Alexandra Field
Senior Vice President and
Deputy General Counsel

2010 Annual Report

October 15, 2010

FILED/ACCEPTED

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Federal Communications Commission
Office of the Secretary

VIA HAND DELIVERY

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th St., S.W.
Washington, DC 20554

Re: TerreStar License Inc.
2010 Annual Report for 2 GHz Mobile Satellite Service System

Dear Ms. Dortch:

TerreStar License Inc. ("TerreStar"), pursuant to Section 25.143(e)(1) of the Commission's rules,[1] hereby submits its annual report for its 2 GHz Mobile Satellite Service ("MSS") system. The information in this report is current as of September 30, 2010.

Introduction

TerreStar holds a letter of intent ("LOI") authorization to provide MSS in the United States via the TerreStar-1 satellite using spectrum in the 2 GHz band.[2] The LOI authorization permits the use of 10 MHz of 2 GHz MSS spectrum in each direction.[3] TerreStar Networks (Canada) Inc., which

[1] 47 C.F.R. § 25.143(e)(1).
[2] *See* Order, DA 07-2028 (Int'l Bur., May 10, 2007); *TMI Communications and Company, Limited Partnership*, Order, 16 FCC Rcd 13808 (Int'l Bur. 2001); *TMI Communications and Company, Limited Partnership, and TerreStar Networks Inc. Application for Review and Request for Stay*, Memorandum Opinion and Order, 19 FCC Rcd 12603 (2004). On February 4, 2008, the Commission was notified of a *pro forma* assignment of the LOI authorization from TerreStar Networks Inc. to TerreStar Licensee Inc., which is a wholly owned subsidiary of TerreStar Networks Inc. *See* Letter from Joseph A. Godles, Counsel to TerreStar Networks Inc., to Marlene H. Dortch, Secretary, FCC, Re: Call Sign LOI-TMI (Feb. 4, 2008).
[3] *See Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, Order, 20 FCC Rcd 19696 (December 9, 2005).

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is owned by TerreStar Networks Inc. and a Canadian company, holds a space station radio license issued by Industry Canada to operate TerreStar-1 in Canada.[4]

Satellite Status

The TerreStar-1 satellite was launched successfully on July 1, 2009. In-orbit testing has been completed as has testing of ground based components of the satellite beam forming system. TerreStar recently commenced wholesale commercial operations with retail partner AT&T, which announced the availability of Satellite Augmented Mobility ("SAM") on September 21, 2010. SAM provides satellite and CMRS network access using the TerreStar GENUS™ smartphone, an integrated dual-mode multi-band device that provides AT&T mobile subscribers a satellite connectivity option.

TerreStar has engineered a solution to satisfy its non-interference obligations to primary fixed service ("FS") microwave licensees operating in the 2190-2200 MHz band TerreStar uses for downlink transmission. TerreStar's beamforming system enables creation of configurable operational parameters for satellite beams. TerreStar can configure frequency assignments and power levels in the vicinity of FS links to meet the C/I objective specified in TSB-86 (*Criteria and Methodology to Assess Interference between Systems in the Fixed Service and the Mobile-Satellite Service in the Band 2165-2200 MHz*, published by the Telecommunications Industry Association). Broadcast Auxiliary Service licensees have transitioned to a new frequency plan and vacated the 2000-2010 MHz mobile terminal uplink band used by the GENUS mobile earth terminal.

[4] *See* Letter from Chantal Beaumier, Industry Canada, to Jan Skora, TerreStar Networks (Canada) Inc., File No. 62415-1 (185786RH) (December 18, 2009).

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Listing of Non-Scheduled Outages

TerreStar-1 experienced a non-scheduled outage in ground based equipment that affected MSS call processing on September 28, 2010. The outage occurred immediately following routine maintenance when a component system failed to reactivate. It began at 5:00 a.m. EST and service was completely restored at 8:52 a.m. EST. The outage was reported pursuant to 47 C.F.R. § 4.9(c) under Incident Reference TT#: 100928-0002.

Description of the Utilization of the In-Orbit Satellite System

As noted, TerreStar-1 is fully operational and the satellite is delivering voice and data service over TerreStar's all IP next-generation mobile broadband network. As also noted, TerreStar began commercial operation 10 days before the close of the reporting period for the 2010 Annual Report. Utilization of the in-orbit satellite system during the 12-month period ending September 30, 2010, consisted of activities related to testing and overall integration of hardware and software systems associated with the space and ground based components of the TerreStar-1 system. Substantial time and resources were required to debug software and optimize systems critical to integration of the satellite base station subsystem and satellite beamforming network with the core IP network and the integrated Genus smartphone.

Since commencing commercial operation, the TerreStar-1 system has been available 100% of the time for U.S. domestic or transborder transmission except during scheduled maintenance or equipment failure (software or hardware), as described in the non-scheduled outage section above.

TerreStar has entered into an agreement to sell satellite voice or data minutes. By its express terms, the agreement will not commence before September 21, 2011.

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Identification of any Space Stations Not Available for Service or Not Performing to Specifications

TerreStar has no space stations that are unavailable for service or not performing to specifications.

Please direct any questions concerning this report to the undersigned.

Sincerely,

Alexandra Field

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Senior Vice President and
Deputy General Counsel
TerreStar License Inc.

cc: Roderick Porter, IB
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