



June 6, 2008

Federal Communications Commission
International Bureau
445 12th Street, S.W.
Washington, D.C. 20554

Re: Engineering Certification of SES Americom, Inc.

To Whom It May Concern:

This letter certifies that SES Americom, Inc. ("SES Americom") is aware that Row 44, Inc. ("Row 44") is seeking a blanket authorization from the Federal Communications Commission ("FCC") for authority to operate, on a non-conforming, non-harmful-interference basis, transmit/receive antennas for aeronautical mobile-satellite services ("AMSS") using fixed-satellite service ("FSS") frequencies pursuant to ITU RR 5.504A. Row 44 is seeking an FCC authorization to utilize SES Americom satellites AMC-2 at 101° W.L. and AMC-9 at 83° W.L., each licensed by the FCC.

SES Americom understands that Row 44's transmit/receive antenna is an AMSS steerable antenna manufactured by Aerosat Corporation designed to provide bi-directional broadband services to aircraft in flight. It supports reception and transmission in the 11.7-12.2 GHz / 14.0-14.5 GHz band respectively, with independent linear polarized array antennas to and from a geostationary satellite in space. The antenna is a 64-element phased array that is 7" in height with an antenna face that is 24.375". The antenna operates under gimballed motor control to orient the antenna in azimuth, elevation and polarization and achieves a ± 0.2 degree pointing accuracy during active tracking of the intended satellite. The antenna complies with Section 25.209 of the FCC's Rules with respect to gain specifications in the co-polarization plane of the geostationary satellite orbit and off-axis cross polarization, provided the skew angle (i.e., the angle between the antenna azimuth plane and the direction along the GSO at the corresponding satellite location) does not exceed 25°. The actual skew angle is constantly monitored by the antenna control system and the aircraft transmitter will be muted in the event that this skew angle is exceeded.

When communicating with either AMC-2 or AMC-9 satellites, Row 44 will operate its antenna within the 14.0-14.5 GHz FSS uplink band and the 11.7-12.2 GHz FSS downlink band with a maximum equivalent isotropically radiated power (EIRP) of 40.6 dBW. At the maximum power the associated power spectral density at the antenna flange is -14 dBW/4kHz and is compliant with FCC rules.

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SES Americom further accepts that the forward downlink (hub¹ to AES) maximum EIRP density is 13 dBW/4 kHz, which is above the 10 dBW/4 kHz specified in Section 25.134(g)(2) of the FCC's rules. Row 44 will maintain the forward downlink EIRP density and the off-axis EIRP spectral density by tight control of system operation that includes:

- 1) maintaining rms pointing error to be ≤ 0.2 degrees, relative to the intended satellite;
- 2) fault detection that terminates transmissions when out of tolerance conditions (including the antenna pointing error) are detected; and
- 3) continuous monitoring/oversight by ground network operations center (NOC).

SES Americom acknowledges that the use of the above referenced transmit/receive antenna by Row 44, installed and operated in accordance with the above conditions, is within the levels coordinated with the adjacent satellite operators and should not cause unacceptable interference into adjacent satellites operating in accordance with FCC's two-degree spacing policy. SES Americom itself operates three satellites with Ku-band capacity within six degrees of AMC-9 (AMC-5 at 79° W.L., AMC-16 at 85° W.L. and AMC-3 at 87° W.L.) and two satellites with Ku-band capacity within six degrees of AMC-2 (AMC-1 at 103° W.L. and AMC-15 at 105° W.L.). If the FCC authorizes the operations proposed by Row 44 in its application, SES Americom will include the antenna, as described above, in all future satellite network coordinations with other adjacent satellite operators. Row 44 shall comply with all such coordination agreements reached by the satellite operators.

In order to prevent unacceptable interference into adjacent satellites, SES Americom has been informed, and Row 44 acknowledges, that the antennas will be installed and operated in accordance with the above conditions and/or any other operational requirements specified in the FCC license ultimately granted to Row 44. Moreover, Row 44 agrees that it will accept interference from adjacent satellites to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming in all respects to the reference patterns defined in Section 25.209 of the FCC's rules. If the use of this antenna should cause unacceptable

¹ The hub stations being used for this service are licensed to HNS License Sub LLC under Call Signs E000166 and E940460.

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interference into other systems, Row 44 has agreed that it will terminate transmissions immediately upon notice from the affected parties.

Sincerely,

 6/12/08
Krish Jonnalagadda
Satellite Marketing Development, Manager
SES Americom, Inc.

Acceptance by Row 44, Inc.:

Row 44 affirms that the information provided to Intelsat and reflected in this coordination letter is true and accurate to the best of Row 44's knowledge, information and belief, and that it shall comply with all relevant SES coordination agreements, as provided herein.

 6/19/08
John Guidon
President & CEO
Row 44, Inc.

Acceptance by Intelsat:

Intelsat agrees to operation of the above antenna with the technical parameters described herein with respect to Galaxy 28 at 89° W.L., which operates within six degrees of AMC-9 at 83° W.L., and with respect to Galaxy 3C at 95° W.L., Galaxy 25 at 97° W.L. and Galaxy 16 at 99° W.L., which each operate within six degrees of AMC-2 at 101° W.L.

Jose Albuquerque
Senior Director, Spectrum Engineering
Intelsat, LLC