

SAT-MOD-20200615-00074, as amended by File # SAT-AMD-20200818-00098

Call Sign **S2713** Grant Date **2/3/2021**

(or other identifier)

Approved by OMB 3060-0678

From 2/3/2021

To: 1/31/2022

Chief, Satellite Policy Branch

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

Date & Time Filed: Aug 18 2020 12:11:27:990PM File Number: SAT-AMD-20200818-00098

Enter a description of this application to identify it on the main menu:

Amendment to Application for Modification of AMC-18 Fixed-Satellite Space Station License

1-8. Legal Name of Applicant

Name:

SES Americom, Inc.

Phone Number:

202-478-7143

DBA

Fax Number:

202-478-7111

Name: Street:

1129 20th Street NW

E-Mail:

petra.vorwig@ses.com

Suite 1000

City:

Washington

State:

DC

Country:

USA

Zipcode:

20036

Attention: Ms Petra A Vorwig

ATTACHMENT TO GRANT

SES Americom, Inc.

IBFS File Nos. SAT-MOD-20200615-00074; SAT-AMD-20200818-00098

IBFS File No(s):	SAT-MOD-20200615-00074, SAT-AMD-20200818- 00098 ¹	G R A N T E D – With Conditions			
Licensee/Grantee:	SES Americom, Inc.	vvidi Collations			
Call Sign:	\$2713	COMMUNIC			
Satellite Name:	AMC-18				
Orbital Location:	83.0° W.L.				
(required station-	(+/- 0.05 degrees east-west station keeping)	COMMISSION			
keeping tolerance)		THIS S			
Administration:	United States of America	International Bureau			
Nature of Service:	Fixed-Satellite Service (FSS)	Satellite Division			
Scope of Grant:	Modification to specify operations of AMC-18 at the 83.0° W.L. orbital location instead of the previously authorized orbital location of 139.0° W.L., and to provide FSS at 83.0° W.L. ²				
Previous Grant(s):	at the 139.0° W.L. orbital location, operating under a U.S. license, ³ IBFS File No. SAT-A/O-20171221-00174 (granted, Mar. 8, 2018). Grant of petition for declaratory ruling to add replacement satellite AMC-18 to the				
	Commission's Permitted Space Station List, operating in orbital location, IBFS File No. SAT-PPL-20061006-0011				
Service Area(s):	See Technical Appendix at 1.	Granted, Dec. 1, 2000).			
Frequencies:	3700-4200 MHz (space-to-Earth)				
1	5925-6425 MHz (Earth-to-space)				
	Tracking, telemetry and command center frequencies: 3700.5 MHz; 4199.5 MHz (space-to-Earth) 6423.5 MHz (Earth-to-space)				

Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:

1. SES must prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. SES will 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

¹ The modification application and the amendment were placed on Public Notice as accepted for filing on September 18, 2020. *See Satellite Policy Branch Information, Space Station Application Accepted for Filing*, Public Notice, Report No. SAT-01498 (Sept. 18, 2020).

² The Satellite Division previously granted two applications for special temporary authority to drift AMC-18 to the 83.0° W.L. orbital location. *See* IBFS File Nos. SAT-STA-20201022-00124 and SAT-STA-20201006-00122. On December 14, 2020, SES filed a letter to indicate that the AMC-18 space station had arrived at the 83° W.L. orbital location on December 4, 2020 and, therefore, drift authority was no longer requested as part of their modification application. *See* Letter from Petra A. Vorwig, SES Americom, Inc. to Marlene H. Dortch, Secretary, FCC (filed Dec. 14, 2020).

³ In 2018, the Satellite Division granted a U.S. license for AMC-18 to operate at the 139.0° W.L. orbital location. The same space station call sign was maintained for purposes of administrative convenience and clarity.

ATTACHMENT TO GRANT

SES Americom, Inc.

IBFS File Nos. SAT-MOD-20200615-00074; SAT-AMD-20200818-00098

administrations, coordination agreements are successfully completed. 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 CFR § 25.111.

