Approved by OMB
3060−0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:
Request for STA re

1. Applicant

Name:	Lockheed Martin Corporation	**Phone Number:**	703−413−5970
DBA Name:		**Fax Number:**	703−413−5908
Street:	2121 Crystal Drive Suite 100	**E−Mail:**	jennifer.warren@lmco.com
City:	Arlington	**State:**	VA
Country:	USA	**Zipcode:**	22202 −
Attention:	Ms Jennifer Warren		

with conditions

FEDERAL COMMUNICATIONS COMMISSION
GRANTED
International Bureau

File # SES-STA-20110518-00600
Call Sign E7541 Grant Date 06/01/2011
(or other identifier)
Term Dates
From 06/01/2011 To 07/30/2011
Approved: [signature]

Conditions of grant of Lockheed Martin Corporation SES-STA-20110518-00600

Lockheed Martin Corporation ("Lockheed Martin") is granted special temporary authority ("STA") to operate its Carpentersville, New Jersey Ku-band fixed earth station (see File No. SES-LIC-20081103-01443, as amended) to provide telemetry, tracking and control ("TT&C") functions during the post-launch and transfer orbit phases of operation for the BSAT-3c satellite that will be operated by the Broadcasting Satellite System Corporation of Japan. Authority is granted, with conditions enumerated below, to transmit on the 17305.0 MHz telecommand uplink channel and receive telemetry signals from the BSAT-3c satellite on the 11707.5 MHz from June 1, 2011 to July 30, 2011 (60days) to encompass earth station calibration testing on June 1 through June 5, 2011, and a 23-day window running from July 1to July 23 for 6 to 10 days of TT&C operations with BSAT-3c.

This grant of authority will serve the public interest because these limited operations support a global network of control facilities that will be used to position the satellite as it progresses from transfer orbit to its final location. The safe and orderly use of the entire geostationary orbital resource and protection of the hundreds of satellites from the U.S. and other countries that operate there depends in no small part on ensuring that the BSAT-3c satellite is controlled while over North America.

1. All operations shall be on an unprotected, non-interference basis to both government and non-government operations.
2. All operations shall be limited to telemetry, tracking, and control (TT&C)
3. All emission will be within the parameters reflected in the Exhibit A attachment to SES-STA-20110518-00600.
4. Lockheed Martin must coordinate operations with space station operators that may be affected during the post-launch and transfer orbit phases of the earth station operation (Call Sign E920270) with the BSAT-3c satellite and will take all reasonable steps to swiftly eliminate any harmful interference caused.
5. In the event of any harmful interference, Lockheed Martin must inform the Commission, in writing, immediately.
6. Lockheed Martin has designated Michael Usarzewicz to be the contact person that will be available whenever transmission to, or reception from, BSAT-3c is to occur. Mr. Usarzewicz must be reachable at the following cell phone number: (609)-865-2658 and/or station number: (908) 859-4050.
7. Appropriate safety protocols must be in place prior to the operation of the terminal to ensure that persons having access to areas where radiofrequency energy in excess of the maximum permissible limits specified in 47 C.F.R. § 1.1310 are not exposed. The exterior surface of the antenna shall be prominently marked with a sign warning of the potential for exposure to high levels of radiofrequency energy.
8. This authorization is not one relating to an "activity of a continuing nature" for purposes of 47 C.F.R. § 1.62 and 5 U.S.C. § 558(c).

File # SES-STA-20110518-00600

Call Sign E7541 Grant Date 06/01/2011

(or other identifier)

Term Dates

From 06/01/2011 To: 07/30/2011

Approved: Paul E Blaco

Lockheed Martin Corporation
Carpentersville, New Jersey Earth Station
Call Sign E7541
STA Request for LEOp TT&C Operations
May 2011
Attachment

Description

Lockheed Martin Corporation ("Lockheed Martin") requests special temporary authority ("STA") to operate its Carpentersville, New Jersey Ku-band fixed earth station (see File No. SES-LIC-20081103-01443, as amended) [1] to provide telemetry, tracking and control ("TT&C") functions during the post-launch and transfer orbit phases of operation for the BSAT-3c satellite that will be operated by the Broadcasting Satellite System Corporation of Japan. BSAT-3c is currently scheduled for launch on July 1, 2011, and Lockheed Martin intents to perform test transmissions in preparation for the launch on or about June 1, 2011.[2] To the extent required to meet this timetable, Lockheed Martin requests expedited treatment of the instant STA request and action by May 31, 2011.

