically designed the 800 MHz ATG band to support communications from the ground to aircraft and vice versa. Space Data departs from this model entirely and, in a position the Commission previously rejected, demands that ATG licensees be allowed to serve mobile handsets on the ground and seeks “clarification” that the Commission intended to permit licensees to use balloons to provide ATG service.

Reconsideration is appropriate only where the petitioner either shows a material error or omission in the original order or raises additional facts not known or existing at the petitioner’s last opportunity to present these issues.<sup>3</sup> A petition for reconsideration of a rulemaking proceeding also must state with particularity how the Commission should change its prior decision.<sup>4</sup> The Commission denies petitions that merely repeat arguments that the Commission previously considered and rejected.<sup>5</sup> Space Data ignores record evidence from Nextel and several other commenters that demonstrates how an ancillary terrestrial component (ATC) in the ATG band would cause harmful interference and fails to explain how balloon-based ATG would operate.

---

<sup>3</sup> See, e.g., Applications of Vodaphone Airtouch, PLC and Bell Atlantic Corporation, et al., *Order on Further Reconsideration*, 17 FCC Rcd 10998, ¶ 2 (2002); LMDS Communications, Inc., *Order on Reconsideration*, 15 FCC Rcd 23747, ¶ 6 (2000); Implementation of Section 25 of the Cable Television Consumer Protection and Competition Act of 1992, *Memorandum Opinion and Order on Reconsideration of the First Report and Order*, 19 FCC Rcd 5854, ¶ 6 (2004); Definition of Markets for Purposes of the Cable Television Broadcast Signal Carriage Rules, *Order on Reconsideration*, 16 FCC Rcd 5022, ¶ 18 (2001).

<sup>4</sup> 47 C.F.R. §§ 1.106(d)(1), 1.429(c).

<sup>5</sup> Applications of Bennett Gilbert Gaines et al., *Memorandum Opinion and Order*, 8 FCC Rcd 3986, 3987 (Rev. Bd. 1993); see also, e.g., Metrocall, Inc. v. Southwestern Bell Tel. Co. et al., *Order on Reconsideration*, 17 FCC Rcd 4781, 4782-83, ¶ 5 (2002); Federal State Joint Board on Universal Service, *Order*, 19 FCC Rcd 22305, ¶ 4 (2004).

Space Data's glib assurance that interference "could be resolved" fails to satisfy the Commission's standard for granting petitions for reconsideration.<sup>6</sup>

**A. Space Data Fails to Present Any Compelling Reason to Reverse the Commission's Decision to Use the ATG Bands for ATG and Ignores All Potential for Harmful Interference.**

Space Data does not explain why the Commission should reverse course and permit terrestrial operations in the ATG band. The Commission properly concluded that spectrum in the ATG band is extremely limited and that operators should focus on providing the air-to-ground services for which the band was intended.<sup>7</sup> Space Data offers no new evidence that contradicts the Commission's conclusion. Space Data also offers no analysis of interference effects, no discussion of power limits on the ground, no analysis of station-keeping requirements and no discussion of the myriad other interference mechanisms at work when licensees use ATG spectrum for ATC services.

As documented in Nextel's technical study filed in this proceeding, permitting ancillary terrestrial uses within the ATG band may cause harmful interference.<sup>8</sup> Like Nextel, AirCell, Boeing, Sprint, Cingular, AMTA and others recognized the challenges that ATC would pose for adjacent operations and each noted the likelihood of harmful interference.<sup>9</sup> Indeed, several parties

---

<sup>6</sup> *Space Data Petition* at 7.

<sup>7</sup> *ATG Order* at ¶ 53.

<sup>8</sup> *See Ex Parte* Letter of Nextel Communications, WT Docket No. 03-103 (filed Nov. 16, 2004).

<sup>9</sup> *See Ex Parte* Letter of Sprint at 1, WT Docket No. 03-103 (filed Dec. 3, 2004) ("The mixture of an ATC and ATG service implicates interference and other issues not adequately addressed by the docket and the submissions made"); *Ex Parte* Letter of AirCell, "Air-to-Ground Myths & Realities" at 1, WT Docket No. 03-103 (filed Dec. 6, 2004) ("allowing terrestrial operations would increase the risk of interference to neighboring public safety licensees"); *Ex Parte* Letter of Boeing at 3, WT Docket No. 03-103 (filed Dec. 8, 2004) ("Ancillary terrestrial operations in the ATG band. . .are likely to create the kind of harmful out-of-band emissions that Nextel has identified. . ."); *see also* Cingular Wireless Comments at 6, WT Docket No. 03-103 (filed Sep. 23, 2004) ("do not permit terrestrial service on air-ground spectrum at this time"); *see* AMTA Comments at 4, WT Docket

