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Policy Branch  
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*BY HAND DELIVERY*

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

RECEIVED

APR - 7 2005

Federal Communications Commission  
Office of Secretary

**Re: STA Request to Operate the Ka-band Payload and  
Ku-band TT&C of AMC-16 at 97° W.L.  
File No. SAT-STA-20050111-00009, Call Sign S2181**

Dear Ms. Dortch:

SES Americom, Inc. ("SES Americom"), by its attorneys, hereby supplements the record with respect to its above-referenced application for special temporary authority to relocate AMC-16 to 97° W.L. and operate its Ka-band payload and Ku-band TT&C at that location for a period of sixty days (the "STA Request"). As discussed herein, SES Americom has successfully completed discussions regarding stationkeeping with Intelsat, which operates the Intelsat Americas 5 satellite at 97° W.L. Pursuant to those discussions, SES Americom proposes to operate AMC-16 centered at 96.925° W.L. with a +/- 0.025 degree stationkeeping tolerance. SES Americom has also coordinated the AMC-16 Ku-band TT&C frequencies with Intelsat and with the adjacent operations of PanAmSat. AMC-16 is scheduled to begin moving toward 97° W.L. on April 9, and SES Americom seeks expedited grant of the STA Request prior to that date.

## BACKGROUND

SES Americom filed this STA Request on January 11, proposing temporary operation of AMC-16's Ka-band payload and Ku-band TT&C at the 97° W.L. orbital location. SES Americom demonstrated that grant of the STA Request was in the public interest and would not adversely affect any other operator. SES Americom showed that no frequency coordination was required with respect to the proposed Ka-band operations of AMC-16. SES Americom noted that Intelsat Americas 5 operates at 97° W.L. in the Ku-band and that PanAmSat operates Ku-band satellites at 95° W.L. and 99° W.L. SES Americom committed to

coordinating stationkeeping matters with Intelsat and coordinating its Ku-band TT&C frequencies as needed with Intelsat and PanAmSat.

To provide flexibility to accommodate stationkeeping matters, the STA Request sought authority to operate AMC-16 centered at a location within 0.1 degrees of 97.0° W.L. STA Request, Narrative at 3 n.7. SES Americom stated that once stationkeeping discussions were completed, it would advise the Commission of any agreed upon offset.

The STA Request appeared on Public Notice on January 28, 2005.<sup>1</sup> No party filed comments on the STA Request.

### STATIONKEEPING MATTERS

As contemplated in the STA Request, SES Americom has conducted discussions with Intelsat to ensure that AMC-16 and Intelsat Americas 5 ("IA-5") can safely co-exist during the limited period of the STA. In order to facilitate joint operations, SES Americom and Intelsat have agreed to the following stationkeeping parameters:

1. IA-5 will continue to operate centered at 97.0° W.L. with a +/- 0.05 degree East/West stationkeeping tolerance.
2. If authorized by the Commission, AMC-16 would operate centered at 96.925° W.L. with a +/- 0.025 degree East/West stationkeeping tolerance.
3. Intelsat and SES Americom will exchange orbital elements and maneuver plans. These will be Keplerian elements in the TEME (True Equator, Mean Equinox) frame. Maneuver plans will contain pre- and post-maneuver predicted elements and delta velocity with direction.
4. Intelsat and SES Americom have exchanged point of contact information identifying responsible personnel to facilitate resolution of any issues that might arise during the temporary operation.

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<sup>1</sup> Policy Branch Information, Report No. SAT-00267 (rel. Jan. 28, 2005)

Under the parameters agreed to between SES Americom and Intelsat, the stationkeeping volume of AMC-16 would not overlap with that of IA-5 during the proposed temporary operation of AMC-16. No other commercial satellite is assigned at or near the 97° W.L. orbital location such that its stationkeeping volume would overlap with that of AMC-16 at 96.925° W.L. +/- 0.025 degrees.<sup>2</sup>

### FREQUENCY COORDINATION

The STA Request included a technical showing demonstrating that temporary operation of AMC-16 would not cause harmful interference to other authorized satellite operations. SES Americom showed that no coordination of the proposed Ka-band operations with adjacent licensees was necessary because AMC-16 complied with Commission technical requirements for operation in a two-degree spacing environment.<sup>3</sup>

In addition, SES Americom showed that its proposed Ku-band TT&C operations would not harm other operators. The STA Request noted that the AMC-16 command channel overlapped with frequencies on one of the IA-5 transponders, but operated on the opposite polarization, providing substantial isolation. STA Request, Technical Appendix at 1 n.1. SES Americom committed to coordinating with Intelsat with respect to the TT&C frequencies. In addition, SES Americom stated that it would advise PanAmSat of its proposed TT&C operations, although the AMC-16 TT&C frequencies do not overlap with PanAmSat's Ku-band operations at 95° W.L. and 99° W.L. *Id.*

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<sup>2</sup> The Massachusetts Institute of Technology's Lincoln Laboratories advises SES Americom regarding government spacecraft and other objects that approach or might enter an assigned stationkeeping volume of SES Americom's operational spacecraft. SES Americom coordinates either through Lincoln Labs or the other commercial satellite operator with respect to any actions that are appropriate at those times to avoid any risk of collision.

<sup>3</sup> STA Request, Technical Appendix at 1-4. The Commission has granted DIRECTV a license to operate a Ka-band satellite at 99.2° W.L. That satellite has not yet been launched, but may commence operation during the period of the requested STA. No coordination with DIRECTV is required because AMC-16 complies with the two-degree spacing requirements and will be spaced at greater than two degrees from the DIRECTV spacecraft. No FCC license is currently in effect for Ka-band operations at 95° W.L. SkyTerra's application for a Ka-band system at 95° W.L. is pending before the Commission.

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SES Americom has reached agreement with Intelsat concerning TT&C frequencies as well as stationkeeping matters. SES Americom has committed to coordinating channel access during the initial phase of the proposed operations. Intelsat has been provided technical information concerning the TT&C operations and power levels, and has agreed that harmful interference is unlikely. The parties have exchanged point of contact information in the event that any issues do arise.

SES Americom has also provided detailed information to PanAmSat concerning its proposed TT&C operations. PanAmSat has confirmed that it has no objections to SES Americom's planned operations.

### CONCLUSION

SES Americom has entered into a stationkeeping agreement with Intelsat and has successfully completed all necessary frequency coordination in connection with the AMC-16 operations proposed in the STA Request. SES Americom respectfully requests that the Commission authorize the temporary relocation of AMC-16 to 96.925° W.L., and the operation of the Ka-band payload and Ku-band TT&C at that location with an East/West stationkeeping tolerance of 0.025 degrees. Grant of the unopposed STA Request as specified herein and consistent with the conditions set forth in the application will promote efficient use of spectrum and orbital resources. SES Americom seeks expedited action to permit relocation of the spacecraft to begin as scheduled on April 9.

Respectfully submitted,



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Counsel for SES Americom, Inc.

cc: Fern Jarmulnek  
Cassandra Thomas  
Andrea Kelly  
Robert Nelson