

S2807 SAT-RPL-20100120-00014 IB2010000311  
SES Americom, Inc.  
SES-1

Approved by OMB  
3060-0678

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APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	FCC Use Only
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**APPLICANT INFORMATION**

Enter a description of this application to identify it on the main menu:  
Replacement Satellite Application for SES-1

**1-8. Legal Name of Applicant**

Name:	SES Americom, Inc.	Phone Number:	202-478-7137
DBA Name:		Fax Number:	202-478-7101
Street:	2001 L Street, NW Suite 800	E-Mail:	daniel.mah@ses.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036
Attention:	Daniel C.H. Mah		

\*\* see also SAT-AMD-2010 0309-00040


**File #** SAT-RPL-20100120-00014 \*\*

**Call Sign** S2807 **Grant Date** 04/20/10

(or other identifier) **Term Dates** see attached

**From conditions** **To:** conditions

**Approved:** *Steph J. Duall*  
Steph J. Duall  
Chief, Policy Branch



**GRANTED\***  
International Bureau  
\*subject to conditions

**Attachment to Grant**  
**IBFS File Nos. SAT-RPL-20100120-00014; SAT-AMD-20100309-00040**  
**Call Sign: S2807**  
**April 20, 2010**

The application of SES Americom, Inc. (SES Americom) for authority to construct, launch, and operate a C/Ku-band Geostationary Orbit (GSO) Fixed-Satellite Service (FSS) space station, SES-1 (Call Sign: S2807), at the 101° W.L. orbital location IS GRANTED.<sup>1</sup> Accordingly, SES Americom is authorized to operate the SES-1 space station at the 101° W.L. orbital location to provide FSS, including direct-to-home (DTH) services, using the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency band and the 11.7-12.2 GHz (space-to-Earth) and 14.0-14.5 GHz (Earth-to-space) frequency bands, in accordance with the terms and conditions contained in its application, the Federal Communications Commission's rules, not waived herein, and the conditions of this attachment.

1. SES Americom shall prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. SES Americom shall be held responsible for all cost-recovery fees associated with ITU filings. No protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other administrations. 47 C.F.R. § 25.111(b).
2. SES Americom shall maintain its SES-1 space station within an east/west longitudinal station-keeping tolerance of  $\pm 0.05$  degrees of the 101° W.L. orbital location.
3. SES Americom must comply with the applicable laws, regulations, rules and authorization process of any country in which it seeks to provide service.
4. SES-1 must begin providing service at the 101° W.L. orbital locations in the C and Ku-bands before the satellite it is replacing, AMC-4, discontinues service at the 101° W.L. orbital location. Failure to meet this milestone shall render this authorization null and void.
5. The license term for the space station is 15 years and will begin on the date that SES Americom certifies to the Commission that the satellite has been successfully placed into orbit and its operations fully conform to the terms and conditions of this authorization. SES Americom is directed to file its certification of commencement of operation with the Chief, Satellite Division, International Bureau within 10 business days of the space station commencing operation at its assigned orbital location.

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<sup>1</sup> The application was placed on Public Notice as accepted for filing on March 3, 2010. Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report N. SAT-00671.

