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OCT - 1 2008

Federal Communications Commission
Office of the Secretary

October 1, 2008

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;

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

Special Temporary Authority, FCC File No. SES-STA-20080811-01049.

Dear Ms. Dortch:

ViaSat, Inc. ("ViaSat") hereby responds to the letter filed on September 26, 2008 by Row 44, Inc. ("Row 44") in connection with the above-referenced applications ("Row 44 Letter"). In particular, ViaSat responds to Row 44's assertions that (i) Row 44 did not conduct unauthorized operations of its proposed aeronautical-mobile satellite service ("AMSS") system on its airplane, despite evidence to the contrary, (ii) Row 44's AMSS system application is complete, despite two Bureau determinations to the contrary, and (iii) Row 44 has demonstrated "extraordinary circumstances" justifying grant of special temporary authority ("STA"), even though Row 44's self-created timing difficulties do not qualify as "extraordinary" under the Commission's rules.

A. Row 44's Unauthorized Operation of its Proposed AMSS System

In its letter of September 18, 2008, ViaSat produced evidence from credible, independent sources demonstrating that Row 44 had conducted operations of its proposed user terminal 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 operations at the show, but had not been granted such authority prior to conducting operations on its airplane. In the Row 44 Letter, Row 44 concedes that it did conduct operations using the AeroSat antenna on its airplane, but claims that those operations took place “under the direction of HNS Licensee Sub, LLC [sic] (‘HNS’) . . . pursuant to HNS’s experimental license (Call Sign WE2XEW) for vehicle/vessel-mounted remote Earth terminals.”²

Far from demonstrating that Row 44 did not operate without authorization, Row 44’s “explanation” presents multiple issues that warrant examination, as set forth below:

- ***HNS’ experimental license does not authorize use of Row 44’s AeroSat antenna.*** HNS’ experimental license permits HNS to conduct tests using certain antennas manufactured by General Dynamics Corporation (“GD”) – and only those antennas.³ However, Row 44’s aircraft is equipped with an AeroSat antenna of substantially different design from, and with substantially different emissions characteristics than, that General Dynamics antenna.⁴ HNS has not filed any application to modify its existing experimental license to add the

¹ Letter from John P. Janka, Counsel for ViaSat, Inc. to Helen Domenici, Chief, International Bureau, Federal Communications Commission, FCC File No. SES-STA-20080711-00928, at 2 (Sep. 18, 2008) (“ViaSat September 18 Letter”).

² Row 44 Letter at 3. The actual licensee of Call Sign WE2XEW is “HNS License Sub, LLC.”

³ Application of Hughes Network Systems, sub LLC, FCC File No. 0011-EX-PL-2006, Supplemental Technical Annex (filed Apr. 24, 2007) (identifying four specific GD antenna sizes to be tested, pursuant to staff request).

⁴ The structural differences between the GD and AeroSat antennas is apparent from even a cursory review of photographs of these antennas. *Compare* Exhibit A *with* Exhibit B. However, a closer analysis of the technical parameters of the GD and AeroSat antennas reveals numerous material technical differences. For example: (i) the GD antennas use a rear fed symmetrically shaped circular reflector, which results in a radiation pattern that is essentially uniform in both axes, while the AeroSat antenna uses a rectangular multi-element lens array, which results in a radiation pattern that is wider in the elevation than the azimuth dimension; (ii) the GD antennas operate at a maximum input power density of -22 dBW/4 kHz, which is substantially lower than the maximum input power density of the AeroSat antenna; (iii) the GD antennas described in the HNS application have effective apertures of 30 in., 24 in., 20 in., and 18 in., while the effective aperture of the AeroSat antenna is approximately 14.6 in.; (iv) the GD antennas are capable of operating at velocities substantially greater than the 15 deg/s, and accelerations substantially greater than the 15 deg/s², at which the AeroSat antenna is capable of operating.

AeroSat antenna.⁵ In fact, in modifying its experimental license to permit maritime testing, HNS represented to the Commission that, with the exception of changes being sought to allow testing on ships (in addition to vehicles), “all other parameters – including all technical and operational parameters – of the authorized terminals are completely unchanged and all of the licensing conditions in the authorization under Call Sign WE2XEW will remain in full force and effect.”⁶ As such, Row 44’s operations over its Aerosat antenna were not authorized under the HNS experimental license for certain GD antennas.

