



21515 Ridgetop Circle, Suite 300  
Sterling, VA 20166  
703-726-5500  
Fax 703-726-5596

December 18, 2023

Office of the Secretary  
Federal Communications Commission  
Washington, DC 20554

Re: Call Sign: E060300  
Site: Fairbanks, AK  
Ka-Band Transmit/Receive Earth Station

Dear Sir:

This letter is to confirm that the Transmit/Receive Earth Station located in Fairbanks, Alaska, (64° 49' 3.2" N, 147° 43' 29.8" W - NAD83) and with the technical parameters noted on the attached datasheet and under the ownership of Iridium Constellation LLC, has been under our continuous monitoring and frequency protection service. We have been monitoring all new frequency coordinations on their behalf and maintaining their participation in the frequency coordination process as specified in part 101 of the FCC Rules and Regulations.

We have been protecting this link on behalf of Iridium Constellation LLC. The technical parameters listed (including frequencies) have not changed and have been protected continuously since the site was coordinated. There are no outstanding protection case issues or objections from any licensed or applied-for licenses in the shared bands of operation.

If you have any questions, or require additional information, please don't hesitate to call me on (703) 726-5656 or by email at [DMeyer@Comsearch.com](mailto:DMeyer@Comsearch.com)

Sincerely,  
COMSEARCH

David E. Meyer  
Senior Manager  
Frequency Protection Services

**COMSEARCH****Earth Station Data Sheet**

21515 Ridgetop Circle, Suite 300, Sterling, VA 20166  
(703)726-5662 <http://www.comsearch.com>

Date: 06/26/2023  
Job Number: <PCNJobCode>

**Administrative Information**

Status ENGINEER PROPOSAL  
Call Sign <PCNCallSign>  
Licensee Code ZIRIDI  
Licensee Name Iridium Satellite LLC

**Site Information****FAIRBANKS, AK**

Venue Name  
Latitude (NAD 83) 64° 49' 3.2" N  
Longitude (NAD 83) 147° 43' 29.8" W  
Climate Zone A  
Rain Zone 2  
Ground Elevation (AMSL) 128.02 m / 420.0 ft

**Link Information**

Satellite Type Low Earth Orbit  
Mode TR - Transmit-Receive  
Modulation Digital  
Minimum Elevation Angle 5.0°  
Azimuth Range 0.0° to 360°  
Antenna Centerline (AGL) 6.1 m / 20.0 ft

**Antenna Information****Receive - FCC32****Transmit - FCC32**

Manufacturer Scientific-Atlanta  
Model 3 meter  
Gain / Diameter 54.0 dBi / 3.0 m  
3-dB / 15-dB Beamwidth 0.40° / 0.70°

Scientific-Atlanta  
3 meter  
57.4 dBi / 3.0 m  
0.24° / 0.45°

Max Available RF Power (dBW/4 kHz)  
(dBW/MHz)

(1) -12.3 (2) -23.7  
11.7 0.3

Maximum EIRP (dBW/4 kHz)  
(dBW/MHz)

45.1 33.7  
69.1 57.7

Interference Objectives: Long Term -156.0 dBW/MHz 20%  
Short Term -150.2 dBW/MHz 0.01%

-151.0 dBW/4 kHz 20%  
-128.0 dBW/4 kHz 0.0025%

**Frequency Information****Receive 18.0 GHz****Transmit 28.0 GHz**

Emission / Frequency Range (MHz)  
200KF9D / 19400.2 - 19405.0  
14M0G7W / 19400.0 - 19600.0

(1) 1M00F9D / 29102.0  
(1) 1M00F9D / 29298.0  
(2) 14M0G7W / 29100.0 - 29300.0

Max Great Circle Coordination Distance 226.0 km / 140.4 mi  
Precipitation Scatter Contour Radius 120.8 km / 75.1 mi

