

File # SAT-AMD - 20131113 - 00132

Call Sign \$2892 Grant Date 4 (or other identifier)

Term Dates

Approved by OMB 3060-0678

CHIEF, SATELLITE DIVISION FCC Use Only

Date & Time Filed: Nov 13 2013 3:28:19:326PM File Number: SAT-AMD-20131113-00132

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

#### APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: SES-3 (S2892) Amendment to Correct SFD Table

1-8.	Legal	Name	of Applicant
	- Cour	T (MILLO	orrippiicuit

Name:

SES Americom, Inc.

**Phone Number:** 

202-478-7137

**DBA** 

Fax Number:

202-478-7101

Name: Street:

1129 20th Street NW

E-Mail:

daniel.mah@ses.com

**Suite 1000** 

City:

Washington

State:

DC

Country:

USA

Zipcode:

20036

Attention: Mr Daniel C.H. Mah

# Attachment to Grant IBFS File Nos. SAT-RPL-20121228-00227, SAT-AMD-20131113-00132 Call Sign S2892

The application of SES Americom, Inc. (SES Americom) to operate the SES-3 satellite as a replacement for the AMC-1 satellite (Call Sign S2445) at the 103° W.L. orbital location, IBFS File No. SAT-RPL-20121228-00227, as amended by IBFS File No. SAT-AMD-20131113-00132, IS GRANTED. Accordingly, SES Americom is authorized to provide Fixed-Satellite Services (FSS) via SES-3 at the 103° W.L. orbital location in the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 11.7-12.2 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. SES Americom is also authorized to conduct telemetry, tracking and command (TT&C) operations and operate two Kuband beacons at 103° W.L. with the following center frequencies: 3700.5 MHz, 4199.5 MHz, 11701.0 MHz, 12199.0 MHz (space-to-Earth), 6423.5 MHz, and 14499.0 MHz (Earth-to-space). Operations under this authorization must be in accordance with the technical specifications set forth in SES Americom's application and Federal Communications Commission (Commission) rules not waived herein, and are subject to the following conditions:

- 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. We also note that 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. See 47 C.F.R. § 25.111(b).
- 2. SES Americom must operate SES-3 at the 103° W.L. orbital location in compliance with all existing or future coordination agreements for this location.
- 3. While at the 103° W.L. orbital location, SES Americom must maintain the SES-3 space station with an east/west longitudinal station-keeping tolerance of  $\pm$  0.05 degrees.
- 4. SES Americom is granted a waiver of Section 25.113(g), 47 C.F.R. § 25.113(g), which requires that a "launch authorization and station license (*i.e.*, operating authority) must be applied for and granted before a space station may be launched and operated in orbit." SES Americom did not seek replacement authority for AMC-1 prior to launching SES-3 in 2011. However, the operations of SES-3 in the period after the satellite's launch have not resulted, and based on the conditions adopted herein, will not result, in any adverse effects on U.S. interests. Therefore, the prior approval requirement of Section 25.113(g) would not be subverted by, and is not an impediment to, granting operating authority to SES-3.
- 5. Nothing in this order changes the license term for SES-3 which expires on June 30, 2025.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> This application was placed on Public Notice as Accepted for filing on November 15, 2013. See Policy Branch Information, Satellite Space Applications Accepted for Filing, Public Notice, Report No. SAT-00843 (IBFS File No. SAT-RPL-20121228-00227). This application was partially granted to authorize limited operation of the SES-3 satellite. SES Americom, Inc., Order, 29 FCC Rcd 3678 (Int'l Bur. rel. Apr. 4, 2014) (TT&C Order). DIRECTV, LLC filed a Petition to Deny or Defer the Application but subsequently withdrew that request on April 2, 2015.

<sup>&</sup>lt;sup>2</sup> TT&C Order, 29 FCC Rcd at 3681-82, ¶¶ 7, 12.

## Attachment to Grant IBFS File Nos. SAT-RPL-20121228-00227, SAT-AMD-20131113-00132 Call Sign S2892

- 6. The SES-3 satellite is also capable of operating in the 17.3-17.8 GHz (space-to-Earth) and 24.75-25.25 GHZ (Earth-to-space) frequency bands, and operations in these bands are authorized by Industry Canada. The Commission has exchanged letters with Industry Canada to ensure a mutual understanding regarding the operations of SES-3. The understandings, and factual background for these understandings, are provided in Appendix A and are material considerations for this authorization. In addition, operations of SES-3 in the 17/24 GHz frequency bands are subject to any Commission and Industry Canada arrangements concerning radiofrequency compatibility. With respect to Paragraph 3.2 of the Minutes of the 13<sup>th</sup> Plenary Meeting of WRC-12 (as set out in ITU Circular Letter CR/333), the Commission does not object to use of the SES-3 satellite for ensuring that frequency assignments of the Canadian Administration at 103° W.L. continue in use.
- 7. SES Americom is afforded 30 days from the date of release of this grant and authorization 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-20121228-00227

