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

In the Matter of	)	
	)	
SES AMERICOM, INC.	)	File No. SAT-STA-_____
	)	Call Sign S2434
Request for Special Temporary Authority for the Decommissioning of the AMC-9 Fixed-Satellite Space Station	)	

EXPEDITED ACTION REQUESTED

REQUEST OF SES AMERICOM, INC.

SES Americom, Inc. ("SES") hereby respectfully requests immediate special temporary authority ("STA") for a period of 30 days to permit SES to commence maneuvers to decommission the AMC-9 space station pursuant to a revised orbital debris mitigation plan. SES requests any necessary waiver of the orbital debris mitigation requirements of Section 25.283 in connection with the updated plan. Grant of the requested authority will serve the public interest by facilitating the removal of AMC-9 to a disposal orbit.

AMC-9 is a hybrid C/Ku-band satellite that is licensed to operate pursuant to Commission authority at 83° W.L.[1] As SES previously informed personnel in the Commission's Satellite Division, on June 17, 2017, AMC-9 experienced an anomaly of unknown origin. Due to this anomaly, SES is unable to maintain the satellite in its assigned stationkeeping volume. SES has requested and received a series of STAs permitting continued Telemetry, Tracking and Command ("TT&C") communications with AMC-9 as the satellite has drifted to the west.[2]

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[1] *See SES Americom, Inc.*, Call Sign S2434, File No. SAT-MOD-20110621-00115 (the "AMC-9 Modification"), granted Aug. 25, 2011.

[2] *See SES Americom, Inc.*, Call Sign S2434, File Nos. SAT-STA-20170619-00091; SAT-STA-20170720-00106; SAT-STA-20170811-00116; and SAT-STA-20170914-00133.

Because of the technical anomaly affecting AMC-9, the spacecraft is no longer capable of commercial operations, and SES has determined that the spacecraft should be decommissioned and placed into a disposal orbit.

Due to the anomaly, SES will not be able to comply fully with the orbital debris mitigation plan previously submitted and approved for AMC-9.[3] Specifically, SES is not able to deplete the monomethylhydrazine ("MMH") propellant aboard the spacecraft. SES estimates that approximately 100 kg of MMH is present, in a tank with a volume of 1108 liters. There is no remaining pressurant in the MMH tank, so the MMH is under a low pressure of 0.1 bar at an estimated temperature of -17 to -13 degrees Celsius. The extremely low pressure makes it impossible to expel the remaining MMH.

The approved AMC-9 orbital debris mitigation plan also establishes a disposal altitude of 294.8 km above the geostationary arc, consistent with Section 25.283(a). SES will make every effort to reach that altitude, but there can be no assurance that it will be able to do so. SES intends to fully use the remaining oxidizer in the orbit-raising maneuvers. SES will inform the Commission of the final disposal orbit distance attained for the spacecraft.

SES seeks any necessary waiver of the orbital debris mitigation provisions of Section 25.283 in connection with this STA request. Granting the waiver will serve the public interest and is consistent with Commission policy:

> The Commission may waive a rule for good cause shown. Waiver is appropriate if special circumstances warrant a deviation from the general rule and such deviation would better serve the public interest than would strict adherence to the general rule. Generally, the Commission may grant a waiver of its rules in a particular case if the relief requested

[3] AMC-9 Modification, Technical Appendix at 2-5.

> would not undermine the policy objective of the rule in question and would otherwise serve the public interest.[4]

The Commission may also take into account considerations of hardship and equity when evaluating a waiver request.[5]

These considerations justify waiver of Section 25.283(c) if one is required. The rule itself recognizes that a satellite operator's obligation to conform to specific requirements is relieved if technical failures make compliance impossible.[6] In this case, the technical anomaly limits SES's ability to conform with all aspects of the rule and with the specifics of the prior AMC-9 orbital debris mitigation plan. Waiving the rule will serve the public interest by allowing SES to proceed with maneuvers to remove AMC-9 to a disposal orbit as high above the geostationary arc as possible.

As discussed above, SES asks that the requested STA take effect immediately. SES has completed the extensive analysis needed to develop its orbit-raising plan, and SES personnel are ready to begin implementing the plan as soon as the necessary authority is in hand. SES respectfully submits that the unexpected anomaly affecting AMC-9 and the benefits of expeditiously removing the satellite to a disposal orbit constitute the type of extraordinary circumstances that justify grant of authority on less than three business days' notice under Section 25.120(a).

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4 *PanAmSat Licensee Corp*., 17 FCC Rcd 10483, 10492 (Sat. Div. 2002) (footnotes omitted).

5 *Wait Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972).

6 *See* 47 C.F.R. § 25.283(a) (specifying the required disposal orbit altitude a spacecraft operator is required to attain "barring catastrophic failure of satellite components"); § 25.283(c) (an operator must vent excess propellant, relieve pressure vessels, and take other passivation steps "unless prevented by technical failures beyond its control").

For the foregoing reasons, SES respectfully requests expedited grant of this STA to permit SES to immediately commence maneuvers to place AMC-9 into a disposal orbit.

Respectfully submitted,

SES AMERICOM, INC.

By: */s/ Nancy J. Eskenazi*

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