warned the Commission that additional adjacent-band interference analysis was necessary before permitting any ancillary terrestrial operations within the ATG spectrum band.<sup>10</sup> These parties' concerns are particularly important because the ATG bands is immediately adjacent to the very spectrum that the Commission spent two and half years evaluating before adopting a complex \$4.86 billion plan to ensure that public safety operations would not suffer from harmful interference.<sup>11</sup> As detailed in Nextel's filings in this docket, the *800 MHz Order* established bright line limits for out-of-band emission (OOBE) as part of a larger framework for the operation of public safety, non-cellular SMR and Business, Industrial and Land Transportation systems; however, these detailed rules governing interference among 800 MHz incumbents do not account for the interference that would likely result from permitting ATC in the ATG bands.<sup>12</sup> Indeed, public safety agencies,

---

No. 03-103 (filed Sep. 23, 2004) (“there should be no changes in the technical parameters of this service, including adding a terrestrial component...”).

<sup>10</sup> See, e.g., *Ex Parte* Letter of CTIA at 2, WT Docket No. 03-103 (filed Oct. 20, 2004) (the Commission should complete a valid assessment, including testing, on the potential for interference to existing licensees in the 800 MHz band before permitting ancillary terrestrial use); *Ex Parte* Letter of Motorola at 2, WT Docket No. 03-103 (filed Nov. 4, 2004) (“the potential for interference to adjacent services is very real and must be addressed by the Commission”), *Ex Parte* Letter of CTIA at 2, WT Docket No. 03-103 (filed Oct. 20, 2004) (“the Commission should complete a valid assessment, including testing, on the potential for interference to existing licensees in the 800 MHz band before permitting ancillary terrestrial use”); *Ex Parte* Letter of Association of American Railroads at 2, WT Docket No. 03-103 (filed Nov. 10, 2004) (requesting that the Commission not make a final determination regarding ATG spectrum without a developing a record on interference to adjacent bands).

<sup>11</sup> *Improving Public Safety Communications in the 800 MHz Band et. al, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969 (2004), *aff'd on recon., Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120 (2004), *stay denied, Order*, 20 FCC Rcd 641 (2005) (denying motion for stay pending appellate review).

<sup>12</sup> See, e.g., *Ex Parte* Letter of Nextel Communications, WT Docket No. 03-103 (filed Dec. 8, 2004).

through APCO, stated their concern about the potential for harmful interference from rule changes in the ATG bands.<sup>13</sup>

Space Data also ignores other basic problems, such as the station-keeping issues associated with ancillary terrestrial services. Balloons floating at thousands of feet above ground level will not have precise control over their ground coverage. As a result, deploying a terrestrial service in this band, even on a secondary basis and even in rural areas, has the potential to interfere with cellular and SMR operations. Moreover, Space Data presents no information about whether and how it intends to build a handset that would support the cellular, SMR and ATG bands, which, even if technically feasible, would prove challenging and costly.

Space Data treats the potential for self-interference from ATG ATC in the same cavalier manner. As the Commission's *ATG Order* explained, a few hundred skyward pointing ATG base stations can provide service coverage to most of the airspace in the United States.<sup>14</sup> These large coverage areas require aircraft to be capable of receiving signals anywhere within large swaths of the country, including urban, suburban and rural areas. While Space Data proposes to limit ATC use to rural areas, Space Data ignores the reality that aircraft will simultaneously receive signals from large portions of the country, including both urban and rural areas. As a result, ancillary terrestrial mobile stations – whether confined to rural areas or not – have the potential to cause harmful co-channel interference to primary ATG communications.

---

<sup>13</sup> See *Ex Parte* Letter of APCO International at 2, WT Docket No. 03-103 (filed Nov. 29, 2004) (“APCO continues to be concerned with “deck-to-deck” operations that would use the 849-851 MHz band on ground or at low elevations near airports.”); see also *Ex Parte* Letter of APCO International at 1, WT Docket No. 03-103 (filed Nov. 29, 2004) (“Public safety licensees should not go through the complex re-banding process to eliminate one form of interference, only to be susceptible to a new type of interference from ATG operations.”).

