

# LATHAM & WATKINS LLP

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February 23, 2009

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: Call Sign E080100: Applications of Row 44, Inc. for  
Authority to Operate up to 1,000 Technically-Identical Aeronautical-Mobile  
Satellite Service Transmit/Receive Earth Stations Aboard Commercial and Private  
Aircraft, FCC File Nos. SES-LIC-20080508-00570; SES-AMD-20080619-00826;  
SES-AMD-20080819-01074; SES-AMD-20080829-01117; SES-AMD-  
20090115-00041 and  
Special Temporary Authority, FCC File No. SES-STA-20080711-00928  
Amendment of Parts 2 and 25 of the Commission's Rules to Allocate Spectrum  
and Adopt Service Rules and Procedures to Govern the Use of Vehicle-Mounted  
Earth Stations in Certain Frequency Bands Allocated to the Fixed-Satellite  
Service, IB Docket No. 07-101

### Notice of Ex Parte Presentation

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Dear Ms. Dortch:

On Friday, February 20, 2009, Daryl T. Hunter, Director of Regulatory Affairs of ViaSat, Inc. ("ViaSat") spoke by telephone with Scott Kotler of the International Bureau regarding the above-captioned applications of Row 44, Inc. ("Row 44"). Their conversation focused on the methodological infirmities in Row 44's proposal to "test" its AMSS system onboard moving aircraft, and, in particular, Row 44's inability to instrument aircraft to measure pointing accuracy while in flight with the requisite level of precision necessary to demonstrate 0.2 degrees peak pointing accuracy. Specifically, Mr. Hunter noted that:

- (i) Due to the asymmetric pattern shape of the AeroSat antenna, any signal level changes could not be resolved to a specific angular displacement or direction;
- (ii) The signal level change occasioned by mispointing of less than 0.2 degrees would be so small that it would appear as measurement noise, and would be resolvable, if at all, only by averaging multiple, time-consuming observations;
- (iii) The required averaging period likely would be greater in duration than the events (e.g., aircraft maneuvers, turbulence) that might cause mispointing;

- (iv) Measurement data output by Row 44's modem would be in the form of Es/No (or energy per symbol divided by the noise density), such that fluctuation in the reported values could arise either from (i) changes in the Es component due to antenna pointing, atmospherics, satellite EIRP fluctuation, ground station EIRP fluctuation, etc. or (ii) changes in the No component due to both thermal noise and the interference noise component; and
- (v) There would be no good way, within the degree of precision required, to tie the test aircraft's attitude/position to the earth/satellite reference frame such that antenna pointing angles with respect to the airframe could be used to calculate antenna to satellite pointing misalignment.

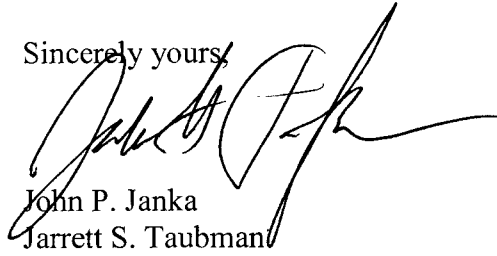
Mr. Hunter also mentioned an industry event convened by AMERICOM Government Services ("AGS") earlier this month, during which a number of different antennas and modems intended for use with ground vehicles were tested (ViaSat was invited but was unable to furnish a hub for use on the test transponder within the testing timeframe). It appears that, during testing, a number of the systems tested caused interference into the adjacent satellite, both while stationary and while in motion, and several systems had problems with their power control and were transmitting at higher power than necessary, contributing to interference in some cases. Mr. Hunter expressed ViaSat's belief that much of the data gathered during the event are relevant to the concerns that been raised regarding Row 44's proposed system (e.g., pointing performance, interference potential, and potential for operation at higher-than-stated power levels), and urged the Commission to obtain a copy of the testing report that MITRE will be publishing. Mr. Hunter also urged the Commission to take part in any future testing of antennas in the AMSS context.

In response to a question from Mr. Kotler, Mr. Hunter confirmed that ViaSat's AMSS system uses power control to maintain the return link EIRP of each user terminal within +/- 0.5 dB. Mr. Hunter noted that power control limits the multiple access interference component from ViaSat's CDMA system, while minimizing the power transmitted by any remote terminal, and thereby maintains the lowest possible off-axis EIRP from each such terminal. Mr. Kotler also inquired as to the return link power density of ViaSat's system. The antenna gain of ViaSat's licensed antenna is 31.27 dBi, with output circuit loss of 1.28 dB, a spreading rate of 35.328 Mchip/s, and a maximum PA power of 6 W. These values yield a maximum EIRP of 37.77 dBW, and a maximum antenna input density of -32.96 dBW/4 kHz. ViaSat's nominal antenna input power density is -38.77 dBW/4 kHz, based on nominal (average) satellite performance for the footprint. Aggregate input power density for all terminals in the network is maintained to less than -24.25 dBW/4 kHz.

Please contact the undersigned should you have any questions.

LATHAM & WATKINS <sup>LLP</sup>

Sincerely yours,

A handwritten signature in black ink, appearing to be "John P. Janka" and "Jarrett S. Taubman" written together in a cursive style.

John P. Janka  
Jarrett S. Taubman

*Counsel for ViaSat, Inc.*

cc: Scott Kotler  
David S. Keir, Counsel for Row 44, Inc.