

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

In the Matter of)
)
SES AMERICOM, INC.) File No. SAT-MOD-_____
) Call Sign S2162
Application for Modification of AMC-3)
Fixed-Satellite Space Station License)

APPLICATION OF SES AMERICOM, INC.

SES Americom, Inc. (“SES”) respectfully requests a modification of its license for the AMC-3 fixed-satellite space station to extend the satellite’s license term to September 30, 2022. The requested extension will serve the public interest by enabling SES to continue to offer services using AMC-3, thus promoting efficient use of satellite and orbital resources. A completed FCC Form 312 is attached, and SES incorporates by reference the technical information previously provided in support of AMC-3.¹

MODIFICATION

AMC-3 is a hybrid C/Ku-band satellite that is licensed to operate pursuant to Commission authority at 72° W.L. with a license term that expires on September 30, 2017.² SES requests a five-year extension of the AMC-3 license term to September 30, 2022. SES has calculated that there is sufficient fuel onboard the AMC-3 spacecraft for the spacecraft to continue providing reliable service during the proposed extended license term and to deorbit the spacecraft consistent with the orbital debris plan the Commission has previously approved for

¹ See File Nos. SAT-LOA-19950215-00028 & SAT-MOD-20111220-00243. On January 18, 2017, the Commission reissued the license for operation at 72° W.L. pursuant to its fleet management procedures. File No. SAT-MOD-20161025-00102.

² See File No. SAT-MOD-20161025-00102, granted Jan. 18, 2017.

the satellite.³ In making these calculations, SES has assumed that standard stationkeeping maneuvers will be performed to maintain AMC-3 at its current orbital location within its existing east-west stationkeeping tolerance.⁴ Furthermore, although SES does not currently contemplate relocating AMC-3 to another orbital location, SES has made allowance in its fuel calculations for the possibility of a single relocation during the requested extension term of the AMC-3 license.⁵

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-3 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.

³ 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.

⁴ The calculations assume inclined orbit operation of the spacecraft. The last north-south stationkeeping maneuver took place on December 6, 2016, prior to relocation of AMC-3 to 72° W.L., but the satellite was maintained within the 0.05 degree north-south tolerance during the drift to 72° W.L. SES projects that the inclination will change at a rate of about 0.8 degrees per year. The expected end-of-life of the satellite accounting for inclined orbit operation and the maneuvers specified under §25.283 of the Commission's rules is September 2028.

⁵ Depending on whether there are any relocations during this time, and the distance and speed of such relocations, the expected lifetime of the satellite may be longer or shorter than estimated. In any case, SES will de-orbit the spacecraft to at least 150 km above the geostationary arc, regardless of the remaining term of the AMC-3 license.

For the foregoing reasons, SES seeks a modification of the AMC-3 license to extend the satellite's license term through September 30, 2022.

Respectfully submitted,

SES AMERICOM, INC.

By: /s/ Petra A. Vorwig

Of Counsel

Karis A. Hastings
SatCom Law LLC
1317 F Street, N.W., Suite 400
Washington, D.C. 20004
Tel: (202) 599-0975

Petra A. Vorwig
Senior Legal & Regulatory Counsel
SES Americom, Inc.
1129 20th Street, N.W., Suite 1000
Washington, D.C. 20036

Dated: June 1, 2017