

Approved by OMB
3060-0678

Date & Time Filed: Sep 14 2005 1:40:31:226PM
File Number: SAT-STA-20050914-00177
Callsign: S2372

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
LM-RPS1 IOT STA

1. Applicant

Name:	Lockheed Martin Corporation	Phone Number:	301-897-6000
DBA Name:		Fax Number:	301-897-6142
Street:	6801 Rockledge Drive	E-Mail:	jennifer.warren@lmco.com
City:	Bethesda	State:	MD
Country:	USA	Zipcode:	20817 -
Attention:	Ms Jennifer A Warren		

S2372 SAT-STA-20050914-00177 IB200500211
Lockheed Martin Corporation
RNSS



File # SAT-STA 20050914-00177
Call Sign S2372 Grant Date 10/7/05
(or other identifier)
Term Dates
From arrival @ 150° WL To: +30 days
Approved: [Signature]

Policy Branch Chief w/c conditions.

Attachment

File No. SAT-STA-20050914-00177

Call Sign: S2372

October 7, 2005

Lockheed Martin Corporation's request for special temporary authority to perform in-orbit testing of its LM-RPS1 payload at 150.0° W.L. for a period of 30 days IS GRANTED. Accordingly, Lockheed Martin Corporation is authorized to perform in-orbit testing of its LM-RPS1 payload for the period of 30 days commencing with the date that the LM-RPS1 payload arrives at the 150.0° W.L. orbital location, in accordance with the terms, conditions, and technical specifications set forth in its application, this Attachment and the Federal Communications Commission's Rules.

- 1) Lockheed Martin Corporation shall coordinate its operations so that no unacceptable interference shall be caused to any other lawfully operating satellites or radiocommunication systems, including, but not limited to, all existing Radionavigation Satellite Service (RNSS) satellites and the U.S. Global Positioning System (GPS) non-geostationary satellites.
- 2) In the event that any unacceptable interference does occur, Lockheed Martin Corporation shall cease operations immediately and inform the Commission in writing of such event.
- 3) Lockheed Martin Corporation is required to accept interference from other lawfully operating satellites or radiocommunication systems.
- 4) During the in-orbit testing, Lockheed Martin Corporation shall operate the LM-RPS1 payload in compliance with all existing coordination agreements with U.S. government systems.
- 5) This action is used pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release. 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, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.



File # SAT-STA-20050914
Call Sign S2372 Grant Date 10/7/05
(or other identifier) 00177
From arrival @ 150° W. Term Dates + 30 day
To:
Approved: [Signature]

*w/conditions. Policy Branch
Chief*

2. Contact

Name:	Stephen D. Baruch	Phone Number:	202-416-6782
Company:	Leventhal Senter & Lerman PLLC	Fax Number:	202-429-4626
Street:	2000 K Street, N.W. Suite 600	E-Mail:	sbaruch@lsl-law.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20006 -
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 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 CRY - Space Station (Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location
150 deg. W.L.

7. Requested Extended Expiration Date

8. 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., pursuant to Section 25.120 of the Commission's Rules, requests Special Temporary Authority to conduct in-orbit testing of its RNSS space station (Call Sign S2372) at the 150 deg. W.L. orbital location prior to placement on station at 133 deg. W.L.

9. 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

10. Name of Person Signing
Jennifer A. Warren

11. Title of Person Signing
Senior Director, Trade & Regulatory Affairs

12. Please supply any need attachments.

Attachment 1: LM RPS-1 STA Request

Attachment 2:

Attachment 3:

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).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

**REQUEST OF LOCKHEED MARTIN CORPORATION
FOR SPECIAL TEMPORARY AUTHORITY TO CONDUCT IN-ORBIT TESTING OF
THE RPS-1 SPACE STATION**

Lockheed Martin Corporation ("Lockheed Martin"), pursuant to Section 25.120 of the Commission's Rules, 47 C.F.R. § 25.120, hereby requests Special Temporary Authority ("STA") to conduct in-orbit testing ("IOT") of its Radionavigation-Satellite Service ("RNSS") space station, RPS-1, at the 150° W.L. orbital location. LM seeks an STA for a period of thirty (30) days, beginning on the date that the RPS-1 space station arrives at the 150° W.L. orbital location. That date is expected to be in early October 2005, more than three working days after the date of this filing.