100.0 km / 62.1 mi  
100.0 km / 62.1 mi

**COMSEARCH****Earth Station Data Sheet**

21515 Ridgetop Circle, Suite 300, Sterling, VA 20166  
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**Coordination Values****FAIRBANKS, AK**

|                                    |                       |       |                   |         |  |
|------------------------------------|-----------------------|-------|-------------------|---------|--|
| Licensee Name                      | Iridium Satellite LLC |       |                   |         |  |
| Latitude (NAD 83)                  | 64° 49' 3.2" N        |       |                   |         |  |
| Longitude (NAD 83)                 | 147° 43' 29.8" W      |       |                   |         |  |
| Ground Elevation (AMSL)            | 128.02 m / 420.0 ft   |       |                   |         |  |
| Antenna Centerline (AGL)           | 6.1 m / 20.0 ft       |       |                   |         |  |
| Antenna Mode                       | Receive 18.0 GHz      |       | Transmit 28.0 GHz |         |  |
| Interference Objectives: Long Term | -156.0 dBW/MHz        | 20%   | -151.0 dBW/4 kHz  | 20%     |  |
| Short Term                         | -150.2 dBW/MHz        | 0.01% | -128.0 dBW/4 kHz  | 0.0025% |  |
| Max Available RF Power             |                       |       | -23.7 (dBW/4 kHz) |         |  |

| Azimuth (°) | Horizon<br>Elevation (°) | Antenna<br>Discrimination (°) | Receive 18.0 GHz      |                               | Transmit 28.0 GHz     |                               |
|-------------|--------------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|
|             |                          |                               | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) |
| 0           | 0.51                     | 44.30                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 5           | 0.51                     | 40.84                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 10          | 0.51                     | 37.67                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 15          | 0.51                     | 34.86                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 20          | 0.51                     | 32.50                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 25          | 0.51                     | 30.71                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 30          | 1.09                     | 30.16                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 35          | 1.60                     | 30.31                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 40          | 1.30                     | 30.40                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 45          | 0.94                     | 31.17                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 50          | 0.51                     | 32.57                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 55          | 0.51                     | 34.95                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 60          | 0.51                     | 37.77                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 65          | 0.51                     | 40.96                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 70          | 0.51                     | 44.42                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 75          | 0.51                     | 48.11                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 80          | 0.51                     | 51.96                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 85          | 0.51                     | 55.94                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 90          | 0.51                     | 60.03                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 95          | 0.51                     | 64.20                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 100         | 0.51                     | 68.43                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 105         | 0.51                     | 72.71                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 110         | 0.51                     | 77.02                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 115         | 0.51                     | 81.36                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 120         | 0.51                     | 85.71                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 125         | 0.51                     | 90.07                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 130         | 0.51                     | 94.44                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 135         | 0.51                     | 98.79                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 140         | 0.51                     | 103.13                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 145         | 0.51                     | 107.44                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 150         | 0.51                     | 111.72                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 155         | 0.51                     | 115.95                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 160         | 0.51                     | 120.11                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 165         | 0.51                     | 124.19                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 170         | 0.51                     | 128.18                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 175         | 0.51                     | 132.02                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 180         | 0.51                     | 135.70                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 185         | 0.51                     | 139.16                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |

**COMSEARCH****Earth Station Data Sheet**

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**Coordination Values****FAIRBANKS, AK**

Licensee Name Iridium Satellite LLC

Latitude (NAD 83) 64° 49' 3.2" N

Longitude (NAD 83) 147° 43' 29.8" W

Ground Elevation (AMSL) 128.02 m / 420.0 ft

Antenna Centerline (AGL) 6.1 m / 20.0 ft

Antenna Mode Receive 18.0 GHz

Interference Objectives: Long Term -156.0 dBW/MHz 20% Transmit 28.0 GHz -151.0 dBW/4 kHz 20%

