

December 28, 2007

VIA HAND DELIVERY

ORIGINAL

FILED/ACCEPTED

DEC 28 2007

Federal Communications Commission
Office of the Secretary

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: Raysat Antenna Systems, LLC, Application for Authority to Operate 400 In-Motion Mobile Satellite Antennas in the 14.0-14.5 GHz and 11.7-12.2 GHz Frequency Bands, Call Sign E060101, File Nos. SES-LIC-20060629-01083, SES-AMD-20070620-00839 - Notice of *Ex Parte* Presentation

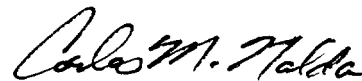
Dear Ms. Dortch:

On December 27, 2007, David Gross and Ilan Kaplan of Raysat Antenna Systems, LLC, along with Carlos Nalda of Mintz Levin, met with Aaron Goldberger of Chairman Martin's office to discuss issues raised in the above-captioned application proceeding.^{1/} The issues discussed in the meeting are reflected in the attached written presentation.

Pursuant to section 1.1206(b) of the Commission's rules, two copies of this submission are being filed with the Office of the Secretary. A copy is also being served electronically to Mr. Goldberger.

Please feel free to contact the undersigned with any questions regarding this submission.

Sincerely,



Carlos M. Nalda
Counsel to Raysat Antenna Systems, LLC

Attachment
cc (w/ att.): Aaron Goldberger

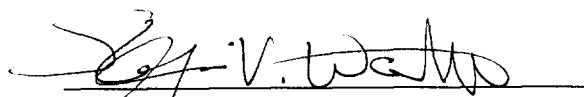
^{1/} This proceeding has been designated "permit-but-disclose" for purposes of the Commission's *ex parte* rules. See Public Notice, Report No. SES-00923 (May 2, 2007).

CERTIFICATE OF SERVICE

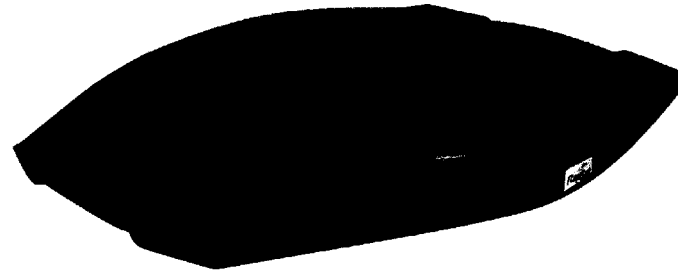
I, Stefani Watterson, hereby certify that on this 28th day of December 2007, served a true copy of the foregoing "Notice of *Ex Parte* Presentation" by first class mail, postage pre-paid upon the following:

Elizabeth R. Park
Latham & Watkins LLP
555 Eleventh Street, N.W.
Suite 1000
Washington, D.C. 20004

Sonny Ellis
Parsons Transportation Group Inc.
1133 Fifteenth Street, N.W.
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Stefani Watterson

Raysat Antenna Systems



**Meeting with Aaron Goldberger
Chairman Martin's Office
December 27, 2007**



RAS LMSS Licensing

- Background
- RAS Licensing Issue
- Effect of VMES Rulemaking
- Conclusion

The FCC may grant RAS's LMSS blanket license application without regard to the status of the VMES rulemaking proceeding.

Background

- RAS has developed a low-profile, vehicle-mounted, mobile two-way broadband earth station
 - Transmit operations in Ku-band LMSS spectrum (14.0-14.5 GHz) on a secondary basis
 - Receive operations in 11.7-12.2 GHz band on an unprotected, non-interference basis
- Main users are military and government entities
 - U.S. Military and National Guard units
 - Other agencies
- Other applications
 - Trains
 - News organizations

Background (cont'd)

□ Experimental Licensing

- Experimental STA - March and June 2005 (WC9XCU)
- Experimental License - August 2005 (WD2XTB, expired August 1, 2007) (Limited Market Study authority added)
- Experimental STA – August 2007 (WC9XZA) (expires February 2, 2008)
- Experimental STA –November 2007 (WD9XCQ) (expires May 28, 2008) (new antenna model)

□ International Bureau Licensing

- LMSS blanket license application - filed June 2006, amended June 2007 (pending)

RAS Licensing Issue

- More than 100 organizations (mainly U.S. Government and military) have tested RAS's StealthRay antenna
- U.S. Government and private sector customers are concerned about RAS's FCC licensing status
 - U.S. military wants RAS antennas fielded immediately
 - U.S. military must train in United States, but current experimental status limits deployment and use
 - Full commercial deployment for private sector use not possible under experimental license
- Existing experimental status unnecessarily constrains the ability of U.S. Government and private sector customers to benefit from RAS's innovative service

Effect of VMES Rulemaking

- Licensing secondary LMSS operations is consistent with existing FCC rules and precedent
 - The VMES NPRM proposes rules for primary VMES operations only
 - The VMES NPRM does not propose to alter the ability of the FCC to authorize secondary LMSS operations
- RAS has applied for authority to operate LMSS earth stations on a secondary basis (up to 400 terminals)
- Consideration of the VMES NPRM should not delay or otherwise affect RAS's application

Conclusion

- RAS's LMSS application is consistent with existing allocations and FCC precedent
 - Secondary operations in the 14.0-14.5 GHz band
 - Unprotected operations in the 11.7-12.2 GHz band
- RAS's proposed LMSS operations have been fully coordinated and will not cause harmful interference
- The FCC may grant RAS's LMSS blanket license application without regard to the status of the VMES rulemaking proceeding

Additional Slides

RAS Protection of Adjacent Satellites

Protection of Adjacent Satellites

- RAS fully protects primary FSS operations
 - Antenna characteristics and transmit power levels carefully designed to prevent harmful interference to adjacent satellites
 - Automated satellite acquisition and closed-loop tracking ensure off-axis EIRP along the GSO remains within prescribed levels
 - Cessation of emissions within 100ms if tracking error exceeds 0.5° precludes any possibility of harmful interference
- RAS's operations have been fully coordinated by satellite operators
 - Seven proposed satellite points of communication coordinated with twenty satellites within $\pm 6^\circ$ of their orbital locations
- No reported instances of interference in more than two years of demonstrations and testing

Protection of Adjacent Satellites (cont'd)

- Off-axis EIRP density levels may not exceed the following mask (resulting from maximum VSAT input power density of Section 25.134(a) into a Section 25.209(a) compliant antenna):

$$\begin{aligned} &15 - 25\log(\theta)\text{dBW/4kHz} && \text{for } 1.25^\circ \leq \theta \leq 7.0^\circ \\ &- 6\text{dBW/4kHz} && \text{for } 7.0^\circ < \theta \leq 9.2^\circ \\ &18 - 25\log(\theta)\text{dBW/4kHz} && \text{for } 9.2^\circ < \theta \leq 48^\circ \\ &- 24\text{dBW/4kHz} && \text{for } 48^\circ < \theta \leq 180^\circ \end{aligned}$$

- RaySat antenna uses max. flange power density of -18.1 dBW/4kHz
- Off-axis EIRP density levels at 50° skew angle confirm no possibility of harmful interference

