

From: Daryl Hunter

To: Leann Nguyen

Date: January 18, 2017

Subject: Request for Info - File # 0012-EX-ST-2017

Message:

The testing will not involve communications with any satellite.

When not pointed along the horizon (0 degree elevation angle), the antenna will be pointed toward the WildBlue-1 satellite at 111.1 W.L.. This satellite is owned and operated by ViaSat.

The WildBlue-1 satellite does not have receivers capable of operating on the 27.5-28.35 GHz band requested for this STA, thus no communications will take place with the satellite.

The antenna will be pointed towards WildBlue-1 for two reasons. The first is to simulate a representative azimuth and elevation angle for test purposes that is typical of earth stations communicating with a GEO satellite. The second reason is to protect other satellites. Because it is known that WildBlue-1 does not have receivers operating in the 27.5-28.35 GHz band, and that there are no operating satellites that use that frequency band within two degrees, protection of other GSO satellites is ensured because the antenna used for the test is compliant with the FCC's two degree spacing performance requirements.

The narrative supplied with the STA application describes the pointing directions of the antenna during the tests, but they are repeated here.

If not pointed at WildBlue-1, i.e., toward the horizon, the elevation angle will be 0 degrees and the azimuth will be swept through 360 degrees of azimuth.

If pointed toward (but not communicating with) WildBlue-1, the azimuth and elevation angles are as follows for the three test locations:

Carlsbad: az: 168.8, el: 50.9

Duluth: az: 222.4, el: 41.1

Pendergrass: az: 222.7, el: 40.7

Thanks and regards,

Daryl Hunter
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