



BlackSky Global, LLC
3415 S. 116th Street, Suite 123
Tukwila, WA 98168

August 3, 2015

Subject: Re: file number 0829-EX-PL-2014, correspondence reference number 28855

Dear Ms. Nguyen,

This information is in response the FCC's July 27, 2015 request for information in regards to the above-referenced application number. This document contains responses to each of the questions contained in that email. Please let me know if you have additional questions.

Sincerely,

John Springmann, Ph.D.
Lead Systems Engineer
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Question 1:

"Information of satellite transmitter antenna including gain, beamwidth, azimuthal range, polarization."

Antenna	Gain	Beamwidth	Azimuthal Range ¹	Polarization
UHF whip (Tx & Rx)	3 dBi	180° (nearly-omni)	Body-fixed	Linear
X-band patch (Tx)	15 dBi	18°	Body-fixed	Right-hand circular

Question 2:

"Information of earth station receiver antenna including gain, beamwidth, azimuthal range, elevation above mean sea level (m), minimum angle of elevation and antenna height above terrain (m)."

Location	Gain	Beamwidth	Azimuthal Range	Elevation AMSL (m)	Min Elevation angle ² (deg)	Height above terrain ³ (m)
Tukwila, WA	19 dBi	UHF: 30°	UHF: 0-360°	15.9	0°	UHF: 10
Redmond, WA	X: 33 dBi	X: 1°	X: 0-360°	33	0°	S/X: 15.2
Fairbanks, AK	UHF: 19 dBi X: 48 dBi	UHF: 30° X: 1°	UHF: 0-360° X: 0-360°	144	0°	UHF: 7 S/X: 4
Prudhoe Bay, AK	UHF: 19 dBi X: 33 dBi	UHF: 30° X: 1°	UHF: 0-360° X: 0-360°	9.1	0°	UHF: 3 S/X: 2

¹ Body-fixed means that the antenna is not steerable; it is rigidly attached to the body of the spacecraft. The entire spacecraft will slew such that the antennas are pointing at the ground station during a contact pass.

² 0° is the physical minimum. We can limit the minimum elevation for transmission, if necessary.

³ Some locations are approximate – final designs in progress.



Truth or Consequences, New Mexico	UHF: 19 dBi X: 33 dBi	UHF: 30° X: 1°	UHF: 0-360° X: 0-360°	1415	0°	UHF: 3 S/X: 2
Southland, New Zealand	UHF: 19 dBi X: 33 dBi	UHF: 30° X: 1°	UHF: 0-360° X: 0-360°	11	0°	UHF: 3 S/X: 2