- ***HNS’ experimental license did not permit aircraft-mounted testing at the time of the WAEA show.*** During the WAEA show, which took place in early September 2008, HNS did not have authority to mount and operate antennas on airplanes under its experimental license. While HNS sought to modify that license to permit “testing of terminals mounted on helicopters, airplanes and unmanned aerial vehicles,”⁷ that authority was not granted until September 22, 2008. Thus, Row 44’s operation of equipment mounted on a Row 44 airplane was not permitted under HNS’ experimental license at that time.
- ***HNS’ experimental license does not permit commercial operations.*** Section 5.111 of the Commission’s rules provides that an experimental licensee “may make only such transmissions as are necessary and directly related to the conduct of the licensee’s stated program of experimentation as specified in the application for license and the related station instrument of authorization[.]”⁸ In applying for experimental authority, HNS specifically represented that it would use such

⁵ While the Commission’s rules permit an experimental licensee to make minor changes in a transmitter consistent with the terms of its authorization, they do not permit the wholesale substitution of another transmitter type, particularly where the technical characteristics of the replacement are inconsistent with the underlying authorization. *See* 47 C.F.R. § 5.77(a). As noted above, Commission staff required HNS to specify the exact antennas to be tested, and consequently the resulting authorization was tied to those specific antennas. Moreover, neither HNS nor Row 44 filed the required notice of change with the Commission to reflect the different emissions characteristics of the AeroSat antenna. *See* 47 C.F.R. § 5.77(b).

⁶ *See* Application of HNS License Sub, LLC, Description of Modification Application, FCC File No. 0047-EX-ML-2008 (filed May 1, 2008).

⁷ *See* Application of HNS License Sub, LLC, Description of Modification, FCC File No. 0100-EX-ML-2008 (filed Aug. 26, 2008 and granted Sep. 22, 2008).

⁸ 47 C.F.R. § 5.111.

authority solely for “developmental purposes”⁹ and not “to implement a revenue-generating or otherwise commercial service.”¹⁰ Further, HNS’s license does not permit “[t]esting of equipment in connection with production or regulatory approval of such equipment” or “market studies.”¹¹ Row 44’s operations at the WAEA show and on local television newscasts were intended to market Row 44’s proposed commercial service to the airline industry and the general public. In seeking STA that was never granted, Row 44 itself noted that operations at the show would “present[] a unique and important opportunity for Row 44 to promote its in-flight information and entertainment service to existing and potential customers.”¹² In short, Row 44’s operations were not “developmental” or designed to gather technical data, but rather were designed to further commercial promotional goals wholly beyond the scope of HNS’ experimental license. As such, Row 44’s operations were not permitted under HNS’ experimental license.

- ***There is no evidence that HNS exercised control over Row 44’s operations.*** Section 310(d) of the Communications Act, as amended, and Section 5.79 of the Commission’s rules provide that HNS must remain in control of all operations under its experimental license, absent specific authority from the Commission to transfer such control to another party.¹³ Row 44 presents no evidence that HNS exercised such control over Row 44’s operations under HNS’ experimental license – on the occasions identified, previously, or when the equipment was installed and tested on Row 44’s airplane. In particular, Row 44 presents no evidence that HNS took measures to ensure that Row 44’s operations complied with applicable technical rules, including the antenna pointing accuracy requirements specified in Section 25.222(a)(7) of the Commission’s rules and

⁹ E-Mail from Steven Doiron, Senior Director, Regulatory Affairs, Hughes Network Systems to Doug Young, File No. 0011-EX-PL-2006 (Apr. 10, 2006) (“Hughes would like to reiterate that this license would be used only for developmental purposes.”).

¹⁰ Application of Hughes Network Systems, sub LLC, FCC File No. 0011-EX-PL-2006, Attachment A (May 5, 2006).

¹¹ HNS’ experimental license limits HNS’ operations to those “[i]n accordance with Sec. 5.3(d, f & i) of the Commission’s Rules.” See 47 C.F.R. §§ 5.3(d), (f), (i). The Commission specifically excluded operations specified in Section 5.3(g) and (j), which permit an applicant to conduct tests in connection with regulatory approvals and market studies. See 47 C.F.R. §§ 5.3(g), (j).

¹² Letter from David S. Keir, Counsel for Row 44, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, FCC File No. SES-STA-20080711-00928 (Sep. 4, 2008).

¹³ 47 U.S.C. § 310(d); 5 C.F.R. § 5.79.

replicated in HNS' license. To the contrary, the press accounts produced by ViaSat demonstrate that Row 44 held itself out to the public as the party conducting those operations. Accordingly, there is no basis for Row 44's claim to have conducted those operations under HNS' direction. To the contrary, these facts strongly suggest that either (i) Row 44 did not, in fact, rely on HNS' experimental authority as claimed or (ii) HNS and Row 44 engaged in an unauthorized transfer of control of HNS' experimental license.