Short Term -150.2 dBW/MHz 0.01% -128.0 dBW/4 kHz 0.0025%

Max Available RF Power -23.7 (dBW/4 kHz)

| Azimuth (°) | Horizon<br>Elevation (°) | Antenna<br>Discrimination (°) | Receive 18.0 GHz      |                               | Transmit 28.0 GHz     |                               |
|-------------|--------------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|
|             |                          |                               | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) |
| 190         | 0.51                     | 142.33                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 195         | 0.51                     | 145.14                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 200         | 0.51                     | 147.50                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 205         | 0.51                     | 149.29                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 210         | 0.51                     | 150.41                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 215         | 0.51                     | 150.78                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 220         | 0.51                     | 150.38                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 225         | 0.51                     | 149.24                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 230         | 0.51                     | 147.43                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 235         | 0.51                     | 145.05                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 240         | 0.51                     | 142.23                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 245         | 0.51                     | 139.04                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 250         | 0.51                     | 135.58                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 255         | 0.51                     | 131.89                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 260         | 0.51                     | 128.04                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 265         | 0.51                     | 124.06                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 270         | 0.51                     | 119.97                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 275         | 0.51                     | 115.80                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 280         | 0.51                     | 111.57                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 285         | 0.51                     | 107.29                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 290         | 0.51                     | 102.98                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 295         | 0.51                     | 98.64                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 300         | 0.51                     | 94.29                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 305         | 0.51                     | 89.93                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 310         | 0.51                     | 85.56                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 315         | 0.51                     | 81.21                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 320         | 0.51                     | 76.87                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 325         | 0.51                     | 72.56                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 330         | 0.51                     | 68.28                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 335         | 0.51                     | 64.05                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 340         | 0.51                     | 59.89                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 345         | 0.51                     | 55.81                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 350         | 0.51                     | 51.82                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 355         | 0.51                     | 47.98                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |

# Ka-Band Earth Station – Fairbanks, AK (E060300)

## Frequency Coordination Report

28 GHz



Prepared on Behalf of  
Iridium Constellation LLC

July 27, 2016



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## 1. Summary of Results

On behalf of Iridium Constellation, Comsearch performed a coordination notice for all existing and proposed terrestrial licenses within the coordination contours of their existing Ka-Band earth station in Fairbanks, Alaska, licensed under call sign E060300, which will transmit at 28 GHz<sup>1</sup>. Prior-notification letters were sent to the licensees and a copy of the notification data is provided in section four of this report. The earth station coordination was finalized on July 27, 2016.

No objections were received from any of the incumbent 28 GHz licensees. Our notification to the LMDS incumbents was performed under the assumption that the earth station would be operating on a non-interference basis in relation to primary LMDS Block A operations. A contact at Iridium Constellation has been provided in case any concerns may arise in the future.

## 2. 28 GHz Common Carrier and LTTS Coordination

In accordance with FCC Rules and Regulations, the Ka-Band earth station in Fairbanks, Alaska was prior-coordinated by Comsearch. A notification letter and datasheets for this earth station were sent to the following 28 GHz common carrier fixed microwave licensees on June 21, 2016. These licensees are authorized to operate temporary fixed operations from 27.5 to 29.5 GHz on a statewide or nationwide basis.

| Licensee                   | Authorized Geographic Area |
|----------------------------|----------------------------|
| AT&T Alascom               | Statewide: Alaska          |
| Frontier                   | Continental US             |
| General Communication Inc. | Statewide: Alaska          |

A notification letter and datasheet for the Ka-Band earth station in Fairbanks, Alaska were also sent to the following 28 GHz local television transmission licensee on June 21, 2016. This licensee is authorized to operate temporary fixed operations from 27.5 to 29.5 GHz on a nationwide basis.

| Licensee                       | Authorized Geographic Area |
|--------------------------------|----------------------------|
| Information Super Station, LLC | Continental US             |

No objections were received from the common carrier or local television transmission service incumbents.

<sup>1</sup> The proposed earth station will operate in the 29.1 – 29.3 GHz portion of the Ka-Band.

### **3. 28 GHz LMDS Coordination**

The Ka-Band earth station will operate on frequencies that overlap Block A of 28 GHz LMDS services. The total frequency allocation for Block A of the LMDS spectrum appears below.

**Block A:**      27.500-28.350 GHz  
                    29.100-29.250 GHz  
                    31.075-31.225 GHz

*No active LMDS services were found within the coordination contour of the Fairbanks, Alaska earth station.*



## **4. Earth Station Coordination Data**

This section presents the data pertinent to the Ka-Band earth station in Fairbanks, Alaska. This data was circulated to all incumbent licensees in the shared 28 GHz frequency ranges.

