

**S2826**      **SAT-AMD-20110613-00107**      **IB2011001689**  
SES Americom, Inc.  
SES-2

Approved by OMB  
3060-0678

Date & Time Filed: Jun 13 2011 6:18:19:783PM  
File Number: SAT-AMD-20110613-00107

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

**APPLICANT INFORMATION**

Enter a description of this application to identify it on the main menu:  
SES-2 Amendment to Application for Replacement Satellite S2826

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

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DBA:		Fax Number:	202-478-7101
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Country:	USA		–
Attention:	Daniel C.H. Mah		



File # SAT-AMD-20110613-00107

Coll Sign S2826 Grant Date Sept. 1, 2011  
(or other identifier)

Term Dates  
From: See attached To: See attached

Approved: John B. Nelson President

*John B. Nelson President*

**Attachment to Grant**  
**IBFS File Nos. SAT-RPL-20110429-00082 & SAT-AMD-20110613-00107**  
**Call Sign: S2826**

The application of SES Americom, Inc. (SES Americom) for authority to construct and launch a Geostationary Orbit (GSO) Fixed-Satellite Service (FSS) space station, SES-2 (Call Sign: S2826), capable of operating in the C-, Ku- and 17/24 GHz frequency bands, and to operate in the C- and Ku-bands at the 87° W.L orbital location, IS GRANTED.<sup>1</sup> Accordingly, SES Americom is authorized to operate the SES-2 space station at the 87° W.L orbital location to provide FSS, including direct-to-home (DTH) services and relay of data from the CHIRP hosted payload, using the 3700-4200 MHz (space-to-Earth) and 5925-6425 MHz (Earth-to-space) frequency bands 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 and amendment, 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-2 space station with an east/west longitudinal station-keeping tolerance of ± 0.05 degrees of the 87° W.L orbital location.
3. SES Americom must comply with the applicable laws, regulations, rules and authorization procedures of any country in which it seeks to provide service.
4. SES-2 must begin providing service at the 87° W.L orbital locations in the C- and Ku-bands before the satellite it is replacing, AMC-3, discontinues service at the 87° 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 that 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 ten business days of the space station commencing operation at its assigned orbital location.
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)

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<sup>1</sup> The application was place on Public Notice as accepted for filing on June 24, 2011. Policy Branch Information, Satellite Space Applications Accepted for Filing, *Public Notice*, Report No. SAT- 00788.

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frequency bands. SES Americom has not sought and is not authorized to operate the 17/24 GHz BSS payload at the 87° W.L orbital location. 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 rules adopted in the Commission's rulemaking in IB Docket No. 06-123 and any requirements subsequently 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 87° 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 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 SES-2's 17/24 GHz BSS capacity at the 87° W.L. 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. 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.
- e. 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

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Commission's rules, 47 C.F.R. § 25.114(d)(3), IS GRANTED. SES Americom supplied an antenna gain contour plotted at the -1,-2, -4, -6, -8, and -10 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 Americom 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.



File # SAT-AMD-20110613-00107

Call Sign S2826 Grant Date Sept. 1, 2011  
(or other identifier)

Term Dates  
From: See Attached To: See Attached

Approved: RJ

*Robert B. Nelson*  
*Chair, Satellite Division*

9-16. Name of Contact Representative			
Name:	Karis Hastings	Phone Number:	202-637-5767
Company:	Hogan Lovells US LLP	Fax Number:	202-637-5910
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City:	Washington	State:	DC
Country:	USA	Zipcode:	20004-
Attention:	Relationship:		
CLASSIFICATION OF FILING			

<p>17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.</p> <p><input type="radio"/> a1. Earth Station  <input checked="" type="radio"/> a2. Space Station</p>	<p>(N/A) b1. Application for License of New Station  (N/A) b2. Application for Registration of New Domestic Receive–Only Station  <input checked="" type="radio"/> b3. Amendment to a Pending Application  <input type="radio"/> b4. Modification of License or Registration  b5. Assignment of License or Registration  b6. Transfer of Control of License or Registration  <input type="radio"/> b7. Notification of Minor Modification  (N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed Satellite  (N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United States  (N/A) b10. Other (Please specify)</p> <p>(N/A) b11. Application for Earth Station to Access a Non–U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States  (N/A) b12. Application for Database Entry  <input type="radio"/> b13. Amendment to a Pending Database Entry Application  <input type="radio"/> b14. Modification of Database Entry</p>
<p>17c. Is a fee submitted with this application?</p> <p><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).</p> <p><input type="radio"/> Governmental Entity    <input checked="" type="radio"/> Noncommercial educational licensee  <input type="radio"/> Other(please explain):</p>	
<p>17d.</p> <p>Fee Classification CWY – Space Station Amendment(Geostationary)</p>	

