

** See also
SAT-AMD-20100908-00191

Approved by OMB
3060-0678

File # SAT-MOD-20100405-00064

Call Sign S2358 **Grant Date** 11/05/10

From 11/08/10 **Term Dates**

Approved: *Stephen J. Duall*

Approved: Stephen J. Duall
Chief, Satellite Policy Branch



S2358 SAT-MOD-20100405-00064 IB2010001083
LightSquared Subsidiary LLC
SKYTERRA 1

Date & Time Filed: Apr 5 2010 3:31:37:230PM
File Number: SAT-MOD-20100405-00064

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

FCC 312 MAIN FORM FOR OFFICIAL USE ONLY

FCC Use Only

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Milestone extension request and waiver of orbital debris mitigation rules


1-8. Legal Name of Applicant

Name:	SkyTerra Subsidiary LLC	Phone Number:	703-390-2001
DBA Name:		Fax Number:	703-390-2770
Street:	10802 Parkridge Blvd	E-Mail:	jeff.carlisle@skyterra.com
City:	Reston	State:	VA
Country:	USA	Zipcode:	20191 -
Attention:	Mr Jeffrey J. Carlisle		

Attachment to Grant
LightSquared Subsidiary LLC
IBFS File Nos. SAT-MOD-20100405-00064, SAT-AMD-20100908-00191
Call Sign: S2358

The application of LightSquared Subsidiary LLC (LightSquared),¹ IBFS File No. SAT-MOD-20100405-00064, as amended by SAT-AMD-20100908-00191, to modify its authorization to operate the SkyTerra-1 space station (Call Sign: S2358) at 101.3° W.L. by extending the deadline for launch and commencement of operations from May 26, 2010, to January 31, 2011, IS GRANTED.² 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 SkyTerra-1 space station adopted in *Mobile Satellite Ventures Subsidiary LLC*, Order and Authorization, DA 05-1492 (Int'l Bur. 2005), unless explicitly waived or modified by the Commission.
2. LightSquared'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. SkyTerra-1 is a Boeing 702 model spacecraft, which has a liquid propulsion system. The fuel and oxidizer tanks will be vented in the end-of-life shutdown procedure. Two helium pressurant tanks, which are designed to leak before burst, will be sealed by firing pyrotechnic valves shortly after launch. LightSquared states that each helium tank has an enclosed volume of 68.8 liters and estimates that the mass and pressure of residual helium in each tank will be 719 grams and 860 psi, respectively, at end-of-life. LightSquared also states that the tanks' designed burst pressure is 5,249 psi, and that the interconnected components of the liquid propulsion system have been pressure tested to 4,000 psi. The information submitted is not sufficient to support a finding that the underlying purpose of Section 25.283(c) would be served by sealing the helium tanks without completely venting them. However, given the imminent scheduled launch of SkyTerra-1, we grant a partial waiver of the rule because undue hardship would result from requiring modification of the space station prior to launch. This action is without prejudice to possible future license requirements in connection with other spacecraft of the same manufacturing series.
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.

 GRANTED* International Bureau *with conditions	File # <u>SAT-MOD-20100405-00064</u> <u>SAT-AMD-20100908-00191</u>
	Call Sign <u>S2358</u> Grant Date <u>11/08/10</u> (or other identifier)
	Term Dates From <u>11/08/10</u> To: _____
	Approved: <u>Stephen J. Duall</u> Stephen J. Duall Chief, Satellite Policy Branch

¹ 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.

² SkyTerra-1 is scheduled to be launched aboard a Proton launch vehicle from Baikonur, Kazakhstan, on November 14, 2010.

9-16. Name of Contact Representative

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

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 Upper: 1544 (Please specify additional frequencies in an attachment)
 Frequency Lower: 1525

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 checked="" type="radio"/> Yes <input 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: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></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: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></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 for a milestone extension and partial waiver of the orbital debris mitigation requirements.</p> </div> <p>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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