6. *17/24 GHz Broadcasting-Satellite Service (BSS) Capacity.* SES Americom is also granted authority to construct and launch this space station with the capability of operating in the 24.75-25.25 GHz (Earth-to-space) and 17.3-17.8 GHz (space-to-Earth) frequency bands. SES Americom has not sought and is not authorized to operate the 17/24 GHz BSS payload at the 101° W.L. orbital location.<sup>2</sup> Grant of construction and launch authority for this 17/24 GHz BSS capacity does not convey to SES Americom any status under the Commission's first-come, first-served processing framework with respect to the 17/24 GHz BSS capacity on this satellite.
- a. Construction and launch of the satellite without obtaining operational authority for the 17/24 GHz BSS capacity is at SES Americom's own risk.
  - b. Grant of authority to construct and launch the 17/24 GHz BSS payload is subject to the outcome of the Commission's rulemaking in IB Docket No. 06-123 and any requirements adopted therein.
  - c. SES Americom's request for waiver of the requirement to post a bond, pursuant to Section 25.165(a) of the Commission's rules, 47 C.F.R. § 25.165(a), IS GRANTED. Section 25.165 provides that "[f]or all satellite licenses issued after September 20, 2004, other than DBS licenses, DARS licenses, and replacement satellite licenses as defined in paragraph (e), the licensee is required to post a bond within 30 days of the grant of its license. Failure to post a bond will render the license null and void automatically." The bond requirement discourages speculation and prevents the warehousing of valuable spectrum resources. SES Americom's request to construct and launch the 17/24 GHz BSS payload triggers the requirement to post a bond. Because SES Americom is not seeking operational authority for the 17/24 GHz payload at the 101° W.L. orbital location and has no status in the Commission's first-come, first-served processing framework with respect to the 17/24 GHz BSS capacity on this satellite, we find that waiver would not undermine the policy objective of the rule and that requiring SES Americom to file a bond would not serve the public interest. For the same reasons, we also determine that SES Americom is not required to satisfy the milestone schedule established pursuant to Section 25.164 of the Commission's rules with respect to the 17/24 GHz payload. 47 C.F.R. § 25.164.
  - d. SES Americom's request for waiver of the requirement to provide an interference analysis, pursuant to Section 25.140 of the Commission's rules, 47 C.F.R. § 25.140, IS GRANTED. In its technical narrative, SES provides a hypothetical analysis showing how the 17/24 GHz BSS payload would operate in a four-degree spacing environment at an Appendix F location. Because SES Americom is not seeking authority to operate at the 101° WL orbital location, it did not provide an analysis tailored to that specific orbital location. Further, SES Americom acknowledges that if it ever seeks to obtain regular operational authority for the 17/24 GHz BSS capacity, it must fully comply with the requirements of Section 25.140 of the Commission's rules. Consequently, we find that requiring SES Americom to comply fully with the requirement to file an

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<sup>2</sup> We note that SES Americom is seeking authority to conduct in-orbit testing operations on the 17/24 GHz BSS payload at the 142.5° W.L. orbital location. IBFS File No. SAT-STA020100408-00068. Temporary operations for the purpose of in-orbit testing do not affect our analysis here.

interference analysis would be unduly burdensome and would not otherwise serve the public interest.


- e. SES Americom's request for waiver of the requirement to employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or the use of spatially independent beams pursuant to Section 25.210(f) of the Commission's rules, 47 C.F.R. § 25.140(f), IS GRANTED. Because SES Americom is not seeking authority to operate at the 101° WL orbital location, its failure to employ full frequency reuse will not preclude the use of the scarce spectrum resource by another satellite that meets the Commission's full frequency reuse requirement. Consequently, we find that requiring SES Americom to comply with the requirements to employ full frequency reuse would not serve the public interest. If, however, SES Americom seeks authority for regular operational authority for the 17/24 GHz BSS capacity at any location, SES Americom must again seek a waiver of this rule with respect to the specific operational authority sought. SES Americom is reminded that launch of this satellite without operational authority is solely at SES Americom's own risk.
  - f. SES Americom's request for waiver of the requirement to supply antenna gain contours plotted at -15 or -20 dB pursuant to Section 25.114(d)(3) of the Commission's rules, 47 C.F.R. § 25.114(d)(3), IS GRANTED. SES Americom supplied an antenna gain contours plotted at the -1, -2, -4, -6, -8, -10, and -12 dB. SES Americom explained, however, that antenna gain contours plotted at -15 and -20 dB would be beyond the edge of the globe. Consequently, we find that requiring SES Americom to comply fully with the antenna gain contour plot requirements would not provide any useful information and would not otherwise serve the public interest.
7. SES is afforded 30 days from the date of release of this action to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
8. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately. Petitions for reconsideration under Section 1.106 of the Commission's rules or applications for reconsideration under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the public notice indicating that this action was taken.

SAT- RPL - 20100120 - 00014  
File # SAT- AMD- 20100309- 00040

Call Sign S2807 Grant Date 04/20/10  
(or other identifier)

From see attached conditions Term Dates see attached conditions  
To: conditions

Approved: Stephen J. Duall  
Stephen J. Duall  
Chief, Policy Branch



International Bureau  
\*subject to conditions

9-16. Name of Contact Representative

Name: Karis A. Hastings, Esq. Phone Number: 202-637-5767

Company: Hogan & Hartson LLP Fax Number: 202-637-5910

Street: 555 Thirteenth Street, NW E-Mail: kahastings@hhlaw.com

City: Washington State: DC

Country: USA Zipcode: 20004 -1109

Attention: Relationship:

**CLASSIFICATION OF FILING**

17. Choose the buttonnext to the classification that applies to thisfiling for both questions a. and b. Choose only one for 17a and only one for 17b.

a.

