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LATHAM & WATKINS LLP

January 16, 2009

Ms. Helen Domenici
Chief, International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: ***Ex Parte Presentation***

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;

Special Temporary Authority, FCC File No. SES-STA-20080711-00928.

Dear Ms. Domenici:

On behalf of ViaSat, Inc. ("ViaSat"), we are writing to supplement the record with respect to the significant issues raised by the aeronautical-mobile satellite service ("AMSS") system proposed by Row 44, Inc. ("Row 44") in the above-referenced applications, and to reiterate the need for Row 44 to submit the technical data it has collected from the ongoing and unauthorized operation of Row 44 equipment on flying aircraft.

Two critical issues in this proceeding are (i) whether Row 44's proposed AMSS network is capable of meeting the Commission's antenna pointing accuracy requirements, and, if not, (ii) how much Row 44 must reduce its transmit power density to avoid interference into adjacent satellite networks. As ViaSat has demonstrated previously, Row 44 simply has not met its burden of showing that its proposed operations would be compatible with a two-degree spacing environment. It is not enough, as some satellite operators suggest, to simply assume that Row 44's unsubstantiated assertions about its proposed operating conditions would be correct.[1] To

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[1] *See, e.g.,* IB File No. SES-AMD-20090115-00041, Supplement to Appendix 3 at 1-2 (Intelsat letter). Any conclusion that Row 44 would operate in compliance with the Commission's requirements "under the conditions described by Row 44" is no more meaningful than observing that a driver would obey the speed limit under conditions

the contrary, recent operations of Row 44's equipment on its own airplane confirm that the pointing issues raised by ViaSat arise in the "real world," and suggest that Row 44 has additional data that could be helpful to the Commission in analyzing these issues.

As detailed by a number of media outlets, Row 44 again demonstrated the operation of its equipment on flying aircraft during the CES Show held in Las Vegas, Nevada earlier this month.[2] During one such demonstration, L.A. Times reporter David Colker observed that Row 44's connection with the Horizons-1 satellite was "lost again as [the plane] head[ed] back toward the Strip and turbulence tosse[d] the small plane about."[3] In other words, Mr. Colker's observation confirms ViaSat's analysis that Row 44's proposed system simply cannot maintain a peak pointing accuracy of 0.2 degrees. If Row 44 were able to maintain such a peak pointing accuracy, Row 44 would not have lost its link due to turbulence. Mr. Colker's observation also raises interesting and important questions that should be answered by Row 44 and considered by the Commission. Among the most critical: If Row 44's equipment was not pointed toward Horizons-1, exactly where was it pointed, and was it transmitting when it was mispointed?

Telling, these issues arose on an airplane owned and operated by Row 44, under conditions carefully managed by Row 44 and presumably intended to demonstrate the "capabilities" of its system to industry and media representatives, in the best possible light, at a major trade show. In all likelihood, similar mispointing would occur during third-party

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where his car is traveling on a highway and under 50 MPH. Both statements beg the question of whether the conditions described accurately reflect real-world operations. Notably, two of the principal conditions assumed by Row 44 are (i) that its antenna would meet the Commission's antenna pointing accuracy requirements (an assumption which is negated by the analysis provided by ViaSat) and (ii) "typical" flight conditions (*see* Amendment Response, IB File No. SES-AMD-20080819-01074, at 1) – a term which Row 44 has refused to define, and which is not meaningful in evaluating the ability of Row 44's equipment to meet the Commission's pointing accuracy requirements in worst-case scenarios. As such, the coordination letters are circular and provide no independent support for Row 44's claims.

2 Notably, the demonstrations at the CES Show were not authorized by the Commission, and thus add to Row 44's continuing pattern of unauthorized operations of its proposed AMSS system. *See* Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, IB File No. SES-STA-20080711-00928, at 2 (Sep. 18, 2008); Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, IB File No. SES-LIC-20080508-000570, at 2 (Dec. 11, 2008).

3 *See* David Colker, *Wi-Fi up high: Row44 Web access for airlines gets a test flight over Las Vegas*, L.A. TIMES (Jan. 11, 2009), *available at* http://www.latimes.com/business/la-fi-consumer11-2009jan11,0,2227041.story?track=rss ("Colker Article") The Colker Article also indicates that communications were "lost during a turn over the lake too steep to allow the antenna to receive the satellite."

commercial flights intended primarily to transport passengers, and the number of mispointing events would increase as more aircraft are allowed to fly with Row 44 equipment installed.[4]

This unbiased account of Row 44's inability to maintain the pointing of its equipment on just one airplane, coupled with unrebutted evidence that Row 44's operations pose an interference threat to VSAT networks on adjacent spacecraft,[5] underscores the need for the Commission to conduct a thorough review of Row 44's system before the Commission considers allowing Row 44 to operate, whether pursuant to STA or a regular license. Moreover, this account calls into question the unsubstantiated representation Row 44 made to the Commission on August 29, 2008 that "[i]n actual practice" mispointing of the Row 44 system "during active pointing will not exceed 0.2 degrees."[6]