Date: 06/23/2016  
Job Number: 160620COMSGE01

#### Administrative Information

Status: ENGINEER PROPOSAL  
Call Sign: E060300  
Licensee Code: IRICON  
Licensee Name: Iridium Constellation LLC

#### Site Information

Venue Name: FAIRBANKS, AK  
Latitude (NAD 83): 64° 49' 3.2" N  
Longitude (NAD 83): 147° 43' 29.8" W  
Climate Zone: A  
Rain Zone: 2  
Ground Elevation (AMSL): 128.02 m / 420.0 ft

#### Link Information

Satellite Type: Low Earth Orbit  
Mode: TR - Transmit-Receive  
Modulation: Digital  
Minimum Elevation Angle: 5.0°  
Azimuth Range: 0.0° to 360°  
Antenna Centerline (AGL): 6.1 m / 20.0 ft

#### Antenna Information

Manufacturer  
Model  
Gain / Diameter  
3-dB / 15-dB Beamwidth

#### Receive - FCC32

Scientific-Atlanta  
3.0 meter  
54.0 dBi / 3.0 m  
0.40° / 0.70°

#### Transmit - FCC32

Scientific-Atlanta  
3.0 meter  
57.4 dBi / 3.0 m  
0.24° / 0.45°

Max Available RF Power (dBW/4 kHz)  
(dBW/MHz)

(1) -12.3 (2) -23.7  
11.7 0.3

Maximum EIRP (dBW/4 kHz)  
(dBW/MHz)

45.1 33.7  
69.1 57.7

Interference Objectives: Long Term  
Short Term

-156.0 dBW/MHz 20%  
-150.2 dBW/MHz 0.01%

-151.0 dBW/4 kHz 20%  
-128.0 dBW/4 kHz 0.0025%

#### Frequency Information

Emission / Frequency Range (MHz)

#### Receive 18.0 GHz

200KF9D / 19400.2 - 19405.0  
14M0G7W / 19400.0 - 19600.0

#### Transmit 28.0 GHz

(1) 1M00F9D / 29102.0  
(1) 1M00F9D / 29298.0  
(2) 14M0G7W / 29100.0 – 29300.0

Max Great Circle Coordination Distance  
Precipitation Scatter Contour Radius

226.0 km / 140.4 mi  
120.8 km / 75.1 mi

100.0 km / 62.1 mi  
100.0 km / 62.1 mi

| <b>Coordination Values</b> |            | <b>FAIRBANKS, AK</b>       |       |                   |         |
|----------------------------|------------|----------------------------|-------|-------------------|---------|
| Licensee Name              |            | Iridium Constellation LLC  |       |                   |         |
| Latitude (NAD 83)          |            | 64° 49' 3.2" N             |       |                   |         |
| Longitude (NAD 83)         |            | 147° 43' 29.8" W           |       |                   |         |
| Ground Elevation (AMSL)    |            | 128.02 m / 420.0 ft        |       |                   |         |
| Antenna Centerline (AGL)   |            | 6.1 m / 20.0 ft            |       |                   |         |
| Antenna Model              |            | Scientific-Atlanta 3 meter |       |                   |         |
| Antenna Mode               |            | Receive 18.0 GHz           |       | Transmit 28.0 GHz |         |
| Interference Objectives:   | Long Term  | -156.0 dBW/MHz             | 20%   | -151.0 dBW/4 kHz  | 20%     |
|                            | Short Term | -150.2 dBW/MHz             | 0.01% | -128.0 dBW/4 kHz  | 0.0025% |
| Max Available RF Power     |            | -12.3 (dBW/4 kHz)          |       |                   |         |

