ShawPittman LLP

A Limited Liability Partnership Including Professional Corporations

Received MAR 3 1 2

DUPLYCATE

March 25, 2004

RECEINE Branch Bureau

EX PARTE OR

MAR 2 5 2004

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

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

> Mobile Satellite Ventures Subsidiary LLC Re: **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-20040209-00014 (replacement satellite application)

Dear Ms. Dortch:

Mobile Satellite Ventures Subsidiary LLC ("MSV") hereby files the attached e-mail correspondence from Dr. Peter D. Karabinis, Vice President and Chief Technical Officer of MSV, to Paul Locke of the International Bureau dated March 24, 2004.

Please direct any questions regarding this matter to the undersigned.

Very truly yours,

fer David S. Konczal

Paul Locke cc:

2300 N Street, NW Washington, DC 20037-1128	202.663.8000 Fax: 202.663.8007	www.shawpittman.com	Washington, DC Northern Virginia New York Los Angeles London
		1	ļ

From: "Peter Karabinis" [pkarabinis@msvlp.com]
Sent: 03/24/2004 07:04 PM
To: <plocke@fcc.gov>; <edrocella@ntia.doc.gov>
Cc: Bruce Jacobs
Subject: Cancellation of ATC-Induced interference over MSV's Space Segment

Gentlemen, our interference canceller prototype is now working "over-the-air" on MSV's system. The simulated ATC interference signal is being launched from Canadaover a first satellite cell, while the desired satellite signal is being launched from RestonVAover a second satellite cell. In the absence of the canceller, the level of interference can be increased until the degradation to the desired signal exceeds 200% Delta T/T (rendering the desired signal useless). With the canceller operative, the residual Delta T/T is maintained at less than 6% (and even becomes negative for small levels of interference due to maximal ratio combining of desired signal contributions of the adjacent satellite cell). The prototype is jointly achieving maximal ratio combining and interference cancellation. The two effects can be demonstrated separately. I invite you to visit MSV to witness this milestone event. Please feel free invite anyone else from your respective organizations that may also be interested and/or skeptical. Hope to see you soon. (I and the team are here all the time so simply indicate your preference and we'll be here to accommodate).

Peter.