<sup>14</sup> *ATG Order* at ¶ 63.

The Commission correctly recognized the high likelihood of co-channel and adjacent-band interference and properly decided against permitting ancillary terrestrial services in the ATG spectrum.<sup>15</sup> While Space Data claims that cellular and SMR handsets “could easily be modified” to accommodate ancillary terrestrial services within the ATG band, Space Data offers no evidence that these unspecified “easy modifications” would adequately address adjacent-band interference.<sup>16</sup> Without a more comprehensive record on the nature and degree of anticipated interference and how best to mitigate its effects, the Commission has nothing before it to justify the introduction of a terrestrial component to ATG.

**B. Space Data Offers No Facts, Evidence or Omissions to Support the Notion that the Commission Intended to Permit Balloon-Based ATG.**

Space Data also improperly demands “clarification” that the Commission intended to permit balloon-based ATG operations. At the most basic level, Space Data nowhere demonstrates whether or how a *four-stage* balloon-based communications system can operate in a band allocated domestically and coordinated internationally for *two-stage* communications systems. Ordinary air-to-ground communications involve only two communications links:

- Ground-station transmitters to airplane receivers; and
- Airplane transmitters to ground-station receivers.

By comparison, a high-altitude balloon-based ATG system will likely require four communications links:

- Ground-stations transmitters to balloon-station receivers;
- Balloon-station transmitters to airplane receivers;

---

<sup>15</sup> *Id.* at ¶ 53.

<sup>16</sup> *Space Data Petition* at 6.

- Airplane transmitters to balloon-station receivers; and
- Balloon transmitters to ground-station receivers.

Space Data does not analyze the potential for interference that may arise from these additional communications links. Nor does Space Data address whether and how its proposed balloon-based ATG mechanism would correspond to the current bilateral agreements with Canada and Mexico. Because Space Data raises no new facts and fails to explain the mechanics or address the potential for interference from offering ATG service using balloons, the Commission should deny Space Data's demand that the Commission reverse its prior decision and permit balloon-based operations in the ATG band.

To warrant reconsideration, Space Data must offer far more than an idealized vision of interference-free service in the ATG bands. Space Data must demonstrate particular errors, omissions or contradictory evidence that render the Commission's prior conclusion erroneous. Space Data has not satisfied this burden and its petition must be denied.

### III. CONCLUSION

Space Data fails to address any of the well-documented technical challenges associated with ATG ATC while, at the same time, proposing a radical rewrite of the Commission's spectrum rules to permit balloon-based ATG services. The Commission should deny the Space Data Petition and affirm its prior decision that prohibited ancillary terrestrial uses of the ATG band and rejected balloon-based ATG.

Respectfully submitted,

**NEXTEL COMMUNICATIONS, INC.**



Laura H. Phillips

Jason E. Friedrich

**DRINKER BIDDLE & REATH LLP**

1500 K Street, N.W., Suite 1100

Washington, D.C. 20005-1209

*Its Attorneys*

Robert S. Foosaner

*Senior VP and Chief Regulatory Officer*

Lawrence R. Krevor

*Vice President - Government Affairs*

Trey Hanbury

*Senior Counsel - Government Affairs*

**NEXTEL COMMUNICATIONS, INC.**

2001 Edmund Halley Drive

Reston, VA 20191

June 16, 2005

CERTIFICATE OF SERVICE

I, Carole A. Rehm, a legal secretary at Drinker Biddle & Reath LLP, do hereby certify that on this 16<sup>th</sup> day of June, 2005, a copy of the foregoing “**OPPOSITION TO PETITION FOR RECONSIDERATION**” was mailed to the following:

Michele C. Farquhar  
David L. Martin  
Hogan & Hartson L.L.P.  
555 Thirteenth Street, N.W.  
Washington, D.C. 20004-1109  
*Counsel for AirCell*

Gerald M. Knoblach  
Chairman and CEO  
Space Data Corporation  
460 South Benson Lane  
Chandler, AZ 85226

Cheryl A. Tritt  
Jennifer L. Kostyu  
Morrison & Foerster LLP  
2000 Pennsylvania Ave., NW  
Suite 5500  
Washington, D.C. 20006  
*Counsel to Space Data Corporation*

Best Copy & Printing, Inc.  
FCC Copy Contractor  
Portals II 445 12<sup>th</sup> Street, N.W.  
Room CY-B402  
Washington, DC 20554

  
Carole A. Rehm