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January 14, 2002

The Honorable Michael K. Powell
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

BOEING

Subject: Nextel White Paper Regarding Eliminating CMRS-Public Safety Interference in the 800 MHz Band

Dear Chairman Powell:

The Boeing Company ("Boeing") recognizes and endorses the need to address and correct the public safety communication interference problem in the 800 MHz band. Boeing believes, however, that the course of action proposed by Nextel in its November 21, 2001 White Paper is not appropriate or desirable.[1] Focused industry efforts are currently underway to identify solutions to the 800 MHz interference problem. One such effort, by the National Association of Manufacturers and MRFAC, Inc. ("NAM/MRFAC"), offers a "rebanding" solution that would resolve the interference problems at substantially less cost for the parties involved.[2] While Boeing appreciates the need for the Commission to act expeditiously to resolve this important public safety issue, we respectfully request that the Commission adequately identify the full scope of related issues and ensure that the industry has sufficient opportunity to provide input on alternative courses of action. In addition, as a 2 GHz Mobile Satellite Service ("MSS") licensee, Boeing opposes any reallocation of such spectrum to any terrestrial service provider as unnecessary and counter to the public interest.

As the world's largest manufacturer of commercial aircraft and a leading defense contractor, and as the licensee of numerous 800 MHz licenses used extensively for private internal communications, Boeing has a significant interest in the matters raised in the Nextel White Paper. Boeing uses its 800 MHz Business and Industrial Land Transportation ("B/ILT") licenses to provide specialized and critical communications functions such as internal safety, security, and emergency services, aeronautical and industrial regulatory compliance, research and development, and manufacturing support. These communication requirements cannot be adequately satisfied by the use of commercial telecommunications systems. Boeing also uses its B/ILT licenses in

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[1] *See Promoting Public Safety Communications, Realigning the 800 MHz Land Mobile Radio Band to Rectify Commercial Mobile Radio – Public Safety Interference and Allocate Additional Spectrum to Meet Critical Public Safety Needs,* White Paper by Nextel Communications, Inc. (submitted Nov. 21, 2001)("*White Paper*").

[2] *See* Letter from Clyde F. Morrow, Sr., President, MRFAC, Inc. and Jerry J. Jasinowski, President, NAM to The Honorable Michael K. Powell, Chairman, Federal Communications Commission (submitted Dec. 21, 2001)("*NAM/MRFAC Letter*").

ways that are complementary and supplemental to public safety users. For example, Boeing has mutual aid agreements with local public safety entities in the states of Washington, Missouri and Kansas that have proven extremely advantageous to all.[3]

Boeing recognizes the critical importance of interference-free public safety communications and supports efforts to increase efficient uses of spectrum. The White Paper proposal to vacate all but public safety users from the 800 MHz band, however, is unnecessary. Public safety has been allocated an additional 24 MHz of spectrum in the 700 MHz band (764-776 MHz and 794-806 MHz). Given this allocation and the needs of other incumbent users in the 800 MHz band, a disruption of the magnitude that the White Paper proposes is ill advised, especially while other less disruptive and less costly alternatives are being sought. It is also worthy to note that the proposal would not guarantee interference-free operation for public safety users. In fact, the proposal infers the need for guard bands (comprised of a significant portion of the additional spectrum allocated to public safety) to protect public safety users from further harmful interference.[4]

Nextel acknowledges that its own operations are the primary cause of the interference currently being experienced by public safety and (other Private Radio users) in the 800 MHz band.[5] It, therefore, should not be incumbent on other 800 MHz users to remedy the problems caused by Nextel's (and other CMRS licensees') commercial operations. Boeing does not cause harmful interference to public safety users. It should not be required to incur the significant expenses related to relocating to other spectrum or the risks of being relegated to secondary status within the 800 MHz band.[6] Further, displaced or disenfranchised private B/ILT licensees should not be required to help fund the relocation of public safety licensees to solve interference problems principally caused by others' operations.[7] Boeing has long opposed the conversion of

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[3] For example, Boeing has entered into agreements whereby Boeing will be the first responder to nearby emergencies. These mutual aid agreements—which were utilized after an earthquake in Seattle and after a tornado in Wichita—would be jeopardized if Boeing was forced to relocate out of 800 MHz.

[4] *White Paper* at 33.

[5] *Id. at 9.*

[6] *Id.* at 29.

[7] *Id.* n. 54 ("Arguably, however, B/ILT users also would benefit from access to interference-free contiguous spectrum, particularly if they choose to relocate...and therefore should also contribute to the fund to relocate public safety.").

private (PMRS) spectrum to commercial use.[8] The proposal included in the White Paper would further exacerbate the PMRS spectrum shortage.