(N/A) a1. Earth Station

a2. Space Station

b.

b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive-Only Station (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) b6. Transfer of Control of License or Registration (N/A) b7. Notification of Minor Modification (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite

b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States

b10. Replacement Satellite Application - no new frequency bands

b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)

b12. Petition for Declaratory Ruling to be Added to the Permitted List (N/A) b13. Other (Please specify)

<p>17c. Is a fee submitted with this application?  <input checked="" type="radio"/> If Yes, complete and attach FCC Form 159.          If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).  <input checked="" type="radio"/> Governmental Entity    <input type="radio"/> Noncommercial educational licensee  <input type="radio"/> Other (please explain):</p>	<p>17c. Fee Classification    BNY – Space Station (Geostationary)</p>
<p>18. If this filing is in reference to an existing station, enter:          (a) Call sign of station:          Not Applicable</p>	<p>19. If this filing is an amendment to a pending application enter:          (a) Date pending application was filed:          Not Applicable          (b) File number of pending application:          Not Applicable</p>

**TYPE OF SERVICE**

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:

- a. Fixed Satellite
- b. Mobile Satellite
- c. Radiodetermination Satellite
- d. Earth Exploration Satellite
- e. Direct to Home Fixed Satellite
- f. Digital Audio Radio Service
- g. Other (please specify)

21. STATUS: Choose the button next to the applicable status. Choose only one.

- Common Carrier
- Non-Common Carrier

22. If earth station applicant, check all that apply.  
Not Applicable

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

- Connected to a Public Switched Network
- Not connected to a Public Switched Network
- N/A

24. FREQUENCY BAND(S): Place an "X" in the box(es) next to all applicable frequency band(s).

- a. C-Band (4/6 GHz)
- b. Ku-Band (12/14 GHz)
- c. Other (Please specify upper and lower frequencies in MHz.)

Frequency Lower: \_\_\_\_\_ Frequency Upper: \_\_\_\_\_ (Please specify additional frequencies in an attachment)

**TYPE OF STATION**

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- (N/A) a. Fixed Earth Station
- (N/A) b. Temporary-Fixed Earth Station
- (N/A) c. 12/14 GHz VSAT Network
- (N/A) d. Mobile Earth Station
- e. Geostationary Space Station.
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION      FACILITY: Not Applicable

**PURPOSE OF MODIFICATION**

27. The purpose of this proposed modification is to: (Place an "X" in the box(es) next to all that apply.)      Not Applicable

**ENVIRONMENTAL POLICY**

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. §§ 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.

Yes       No

**ALIEN OWNERSHIP**

Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30-34.



<p>29. Is the applicant a foreign government or the representative of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>30. Is the applicant an alien or the representative of an alien?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>31. Is the applicant a corporation organized under the laws of any foreign government?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A</p>
<p>33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p>
<p>34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.</p>	

**BASIC QUALIFICATIONS**

Exhibit A

<p>35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhibit, an explanation of the circumstances.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>

<p>40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.</p>	<p>41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes.</p>	<p>42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.</p>	<p>42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?</p>
	<p>Yes <input checked="" type="radio"/> No <input type="radio"/></p>	<p>Yes <input type="radio"/> No <input checked="" type="radio"/></p>	<p>Exhibit B</p>

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

SES Americom, Inc. seeks authority to launch and operate a C/Ku-band replacement spacecraft for AMC-4 at 101 deg. W.L., to be designated SES-1.

Narrative

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

<p>44. Applicant is a (an): (Choose the button next to applicable response.)</p> <p> <input type="radio"/> Individual  <input type="radio"/> Unincorporated Association  <input type="radio"/> Partnership  <input checked="" type="radio"/> Corporation  <input type="radio"/> Governmental Entity  <input type="radio"/> Other (please specify) </p>	
<p>45. Name of Person Signing Daniel C.H. Mah</p>	<p>46. Title of Person Signing Regulatory Counsel</p>
<p>47. Please supply any need attachments.</p> <p>1:</p> <p>2:</p> <p>3:</p>	
<p>WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT  (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION  (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).</p>	

Completed Schedule S

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