Pillsbury
Winthrop
Shaw
Pittman LLP

2300 N Street, N.W.
Washington, D.C. 20037-1128

Tel 202.663.8000
Fax 202.663.8007
www.pillsburylaw.com

November 17, 2005

Bruce D. Jacobs
202-663-8077
bruce.jacobs@pillsburylaw.com

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

Re: Mobile Satellite Ventures Subsidiary LLC
Application for Modification of License to Operate ATC
File No. SAT-MOD-20051104-00212
File No. SAT-MOD-20051104-00211
File No. SES-MOD-20051110-01561

Dear Ms. Dortch:

On November 15, 2005, Peter Karabinis, Senior Vice President and Chief Technical Officer of Mobile Satellite Ventures Subsidiary LLC ("MSV"); and Bruce Jacobs and David Konczal of Pillsbury Winthrop Shaw Pittman LLP, counsel for MSV; met with William Bell, Richard Engleman, Howard Griboff, Andrea Kelly, Karl Kensinger, Scott Kottler, Kathyrn Medley, Robert Nelson, and Sean O'More of the International Bureau regarding MSV's above-referenced application for modification of its license to operate an Ancillary Terrestrial Component ("ATC"). In addition to discussing the document attached hereto, MSV elaborated on the public interest benefits of the waivers it is seeking, which are discussed on pages 9-11 of the Technical Appendix of the application. Among other things, the requested base station waivers will minimize the cost and complexity of deploying an ATC network, meaning ATC can be deployed more expeditiously and at less cost. The requested waiver pertaining to the EIRP of user devices will afford MSV additional flexibility that is important to offering new and innovative services.

Please direct any questions regarding this matter to the undersigned.

Very truly yours,

Bruce D. Jacobs

cc: William Bell
Richard Engleman
Howard Griboff
Andrea Kelly
Karl Kensinger
Scott Kottler
Kathyrn Medley
Robert Nelson
Sean O'More

MSV's APPLICATION FOR MODIFICATION OF AUTHORITY TO OPERATE AN ANCILLARY TERRESTRIAL COMPONENT

Fundamental Relationship

Let P_1 and B_1 denote the EIRP (Watts) and the bandwidth (Hz) of a carrier, respectively, of a **first** protocol (e.g., GSM). The EIRP spectral density (i.e., the equivalent isotropic radiated power spectral density, "PSD") of the carrier may be expressed as:

$$10*\log (P_1/B_1) = 10*\log (P_1) - 10*\log (B_1); \text{ dBW/Hz} \quad (1)$$

Let P_2 and B_2 denote the EIRP (Watts) and the bandwidth (Hz) of a carrier, respectively, of a **second** protocol (e.g., cdma2000). The EIRP spectral density associated with M second carriers, each radiating the same EIRP, P_2, can be expressed as:

$$10*\log [M*(P_2/B_2)] = 10*\log (M) + 10*\log (P_2) - 10*\log (B_2); \text{ dBW/Hz} \quad (2)$$

Equating equation (1) to equation (2) and solving for M; we find:

$$M = 10^{[10*\log (P_1) - 10*\log (P_2) + 10*\log (B_2) - 10*\log (B_1)]/10} \quad (3)$$

Application: Let us assume that $10*\log (P_1) = 0$ dBW and $10*\log (B_1) = 53$ dBHz as may be the case for a GSM return link carrier (200 kHz bandwidth and EIRP = 1 Watt). For a second protocol let us assume $10*\log (P_2) = -6$ dBW (i.e., EIRP = 0.25 Watts) and a carrier bandwidth of 1.25 MHz; that is, $10*\log (B_2) = 61$ dBHz, as may be the case for a return link cdma2000 carrier radiating one code. Substituting these values into equation (3) above we find:

$$M = 10^{[0 + 6 + 61 - 53]/10} = 10^{[14]/10} = 25$$

This means that the PSD potential that may be generated by a fully-loaded return link GSM carrier (all eight time slots loaded) is indistinguishable from the PSD potential that may be generated by 25 cdma2000 return link carriers each radiating one code or by one cdma2000 return link carrier radiating 25 codes (each at -6 dBW EIRP).