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December 11, 2008

Marlene H. Dortch
Secretary
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; and

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

Dear Ms. Dortch:

On behalf of ViaSat, Inc. ("ViaSat"), we are writing (i) to provide evidence demonstrating that Row 44, Inc. has continued to engage in unauthorized operations of its proposed aeronautical-mobile satellite service ("AMSS") user terminals, and (ii) to request that the Commission require Row 44 to provide a report, on the record, of its recurring AMSS operations using its proposed system, which are being referenced in the press.

In its letter of September 18, 2008, ViaSat produced evidence from credible, independent sources demonstrating that Row 44 had engaged in unauthorized operations in connection with the World Airline Entertainment Association ("WAEA") show in Southern California in early September.[1] ViaSat also noted that Row 44 previously had sought authority to conduct

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1 Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, FCC File No. SES-STA-20080711-00928, at 2 (Sep. 18, 2008).

operations at the show, but had not been granted such authority prior to conducting operations on its Albatross airplane.[2]

Recent statements by Row 44's president, Gregg Fialcowitz, establish that Row 44 has continued its unauthorized operations. Specifically, on December 9, 2008, Mary Kirby, author of the well-known "Runway Girl" blog, published a report quoting Mr. Fialcowitz in which he: (i) claimed that Row 44 has received "FCC approval for the trials [of its proposed AMSS system]," (ii) represented that Row 44 is "presently operating in the U.S. under a temporary FCC license," and (iii) stated that Row 44 has been "flying the [Row 44] Albatross all over the place testing and showing off the system/service in flight."[3]

The first and second statements are patently false; Row 44 has received no Commission authority to test its AMSS system on aircraft. Rather, Row 44's AMSS system application and request for airborne special temporary authority ("STA") remain pending before the Commission. Moreover, those Row 44 statements, which maintain that temporary AMSS authority has been granted *to Row 44* and strongly suggest that operations are being directed *by Row 44*, directly contradict Row 44's earlier "explanation" that its unauthorized operations at the WAEA show were conducted "under the direction of [HNS] . . . pursuant to HNS's experimental license . . . ."[4] As such, the third statement not only constitutes an admission that Row 44 has been operating its proposed system without Commission authorization and in violation of the Communications Act and the Commission's rules, but strongly suggests that Row 44's earlier operations at the WAEA show were both unauthorized and misrepresented to the Commission.

Notwithstanding, Row 44 may assert once again that it has relied on HNS' experimental license as "authority" for Row 44's ongoing AMSS operations. In this respect, ViaSat reminds the Commission that: (i) the HNS license does not authorize operations with the AeroSat antenna proposed by Row 44,[5] (ii) HNS has not filed any application to modify its license to add the

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2 *Id. See also* Letter from Counsel for ViaSat, Inc. to Secretary, Federal Communications Commission, FCC File Nos. SES-LIC-20080508-00570; SES-STA-20080711-00928 (Oct. 1, 2008).

3 *See* Mary Kirby, *Row 44 on record about Alaska trial delay and Southwest install, at* http://www.flightglobal.com/blogs/runway-girl/2008/12/row-44-on-record-about-alaska.html (Dec. 9, 2008), attached as Exhibit A.

4 *See* Letter from Counsel for Row 44, Inc. to Secretary, Federal Communications Commission, FCC File No. SES-STA-20080711-00928, at 3 (Sep. 26, 2008). If Mr. Fialcowitz's claim that Row 44 has sufficient authority under the HNS experimental license to conduct tests is credited, the Commission should dismiss as moot Row 44's pending request for airborne STA.

5 The HNS experimental license permits HNS to conduct tests using certain antennas manufactured by General Dynamics Corporation ("GD") – and only those antennas.

