

Affidavits from Adjacent Satellite Operators

Attached are the affidavits from the adjacent satellite operators demonstrating that the 0.75 meter antennas will operate satisfactory with all adjacent satellites.

The applicant agrees to accept any adjacent satellite interference in the 12 GHz receive band as a result of the performance of the antenna in the 1° to 1.5° region. The applicant understands that no adjacent satellite interference protection will be available in the 1° to 1.5° regions. The applicant understands that adjacent satellite interference protection applies only to the extent of the criteria set forth in §25.209.

10 March 2010



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

To whom it may concern:

This letter certifies that Intelsat is aware that Spacenet Services License Sub, Inc. ("Spacenet") is seeking FCC authorization to access the Galaxy-18 satellite at 123.0° W.L. as a point of communication, using Ku-band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain.¹

Intelsat understands that Spacenet will be deploying transmit/receive earth station antennas of 62 x 89 cm, using an Andrew Model 755 antenna, mounted in all cases such that the major axis of the elliptical reflector is aligned with the geostationary orbit arc. The above antenna is not compliant with Section 25.209 of the FCC rules insofar as the antenna meets the sidelobe performance only at an angle of 1.72 degrees and greater, rather than 1.5 degrees and greater as specified in the FCC rules. These antennas are to be operated with a pointing error that will not exceed $\pm 0.3^\circ$ and will operate at a maximum input power density at the antenna waveguide flange of -15 dBW/4 kHz , which is 1 dB lower than the limit contained in 47 CFR §25.134.

Intelsat and Spacenet further certify that the maximum forward downlink satellite EIRP density is equal to or less than $+13.0 \text{ dBW/4kHz}$, which is routinely used at 2-degree spacing without causing unacceptable interference to adjacent satellite operators.

Furthermore, in order to prevent unacceptable interference into adjacent satellites, Intelsat has been informed and Spacenet acknowledges that these antennas will be installed in compliance with the technical, operational and performance requirements of Part 25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for the above antennas.

Intelsat and Spacenet acknowledge that they will not seek any additional protection compared to the case of an earth station employing an antenna conforming to the reference patterns defined in § 25.209 of the FCC rules.

¹ 47 CFR §25.209.

Duty



Intelsat acknowledges that the use of the above referenced transmit/receive antenna by Spacenet, installed and operated in accordance with the above conditions should not cause unacceptable interference into adjacent satellites operating in accordance with FCC's 2-degree spacing policy.

Spacenet has agreed that should operation of this antenna cause unacceptable interference into other systems, Spacenet will terminate transmissions immediately upon notice from the affected parties.

Finally, Intelsat acknowledges that it will include the subject non-conforming earth station operations in all future satellite network coordinations.

Sincerely,

Jose Albuquerque
Jose Albuquerque
Senior Director, Spectrum Engineering
Intelsat

11 March 2010
Date

Acceptance by Spacenet Services License Sub, Inc.:

Spacenet certifies that the information provided to Intelsat and reflected in this Affidavit letter is true and accurate to the best of Spacenet's knowledge.

Glenn Katz
Glenn Katz
President and COO
Spacenet

7/7/10
Date

Acceptance by ECHOSTAR:

Echostar agrees to the use of the Andrews Model 755, 62 x 89 cm antenna, with the pointing error tolerances towards the intended satellite and the power density levels into the antenna flange as stated in this letter, to communicate with the Galaxy-18 satellite at 123.0° W.L. with respect to Echostar satellite networks located within $\pm 6^\circ$ from Galaxy-18 at 123.0° W.L.

David Bair
David Bair
Senior Vice President,
Space Programs and Operations
Echostar

11 MAR 2010
Date



10 March 2010

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

To whom it may concern:

This letter certifies that Intelsat is aware that Spacenet Services License Sub, Inc. ("Spacenet") is seeking FCC authorization to access the Galaxy-18 satellite at 123.0° W.L. as a point of communication, using Ku-band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain.¹

Intelsat understands that Spacenet will be deploying transmit/receive earth station antennas of 62 x 89 cm, using an Andrew Model 755 antenna. The above antenna is not compliant with Section 25.209 of the FCC rules insofar as the antenna meets the sidelobe performance only at an angle of approximately 1.8 degrees and greater, rather than 1.5 degrees and greater as specified in the FCC rules. This antenna will operate at a maximum input power density at the antenna waveguide flange of -15 dBW/4 kHz, which is 1 dB lower than the limit contained in 47 CFR §25.134.

Intelsat and Spacenet further certify that the maximum forward downlink satellite EIRP density is equal to or less than +13.0 dBW/4kHz, which is routinely used at 2-degree spacing without causing unacceptable interference to adjacent satellite operators.