Lockheed Martin specifically seeks authority to transmit on the 17305.0 MHz telecommand uplink channel. The earth station would receive telemetry signals from the BSAT-3c satellite on the 11701.5 MHz channels. The mission duration for the TT&C operations requested here is 6 to 10 days. Lockheed Martin thus requests an STA window of 60 days to encompass the tests on June 1 through June 5, 2011, and a 23-day window running from July 1to July 23 for 6 to 10 days of TT&C operations, to enable it to accommodate any slippage in the launch date without the need for additional authority from the Commission. Together, the two windows for tests and TT&C operation have a duration that is less than the 30-day period specified in Section 25.120(b)(4) of the Commission's Rules, 47 C.F.R. § 25.120(b)(4).

The transmit frequencies Lockheed Martin seeks to use for the BSAT-3c TT&C support operations are not included in Lockheed Martin's former license for Call Sign E920702 and current application for the Ku-band antenna in File No. SES-LIC-20081103-01443 (under Call Sign E7541). Lockheed Martin notes, however, that the Commission previously granted Lockheed Martin STA requests for launch and early-operations TT&C support using frequencies in the ranges sought in the instant STA request. Most recently, the Commission authorized Lockheed Martin to perform launch support operations for the BSAT-3b satellite in the Fall of 2010 using the 17306.4 MHz telecommand frequency and the 11707.1 MHz telemetry frequency. *See* Request of Lockheed Martin Corp. for STA to support LEOp TT&C Functions

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[1] The pending application in File No. SES-LIC-20081103-01443, under Call Sign E7541, was filed on a provisional basis to replace Lockheed Martin's inadvertently non-renewed license for a 14.2 meter Ku-band antenna at the Carpentersville, NJ site under Call Sign E920702. Lockheed Martin's petition to reinstate the license for Call Sign E920702, as well as the "replacement" application it filed in the alternative under File No. SES-LIC-20081103-01443 and Call Sign E7541, are pending.

[2] The test transmissions that would begin on or about June 1, 2011 would occur over a period of approximately two days. During these tests, the earth station would not be communicating with any satellite; instead, the transmissions will be made with the antenna at zenith to verify RF functionality.

of BSAT-3b, File No. SES-STA-20101012-01276. *See also,* Request of Lockheed Martin Corp. for STA to Support LEOp TT&C Functions of NS-201, File No. SES-STA-20100706-00875 (STA to support launch and early operations TT&C functions for NS-201 using 17305.5 MHz); Request of Lockheed Martin Corp. for STA to Support LEOp TT&C Functions for EchoStar-7, File No. SES-STA-20020208-00160 (STA to support launch and early operations TT&C functions for EchoStar-7 satellite using 17.3-17.8 GHz band frequencies for Earth-to-space telecommand transmissions) ("EchoStar-7 TT&C STA"); Request of Lockheed Martin Corp. for STA to Support LEOp TT&C Functions of Astra 3B, File No. SES-STA-20100511-00579 (STA to support launch and early operations TT&C functions for Astra 3B using 17304 MHz). The EchoStar-7 TT&C STA request included a radiation hazard study for this frequency range that Lockheed Martin hereby incorporates by reference. *See* EchoStar-7 TT&C STA, at Attachment 3.

The 11701.5 MHz receive frequency is in the 11.7-12.2 GHz range that was authorized to Lockheed Martin under Call Sign E920702 and that is proposed in the license "replacement" application under Call Sign E7541. The parameters of operation are within the parameters in the pending application referenced in Note 1 above.