AeroSat antenna,[6] and (iii) HNS has not provided a suitable notice satisfying the requirements of Section 5.77(b) of the Commission's rules.[7]

* * * * *

Information about Row 44's operation of the proposed AeroSat antenna is directly relevant to the issues in this proceeding, including: (i) whether Row 44 actually would be able to point and orient its antennas as it represents, (ii) whether Row 44 actually would be able to close its service links at the power limits it proposes, and (iii) whether Row 44 actually would be able to limit its amplifier power to 10 watts at all times. The records that Row 44 doubtless is maintaining of the results of its testing program are relevant to an examination of these issues, and also are relevant for purposes of evaluating the progress of any experiments that Row 44 (and HNS) may be conducting. ViaSat urges the Commission to require Row 44 to provide a full and complete report containing the details of all such operations to date.

Row 44 proposes to use an AeroSat antenna of substantially different design from, and with substantially different emissions characteristics than, that GD antenna. *See* Exhibit B.

6 While the Commission's rules permit an experimental licensee to make minor changes consistent with the terms of its authorization, they do not permit the wholesale substitution of another antenna system, particularly where the technical characteristics of the substituted equipment are inconsistent with the underlying authorization. *See* 47 C.F.R. § 5.77(a). Moreover, Commission staff required HNS to specify the exact GD antennas to be tested; consequently, the resulting experimental license is limited to those specific GD antennas.

7 The notice submitted by HNS on October 22, 2008 for call sign WE2XEW – the filing of which directly contradicts Row 44's assertion that its operations at the WAEA show in September were authorized under the HNS experimental license *at that time* – would not "cover" the unauthorized Row 44 operations for a number of reasons. First and foremost, Row 44's operations are clearly outside of the maximum emissions envelope authorized under the HNS license because Row 44's system operates (i) at a higher antenna input power density level than that specified by HNS in its application; (ii) with an asymmetrical antenna pattern (as opposed to the symmetrical pattern of the GD antennas authorized to HNS); (iii) at higher EIRP off-axis power density levels than those resulting from HNS's use of a GD antenna, and (iv) with less accurate antenna pointing capabilities than the GD antennas. For similar reasons, and because the AeroSat antenna is not covered by the HNS license, the notice's claim that operations under emissions designator 1M60G7D (i.e., the one used by Row 44's system) would "conform to the specific conditions placed on the experimental license" is simply incorrect. Further, although Section 5.77(b) clearly requires *prior* notification to the Commission that the proposed changes "will not" exceed that envelope, HNS submitted its notice 44 days after the first reports of Row 44's unauthorized operations.

For the foregoing reasons, the Commission should take no further action with respect to Row 44's AMSS application unless and until Row 44 submits a (i) complete and detailed report covering any and all AMSS operations that it has conducted to date; and (ii) a complete and detailed explanation of the specific authority relied upon for each element of such operations.

Please contact the undersigned should you have any questions.

Sincerely yours,

John P. Janka
Elizabeth R. Park
Jarrett S. Taubman

Counsel for ViaSat, Inc.

cc: Helen Domenici, International Bureau
Rod Porter, International Bureau
Gardner Foster, International Bureau
Bob Nelson, International Bureau
Fern Jarmulnek, International Bureau
Karl Kensinger, International Bureau
Steve Spaeth, International Bureau
Andrea Kelly, International Bureau
Scott Kotler, International Bureau
Kathyrn Medley, International Bureau
Sophie Arrington, International Bureau
Steve Duall, International Bureau
Trang Nguyen, International Bureau
Frank Peace, International Bureau
Jeanette Spriggs, International Bureau

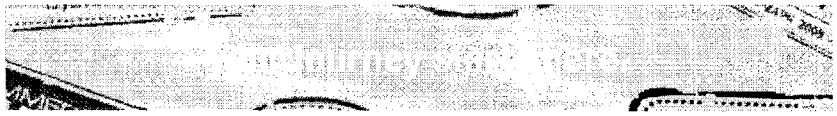
Kris Monteith, Enforcement Bureau
George Dillon, Enforcement Bureau
Gene Fullano, Enforcement Bureau
Robert Ratcliffe, Enforcement Bureau
Susan McNeil, Enforcement Bureau

Julius Knapp, Office of Engineering and Technology
James R. Burtle, Office of Engineering and Technology

David S. Keir, Counsel for Row 44, Inc.

