

ORIGINAL



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August 30, 1996

EX PARTE OR LATE FILED

EX PARTE

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW, Room 222  
Washington, DC 20554

RECEIVED  
AUG 30 1996  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

RE: Amendment of the Commission's Rules to Provide for Unlicensed  
NII/SUPERNet Operations in the 5 GHz Frequency Range  
(ET Docket No. 96-102)

Dear Mr. Caton:

On Thursday, August 29, 1996, Donna Bethea and I, on behalf of AirTouch Communications, met with David Wye, Elizabeth Lyle, Nancy Booker, Ron Netro, and Marty Liebman to discuss issues relating to this proceeding. Please associate the attached material with the above-referenced proceeding.

Two copies of this notice are being submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me at 202-293-4960 should you have any questions or require additional information concerning this matter.

Sincerely,

Kathleen Q. Abernathy

Attachment

- cc: David Wye
- Elizabeth Lyle
- Nancy Booker
- Ron Netro
- Marty Liebman

U.S. of Commerce Field  
202-293-4960  
DH

# **AIRTOUCH COMMUNICATIONS, INC.**

## **COMMENTS**

**Amendment of the Commission's Rules to Provide for Unlicensed NII/SUPERNet  
Operations in the 5 GHz Frequency Range**

**(ET DOCKET NO. 96-102)**

**Kathleen Q. Abernathy  
Donna L. Bethea  
August 29, 1996**

## Background on MSS

- June 1991      Globalstar Submits Mobile Satellite Service (MSS) Applications.
- WARC - 1992    The US Achieves International Allocation of MSS Service Link Spectrum in the Ghz Band.
- Early 1993     The FCC and Industry Begin Working Toward the International Allocation of MSS Feeder Link Spectrum.
- The FCC Begins the Licensing Process for the Big Leo Service Link Spectrum; Feeder Link Spectrum Awaits International Allocation.
- May 1995      WinForum and Apple Petition the FCC for a Rulemaking to Allocate the 5 Ghz Band and Adopt Service Rules for a Shared Unlicensed Personal Radio Network.
- WRC - 95        The US Industry and Government are Successful in Winning a Global Allocation of MSS Feeder Link Spectrum in the Ghz Band; Try to Adjust for the 20 Mhz Service Link Domestically Allocated to PCS.

## **Services Offered by Big LEOS**

MSS Systems Have Accomplished or Largely Completed the Commercial Undertakings Necessary to Ensure the Timely Deployment of Services.

- Obtained Funds Necessary to Construct, Launch, and Operate.
- Satellite Construction Has Commenced.
- Launch Contracts Have Been Secured.
- Gateway Designs are Near Completion.

Specific Service Offerings Will Include:

- Ubiquitous Voice and Data Mobile Services.
- Position Location Services.
- Search and Rescue Communications.
- Environmental Monitoring.

## **NPRM Proposal**

Allocation of 350 Mhz of the 5 Ghz Band to Support the Operation of Unlicensed, Short-Range, High Speed Wireless Communications.

Adoption of a “Safe Harbor” Rule for Part 15 Devices.

- Specific FCC Definition of Interference.

Adoption of a 100 mW EIRP Limit.

Listen Before Talk Protocol.

## **Part 15 Operation Rules**

Unlicensed Part 15 Devices Have No Spectrum Allocation Status, but Rather Have a Secondary Status only:

“Persons Operating Intentional or Unintentional Radiators Shall not be Deemed to Have a Vested or Recognizable Right to Continued Use of Any Given Frequency...”  
(47 C.F.R. § 15.5(a) (1995))

These Devices are Prohibited From Causing Harmful Interference To and Must Accept Interference From Licensed Radio Services:

“Operation of an Intentional, Unintentional, or Incidental Radiator is Subject to the Conditions That no Harmful Interference is Caused and That Interference Must be Accepted That May be Caused by the Operation of an Authorized Radio Station...”  
(47 C.F.R. § 15.5(b))

## **FCC's Proposal Does Not Accommodate MSS Feederlink Operations**

MSS Systems Cannot Operate Effectively Pursuant to the “Safe Harbor” Proposal Outlined in the NPRM.

Since MSS Systems are Already Designed and Satellite Construction has Commenced, It is Infeasible to Redesign for Other Spectrum.

In Contrast, NII/SUPERNet Devices are in a Very Preliminary Design Concept Phase and There are Alternative Chunks of Spectrum Available for Part 15, Low Power or Long Range Links.

The Sharing Proposal in the NPRM is Not Feasible.

- The NPRM Relies on the ITU-R WP 4A Paper to Establish Sharing Feasibility but Does Not Apply the Same Conditions Because the ITU-R Study Relies on 99 % Indoor Use of the Wireless Devices.
- Incorrect Globalstar Parameters Were Used.

## AirTouch Calculations

Number of Terminals = 50 Million

Bandwidth/Terminal = 20 Mhz

Duty Cycle = 50%

Outdoor Use = 60%

AirTouch Estimates That the Total Interference Introduced by the NII/SUPERNet Devices Into the MSS Feeder Links Will be -207.09 dB/Hz.

This Interference Will Reduce the Capacity of the System by 27.4%.

## **Conclusion**

The US Industry and Government Have Invested Significant Time, Money, and Credibility Setting the International and Domestic Framework Necessary for the Development of the MSS Industry.

The Proposals in ET Docket 96-102 Undermine Those Efforts.

The Globalstar System and Other Mobile Satellite Systems Will Serve Important Public Benefits.

To Maximize the Benefits to be Derived From Such Systems, the FCC Must Not Expose MSS Feeder Links to Devices Which Will Cause Harmful Interference to Their System.