The Commission has authorized Lockheed Martin to launch the RPS-1 space station and to operate it at the 133° W.L. orbital location.¹ The RPS-1 RNSS space station is being hosted on PanAmSat Licensee Corp.'s ("PanAmSat") Galaxy 15 satellite, for which PanAmSat holds Commission authority to launch and operate in the fixed-satellite service ("FSS"). On August 18, 2005, PanAmSat applied for an STA to operate the Galaxy 15 satellite for thirty days at 150° W.L. for purposes of IOT.² PanAmSat indicated that it is unable to conduct IOT for Galaxy 15 at its assigned orbital location (also 133° W.L.) because doing so would interfere with ongoing services.³ Although testing of the RPS-1 RNSS space station that is hosted on Galaxy 15 at the 133° W.L. location would not interfere with ongoing RNSS space-to-Earth services, RPS-1 is a hosted payload, and therefore Lockheed Martin will need to conduct IOT from the same location that is used by Galaxy 15 – in this case, 150° W.L. Accordingly, Lockheed Martin seeks authority to operate RPS-1 at 150° W.L. for purposes of IOT. Lockheed Martin does not contemplate requesting regular authority to operate RPS-1 at the 150° W.L. orbital location. *See* 47 C.F.R. § 25.120(b)(4).

Good cause exists for the grant of Lockheed Martin's requested STA:

- PanAmSat is conducting TT&C functions for the Galaxy 15 satellite that hosts RPS-1, and has stated that IOT for Galaxy 15 cannot be conducted at 133° W.L. without disrupting current PanAmSat customers and ongoing services. Grant of the instant request will thus further the public interest by providing for the continuity of service.
- The 150° W.L. orbital location can accommodate testing of the spacecraft's TT&C payload, the C-band payload, and RPS-1 with no interference to other GSO satellites.

¹ *See Lockheed Martin Corp.*, DA 05-1747 (Int'l. Bur., released June 23, 2005).

² Application of PanAmSat Licensee Corp. for Special Temporary Authority, File No. SAT-STA-20050818-00162 (filed August 18, 2005).

³ *Id.* at Attachment.

- Testing of the RPS-1 payload, which transmits exclusively in the RNSS bands at 1565.17-1585.67 MHz and 1166.20-1186.70 MHz, is functionally similar to the testing of the Galaxy 15 FSS payloads, and can expeditiously be performed with the Galaxy 15 testing at 150° W.L. Lockheed Martin wishes to take advantage of the concurrent testing available at the 150 ° W.L. location.
- PanAmSat is the TT&C controller for the Galaxy 15 spacecraft (i.e., the satellite bus and all of the payloads). The testing of Galaxy 15's C-band payload and the TT&C operations will be performed with co-located equipment at PanAmSat's Fillmore, California earth station. Testing of RPS-1 will be performed at Lockheed Martin's Napa, California earth station (for which separate transmit authority is to be sought) in conjunction with TT&C operations being conducted from PanAmSat's Fillmore facility.

Lockheed Martin emphasizes that grant of the requested STA will present no risk of interference to other authorized users of the frequencies assigned to Lockheed Martin. There are several RNSS satellite networks and systems – including the U.S. Global Positioning System (“GPS”) non-geostationary satellite orbit RNSS system – that currently operate on frequencies that overlap with RPS-1 in the 1565.17-1585.67 MHz band, and there is only one RNSS satellite network that currently operates on frequencies that overlap with RPS-1 in the 1166.20-1186.70 MHz band. Because RNSS systems and networks have ubiquitous coverage of the earth, there is a potential for interference from an RNSS network located at any given satellite orbital location. Lockheed Martin understands its obligation to coordinate its use of RNSS frequencies with all RNSS systems and networks potentially affected by its temporary operation for IOT purposes at 150° W.L. In this regard, Lockheed Martin has coordinated with the GPS Joint Program Office on the temporary operation of RPS-1 at 150° W.L. It will do the same for any potentially affected non-U.S. RNSS networks.

For the foregoing reasons, Lockheed Martin respectfully requests an STA that enables it to conduct IOT of the RPS-1 RNSS space station at the 150° W.L. orbital location for a period of 30 days after arrival of the Galaxy 15 satellite at that location.