

S2134 SAT-MOD-20140207-00020 IB2014000230
SES Americom, Inc.
AMC-2

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File # SAT-MOD-20140207-00020

Call Sign S2134 Grant Date 04/10/14
(or other identifier)

From 04/10/14 To: conditions

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

Approved by OMB
3060-0678

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

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
AMC-2 (S2134) Mod for Reorientation to NA at 80.85 W.L.

1-8. Legal Name of Applicant

Name:	SES Americom, Inc.	Phone Number:	202-478-7137
DBA Name:		Fax Number:	202-478-7101
Street:	1129 20th Street NW Suite 1000	E-Mail:	daniel.mah@ses.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 -
Attention:	Mr Daniel C.H. Mah		

Attachment to Grant
SES Americom, Inc.
IBFS File No. SAT-MOD-20140207-00020
Call Sign S2134

The application of SES Americom, Inc. (SES Americom), IBFS File No. SAT-MOD-20140207-00020, to modify the authorization of the AMC-2 space station (Call Sign S2134) at the 80.85° W.L. orbital location is GRANTED.¹ Specifically, SES Americom is authorized to: (1) reorient the AMC-2 space station to provide coverage to North America, rather than its current orientation towards South America, from the 80.85° W.L. orbital location; (2) provide Fixed-Satellite Service (FSS) 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; (3) provide direct-to-home FSS in the 11.7-12.2 GHz (space-to-Earth) frequency band; and (4) conduct telemetry, tracking and command functions using the following center frequencies: 3700.5 MHz, 4199.5 MHz, and 12198 MHz (space-to-Earth), and 6423.5 MHz (Earth-to-space). Operations of the AMC-2 space station under this authorization must be in accordance with the technical specifications set forth in SES Americom's application, the Federal Communications Commission's rules, and are subject to the following conditions:

1. All operations at the 80.85° W.L. orbital location must be on an unprotected and non-harmful interference basis, *i.e.*, SES Americom must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating station.
2. In the event of any harmful interference as a result of AMC-2's operations at 80.85° W.L., SES Americom must cease operations immediately upon notification of such interference, and must inform the Commission, in writing, immediately of such an event.
3. With the exception of the space station's orientation, and unless otherwise noted herein, SES Americom must comply with the conditions placed on AMC-2's operations in IBFS File No. SAT-MOD-20130225-00024 (granted May 9, 2013).
4. In connection with the provision of service in any particular country, SES Americom is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
5. SES Americom must operate the AMC-2 space station at the 80.85° W.L. orbital location in compliance with all existing and future coordination agreements.
6. SES Americom's request for a waiver of Section 25.210(j) of the Commission's rules, 47 C.F.R. § 25.210(j), is GRANTED, subject to conditions. Section 25.210(j) requires geostationary space stations to be maintained within +/-0.05 degrees of their assigned orbital longitude in the east-west direction, unless specifically authorized by the Commission to operate with a different longitudinal tolerance. The Division previously granted SES Americom a waiver of Section 25.210(j) to operate AMC-2 with an east-west station-keeping tolerance of +/- 0.15 degrees of 80.85° W.L., to facilitate the coordinated operation of AMC-2 and AMC-5 (Call Sign S2156) in the same station keeping volume at this orbital location. *See* IBFS File No. SAT-MOD-20130225-00024 (granted May 9, 2013). SES Americom requests a continuation of the waiver to operate AMC-2 with an east-west station keeping

¹ This modification application was placed on public notice, *Policy Branch Information, Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-00999 (Feb. 28, 2014). No comments were filed in response to the Public Notice.

tolerance of +/- 0.15 degrees within a combined station-keeping volume with AMC-5.² SES Americom also states that AMC-5 will be retired in May 2014. Therefore, SES's authority to operate AMC-2 with a station keeping tolerance of +/- 0.15 degrees will terminate after AMC-5 leaves the 80.85° W.L. orbital location. After the departure of AMC-5, SES Americom is authorized to operate the AMC-2 space station with an east-west station keeping tolerance of +/- 0.1 degree of 80.85° W.L. This waiver and the operations it permits will terminate in the event that another space station is launched or relocated into a location such that its station-keeping volume would overlap AMC-2's +/- 0.1 degree station-keeping volume, but not overlap AMC-2's +/- 0.05 degree station-keeping tolerance, unless SES Americom successfully coordinates AMC-2's physical operations with those of the other space craft. This waiver is limited to AMC-2 and does not extend to any replacement space craft.

7. SES Americom's request for continued application of its waiver of Section 25.114(d)(3) of the Commission's rules, 47 C.F.R. 25.114(d)(3), IS GRANTED. *See* IBFS File No. SAT-MOD-20130225-00024, ¶ 8 (granted May 9, 2013).

8. SES Americom's request for a waiver of Section 25.114(c) of the Commission's rules, 47 C.F.R. § 25.114(c), is GRANTED. *See International Bureau Adopts Policy of Granting Interim Waiver of Certain Requirements for Space Station Applications*, Public Notice, DA 14-90 (rel. Jan. 28, 2014).

