

RECEIVED

AUG - 5 2004

Federal Communications Commission
Office of Secretary

SQUIRE, SANDERS & DEMPSEY L.L.P.

1201 Pennsylvania Avenue, N.W.
P.O. Box 407
Washington, D.C. 20044-0407

Office: +1.202.626.6600
Fax: +1.202.626.6780

(202) 626-6615

August 5, 2004

VIA HAND DELIVERY

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20054

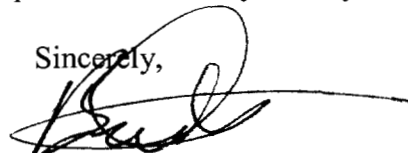
Re: GTECH Corporation
VSAT Network Call Sign E930182
FCC File No. SES-AMD-20040528-00743

Dear Ms. Dortch:

Please find attached for inclusion in the above-reference file, original executed coordination letters indicating the approval of Intelsat and Panamsat for the VSAT network operations described in the referenced application. Electronic copies of these coordination letters have already been provided to the staff of the International Bureau.

Please let us know if you have any questions. Thank you for your attention to this matter.

Sincerely,



Bruce A. Olcott
Counsel to GTECH Corporation

Enclosures

SES AMERICOM

An SES GLOBAL Company

July 22, 2004

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

RECEIVED
AUG - 5 2004
Federal Communications Commission
Office of Secretary

Subject: Engineering Certification of SES Americom

Fcc File No. SES-AMD-20040528-00743

To whom it may concern:

This letter certifies that SES Americom Inc. ("SES") is aware that GTECH Corporation ("GTECH"), a customer of SES Americom's customer Hughes Network Systems (HNS), is seeking FCC authorization to access SES satellite AMC-3 at 87° degrees W.L. licensed by the Federal Communications Commission ("FCC"), using Ku--band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain. The SES AMC-3 satellite provides coverage of the Continental United States (CONUS) from this orbital location, at 87 degrees W.L. SES has provided Intelsat with a list of SES transponders currently assigned to support transmissions from these antennas and, for purposes of inter-system coordination, will promptly provide Intelsat with relevant information for any additional or different transponders provided by SES.¹

SES Americom understands that GTECH will be deploying mostly E74 cm and E75 cm equivalent transmit/receive remote terminals for its two-way VSAT services working with the hubs located at West Greenwich, RI, and Austin, TX, under the call signs E930182 and E970347 respectively. SES Americom understands that GTECH will also operate 96 cm and 98cm transmit/receive circular aperture remote terminals in the high rain or low spacecraft EIRP regions in the CONUS. The proposed antennas are not compliant with the FCC part 25 rules: the antennas will meet the antenna sidelobe performance 29-25Log(theta) at an angle slightly larger than that specified in the FCC part 25 rules, but still smaller than two degrees. Therefore the specification of pointing accuracy is defined below in order to insure that the operations of these non-compliant antennas, with the associated defined angle at which the antenna starts meeting the 29-25log(theta) sidelobe performance, will not cause unacceptable

¹ Intelsat agrees to keep all transponder specific information it acquires from SES confidentially and shall not disclose such information to any third parties.

interference into adjacent satellites with a separation of two degrees with respect to AMC-3.

Prodelin, model number HANT-91TR, 98 by 56 cm elliptical-aperture antenna

One terminal utilizes a 98 by 56 cm elliptical-aperture antenna having the same transmit gain as a 74 cm equivalent circular-aperture (E74 cm) Prodelin antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.4 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.4 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.56 degrees and will operate and will operate at a maximum input power density at the antenna waveguide flange of -16 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing².

Prodelin, model number 9008668, 98cm circular antenna

The other terminal utilizes a 98 cm circular-aperture Prodelin antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.6 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.6 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.40 degrees and will operate at a maximum input power density at the antenna waveguide flange of -16 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing³.

Channel Master, model number 75E, 89 by 62 cm elliptical-aperture antenna

One terminal utilizes a 89 by 62 cm elliptical-aperture antenna having the same transmit gain as a 75 cm equivalent circular-aperture (E75 cm) Channel Master antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.73 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.73 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/-0.27 degrees and will operate and will operate at a maximum input power density at the antenna waveguide flange of -14.8 dBW/4 kHz, compliant

² 47 CFR § 25.134

³ 47 CFR § 25.134

with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing⁴.

Channel Master, model number 960, 96 cm circular antenna

The other terminal utilizes a 96 cm circular-aperture Channel Master antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.72 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.72 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.28 degrees and will operate at a maximum input power density at the antenna waveguide flange of -14.8 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing⁵.

