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July 17, 2006

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Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W., Room TW-B204
Washington, D.C. 20554

**Re: Application of HNS Licensee Sub, LLC,
File No. SES-MFS-20060713-01156**

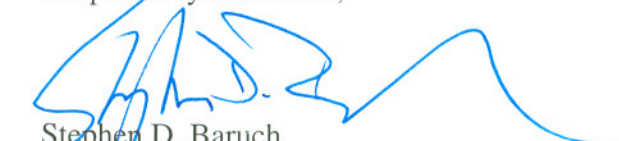
Dear Ms. Dortch:

HNS Licensee Sub, LLC (“Hughes”), by its attorneys and pursuant to Section 1.65 of the Commission’s Rules, 47 C.F.R. § 1.65, hereby provides additional information relevant to its above-referenced application to modify its earth station authorization under Call Sign E000166. In its application, Hughes requested, *inter alia*, to add the Mexican Satmex-6 satellite as a point of communication for its authorized and proposed antennas. It represented that a coordination agreement had been reached in principle with the operator of Satmex-6, but that the joint Hughes/Satmex-6 coordination letter memorializing the agreement had not yet been finalized. *See* Hughes Modification Application, Exhibit A at 8, n.5.

The letter in question has now been fully executed, and a copy is enclosed. Please associate this letter with Attachment 3 to Exhibit A to Hughes’ July 13 modification of license application.

Any questions concerning this matter should be directed to me.

Respectfully submitted,



Stephen D. Baruch
Counsel for HNS Licensee Sub, LLC

Enclosure

cc (w/encl.): Scott Kotler, Chief, System Analysis Branch (by e-mail)
Steven Doiron, Hughes (by e-mail)



July 13, 2006

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

Subject: Engineering Certification of Satelites Mexicanos S.A. de C.V. (SATMEX)

To whom it may concern:

This letter certifies that Satelites Mexicanos S.A. de C.V. (SATMEX) is aware that Hughes Network Systems, LLC (HNS), is seeking FCC authorization to access Satmex-5 at 116.8 degrees W.L. and Satmex-6 at 113.0 degrees W.L., using Ku-band transmit/receive antennas that are not strictly compliant with the FCC 2-degree spacing requirements for off-axis sidelobe gain. The Satmex-5 satellite currently provides coverage of the Continental United States (CONUS) from this orbital location, at 116.8 degrees W.L. Satmex 6 was launched on 27 May, 2006 and will operate under authorization from the Government of Mexico. The application for the inclusion of Satmex-6 to the U.S. Permitted List has been submitted to the FCC and is presently on public notice.¹

SATMEX understands that HNS will be deploying 74 cm equivalent transmit/receive remote terminals for its two-way VSAT services working with the hubs located at Germantown, MD, and North Las Vegas, NV, under the FCC call signs E000166 and E940460 respectively. These terminals can be deployed with either Prodelin HANT-91TR antenna or with Raven 74 cm antenna (model number HNS-1035610), where both have a performance that is equivalent to a 74 cm circular aperture antenna. SATMEX understands that HNS will also operate 98 cm transmit/receive circular aperture remote terminals in the U.S. These antennas are to be installed with a nominal pointing accuracy of less than or equal to +/-0.6 degrees. (See Attachment 1 HNS Commitment and Attachment 2 Terminal Performance)

All the above are not strictly compliant with the FCC part 25 rules: the antennas will meet the antenna sidelobe performance $29-25\text{Log}(\theta)$ starting at an angle slightly larger than that specified in the FCC part 25 rules, but still smaller than 1.9 degrees. SATMEX has made a commitment that the carrier parameters it will assign will not exceed the technical parameters establish in coordination agreement with Telesat Canada.

SATMEX has coordinated a maximum input power density at the antenna waveguide flange of -17.0 dBW/4 kHz in Ku band with adjacent satellite operators. This represents a level which is 3 dB more restrictive than the maximum flange power that is routinely authorized by the FCC in §25.134(a)(1) of its regulations.

The undersigned further certifies that the maximum downlink Satellite EIRP density of +13.0 dBW/4KHz or 37.0 dBW/MHz, operational level of the Ku-band VSAT network operated by HNS, is within the levels coordinated with Telesat Canada this operation will be consistent with the coordination Agreement.

¹ Satelites Mexicanos, S.A. de C.V., Public Notice June 23, 2006, File Number SAT-PPL -20060329-00030, Call Sign S2695.

X
[Handwritten initials]



SATMEX

SATMEX will include the subject non-conforming earth station operations in all future satellite network coordinations, as is required in Sections 25.220(d)(1)(iii) of the Commission's rules.

Sincerely,

Alonso Picazo Díaz
Regulatory Branch, Director

Acceptance by HNS:

HNS certifies that the information provided to SATMEX and reflected in this affidavit letter is true and accurate to the best of its knowledge. HNS agrees to abide by the technical specifications defined above.