- 2. SES must operate AMC-18 at the 83.0° W.L. orbital location in accordance with any existing or future coordination agreements for this location. In the absence of a coordination agreement, such operations must comply with applicable provisions of the ITU Radio Regulations as the Commission cannot guarantee the success of the required coordination.
- 3. In connection with the provision of service in any particular country, SES is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 4. SES must maintain the AMC-18 space station within an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees at the 83.0° W.L. orbital location.
- 5. The operations of AMC-18 in the 3700-4200 MHz band, within the contiguous United States, are subject to the terms of the 3.7-4.2 GHz Report and Order (FCC 20-22), including section 2.106, footnote NG182 and footnote NG457A, future actions in the proceeding, and actions on delegated authority taken in accordance with the Commission's Order (see, e.g., Public Notice DA 20-578, released June 1, 2020, announcing accelerated clearing in the 3.7 4.2 GHz band).
- 6. The operations of AMC-18 and associated earth stations must comport with the applicable uplink and downlink limits in 47 CFR § 25.140(a)(3) of the Commission's rules, unless SES coordinates any non-conforming operations with the operations of U.S.-licensed geostationary orbit space stations within 6 degrees of the 83.0° W.L. orbital location. SES must also comport with the maximum power limits indicated in existing or future coordination agreements at 83.0° W.L. Non-conforming operation must also be coordinated with respect to those operations of non-U.S.-licensed space stations within 6 degrees of 83.0° W.L. involving approved communications with U.S.-licensed earth stations.
- 7. The power flux-density (PFD) at the Earth's surface produced by the emissions from the AMC-18 space station, in the 3700-4200 MHz frequency band (space-to-Earth), must not exceed the applicable power flux-density limits contained in No. 21.16 in Article 21 of the ITU Radio Regulations.
- 8. AMC-18's operations in the 5925-6425 MHz frequency band (Earth-to-space) are subject to No. 5.457A of the ITU Radio Regulations, which states that earth stations located on board vessels may communicate with space stations of the fixed-satellite service. Such use shall be in accordance with Resolution 902 (WRC-03).
- 9. SES has been granted waiver of sections 25.114(d)(14)(ii) and 25.283(c) of the Commission's rules, 47 CFR §§ 25.114(d)(14)(ii), 25.283(c).⁴ Sections 25.114(d)(14)(ii) and 25.283(c) specify that space stations must discharge all stored energy sources at end-of-life of the space station. The AMC-18 space station is a Lockheed Martin model A2100A spacecraft with oxidizer tanks that were permanently sealed by firing pyrotechnic valves. As a result, residual pressure will remain at the space station's end of operational life. SES projects the amount of oxidizer remaining at end-of-life to be 7.2 kg, in each of the two tanks with a volume of roughly 229.1 liters per tank. This waiver is granted because modification of the spacecraft would present an undue hardship, since AMC-18 is an in-orbit space station and venting AMC-18's oxidizer tanks would require direct retrieval of the satellite, which is not currently possible. In making this determination, we note that the information submitted in the application is not sufficient to support a finding that the intent of the rule would be satisfied by the described procedures for sealing the oxidizer tanks.
- 10. SES must maintain on file with the Commission the information required by section 25.172 of the Commission's rules, 47 CFR § 25.172.

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⁴ See IBFS File No. SAT-A/O-20171221-00174, condition 6, granted, Mar. 8, 2018.

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SES Americom, Inc. IBFS File Nos. SAT-MOD-20200615-00074; SAT-AMD-20200818-00098

- 11. Within 30 days of completion of the end-of-life maneuvers, SES must send a letter to the Chief, Satellite Division, International Bureau, indicating the apogee and perigee of the AMC-18 space station disposal orbit.
- 12. Grant of this application does not change the license term for the AMC-18 space station, which expires on January 31, 2022.⁵

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 CFR § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action	February 3, 2021	
Date:		
Term Dates	From: February 3, 2021	To: January 31, 2022

Approved:

Merissa L. Velez

Chief, Satellite Policy Branch

Mid. Wit

⁵ See IBFS File No. SAT-PPL-20061006-00118 (grant stamp, Dec. 7, 2006).

9–16. Name of Contact Representative

Name: Karis Hastings **Phone Number:** 202–599–0975

Company: SatCom Law LLC **Fax Number:**

Street: 1317 F Street, N.W. E-Mail: karis@satcomlaw.com

Suite 400

City: Wasington State: DC

Country: USA 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.

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

b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

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

b13. Amendment to a Pending Database Entry Application

b14. Modification of Database Entry

17c. Is a fee submitted with this applicati If Yes, complete and attach FCC Form	on? 159. If No, indicate reason for fee exemption (se	ee 47 C.F.R.Section 1.1114).
Governmental Entity 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 apmodification please enter only the file number:	oplication enter both fields, if this filing is a
(a) Call sign of station: S2713	(a) Date pending application was filed:	(b) File number:
32/13	06/15/2020	SATMOD2020061500074

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 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 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.
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:
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.)	
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 & Description of Statellites & De	
k — authorization for facilities for which environmental assessment and radiation hazard reporting is required I — authorization to change orbit location m — authorization to perform fleet management n — authorization to extend milestones X o — Other (Please specify)	

ENVIRONMENTAL POLICY

under the laws of a foreign country?

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.	_		•			
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 er	ı roı	ıte o	r	
29. Is the applicant a foreign government or the representative of any foreign government?	٥	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	, o	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	0	Yes	•	. No	· o	N/A

O Yes No

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

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.	Exhibits A and B
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 FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	Yes 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.	• Yes	⊚ 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	• Yes	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.	• Yes	⊘ 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.		

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.	• Yes	⊚ No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, v coordinated or is in the process of coordinating the space station?	vhat administr	ration has

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. hereby amends its pending application for modification of its license for the AMC-18 fixed-satellite space station by updating the timing for relocating the satellite from 139 W.L. to 83 W.L. SES now plans to move the satellite starting on October 16, 2020, rather than July 16, 2020.

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.	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.

■ To #2.2 doub		
Individual		
 Unincorporated Association 		
O Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
45. Name of Person Signing	46. Title of Person Signing	
Petra A. Vorwig	Vice President, Legal & Regulatory Affairs	
>	•	

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).

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