- ***Row 44's conduct demonstrates an awareness that Row 44 needed additional, independent authority to conduct operations.*** Row 44 has repeatedly sought STA from the Commission to conduct ground-based testing at AeroSat's Amherst, NH facilities, and in August 2008 requested STA for temporary-fixed testing at unspecified locations throughout the U.S. It is unclear why Row 44 would have sought such authority if it believed it could have conducted such operations under HNS' experimental authorization. Row 44's conduct strongly suggests that it did not believe that it had authority to conduct operations under HNS' experimental license before conducting such operations, and also suggests that Row 44 has now simply seized upon the existence of that license in a retroactive attempt to "seek cover" in response to the evidence ViaSat has presented with respect to Row 44's unauthorized operations.¹⁴

B. Row 44's AMSS System Application Was Not Complete When Filed

In its letter of September 18, 2008, ViaSat noted that the Commission (i) has twice acknowledged the incomplete nature of Row 44's AMSS system application, (ii) has required Row 44 to file corrective amendments or face dismissal, and (iii) has sought further public comment on the two recent technical amendments filed by Row 44 in an attempt to cure the deficiencies in its initial filing.¹⁵ In response, Row 44 claims that the letters sent by the Bureau

¹⁴ Tellingly, the only documents associated with HNS' experimental license that mention the Row 44 terminal at all were filed on September 26, 2008 – weeks after the WAEA show and a mere eight days after ViaSat brought Row 44's unauthorized operations in connection with that show to the Commission's attention on September 18, 2008. See Application of HNS License Sub, LLC, FCC File No. 0100-EX-ML-2008. These documents are coordination agreements executed months earlier between Row 44 and other operators and filed in connection with Row 44's AMSS system application. HNS has inserted brief references to its relationship with Row 44 on the final pages of these documents, in an apparent attempt to retroactively link these agreements with HNS' experimental license.

¹⁵ ViaSat September 18 Letter at 3. See also Letter from Scott A. Kotler, Chief, Systems Analysis Branch, Satellite Division, International Bureau to David S. Keir (Aug. 7, 2008) ("August 7 Deficiency Letter"); Letter from Scott A. Kotler, Chief, Systems Analysis

to Row 44 on August 7, 2008 and August 25, 2008 do not represent a finding by the Bureau that the application is deficient, but merely seek “additional” information.¹⁶

Row 44 does not explain why the Bureau would have sought “additional” information if the initial application contained all information necessary to process that application (i.e., if that application lacked any deficiencies). If that had been the case, the Bureau would have had no need to request any “additional” information from Row 44. Simply put, the very existence of the letters indicates a deficiency in Row 44’s application. This is underscored by the fact that the letters (i) specifically identify information that Row 44 had not provided that is required by the Commission’s rules (e.g., elevation transmit patterns);¹⁷ (ii) specifically require Row 44 to submit additional information “in order to evaluate the application” and “to allow the Commission to continue to process the application”¹⁸ and (iii) alert Row 44 that the Commission might dismiss the application if the requested information were not provided, pursuant to Section 25.112(c) of the Commission’s rules, which governs the dismissal of “defective” applications.¹⁹ Thus, it is clear that the Commission’s letters acknowledge defects or deficiencies in Row 44’s application.

C. There Are No “Extraordinary Circumstances” Justifying Grant of STA

In its letter of September 24, 2008, ViaSat noted that Row 44 had failed to demonstrate “extraordinary circumstances” justifying grant of STA under Section 25.120(b)(1) of the Commission’s rules, which specifically provides that “[c]onvenience to the applicant, such as marketing considerations or meeting scheduled customer in-service dates, will not be deemed sufficient for this purpose.”²⁰ In response, Row 44 claims that the Commission has made clear that it would consider the length of time necessary to process an application as “extraordinary circumstances” justifying STA.²¹ However, a careful reading of Commission precedent makes clear that the Commission stated only that staff typically would not consider requests for STA

Branch, Satellite Division, International Bureau to David S. Keir (Aug. 25, 2008) (“August 25 Deficiency Letter”).

¹⁶ Row 44 Letter at 1-2.

¹⁷ August 15 Deficiency Letter at 1.

¹⁸ August 7 Deficiency Letter at 1.

¹⁹ See 47 C.F.R. § 25.112(c).