The undersigned further certifies that the maximum downlink Satellite EIRP density of +9.1 dBW/4KHz, operational level of the Ku-band VSAT network operated by GTECH, is within the levels coordinated with Intelsat.

Furthermore, in order to prevent unacceptable interference into adjacent satellites, SES and GTECH acknowledge 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 sub-meter Prodelin and Channel Master antennas.


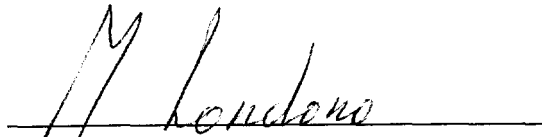
SES and GTECH acknowledge that the use of the Prodelin and Channel Master non-conforming antennas will not cause unacceptable interference into adjacent satellites in accordance with the FCC's 2-degree spacing policy and will accept interference from adjacent satellites to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the reference patterns defined in § 25.209 of the FCC rules.

Furthermore, should other satellites be positioned at the aforementioned orbital location, the transponder assignments coordinated pursuant to this letter will remain the same. SES Americom will promptly provide Intelsat with relevant information for any new transponders leased by GTECH from SES, for purposes of inter-system coordination, which will be operated on a non-conforming basis with respect to the FCC part 25 rules

Sincerely,

⁴ 47 CFR § 25.134

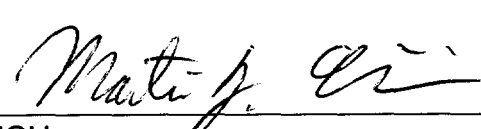
⁵ 47 CFR § 25.134

Jaime Londono
Satellite Market Development, Director
SES Americom

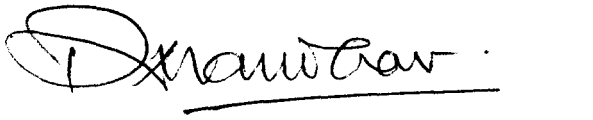
Acceptance by GTECH:

GTECH testifies that the information provided to SES Americom and reflected in this Affidavit letter is true and accurate to best of GTECH's knowledge.


GTECH MARTIN J. AHLJANIAN Date 7/22/04
By: _____
Its: VP/Asst. Gen. Counsel

Acceptance by Intelsat :

Intelsat agrees to the use of the Prodelin, model number HANT-91-TR, 98 by 56 cm elliptical-aperture (E74 cm) antenna, Prodelin, model number 9008668, 98cm circular antenna, Channel Master, model number 75E, 89 cm by 62 cm elliptical-aperture (E75 cm) antenna, and Channel Master, model number 960, 96cm circular antenna with their respective azimuth angle alignment tolerances toward AMC-3 and the power density levels into the antenna flange as stated in this letter, with respect to Intelsat satellite networks located within $\pm 6^\circ$ from AMC-3 at 87 W.L.



Ram Manohar
Department Manager, Frequency Management
Intelsat

July 22, 2004

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

Subject: Engineering Certification of SES Americom

FCC File No SES-AMD-20040528-00743

To whom it may concern:

This letter certifies that SES Americom Inc. ("SES") is aware that GTECH Corporation ("GTECH"), a customer of SES Americom's customer Hughes Network Systems (HNS), is seeking FCC authorization to access SES satellite AMC-3 at 87° degrees W.L. licensed by the Federal Communications Commission ("FCC"), using Ku--band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain. The SES AMC-3 satellite provides coverage of the Continental United States (CONUS) from this orbital location, at 87 degrees W.L. SES has provided PanAmSat with a list of SES transponders currently assigned to support transmissions from these antennas and, for purposes of inter-system coordination, will promptly provide PanAmSat with relevant information for any additional or different transponders provided by SES.¹

SES Americom understands that GTECH will be deploying mostly E74 cm and E75 cm equivalent transmit/receive remote terminals for its two-way VSAT services working with the hubs located at West Greenwich, RI, and Austin, TX, under the call signs E930182 and E970347 respectively. SES Americom understands that GTECH will also operate 96 cm and 98cm transmit/receive circular aperture remote terminals in the high rain or low spacecraft EIRP regions in the CONUS. The proposed antennas are not compliant with the FCC part 25 rules: the antennas will meet the antenna sidelobe performance $29-25\log(\theta)$ at an angle slightly larger than that specified in the FCC part 25 rules, but still smaller than two degrees. Therefore the specification of pointing accuracy is defined below in order to insure that the operations of these non-compliant antennas, with the associated defined angle at which the antenna starts meeting the $29-25\log(\theta)$ sidelobe performance, will not cause unacceptable

¹ PanAmSat agrees to keep all transponder specific information it acquires from SES confidentially and shall not disclose such information to any third parties.

interference into adjacent satellites with a separation of two degrees with respect to AMC-3.