Dave Zafoukal
S.R. Vice President, Network Services, HNS, LLC

C.c.p. John Forsey .- TELESAT/CANADA
Carmen Ochoa .- SATMEX/MEXICO
Hector Fortis .- SATMEX/MEXICO

ATTACHMENT 1

Prodelin, model number HANT-91TR, 98 by 56 cm elliptical-aperture antenna
These antennas are to be installed with a nominal pointing accuracy of less than
or equal to +/-0.6 degrees.

Raven, model number HNS-1035610, 84 by 69 cm elliptical-aperture antenna
These antennas are to be installed with a nominal pointing accuracy of less than
or equal to +/-0.5 degrees.

Prodelin, model number 9008668, 98cm circular antenna
These antennas are to be installed with a nominal pointing accuracy of less than
or equal to +/- 0.5 degrees.

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ATTACHMENT 2

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.

Raven, model number HNS-1035610, 84 by 69 cm elliptical-aperture antenna

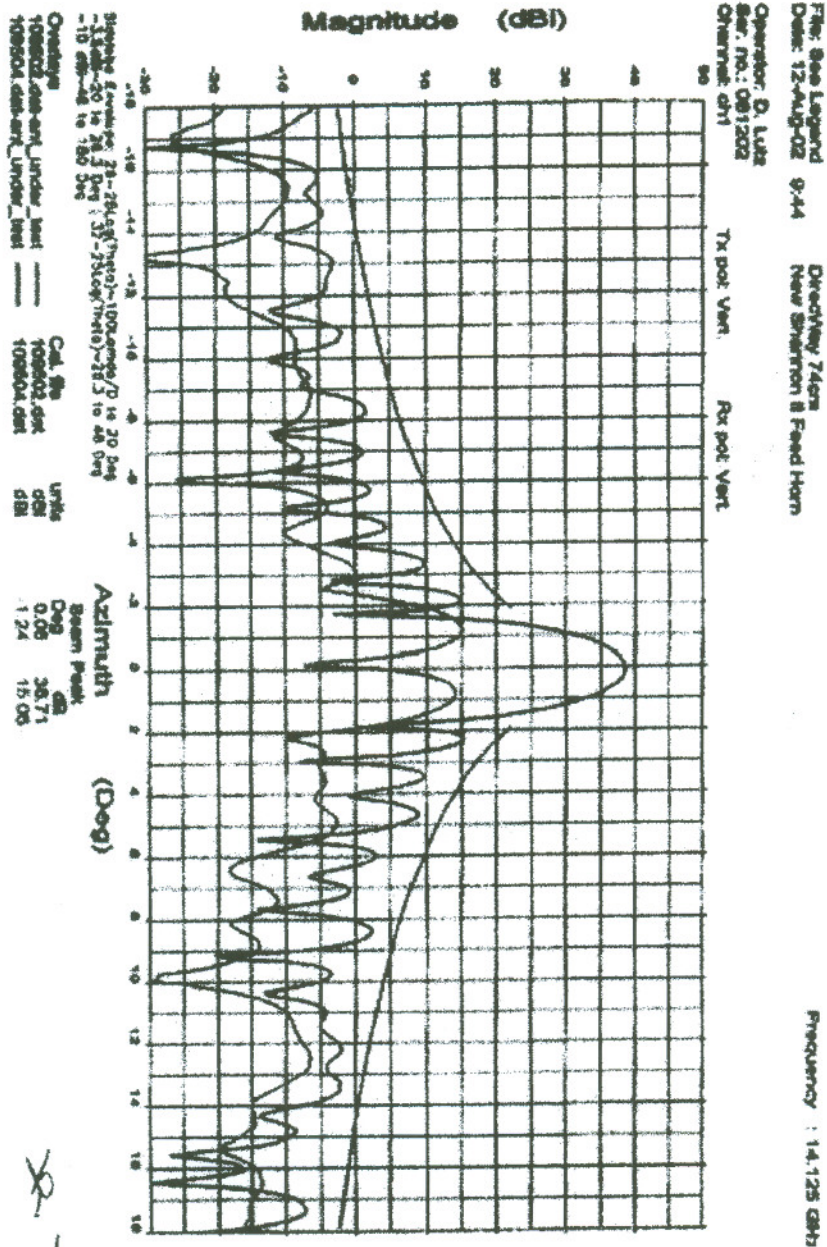
One terminal utilizes a 84 by 69 cm elliptical-aperture antenna having the same transmit gain as a 74 cm equivalent circular-aperture (E74 cm) antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.6 degrees off axis from maximum gain in the transmit band, due to 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.

