

Approved by OMB  
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
STA Extension for Call Sign E050272, Napa, CA -- March 2011

1. Applicant

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Attention: Ms Jennifer Warren

60 days "Extension with conditions"



File# SES-STA-20110302-00230  
Call Sign E050272 Grant Date 03/07/2011  
(or other identifier)  
Term Dates  
From 03/07/2011 To: 05/05/2011  
Approved: [Signature]

Attachment

SES-STA-20110302-00230

E050272

Condition:

All operations shall be on an unprotected and non-harmful interference basis, i.e., Lockheed Martin Corporation shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission immediately upon notice of such interference.

*60 days "extension with conditions"*



File# SES-STA-20110302-00230

Call Sign E050272 Grant Date 03/07/2011  
(or other identifier)

Term Dates  
From 03/07/2011 To 05/05/2011

Approved: Paul E. Gibbs

**Exhibit A**

**Lockheed Martin Corp.  
Earth Station STA  
Call Sign E050272  
March 2011**

**Description**

Lockheed Martin Corporation ("Lockheed Martin") hereby respectfully requests special temporary authority ("STA") to continue operating its Napa, California earth station (Call Sign E050272) at slight variance from the station's license under a 60-day extension of the Lockheed Martin STA now in force for Call Sign E050272 in File No. SES-STA-20110202-00105 ("February STA").

The Galaxy 15 satellite, which is operated by Intelsat License LLC ("Intelsat") nominally at the 133° W.L. orbital location and is the host platform for LM-RPS1, suffered an anomaly of unknown origin in April 2010 that caused the satellite to drift eastward. In December 2010, Intelsat was able to regain control of the Galaxy 15 satellite, and subsequently moved the satellite to a temporary holding slot at 93° W.L., where tests of the LM-RPS1 radionavigation-satellite service ("RNSS") payload were successfully conducted via the Napa earth station. *See* February STA, Exhibit A at 1. Intelsat successfully completed its own tests on the Galaxy 15 satellite, and has started the satellite on a slow westward drift to the 133.1° W.L. orbital location. Intelsat anticipates that the satellite will arrive at the new location on April 3, 2011. *See* Intelsat License LLC STA Request for Galaxy 15, File No. SES-STA-20110228-00039, Narrative at 2 (filed February 28, 2011). Intelsat has stated its intention to reload communications traffic onto Galaxy 15 and have the satellite eventually resume its authorized orbital location at 133° W.L. *See* Intelsat Request for STA to Drift and Operate Galaxy 15, File No. SAT-STA-20110209-00028, Narrative at 2-3 (filed February 9, 2011).

Lockheed Martin will be able to use the Napa earth station to access the LM-RPS1 payload in its intended manner during the satellite's drift to the 133.1° W.L. orbital location, and while the satellite is at the temporary location, for the provision of radionavigation-satellite service ("RNSS"). To the extent that the space station is operating outside its designated station-keeping box, Lockheed Martin's operation of the Napa earth station takes place under the authority granted in the February STA.

Lockheed Martin hereby requests an extension of the February STA to allow for continued communication by the Napa earth station with LM-RPS1 during the drift to and while on station at the 133.1° W.L. orbital location. In Lockheed Martin's view, the situation with the Galaxy 15 satellite has now become stable enough that a return to a 60-day STA term is warranted, and thus Lockheed Martin seeks an extension of the February STA to May 5, 2011. As always, Lockheed Martin will apprise the Commission of any additional developments as events warrant.

During the 60-day term requested in this STA, the elevation angle from the earth station to the satellite and other technical transmission parameters will be within values Lockheed Martin was authorized to use in the February STA (*see* File No. SES-STA-20110202-00105, at Exhibit A). Lockheed Martin notes further that the location of the satellite in the geostationary arc, the elevation angle range, and the azimuth range, are all within levels for which Lockheed Martin provided an updated frequency coordination study for the operation of the E050272 earth station with LM-RPS1 during the eastward drift that occurred before control of the satellite was recovered in December 2010. The Comsearch study, which was included as Attachment 1 to Exhibit A to the Lockheed Martin's STA request for Call Sign E050272 in File No. SES-STA-20101028-01360, is incorporated by reference into the instant STA request, covers a satellite arc that extends to 75° W.L., an elevation angle range of 24.3° to 44.3° and an azimuth range of 119.8° and 197°. Therefore, the Comsearch study includes the range of elevation angles and eastern azimuth range proposed for operation through May 5, 2011. The report shows no potential interference cases.

Lockheed Martin has notified the GPS Directorate (operators of the co-frequency GPS system) of the status of the LM-RPS1 satellite, as required. Lockheed Martin confirms that it has coordinated at-variance operations of LM-RPS1 with the GPS Directorate for the duration of the requested STA term. Lockheed Martin recognizes and accepts that all operations at variance with its license for Call Sign E050272 are on a non-harmful interference/non-protected basis.

Continued use of a viable LM-RPS1 satellite via the Napa earth station by Lockheed Martin is in the public interest. The LM-RPS1/E050272 network is part of a GPS augmentation system that provides the Federal Aviation Administration (the sole customer of Lockheed Martin for LM-RPS1 capacity) with enhanced navigation data that is used in managing the nation's air traffic and control systems. Any denial to Lockheed Martin of the ability to provide its customer with a viable enhanced navigation data would cause a serious prejudice to the public and national interests. As long as Lockheed Martin can reliably communicate that information over LM-RPS1 via its Napa earth station without harmfully interfering with any authorized users of the spectrum, it should be allowed to do so.

Lockheed Martin remains prepared to submit permanent applications for the modified authority should such submissions be necessary or appropriate following a determination of the intended operating location for the recovered Galaxy-15 satellite. Under these circumstances, a 60-day STA (*i.e.*, until May 5, 2011) to allow Lockheed Martin to continue operating its Napa earth station (Call Sign E050272) with LM-RPS1 is appropriate.