Prodelin, model number HANT-91TR, 98 by 56 cm elliptical-aperture antenna

One terminal utilizes a 98 by 56 cm elliptical-aperture antenna having the same transmit gain as a 74 cm equivalent circular-aperture (E74 cm) Prodelin antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.4 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.4 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.56 degrees and will operate and will operate at a maximum input power density at the antenna waveguide flange of -16 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing².

Prodelin, model number 9008668, 98cm circular antenna

The other terminal utilizes a 98 cm circular-aperture Prodelin antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.6 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.6 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.40 degrees and will operate at a maximum input power density at the antenna waveguide flange of -16 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing³.

Channel Master, model number 75E, 89 by 62 cm elliptical-aperture antenna

One terminal utilizes a 89 by 62 cm elliptical-aperture antenna having the same transmit gain as a 75 cm equivalent circular-aperture (E75 cm) Channel Master antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.73 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.73 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/-0.27 degrees and will operate and will operate at a maximum input power density at the antenna waveguide flange of -14.8 dBW/4 kHz, compliant

² 47 CFR § 25.134

³ 47 CFR § 25.134

with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing⁴.

Channel Master, model number 960, 96 cm circular antenna

The other terminal utilizes a 96 cm circular-aperture Channel Master antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.72 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern requirements specified in Section 25.209 of the Commission's Rules in the plane of the geostationary satellite orbit as it appears at the particular earth station location for off-axis angles starting at 1.72 degrees in the transmit band. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/- 0.28 degrees and will operate at a maximum input power density at the antenna waveguide flange of -14.8 dBW/4 kHz, compliant with the -14.0 dBW/4 kHz FCC maximum for 2-degree compliant systems and routine licensing⁵.

The undersigned further certifies that the maximum downlink Satellite EIRP density of +9.1 dBW/4KHz, operational level of the Ku-band VSAT network operated by GTECH, is within the levels coordinated with PanAmSat.

Furthermore, in order to prevent unacceptable interference into adjacent satellites, SES and GTECH acknowledge 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 sub-meter Prodelin and Channel Master antennas.

SES and GTECH acknowledge that the use of the Prodelin and Channel Master non-conforming antennas will not cause unacceptable interference into adjacent satellites in accordance with the FCC's 2-degree spacing policy and 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 to the reference patterns defined in § 25.209 of the FCC rules.

Furthermore, should other satellites be positioned at the aforementioned orbital location, the transponder assignments coordinated pursuant to this letter will remain the same. SES Americom will promptly provide PanAmSat with relevant information for any new transponders leased by GTECH from SES, for purposes of inter-system coordination, which will be operated on a non-conforming basis with respect to the FCC part 25 rules

Sincerely,

⁴ 47 CFR § 25.134

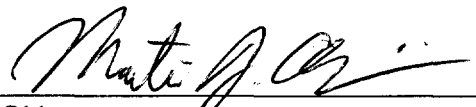
⁵ 47 CFR § 25.134



Jaime Londono
Satellite Market Development, Director
SES Americom

Acceptance by GTECH:

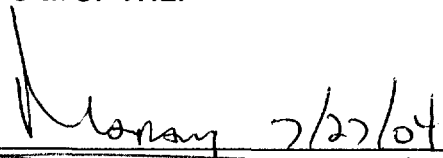
GTECH testifies that the information provided to SES Americom and reflected in this Affidavit letter is true and accurate to best of GTECH's knowledge.



GTECH **MARTIN J. AHLUJANIAN** 7/20/04
By: _____ Date
Its: VP/ASIS Gen. Cr _____

Acceptance by PanAmSat :

PanAmSat agrees to the use of the Prodelin, model number HANT-91-TR, 98 by 56 cm elliptical-aperture (E74 cm) antenna, Prodelin, model number 9008668, 98cm circular antenna, Channel Master, model number 75E, 89 cm by 62 cm elliptical-aperture (E75 cm) antenna, and Channel Master, model number 960, 96cm circular antenna with their respective azimuth angle alignment tolerances toward AMC-3 and the power density levels into the antenna flange as stated in this letter, with respect to PanAmSat satellite transponders located at $\pm 6^\circ$ from AMC-3 at 87 W.L.



Mohammad Marash
Vice President
Customer Support Engineering
PanAmSat Corporation