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JAN 28 2004

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Policy Branch
International Bureau
January 22, 2004

RECEIVED

JAN 22 2004

Via Hand Delivery

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Jon Burton

JAN 22 2004

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

From Office

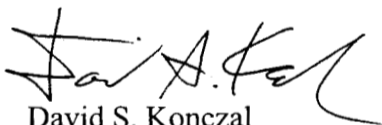
Re: Mobile Satellite Ventures Subsidiary LLC
Ex Parte Presentation
IB Docket No. 01-185
File No. SAT-MOD-20031118-00333 (ATC application)
File No. SAT-AMD-20031118-00332 (ATC application)
File No. SES-MOD-20031118-01879 (ATC application)
File No. SAT-AMD-20031118-00335 (replacement satellite application)

Dear Ms. Dortch:

On January 21, 2004, Mobile Satellite Ventures Subsidiary LLC ("MSV") provided a demonstration to International Bureau staff members of its techniques for mitigating self-interference from the operation of an Ancillary Terrestrial Component ("ATC"). The demonstration was held at MSV's headquarters in Reston, Virginia. The following International Bureau staff members attended: William Bell, Lisa Cacciatore, Richard Engelman, Howard Griboff, Paul Locke, Kathryn Medley, Robert Nelson, and Ronald Repasi. The following attended on behalf of MSV: Carson Agnew, Lon Levin, Peter Karabinis, and Gary Churan, as well as Bruce Jacobs of Shaw Pittman LLP, counsel for MSV. MSV presented the information contained in the attached set of presentation materials.

Please direct any questions regarding this matter to the undersigned.

Very truly yours,



David S. Konczal

ShawPittman LLP

Ms. Marlene H. Dortch
January 22, 2004
Page 2

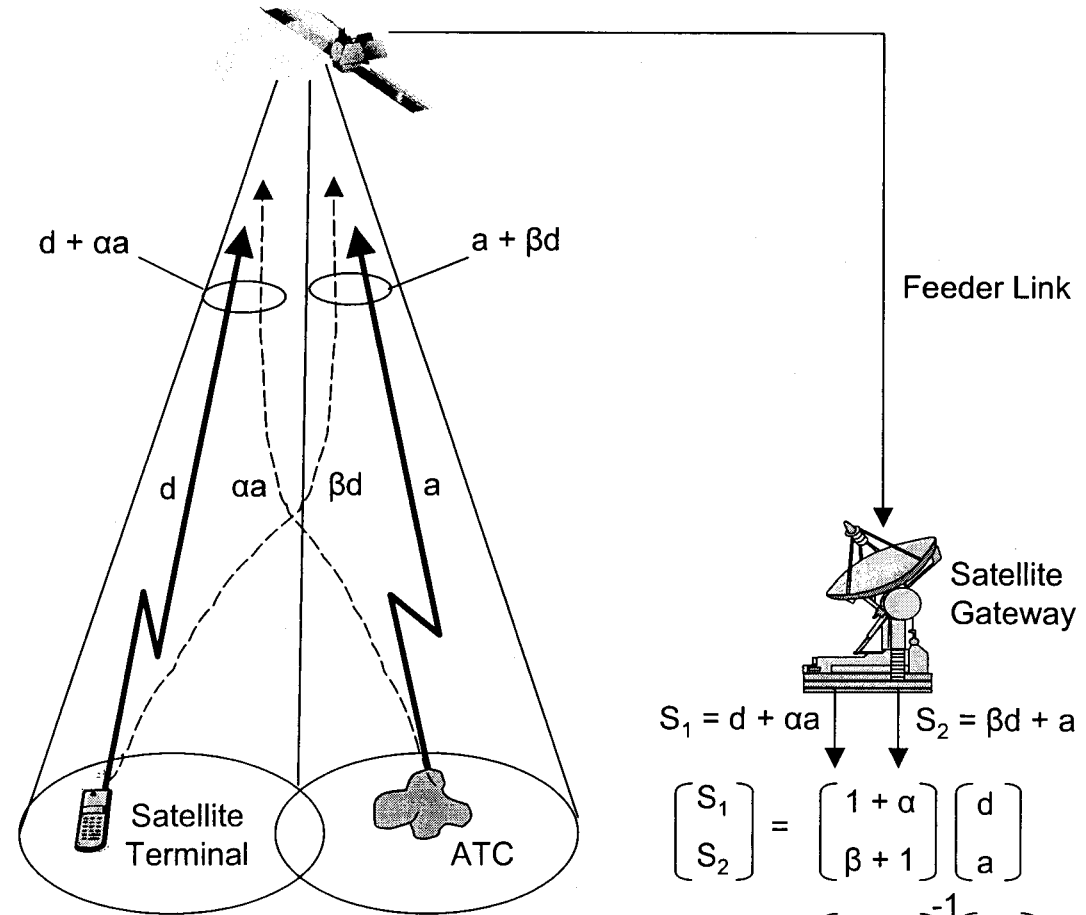
cc: William Bell
Lisa Cacciatore
Richard Engelman
Howard Griboff
Paul Locke
Kathryn Medley
Robert Nelson
Ronald Repasi

Interference Cancellation Presentation to the FCC

January 21, 2004



Interference Mechanism



$$S_1 = d + \alpha a \quad S_2 = \beta d + a$$

$$\begin{bmatrix} S_1 \\ S_2 \end{bmatrix} = \begin{bmatrix} 1 + \alpha \\ \beta + 1 \end{bmatrix} \begin{bmatrix} d \\ a \end{bmatrix}$$

$$\begin{bmatrix} d \\ a \end{bmatrix} = \begin{bmatrix} 1 + \alpha \\ \beta + 1 \end{bmatrix}^{-1} \begin{bmatrix} S_1 \\ S_2 \end{bmatrix}$$

Interference Canceller Architecture