Lockheed Martin's proposed transmissions on the 17305.0 MHz transmit frequency will use the emission designators for telecommand functions that are proposed in the pending license application, or will use carriers that do not exceed the highest e.i.r.p., e.i.r.p. density, and bandwidth prescribed in the application for the telecommand carriers. When no commands are being sent, a CW carrier that is within the emission envelope proposed in Lockheed Martin's application, as amended, would be present. *See* File No. SES-AMD-20081219-01664, at Schedule B. The information in the Schedule B portion of Lockheed Martin's pending application in File No. SES-LIC-20081130-01443, as amended, is hereby incorporated by reference. Lockheed Martin notes that it is possible that during an unexpected emergency with the satellite, the power levels proposed for the earth station in the 2008 application as amended may need to be exceeded to help recover the satellite. Under these extremely unlikely circumstances, Lockheed Martin will make every effort to coordinate such operations with affected users, and will take all reasonable steps to swiftly eliminate any harmful interference caused. Lockheed Martin fully understands that all of its proposed launch and early-operations TT&C support for the BSAT-3c launch will be on a strictly non-harmful interference, non-protected basis.

Lockheed Martin has secured a temporary frequency coordination that covers the entire proposed STA window (June 1, 2011 through July 23, 2011) for operations on the BSAT-3c TT&C frequencies from its Carpentersville earth station facility. The report is attached to this Exhibit A.

Lockheed Martin believes that the limited operations it proposed in support of the launch of BSAT-3c – operations Lockheed Martin and the satellite operator will coordinate in advance with any and all potentially affected entities that operate communications systems in compliance with the Table of Frequency Allocations during the limited period of use – are required in the public interest. Lockheed Martin's earth station will be part of a global network of control facilities that will be used to position the satellite as it progresses from transfer orbit to its final

location. The safe and orderly use of the entire geostationary orbital resource and protection of the hundreds of satellites from the U.S. and other countries that operate there depends in no small part on ensuring that the BSAT-3c satellite is controlled while over North America, and Lockheed Martin's earth station thus will serve a limited-duration, but nonetheless vital function.

Lockheed Martin designates Michael Usarzewicz to be the contact person that will be available whenever transmission to, or reception from, BSAT-3c is to occur through the subject earth station. Mr. Usarzewicz can be reached at the following cell phone number: (609)-865-2658 and/or station number: (908) 859-4050.

The antenna to be used for operations under the proposed STA is already built. It is the same antenna that was previously authorized under Call Sign E920270 and that is now the subject of the pending application and reinstatement request described in Note 1 above, and, as noted, has been authorized for use on an STA-basis to support other satellite launches.

In sum, Lockheed Martin requests authority to operate its Carpentersville, NJ Ku-band earth station antenna to provide critical TT&C services during the launch and early operations phase of the BSAT-3c satellite, for a term of 14 days – June 1 to June 5 for calibration testing, and July 1 to July 23 for six to ten days of TT&C support operations..

2. Contact

Name:	Stephen D. Baruch	**Phone Number:**	202-416-6782
Company:	Lerman Senter PLLC	**Fax Number:**	202-293-7783
Street:	2000 K Street, NW	E-Mail:	sbaruch@lermansenter.com
	Suite 600		
City:	Washington	**State:**	DC
Country:	USA	**Zipcode:**	20006 -1809
Attention:		**Relationship:**	Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)
3. Reference File Number SESLIC2008110301443 or Submission ID

4a. Is a fee submitted with this application?
◉ If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
○ Governmental Entity ○ Noncommercial educational licensee
○ Other(please explain):

4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station

5. Type Request

○ Use Prior to Grant ○ Change Station Location ◉ Other

6. Requested Use Prior Date 06/01/2011	
7. CityCarpentersville	8. Latitude (dd mm ss.s h) 40 38 39.0 N

9. State NJ	10. Longitude (dd mm ss.s h) 75 11 29.0 W

11. Please supply any need attachments.

Attachment 1: Exhibit A Attachment 2: Attachment 3:

12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Lockheed Martin Corp. requests authority to use its Carpentersville, NJ earth station to support post-launch/early-operations TT&C for BSAT-3c satellite. Action requested by May 31, 2011, to support calibration tests from June 1 to 5, and launch operations during the July 1-July 23 window. See Attachment

13. 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

14. Name of Person Signing Jennifer Warren	15. Title of Person Signing Vice President, Technology Policy & Regulation

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