

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
SES AMERICOM, INC.	)	File No. SAT-MOD-_____
	)	Call Sign S2445
Application for Modification of AMC-1	)	
Fixed-Satellite Space Station License	)	

**APPLICATION OF SES AMERICOM, INC.**

SES Americom, Inc. (“SES”) respectfully requests a modification of its license for the AMC-1 C- and Ku-band fixed-satellite space station to extend the satellite’s license term to May 31, 2018. The requested extension will serve the public interest by enabling SES to continue service using AMC-1 at the nominal 129° W.L. orbital location in anticipation of the launch and operation of the SES-15 satellite,<sup>1</sup> thus ensuring uninterrupted service to customers. A completed FCC Form 312 is attached, and SES incorporates by reference the technical information previously provided in support of AMC-1.<sup>2</sup>

**MODIFICATION**

AMC-1 is a hybrid C/Ku-band satellite that is licensed to operate pursuant to Commission authority at 129.15° W.L. The current authorization expires on October 15, 2016.<sup>3</sup> SES requests an extension of the AMC-1 license term to May 31, 2018. SES has calculated that

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<sup>1</sup> See *SES Satellites (Gibraltar) Ltd*, File No. SAT-PPL-20160126-00007, granted July 12, 2016.

<sup>2</sup> The most recent technical information submitted relating to AMC-1 is found in File No. SAT-MOD-20140730-00089, as amended by SAT-AMD-20150219-00006 (the “AMC-1 Modification”).

<sup>3</sup> See File Nos. SAT-MOD-20140730-00089, SAT-AMD-20150219-00006, granted May 28, 2015, Attachment to Grant at 4, ¶ 16.

there is sufficient fuel onboard the AMC-1 spacecraft for the spacecraft to continue providing reliable service during the proposed extended license term and to deorbit the spacecraft to a disposal altitude of at least 150 km above geostationary orbit, consistent with the orbital debris mitigation plan approved by the Commission.<sup>4</sup> In making these calculations, SES has assumed that standard stationkeeping maneuvers will be performed to maintain AMC-1 within its existing east-west stationkeeping tolerance.<sup>5</sup>

The satellite's overall health is good, with all satellite subsystems functioning nominally. There is no single point of failure in the satellite's design; and there is no problem with the satellite's TT&C links, including the back-up TT&C links. As a result, extending the license term for AMC-1 will serve the public interest by allowing SES to continue to use the spacecraft to provide service to customers, promoting the efficient use of satellite and orbital resources.

No change has occurred in the disposal orbit plan filed as part of the AMC-1 Modification.<sup>6</sup> Calculations performed by SES indicate that at the conclusion of the requested extension period, the spacecraft will have sufficient fuel to reach the previously specified deorbit altitude of 150 kilometers, barring a catastrophic failure of satellite components.

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<sup>4</sup> See File No. File No. SAT-MOD-20110718-00130, grant-stamped Oct. 13, 2011, Attachment to Grant at 1. SES developed the nominal lifetime prediction by estimating future fuel consumption, including for the planned deorbiting maneuvers, and taking into account fuel usage predictions based on data from previous maneuvers. SES's calculations use lifetime models that incorporate uncertainty in a number of variables including initial tank loading, fuel usage efficiency, and the oxidizer to fuel ratio.

<sup>5</sup> AMC-1 currently operates in inclined orbit. See File No. SAT-AMD-20150219-00006, Technical Appendix at 6.

<sup>6</sup> See *id.*

For the foregoing reasons, SES seeks a modification of the AMC-1 license to extend the satellite's license term through May 31, 2018.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Petra A. Vorwig

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