File # SAT-AMD-20131113-00132

Call Sign \$2892 Grant Date 4/2/15

(or other identifier)

From: 4/2/15 To: 6/30/25

Approved: Tose Albumurgue

\* With conditions

Tose Albumurgue

Tose Albumurgue

CHIEF, SATELLITE DIVISION



### Federal Communications Commission Washington, D.C. 20554

March 21, 2014

Mrs. Suzanne Lambert
Director, Space Services Operations
Engineering, Planning and Standards Branch
Industry Canada
15th Floor — Jean Edmond Tower North
300 Slater Street
Ottawa, Ontario, Canada
K1A 0C8

Re: Operation of the SES-3 satellite

Dear Mrs. Lambert:

This letter is to confirm the informal understanding of Industry Canada and the Federal Communications Commission (FCC) concerning the proposed operation of the SES-3 satellite.

The SES-3 satellite was launched in 2011 and is capable of operating using C-band frequencies (3700-4200 MHz downlink and 5925-6425 MHz uplink), Ku-band frequencies (11.7-12.2 GHz downlink and 14.0-14.5 GHz uplink), and 17/24 GHz band frequencies (17.3-17.8 GHz downlink and 24.75-25.25 GHz uplink), with Telecommand, Telemetry and Control (TT&C) for the satellite in the C- and Ku-band frequencies.

In connection with the operation of the satellite at the 103° W.L. orbital location, Industry Canada issued an authorization to Ciel Satellite Limited Partnership, a Canadian affiliate of SES Americom, on September 21, 2012 including a condition regarding the direction or control of the satellite facility. On December 28, 2012, SES Americom filed an application with the FCC for a license to operate the C- and Ku-band frequencies on SES-3, and amended that application on November 13, 2013. The FCC has not presently issued any authorizations to SES Americom for operations of the C- and Ku-band frequencies on SES-3 at the 103° W.L. orbital location. SES Americom's applications requesting such authority are pending and will require separate action by the FCC.

Informal Understandings Between IC and the FCC Concerning Operation of SES Americom's SES-3 Satellite

It is my understanding that our agencies have concurred on the following technical issues concerning the operation of the SES-3 satellite:

For purposes of No. 18.1 of the International Telecommunication Union (ITU) Radio
Regulations, the FCC will be the licensing administration for the C- and Ku- band frequencies on
SES-3 and, while the satellite is located at the 103° W.L. orbital location, Industry Canada is the
licensing administration for the 17/24 GHz band frequencies of the SES-3 satellite.

- Operation of the SES-3 satellite at any location other than 103° W.L. will be subject solely to the
  licensing authority of the FCC, including the operation of the 17/24 GHz band frequencies and
  including any operations as a result of equipment failure in the satellite that results in the inability
  to maintain the satellite within ±0.05° of its assigned position at the 103° W.L. orbital location.
- SES Americom, under the authority issued by the United States will maintain control over the
  physical operations of SES-3. Ciel, under the authority issued by Canada will maintain direction
  and control of SES-3 satellite operations in the 17/24 GHz band at 103° W.L.
- 4. The FCC will retain the unilateral right in the event of extraordinary circumstances to direct SES Americom to cease operations of the satellite or any portion of the satellite, without the need for consultation with or approval from Industry Canada, for example to comply with a direction by the U.S. President under Section 706(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 606(c), or in the event of a satellite anomaly presenting an imminent danger, and SES Americom will be required to comply with any such direction.
- The FCC will consult with Industry Canada, if practicable, prior to any relocation of the satellite, or as soon thereafter as possible.
- The FCC and IC will consult with each other in the event there is any proposal by the respective operators to modify licensing arrangements concerning the SES-3 satellite to include or substitute a third administration.
- Industry Canada and the Canadian licensee will be responsible for compliance with the ITU
  Radio Regulations (in particular the coordination and notification procedures) for the Canadian
  licensee's operation at 103° W.L. in the 17/24 GHz frequency bands.
- The FCC and the U. S. licensee will be responsible for compliance with the ITU Radio Regulations (in particular the coordination and notification procedures) for the U.S. licensee's operation at 103° W.L. in the C- and Ku- frequency bands.

The informational understandings set forth above concerning operation of the SES-3 satellite do not constitute a concurrence by either the Industry Canada and the Canadian Administration or the FCC and the U.S. administration to any filings with the ITU.

Additionally, it is my understanding that in the event the FCC issues a license for SES-3, the U.S. State Department will register the SES-3 spacecraft with the Secretary-General of the United Nations, pursuant to the 1976 U.N. Convention on Registration of Objects Launched into Outer Space:

Lastly, all notices, inquiries, and correspondences from Industry Canada concerning these matters should be directed to the Chief, Satellite Division, International Bureau (phone number 202-418-2288) (email Jose.Albuquerque@fcc.gov, with a copy to Karl.Kensinger@fcc.gov), on the part of the FCC. The FCC will forward all notices, inquiries, and correspondences concerning these matters to the Director, Space Services Operations, Engineering, Planning, and Standards Branch (phone number 613.998.3948) (email Suzanne.Lambert @ic.gc.ca), on the part of Industry Canada.