EXHIBIT A

RUNWAY GIRL ARTICLE



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Mary Kirby's RUNWAY GIRL

Worth being delayed for

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Row 44 on record about Alaska trial delay and Southwest install

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Row 44 on record about Alaska trial delay and Southwest install

By Mary Kirby on December 9, 2008 4:47 PM | Permalink | Comments (0) | TrackBacks (0) | ShareThis

The other day I **blogged about a delay in Alaska Airlines' trial** of Row 44's Ku band-based connectivity system, as well as some opposition the California firm has faced in its pursuit of FCC permanent approval, including from ViaSat, Arinc and Boeing (oh my).

Row 44 president Gregg Fialcowitz was kind enough to respond with comment. While he hasn't yet addressed ViaSat's filings to the FCC, Gregg does add serious colour to the story.

Tag Cloud

ViaSat and others prove thorn in Row 44's side; Alaska says test delayed

Continental admits 80-channel LiveTV system; Bravo JetBlue!

James Park's stacked sleeper bed revealed!

Another Chinese customer for Panasonic and I ain't talken Southern

Air Canada IFE and a little case of the nasty

So trashy - a canny compactor that makes it all go away

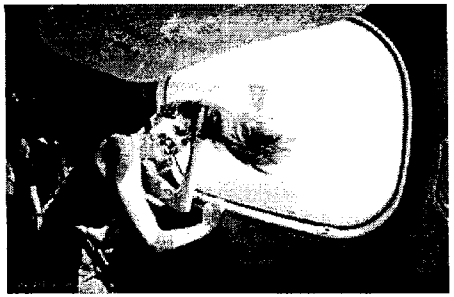
Cozy econo suites on Delta 787s?...plus Lufthansa Technik innovation

Slim seats for Embraer E-Jets within two years, reveals Chiessi

Recent Assets

I've fashioned his comments into an article **now running on Flight.** Below you'll find the text of Gregg's full response, including his revelation that installation of the Row 44 system will occur on a Southwest 737 on 16 December, and that the system is now being flight-tested in US airspace on the company's Albatross testbed! Meanwhile, here's what happens when you try to stick your head out of a flying Albatross. It's a hairy situation.

Gregg says:



"The Alaska trial was indeed scheduled for September/October, however, we encountered some late-breaking delays with the final certification of parts by one of our suppliers.

We were able to work to assist the supplier, but this extra effort caused a delay to our trials. However, those issues are behind us and we successfully completed our first Alaska Airlines installation several weeks ago.

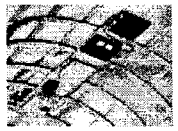
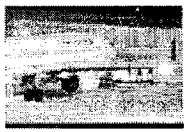
If you recall, we've broken our installation into two separate STCs: one for the components/wiring inside the aircraft and a second for the external components (i.e., ring, radome, antenna, etc.).

The STC for the inside of the aircraft was issued several weeks ago, but the second STC didn't issue until the Wednesday before Thanksgiving.

Because of Alaska's busy holiday season, the trial aircraft had to be returned to service before the second STC was granted. We expect to reinstall the external components after the holidays and commence the trial at that point. Alaska still intends to move forward with a single aircraft trial ahead of the fleet-wide deployment.

We've received PMA for the LRUs and expect to receive PMA on the external components in time to begin installation on the first Southwest trial aircraft on the 16th of this month. Southwest intends to trial four aircraft ahead of a fleet-wide deployment.

Boeing 757 Boeing 767






We don't have definitive durations for the trials for either ASA or SWA, but we anticipate around 30+ days.