Prodelin, model number 9008668, 98cm circular antenna

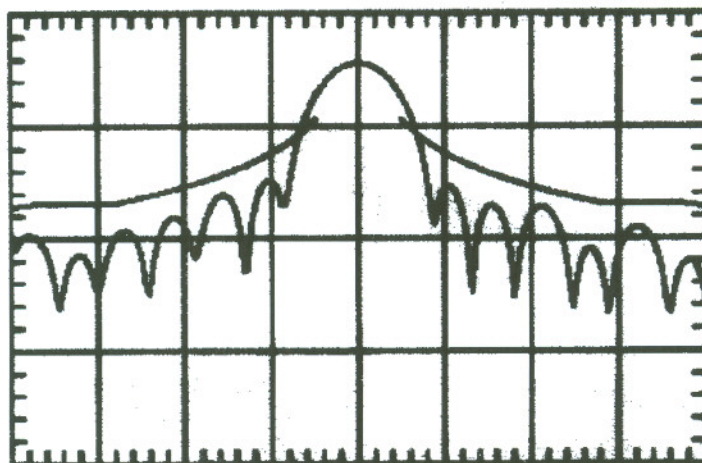
The other terminal utilizes a 98 cm circular-aperture Prodelin antenna. These antennas generally exhibit their non-compliance in the region from 1.25 to 1.6 degrees off axis from maximum gain in the transmit band, due to the width of their main gain lobe. They are compliant with the side lobe pattern 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.

to
HNS
P.

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



Raven, model number HNS-1035610, 84 by 69 cm elliptical-aperture antenna



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HNS

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4-1000

1000

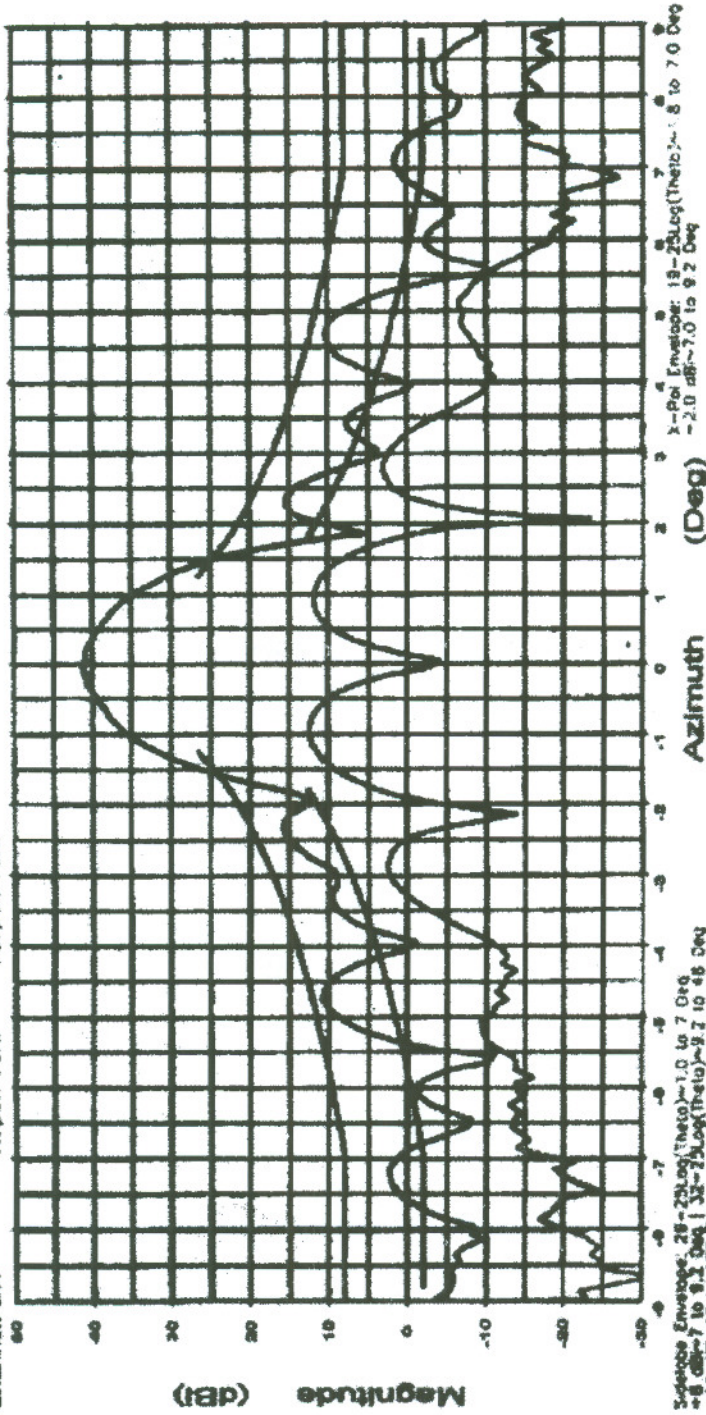
Frequency : 14.250 GHz

Prodelin 98cm Offset Antenna System
Receive / Transmit Series 1992

File: See Legend

Operator: D. Lutz
Ser. no.:
Channel: ch1

Tx pol: Vert. Rx pol: Vert.



Scope Envelope: 28-25Log(Theta)=-1.0 to 7.0 Deg
-8 dB~-7 to 8.1 Deg | 32-25Log(Theta)=-9.7 to 48 Deg
-10 dB~-48 to 180 Deg

Beam Peak
Deg dB
-0.05 41.18
-0.95 12.48

Overlays
069205.DAT-ant_under_test
069205.DAT
069207.DAT-ant_under_test

Prodelin Corporation
Reverbend Test Range