<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: S2826</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:</p> <p>(a) Date pending application was filed: 04/29/2011</p> <p>(b) File number: SATRPL2011042900082</p>
<p><b>TYPE OF SERVICE</b></p> <p>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:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> a. Fixed Satellite</li> <li><input type="checkbox"/> b. Mobile Satellite</li> <li><input type="checkbox"/> c. Radiodetermination Satellite</li> <li><input type="checkbox"/> d. Earth Exploration Satellite</li> <li><input checked="" type="checkbox"/> e. Direct to Home Fixed Satellite</li> <li><input type="checkbox"/> f. Digital Audio Radio Service</li> <li><input type="checkbox"/> g. Other (please specify)</li> </ul> <p>21. STATUS: Choose the button next to the applicable status. Choose only one.</p> <p><input type="radio"/> Common Carrier    <input checked="" type="radio"/> Non-Common Carrier</p> <p>22. If earth station applicant, check all that apply.</p> <p><input type="checkbox"/> Using U.S. licensed satellites  <input type="checkbox"/> Using Non-U.S. licensed satellites</p> <p>23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:</p> <p><input type="radio"/> Connected to a Public Switched Network    <input checked="" type="radio"/> Not connected to a Public Switched Network    <input checked="" type="radio"/> N/A</p>	

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.

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

26. TYPE OF EARTH STATION FACILITY:

a. Transmit/Receive

b. Transmit-Only

c. Receive-Only

d. N/A

"For Space Station applications, select N/A."

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- a — authorization to add new emission designator and related service
- b — authorization to change emission designator and related service
- c — authorization to increase EIRP and EIRP density
- d — authorization to replace antenna
- e — authorization to add antenna
- f — authorization to relocate fixed station
- g — authorization to change frequency(ies)
- h — authorization to add frequency
- i — authorization to add Points of Communication (satellites & countries)
- j — authorization to change Points of Communication (satellites & countries)
- k — authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l — authorization to change orbit location
- m — authorization to perform fleet management
- n — authorization to extend milestones
- o — Other (Please specify)

## ENVIRONMENTAL POLICY

<p>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.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p><b>ALIEN OWNERSHIP</b> 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>	
<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 of record 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>

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 of record 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?  Yes  No  N/A

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.

#### BASIC QUALIFICATIONS

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.  Yes  No

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 FCCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.  Yes  No

<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>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<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>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<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>	<input type="radio"/> Yes <input checked="" type="radio"/> No
<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>	<input type="radio"/> Yes <input checked="" type="radio"/> No Exhibit B

<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>	<input checked="" type="radio"/> Yes <input type="radio"/> No
<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 CFR 25.137, as appropriate. If No, proceed to question 43.</p>	<input checked="" type="radio"/> Yes <input type="radio"/> No
<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>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.)</p> <div style="border: 1px solid black; padding: 5px;"> <p>SES Americom, Inc. hereby amends its pending application for the SES-2 C/Ku-band replacement satellite by submitting a revised Schedule S database. The attached Schedule S contains corrected data in columns S7.1 (transmit effective output power); S9.e (polarization); S10.d (receive beam ID); and S10.e (transmit beam ID). No other changes</p> </div>	

**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

B

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.

C

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.

**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.

44. Applicant is a (an): (Choose the button next to applicable response.)

- Individual
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing  
Daniel C.H. Mah



46. Title of Person Signing  
Regulatory Counsel

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).

## FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

**THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.**

**43. Description.** (Summarize the nature of the application and the services to be provided).

SES Americom, Inc. hereby amends its pending application for the SES-2 C/Ku-band replacement satellite by submitting a revised Schedule S database. The attached Schedule S contains corrected data in columns S7.1 (transmit effective output power) ; S9.e (polarization) ; S10.d (receive beam ID) ; and S10.f (transmit beam ID) . No other changes have been made in the data previously provided.