Because industry groups are currently addressing 800 MHz interference issues, the Commission should not take action specific to the White Paper. A coalition of Private Land Mobile coordinators,[9] and NAM/MRFAC, an organization representing the spectrum needs of private internal use system operators, are also working on consensus-based plans to help resolve Nextel-type interference problems at 800 MHz.[10] Boeing is an active participant in both efforts and believes that the appropriate course of action is to allow the various parties to offer alternative resolutions reached by way of industry consensus.

In addition to sharing the concerns expressed by NAM/MRFAC about the White Paper,[11] Boeing has several unique areas of concern. First, many of Boeing's B/ILT licenses for its operations in the Puget Sound area are close to the Canadian border region and are encumbered by coordination considerations that typically render approximately half of the 800 MHz spectrum in the affected areas unavailable. The same coordination considerations are anticipated to exist in the 700 and 900 MHz bands. As a result, the relocation proposed in the White Paper could prove impossible. Second, as one of the largest private licensees in the country, the economic impact of retuning versus relocating and re-equipping would be substantial. Preliminary research indicates that it would cost over $50 million (in equipment costs alone) for

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[8] *See, e.g., Implementation of Sections 309 (j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz,* Comments of The Boeing Company, WT Docket No. 99-87, RM 9332 (submitted Aug. 2, 1999)(urging the Commission to avoid further commercialization of PMRS spectrum); *Wireless Telecommunications Bureau Seeks Comments on Nextel Communications, Inc. Request for Waiver,* Comments of the Boeing Company in Opposition to the Requests for Waiver, DA 98-2206 (submitted Nov. 25, 1998)(opposing conversion of PMRS spectrum to commercial use).

[9] *See* Letter from Aeronautical Radio, Inc. (ARINC), American Association of Railroads (AAR), American Petroleum Institute (API), Forest Industries Telecommunications (FIT), Industrial Telecommunications Association, Inc. (ITA), MRFAC, Inc. (MRFAC), and the United Telecom Council (UTC) to The Honorable Michael K. Powell, Chairman, Federal Communications Commission at 1 (submitted Dec. 20, 2001)("Our organizations are fully engaged with our memberships and will provide the Commission with specific recommendations in the coming weeks.").

[10] *NAM/MRFAC Letter* at 3-4. The NAM/MRFAC plan is preferable because it resolves the interleaving problem, rebands to protect public safety licensees, avoids relocation, aligns 800 MHz and 700 MHz public safety spectrum, and provides public safety with additional 800 MHz spectrum.

[11] *See NAM/MRFAC Letter* at 2-3. Concerns with the White Paper proposal include the cost, disruption, and risks related to B/ILT relocation or relegation to secondary status and the likelihood that Nextel does not control enough 700 MHz and 900 MHz relocation spectrum in all areas of the country.

Boeing to re-equip upon relocation as opposed to a cost of a few million dollars to retune within the 800 MHz band.

Boeing, as a 2 GHz MSS licensee, also opposes Nextel's request for 10 MHz of the current 2 GHz MSS spectrum allocation. Boeing plans to use its 2 GHz MSS license to provide aeronautical communications and navigation services. Boeing's system is designed to improve the efficiency and safety of global air transportation through a satellite-based air traffic management ("ATM") and communications, navigation, and surveillance ("CNS") system.

The 2 GHz spectrum allocation for MSS was only recently made, and the public interest will be disserved by reclamation of an allocation so recently determined to be appropriate. Also, 2 GHz MSS development plans call for expanded use of the 2 GHz MSS spectrum allocation beyond the initial spectrum allotments, and the availability of the spectrum is critical to the implementation of several companies' business plans.[12] Further, several proceedings are already before the Commission related to the 2 GHz MSS allocation.[13] The request for a 10 MHz block of the 2 GHz MSS spectrum as consideration for the "concessions" it would make under its proposal would result in a windfall for Nextel.

Accordingly, Boeing strongly urges the Commission to consider the NAM/MRFAC and other coalition alternatives that are being developed for eliminating the 800 MHz public safety interference problem. Such solutions could bring resolution to public safety concerns without resulting in the substantial expense and disruptive reallocation that is called for in the Nextel White Paper.

Sincerely,

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The Boeing Company
M/C 7A-49

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[12] *See, e.g.*, Boeing's *3G FNPRM* comments at 2-6.

[13] *See, e.g., Amendment of Part 2 of the Commission's Rules to Allocated Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems; Amendment of Section 2.106 of the Commissions Rules to Allocate Spectrum at 2 GHz for Use by Mobile-Satellite Service; The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band,* CTIA Petition for Reconsideration, ET Docket Nos. 00-258, 95-18, IB Docket No. 99-81 (filed Oct. 15, 2001); *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, ET Docket No. 00-258, 16 FCC Rcd 16043 (2001)("*3G FNPRM*").

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