

\*\* See also  
SAT-AMD-20100514-00101  
SAT-AMD-20100527-00112

File # SAT-MOD-20100412-00075

Call Sign AMSC-1 Grant Date 11/08/10

(or other identifier)

Term Dates

From 11/08/10 To: \_\_\_\_\_

Approved by OMB  
3060-0678

Approved: Stephen J. Duall

Stephen J. Duall

Chief, Satellite Policy Branch



AMSC-1 SAT-MOD-20100412-00075 IB2010001173  
LightSquared Subsidiary LLC  
MSAT-2

Date & Time Filed: Apr 12 2010 6:17:49:583PM  
File Number: SAT-MOD-20100412-00075

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:  
Modification to relocate MSAT-2 to 103.3W

1-8. Legal Name of Applicant

Name:	SkyTerra Subsidiary LLC	Phone Number:	703-390-2001
DBA Name:		Fax Number:	703-390-2700
Street:	10802 Parkridge Blvd	E-Mail:	jeff.carlisle@skyterra.com
City:	Reston	State:	VA
Country:	USA	Zipcode:	20191
Attention:	Mr Jeffrey J. Carlisle		

**Attachment**  
**LightSquared Subsidiary LLC**  
**IBFS File Nos. SAT-MOD-20100412-00075, SAT-AMD-20100514-00101, SAT-AMD-20100527-00112**  
**Call Sign: AMSC-1**

The application of LightSquared Subsidiary LLC (LightSquared),<sup>1</sup> IBFS File No. SAT-MOD-20100412-00075, as amended by SAT-AMD-20100514-00101 and SAT-AMD-20100527-00112, to modify its authorization to operate the MSAT-2 space station (Call Sign: AMSC-1), IS GRANTED. Accordingly, the license term for the MSAT-2 space station is extended until December 31, 2011. LightSquared is also authorized to use the center frequencies of 11.7005 GHz and 11.701 GHz (space-to-Earth) and 14.005 GHz and 14.4995 GHz (Earth-to-space) to conduct telemetry, tracking, and telecommand operations necessary to drift MSAT-2 to the 103.3° W.L. orbital location and to maintain it at that location. In addition, LightSquared is authorized to use the 1530-1544/1545-1559 MHz (space-to-Earth) and 1631.5-1645.5/1646.5-1660.5 MHz (Earth-to-space) frequency bands for links with mobile terminals and to use the 10.75-10.95 GHz (space-to-Earth) and 13.0-13.15 GHz and 13.20-13.25 GHz (Earth-to-space) frequency bands for feeder link operations from the 103.3° W.L. orbital location and during the drift to 103.3° W.L. This authorization is granted in accordance with the specifications set forth in LightSquared's application and the Federal Communication Commission's (Commission) rules, and is subject to the following conditions:

1. LightSquared shall comply with all terms and conditions of the authorization for the MSAT-2 space station adopted in *American Mobile Satellite Corp.*, Memorandum Opinion, Order and Authorization, 4 FCC Rcd 6041 (1989), unless explicitly waived or modified by the Commission.
2. The applicant's request for waiver of Section 25.283(c) of the Commission's rules, 47 C.F.R. § 25.283(c), IS GRANTED. Section 25.283(c) requires discharge of all stored energy sources when a space station is retired from service. MSAT-2 is a Boeing 601 model spacecraft, which has a liquid propulsion system that includes two helium pressurant tanks and two pairs of fuel and oxidizer tanks. The fuel and oxidizer tanks will be vented in the end-of-life shutdown procedure, but there is no mechanism for venting the helium tanks. Instead, the helium tanks were sealed by firing pyrotechnic valves shortly after launch in 1995. LightSquared states that each helium tank has an enclosed volume of 43.42 liters and estimates that the mass and pressure of residual helium in each tank will be 129 grams and 262 psi, respectively, at end-of-life. We waive Section 25.283(c) in light of the fact that the action taken to seal the helium tanks was taken prior to the adoption of this rule, and compliance would require direct retrieval of the spacecraft.
3. This action is taken 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 announcing this action.



File # SAT-MOD-20100412-00075  
SAT-AMD-20100514-00101 ; SAT-AMD-20100527-00112  
Call Sign AMSC-1 Grant Date 11/08/10  
(or other identifier)  
Term Dates  
From 11/08/10 To: \_\_\_\_\_  
Approved: Stephen J. Duall  
Stephen J. Duall  
Chief, Satellite Policy Branch

<sup>1</sup> The modification application was originally filed in the name of SkyTerra Subsidiary LLC. On July 20, 2010, SkyTerra Subsidiary LLC notified the Commission of the change of its corporate name to LightSquared Subsidiary LLC. Letter from Jeffrey J. Carlisle, Executive Vice President, LightSquared GP Inc., to Marlene H. Dortch, Secretary, FCC, dated July 20, 2010.

9-16. Name of Contact Representative

<b>Name:</b>	Bruce D. Jacobs	<b>Phone Number:</b>	202-663-8077
<b>Company:</b>	Pillsbury Winthrop Shaw Pittman LLP	<b>Fax Number:</b>	202-663-8007
<b>Street:</b>	2300 N St. NW	<b>E-Mail:</b>	bruce.jacobs@pillsburylaw.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20037-
<b>Attention:</b>		<b>Relationship:</b>	Legal Counsel

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</p> <p><input checked="" type="radio"/> a2. Space Station</p>	<p>(N/A) b1. Application for License of New Station</p> <p>(N/A) b2. Application for Registration of New Domestic Receive-Only Station</p> <p><input type="radio"/> b3. Amendment to a Pending Application</p> <p><input checked="" type="radio"/> b4. Modification of License or Registration</p> <p>b5. Assignment of License or Registration</p> <p>b6. Transfer of Control of License or Registration</p> <p><input type="radio"/> b7. Notification of Minor Modification</p> <p>(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite</p> <p>(N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States</p> <p>(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</p> <p>(N/A) b12. Application for Database Entry</p> <p><input type="radio"/> b13. Amendment to a Pending Database Entry Application</p> <p><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 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: AMSC-1</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:</p> <p>(b) File number: SATMOD2009042900047</p>
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**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.)    (Please specify additional frequencies in an attachment)  
 Frequency Lower: 1530    Frequency Upper: 1559

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



<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?</p>	<p><input checked="" type="radio"/> Yes   <input type="radio"/> No   <input type="radio"/> N/A</p>
<p>34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.</p>	<p>Exhibit B</p>

**BASIC QUALIFICATIONS**

<p>35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.</p>	<p><input type="radio"/> Yes   <input checked="" type="radio"/> No</p>
<p>36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.</p>	<p><input type="radio"/> Yes   <input checked="" type="radio"/> No</p>

<p>37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.</p>	<p style="text-align: right;"> <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 style="text-align: right;"> <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 style="text-align: right;"> <input type="radio"/> Yes      <input checked="" type="radio"/> No </p>
<p>40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.</p>	

<p>41. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; party to the application; for these purposes.</p>	<p style="text-align: center;"> <input checked="" type="radio"/> Yes      <input type="radio"/> No         </p>
<p>42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.</p>	<p style="text-align: center;"> <input type="radio"/> Yes      <input checked="" type="radio"/> No         </p>
<p>42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?</p>	
<p>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; margin: 5px 0;"> <p>Applicant seeks authority to operate MSAT-2 (a.k.a. AMSC-1) at 103.3W.</p> </div> <p style="text-align: right;">Exhibit C</p>	

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  
Jeffrey J. Carlisle

-->

46. Title of Person Signing  
Vice President, 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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