This evidence also confirms what ViaSat has demonstrated previously: the AeroSat antenna that Row 44 is employing does not have the technical capability to deal with rapid changes in acceleration and velocity, as do the General Dynamics antennas that are specified in the HNS experimental license on which Row 44 (improperly) relies.[7] The stark difference in the capabilities of the AeroSat and GD antennas highlights the interference risk of allowing Row 44 to continue to operate its equipment, whether on Row 44's own Albatross airplane, or on the numerous commercial airplanes on which Row 44 apparently intends to conduct demonstrations in a matter of weeks.

To ensure the integrity of its rules and licensing procedures, the Commission should ensure that no further operations of Row 44 equipment occur before Row 44's applications are reviewed fully. Media reports indicate that Row 44 intends to conduct commercial trials of its system on commercial airliners later this month.[8] As ViaSat has detailed, such operations would pose a substantial threat of harmful interference to adjacent spacecraft. This threat is particularly

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4 Contrary to the assertion by Row 44's CEO quoted in the Colker Article, there is no reason to believe that these types of problems would not arise during commercial flight.

5 *See* Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, IB File No. SES-LIC-20080508-00570 (Dec. 8, 2008). Significantly, neither Row 44, Intelsat, SES Americom, nor EchoStar has contested ViaSat's quantification of the level of interference that would occur into VSAT systems operating on adjacent spacecraft if Row 44 does not actually maintain a peak antenna pointing accuracy of 0.2 degrees.

6 Amendment Response, IB File No. SES-AMD-20080829-01117, at 2.

7 *See, e.g,* Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, IB File No. SES-LIC-20080508-000570, at Exh. B (Dec. 11, 2008) (comparing capabilities of AeroSat and GD antennas).

8 *See* Colker Article, *supra* n. 3 ("Later this month, Row44 will have a public trial run aboard selected Southwest and Alaska airlines flights.").

pronounced given the absence of any indication that Row 44 (i) would properly supervise the trials; (ii) has informed commercial airlines of the limited capabilities of the Row 44 equipment; or (iii) has bound commercial airlines to ensure that the Row 44 equipment is not operated on routes where the satellite link cannot be closed at the power levels specified in Row 44's AMSS application.[9]

The Row 44 applications remain incomplete, and unrebutted evidence on the record demonstrates that Row 44 cannot operate at its proposed power levels on a non-interference basis. If the Commission does not dismiss the Row 44 applications on those bases alone, the Commission should require Row 44 to provide, on the record and for review by the Commission and the public, a full report containing the technical data collected during the test flights and demonstrations of the Row 44 equipment. As ViaSat has noted previously, this information is directly relevant to the issues in this proceeding, including: (i) whether Row 44 actually is able to point and orient its antennas as it represents, (ii) whether Row 44 actually is able to close its service links at the power limits it proposes, and (iii) whether Row 44 actually is able to limit its amplifier power at it represents.

Finally, by Row 44's own admission, regardless of whether Row 44 ever meets its obligation to provide a complete technical showing, the public will be well-served by aeronautical communications services in the coming months and years. As Row 44's president recently stated, if Row 44's system were not to be successful, another provider would inevitably "pick up the pieces" and provide a viable alternative broadband solution.[10]

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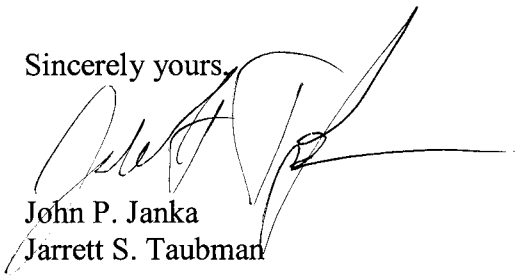
9 *See* ViaSat Supplement to Petition to Deny, IB File No. SES-LIC-20080508-00570 (Oct. 10, 2008), at 13 and n.33 (noting Row 44's admission that, on some routes, G/T would be too low to close the inroute link, and suggestion that the "solution" to low G/T would be "to avoid the affected flight paths") and 14 (requesting that the Commission require Row 44 to obtain an affidavit from each of its airline customers affirming that it would either alter its flight paths as required to keep the satellite link closed without increasing power, or not operate Row 44 terminals on such flight paths).

10 *See* Matt Richtel, *Think the Guy in the Next Seat is Annoying Now?*, N.Y. TIMES (Jan. 9, 2009), *available at* http://bits.blogs.nytimes.com/2009/01/09/you-think-the-guy-in-the-seat-next-to-you-is-annoying-now/?apage=1.

Sincerely yours,



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