9. SES Americom must maintain full operational control of AMC-2 at all times.

10. This authorization is issued on the express understanding that, to the extent SES Americom and its affiliated companies, pursuant to any arrangement with EMPRESA ARGENTINA DE SOLUCIONES SATELITALES SOCIEDAD ANONIMA AR-SAT, and its affiliated companies, will conform its operations to any parameters agreed to in coordination agreements between the Administration of Argentina and other Administrations, responsibility for both compliance with, and enforcing compliance with, those arrangements and agreements is a matter that would arise under private law.

11. This authorization is issued with the understanding that this grant is not an approval of any specific arrangement entered into by SES Americom, its subsidiaries and affiliates, nor of any specific provision of any such arrangement concerning operation of the AMC-2 space station, nor is this grant an approval of an arrangement/agreement concerning any related matter, nor of any specific provision of any such arrangement/agreement concerning any related matter.

12. This authorization is issued with the understanding that the United States remains the licensing Administration of the AMC-2 space station and its communications payloads, for purposes of International Telecommunication Union (ITU) Radio Regulation 18.1, and that any operations of AMC-2 at the 80.85° W.L. orbital location are pursuant to ITU Radio Regulation 4.4.

13. This authorization is issued with the understanding that, with respect to its filings with the ITU for the 80.85° W.L. orbital location, the Administration of Argentina is not acting pursuant to Article 9 of the Radio Regulations on behalf of the United States Administration.

14. This authorization is issued with the understanding that this grant does not in any way express a view concerning, or agreement as to, the validity or lack of validity of any ITU filing at or within the vicinity of the 80.85° W.L. orbital location.

² SES Americom, Inc. IBFS File No. SAT-MOD-20130325-00054 (granted June 4, 2013) (authorizing AMC-5 to operate at 80.85° W.L., and granting a waiver of Section 25.210(j) to allow the AMC-5 and AMC-2 space stations to operate within a combined station-keeping tolerance of +/- 0.15 degrees of 80.85° W.L.).

15. SES Americom must comply with the power levels specified in Section 25.212 of the Commission's rules, 47 C.F.R. § 25.212, unless SES Americom coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within six degrees orbital separation of the 80.85° W.L. orbital location. SES Americom must inform the Commission of the power levels it has coordinated. In addition, SES Americom must inform all affected earth station operators that Section 25.220 of the Commission's rules, 47 C.F.R. § 25.220, applies to operations that exceed the power levels specified in Section 25.212. Even when power levels higher than those in Section 25.212 have been coordinated, the following levels cannot be exceeded: (i) For AMC-2's operations in the C-band to, from, or within the United States, the input power density of the uplink digital carriers of earth stations operating with AMC-2's digital carriers must not exceed -38.7 dBW/Hz, and the downlink EIRP density of AMC-2's digital carriers must not exceed -29.7 dBW/Hz; (ii) For AMC-2's operations in the Ku-band to, from, or within the United States, the input power density of the uplink digital carriers of earth stations operating with AMC-2's digital carriers must not exceed -45 dBW/Hz and the downlink EIRP density of AMC-2's digital carriers must not exceed -20.3 dBW/Hz.

16. Grant of this authorization does not convey to SES Americom any authority to operate a space station at the 80.85° W.L. orbital location beyond the term granted herein, nor any status in the United States satellite licensing process relative to applications for authority to operate a regularly authorized satellite at this orbital position.

17. Nothing in this authorization extends the license term for the AMC-2 space station, which expires on May 31, 2016.³

18. SES Americom has 30 days from the date of this grant to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

19. 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 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106 and 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.



*with conditions

File # SAT-MOD-20140207-00020

Call Sign S2134 Grant Date 04/10/14
(or other identifier)

Term Dates see
From 04/10/14 To: conditions

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

³ See SES Americom, Inc. IBFS File No. SAT-MOD-20111025-00209 (granted Feb. 24, 2012).

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, Suite 400	E-Mail:	karis@satcomlaw.com
City:	Washington	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
- ☐ 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

<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 type="radio"/> Noncommercial educational licensee</p> <p><input type="radio"/> Other (please explain):</p>	
<p>17d.</p> <p>Fee Classification BFY – Space Station Modification (Geostationary)</p>	
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: S2134</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: (b) File number: SATMOD2013022500024</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.

- ☐ Using U.S. licensed satellites
- ☐ 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 & 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

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.

29. Is the applicant a foreign government or the representative of any foreign government?

☐ Yes ☒ No

30. Is the applicant an alien or the representative of an alien?

☐ Yes ☒ No ☐ N/A

31. Is the applicant a corporation organized under the laws of any foreign government?

☐ Yes ☒ No ☐ 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?

☐ Yes ☒ No ☐ 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 ☐ 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 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>	<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>	

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 ☐ 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, what administration has coordinated or is in the process of coordinating the space station?

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 seeks a modification of the license for AMC-2, call sign S2134, to reorient the spacecraft for coverage of North America at its current orbital location, 80.85 deg. W.L. +/- 0.15 degrees.

Narr and Tech App

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.

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

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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).

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