²⁰ Letter from John P. Janka, Counsel for ViaSat, Inc., to Helen Domenici, Chief, International Bureau, Federal Communications Commission, FCC File No. SES-LIC-20080508-00570, at 3 (Sep. 24, 2008).

²¹ Row 44 Letter at 3.

unless an application could not be granted within 60 days.²² The applicant must still demonstrate independent “extraordinary circumstances” justifying grant of STA – which do not include the self-created timing problems that Row 44 has described regarding its marketing desires. As much is reinforced by the Commission’s statement, in the same paragraph, that it would “continue [its] policy of denying domestic earth station STA requests based solely on marketing considerations[.]”²³

Here, no such extraordinary circumstances are present, and Row 44’s timing expectations are unrealistic. Row 44 is applying for authority to operate a service without an existing licensing framework or service rules, or even a supporting frequency allocation. Moreover, historically the licensing process for AMSS systems has taken many months, if not years.²⁴ The current processing period for Row 44’s application is far from “extraordinary” and should have been anticipated by Row 44, particularly since its initial application was incomplete. Row 44’s failure to develop a proper business plan or timetable does not justify the extraordinary step of granting STA, particularly where there are numerous, manifest technical deficiencies in Row 44’s underlying application, and material interference issues that remain unresolved.

* * * * *

In light of the material technical issues that remain outstanding with respect to Row 44’s application – “corrective” amendments notwithstanding – ViaSat urges the Commission to consider the comments to be filed by October 10, 2008 on Row 44’s technical amendments before considering any grant of STA.

Please contact the undersigned should you have any questions.

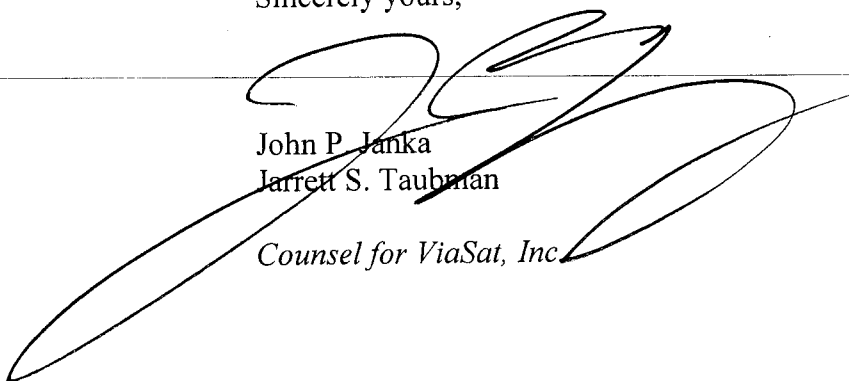
²² *Amendment of Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacings and to Revise Application Processing Procedures for Satellite Communications Services*, First Report and Order, 6 FCC Rcd 2806, at ¶ 27 (1991) (“When an application cannot be routinely granted within sixty days, the staff will, in most cases, *consider* a request for an STA.”) (emphasis supplied).

²³ *Id.*

²⁴ For example, the grant of the AMSS application of ARINC took about 18 months and the grant of the AMSS application of ViaSat took about 2 years.

LATHAM & WATKINS LLP

Sincerely yours,



John P. Janka
Jarrett S. Taubman

Counsel for ViaSat, Inc.

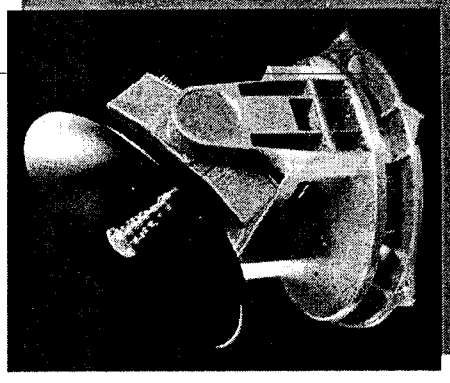
cc: Helen Domenici
Rod Porter
Bob Nelson
Fern Jarmulnek
Steve Spaeth
Karl Kensinger
Andrea Kelly
Scott Kotler
Sophie Arrington
Steve Duall
Kal Krautkramer
Trang Nguyen
Frank Peace
Jeanette Spriggs
David Keir, Counsel for Row 44, Inc.

EXHIBIT A

GENERAL DYNAMICS

C4 Systems

Satcom-On-The-Move™ Licensing Request Clarification



October 26, 2005

EXHIBIT B

Source: Letter from David S. Keir, Counsel for Row 44, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission (Sep. 24, 2008).

ROW



The Antenna