If the foregoing corresponds to your understanding of the informal arrangements between our two agencies concerning the various issues involved in the proposed operation of the SES-3 satellite at the 103° W.L. orbital location, please confirm by return letter. Thank you.

Sincerely,

Fose P. Albuquerque Chief, Satellite Division International Bureau

c: Karis Hastings Counsel for SES SatCom Law LLC 1317 F Street NW, Suite 400 Washington, D.C. 20004 USA

> Daniel C.H. Mah Regulatory Counsel SES Americom, Inc. 1129 20<sup>th</sup> Street NW, Suite 1000 Washington, D.C. 20036 USA

industry incustrie Canada Canada

> 300 Slater Street Ottawa, Ontario K1A 0C8

> > MAR 2 4 2014

Our File: 46215-1 (380990 SL)

Mr. Jose Albuquerque Chief, Satellite Division International Bureau Federal Communications Commission Washington D.C. 20554 United States of America

Dear Mr. Albuquerque:

Thank you for your letter of March 21, 2014, setting out our informal understandings concerning the operations of the SES-3 spacecraft at 103°W.L.

I am pleased to provide Industry Canada's confirmation of these understandings.

I want to express my appreciation for the support your administration is giving to this kind of commercial arrangement which facilitates the delivery of important and valuable satellite services in our respective countries.

Yours sincerely,

Mrs. Suzanne Lambert

Director, Space Services Operations

Engineering, Planning and Standards Branch

Canada

9-16. Name of Contact Representative

Name:

Karis A. Hastings

Phone Number:

202-599-0975

Company:

SatCom Law LLC

Fax Number:

Street:

1317 F Street, NW

E-Mail:

karis@satcomlaw.com

Suite 400

**USA** 

City:

Washington

State:

DC

Country:

Zipcode:

20004 -

Attention:

Relationship:

Legal Counsel

#### **CLASSIFICATION OF FILING**

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.

o a1. Earth Station

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) b2. Application for Registration of New Domestic Receive-Only Station

**b** b3. Amendment to a Pending Application

o b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

o 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)

(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

o b13. Amendment to a Pending Database Entry Application

o b14. Modification of Database Entry

17c. Is a fee submitted with this application	on?	
	159. If No, indicate reason for fee exemption (se	ee 47 C.F.R.Section 1.1114).
O Governmental Entity O Noncomme	rcial educational licensee	
Other(please explain):		
17d.		
Fee Classification CWY – Space Station A	Amendment(Geostationary)	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending an modification please enter only the file number:	oplication enter both fields, if this filing is a
(a) Call sign of station: S2892	(a) Date pending application was filed:	(b) File number:
,	12/28/2012	SATRPL2012122800227

## 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	A Company of the Comp	
d. Earth Exploration Satellite		
e. Direct to Home Fixed Satellite		
f. Digital Audio Radio Service		
g. Other (please specify)		
<del>_</del>		
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.	
only one.	Using U.S. licensed satellites	
Common Carrier Non-Common Carrier	Using Non–U.S. licensed satellites	
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these	
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 a	pplicable 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
o b. Temporary—Fixed Earth Station
o c. 12/14 GHz VSAT Network
o d. Mobile Earth Station
e. Geostationary Space Station
o f. Non-Geostationary Space Station
o g. Other (please specify)
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit-Only Receive-Only 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.)	is a
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 & Description of Satellites & Description of Satel	
m — authorization to perform fleet management  n — authorization to extend milestones  o — Other (Please specify)	

## 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, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	•	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	No	0	N/A
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?	0	Yes	•	No	0	N/A

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	0	No O	, 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.			۵		
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.		O Y	es	<b>©</b> 1	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 FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.		O Y	es	<b>⊚</b> 1	No

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 explination of circumstances.	O Yes	<b>⊚</b> No
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	O Yes	<b>⊚</b> No
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 exhinit, an explanation of the circumstances.	O Yes	<b>⊚</b> No
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.	Exhibit B	

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.	Yes	O No
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.	O Yes	<b>⊚</b> No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we coordinated or is in the process of coordinating the space station?	hat administr	ation has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description box, please go to the end of the form to view it in its entirety.)	on does not a	ppear in this
SES Americom, Inc. (SES) hereby amends the SES-3 application to correct a ta Technical Appendix. See attached narrative.	ble in th	ıe
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.	<b>●</b> 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.	O 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.	o 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.

44. Applicant is a (an): (Choose the button next to applic	cable response.)	*
O Individual		
O Unincorporated Association		
O Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
		,
45. Name of Person Signing	46. Title of Person	n Signing
Daniel C.H. Mah	Regulatory Counse	sel
>	7	1
WILLFUL FALSE STATEMENTS MADE O (U.S. Code, Title 18, Section 100 (U.S. Code, Title 47, Section 312(a)	01), AND/OR REVOCATION OF A	ANY STATION AUTHORIZATION

#### 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.