Furthermore, in order to prevent unacceptable interference into adjacent satellites, Intelsat has been informed and Spacenet acknowledges that these antennas will be installed in compliance with the technical, operational and performance requirements of Part 25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for the above antennas. Moreover, pointing errors will be minimized through the use of good engineering practices and are expected to be in the 0.1° to 0.3° range.

As required per 47 CFR §25.220(e)(1)(i), Intelsat and Spacenet acknowledge that the use of the Andrew non-conforming antenna has the

¹ 47 CFR §25.209.



potential to cause unacceptable interference into adjacent satellites in accordance with the FCC's 2-degree spacing policy and will not seek any additional protection compared to the case of an earth station employing an antenna conforming to the reference patterns defined in § 25.209 of the FCC rules. However, under the conditions defined above satellites at 2° spacing or more will not experience unacceptable interference.

Finally, Intelsat acknowledges that it will include the subject non-conforming earth station operations in all future satellite network coordinations.

Sincerely,

Jose Albuquerque
Jose Albuquerque
Senior Director, Spectrum Engineering
Intelsat

10 March 2010
Date

Acceptance by Spacenet Services License Sub, Inc.:

Spacenet certifies that the information provided to Intelsat and reflected in this Affidavit letter is true and accurate to the best of Spacenet's knowledge.

[Signature]
Glenn Katz
President and COO
Spacenet

7/7/10
Date

Acceptance by SES Satellites (Gibraltar):

SES Satellites (Gibraltar) agrees to the use of the Andrews Model 755, 62 x 89 cm antenna, with the azimuth angle alignment tolerances towards the intended satellite and the power density levels into the antenna flange as stated in this letter, to communicate with the Galaxy-18 satellite at 123.0° W.L. with respect to SES Satellites (Gibraltar) satellite networks located within ±6° from Galaxy-18 at 123.0° W.L.

K. Jonnalagadda
Krish Jonnalagadda
SES Satellites (Gibraltar)

3/10/2010
Date



3 March 2010

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

To whom it may concern:

This letter certifies that Intelsat is aware that Spacenet Services License Sub, Inc. ("Spacenet") is seeking FCC authorization to access the Galaxy-18 satellite at 123.0° W.L. as a point of communication, using Ku-band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain.¹

Intelsat understands that Spacenet will be deploying transmit/receive earth station antennas of 62 x 89 cm, using an Andrew Model 755 antenna. The above antenna is not compliant with Section 25.209 of the FCC rules insofar as the antenna meets the sidelobe performance only at an angle of approximately 1.8 degrees and greater, rather than 1.5 degrees and greater as specified in the FCC rules. This antenna will operate at a maximum input power density at the antenna waveguide flange of -15 dBW/4 kHz, which is 1 dB lower than the limit contained in 47 CFR §25.134.

Intelsat and Spacenet further certify that the maximum forward downlink satellite EIRP density is equal to or less than +13.0 dBW/4kHz, which is routinely used at 2-degree spacing without causing unacceptable interference to adjacent satellite operators.

Furthermore, in order to prevent unacceptable interference into adjacent satellites, Intelsat has been informed and Spacenet acknowledges that these antennas will be installed in compliance with the technical, operational and performance requirements of Part 25 of the FCC rules and any requirements set forth in the licenses granted by the FCC for the above antennas. Moreover, pointing errors will be minimized through the use of good engineering practices and are expected to be in the 0.1° to 0.3° range.

As required per 47 CFR §25.220(e)(1)(i), Intelsat and Spacenet acknowledge that the use of the Andrew non-conforming antenna has the

¹ 47 CFR §25.209.



potential to cause unacceptable interference into adjacent satellites in accordance with the FCC's 2-degree spacing policy and will not seek any additional protection compared to the case of an earth station employing an antenna conforming to the reference patterns defined in § 25.209 of the FCC rules. However, under the conditions defined above satellites at 2° spacing or more will not experience unacceptable interference.

Finally, Intelsat acknowledges that it will include the subject non-conforming earth station operations in all future satellite network coordinations.

Sincerely,

Jose Albuquerque
Jose Albuquerque
Senior Director, Spectrum Engineering
Intelsat

10 March 2010
Date

Acceptance by Spacenet Services License Sub, Inc.:

Spacenet certifies that the information provided to Intelsat and reflected in this Affidavit letter is true and accurate to the best of Spacenet's knowledge.

Glenn Katz
Glenn Katz
President and COO
Spacenet

2/2/10
Date

Acceptance by Telesat Canada:

Telesat Canada agrees to the use of the Andrews Model 755, 62 x 89 cm antenna, with the azimuth angle alignment tolerances towards the intended satellite and the power density levels into the antenna flange as stated in this letter, to communicate with the Galaxy-18 satellite at 123.0° W.L. with respect to TELESAT CANADA satellite networks located within ±6° from Galaxy-18 at 123.0° W.L.

John Forsey
John Forsey
Director, ITU and Regulatory
Telesat Canada

5 March 2010
Date