So, in summary, we've received our STCs and we're good to go. We've also received our FCC approval for the trials and have been flying the Albatross all over the place testing and showing off the system/service in flight.

We're presently operating in the U.S. under a temporary FCC license and expect our permanent license shortly. We've already received our permanent licenses to operate in Canada and Mexico."

Categories: Air Transport, In-flight Entertainment/Communications, US Air Transport

Tags: Alaska Airlines, Albatross, Arinc, Boeing, Boeing 737, Gregg Fialcowitz, Row 44, Southwest Airlines, ViaSat

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Kirby

EXHIBIT B:
COMPARISON OF GENERAL DYNAMICS AND AEROSAT ANTENNAS

As noted herein, the HNS experimental license permits HNS to conduct tests using certain antennas manufactured by General Dynamics Corporation ("GD") – and only those antennas.[1] Row 44 proposes to use an AeroSat antenna of substantially different design from, and with substantially different emissions characteristics than, those GD antennas. The following table provides a non-exhaustive comparison of the GD and AeroSat antennas:

	General Dynamics Antennas	**AeroSat Antenna**
Reflector/Lens and Radiation Pattern	Rear fed symmetrically shaped circular reflector, resulting in a radiation pattern that is essentially uniform in both axes	Rectangular multi-element lens array, resulting in a radiation pattern that is wider in the elevation than the azimuth dimension
Maximum Input Power Density	-22 dBW/4 kHz (-21 dBW/4 kHz for the 30 in. antenna) [2]	At least -17.6 dBW/4 kHz [3]
Effective Aperture Size	30 in., 24 in., 20 in., and 18 in.	Approximately 14.6 in.
Maximum Tracking Velocity and Acceleration	>1000 deg/s velocity and >1000 deg/s^2 acceleration	7 deg/s velocity and 7 deg/s^2 acceleration [4]

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1 *See* Application of Hughes Network Systems, sub LLC, FCC File No. 0011-EX-PL-2006, Supplemental Technical Information (filed Apr. 24, 2007) (identifying four specific GD antenna sizes to be tested, pursuant to staff request). Information about the General Dynamics antennas presented herein is drawn from the technical data submitted in connection with that application, and from ViaSat's industry knowledge.

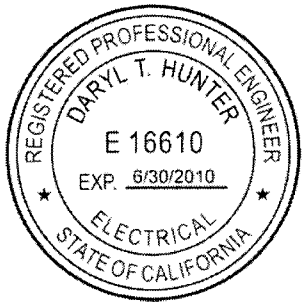
2 *See id.* at 3.

3 Row 44 incorrectly calculates power density assuming 1600 kHz of occupied bandwidth, even though its signal will occupy only approximately 1024 kHz of bandwidth. *See* ViaSat Petition to Deny, Technical Annex at 4-5 (Jun. 27, 2008); ViaSat Supplement to Petition to Deny, Supplemental Technical Annex at 18-19 (Oct. 10, 2008). As such, Row 44's actual input power density would be higher than this -17.6 dBW/4 kHz value claimed by Row 44. *See* Row 44 Opposition to Supplement to Petition to Deny, Technical Annex at 20 (Oct. 23, 2008).

4 *See* ViaSat Reply to Opposition to Supplement, Technical Annex, Appendix 2 (Nov. 4, 2008) (technical specifications for AeroSat antenna).

ENGINEERING INFORMATION CERTIFICATION

I hereby certify that I am the technically qualified person responsible for reviewing the engineering information contained in the foregoing submission, that I am familiar with Part 25 of the Commission's rules, that I have either prepared or reviewed the engineering information submitted in this filing, and that it is complete and accurate to the best of my knowledge and belief.



/s/ Daryl T. Hunter
Daryl T. Hunter, P.E.
ViaSat, Inc.
6155 El Camino Real
Carlsbad, CA 92009-1699

Dated: December 11, 2008