| Azimuth (°) | Horizon<br>Elevation (°) | Antenna<br>Discrimination (°) | Receive 18.0 GHz      |                               | Transmit 28.0 GHz     |                               |
|-------------|--------------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|
|             |                          |                               | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) |
| 0           | 0.36                     | 44.21                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 5           | 0.36                     | 40.75                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 10          | 0.36                     | 37.56                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 15          | 0.36                     | 34.74                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 20          | 0.36                     | 32.37                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 25          | 0.39                     | 30.60                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 30          | 1.09                     | 30.17                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 35          | 1.60                     | 30.31                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 40          | 1.31                     | 30.41                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 45          | 0.94                     | 31.17                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 50          | 0.46                     | 32.53                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 55          | 0.36                     | 34.83                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 60          | 0.36                     | 37.66                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 65          | 0.36                     | 40.86                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 70          | 0.36                     | 44.34                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 75          | 0.36                     | 48.03                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 80          | 0.36                     | 51.89                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 85          | 0.36                     | 55.89                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 90          | 0.36                     | 59.98                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 95          | 0.36                     | 64.16                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 100         | 0.36                     | 68.40                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 105         | 0.36                     | 72.68                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 110         | 0.36                     | 77.00                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 115         | 0.36                     | 81.34                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 120         | 0.36                     | 85.71                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 125         | 0.36                     | 90.07                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 130         | 0.36                     | 94.44                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 135         | 0.36                     | 98.80                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 140         | 0.36                     | 103.15                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 145         | 0.36                     | 107.47                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 150         | 0.36                     | 111.75                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 155         | 0.36                     | 115.99                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 160         | 0.36                     | 120.16                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 165         | 0.36                     | 124.25                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 170         | 0.36                     | 128.24                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 175         | 0.36                     | 132.10                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 180         | 0.36                     | 135.79                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 185         | 0.36                     | 139.25                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |

| Coordination Values      |            | FAIRBANKS, AK              |       |                   |         |
|--------------------------|------------|----------------------------|-------|-------------------|---------|
| Licensee Name            |            | Iridium Constellation LLC  |       |                   |         |
| Latitude (NAD 83)        |            | 64° 49' 3.2" N             |       |                   |         |
| Longitude (NAD 83)       |            | 147° 43' 29.8" W           |       |                   |         |
| Ground Elevation (AMSL)  |            | 128.02 m / 420.0 ft        |       |                   |         |
| Antenna Centerline (AGL) |            | 6.1 m / 20.0 ft            |       |                   |         |
| Antenna Model            |            | Scientific-Atlanta 3 meter |       |                   |         |
| Antenna Mode             |            | Receive 18.0 GHz           |       | Transmit 28.0 GHz |         |
| Interference Objectives: | Long Term  | -156.0 dBW/MHz             | 20%   | -151.0 dBW/4 kHz  | 20%     |
|                          | Short Term | -150.2 dBW/MHz             | 0.01% | -128.0 dBW/4 kHz  | 0.0025% |
| Max Available RF Power   |            | -12.3 (dBW/4 kHz)          |       |                   |         |

| Azimuth (°) | Horizon<br>Elevation (°) | Antenna<br>Discrimination (°) | Receive 18.0 GHz      |                               | Transmit 28.0 GHz     |                               |
|-------------|--------------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|
|             |                          |                               | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) | Horizon<br>Gain (dBi) | Coordination<br>Distance (km) |
| 190         | 0.36                     | 142.44                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 195         | 0.36                     | 145.26                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 200         | 0.36                     | 147.63                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 205         | 0.36                     | 149.43                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 210         | 0.36                     | 150.56                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 215         | 0.36                     | 150.93                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 220         | 0.36                     | 150.53                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 225         | 0.36                     | 149.38                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 230         | 0.36                     | 147.56                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 235         | 0.36                     | 145.17                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 240         | 0.36                     | 142.34                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 245         | 0.36                     | 139.14                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 250         | 0.36                     | 135.66                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 255         | 0.36                     | 131.97                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 260         | 0.36                     | 128.11                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 265         | 0.36                     | 124.11                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 270         | 0.36                     | 120.02                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 275         | 0.36                     | 115.84                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 280         | 0.36                     | 111.61                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 285         | 0.36                     | 107.32                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 290         | 0.36                     | 103.00                        | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 295         | 0.36                     | 98.66                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 300         | 0.36                     | 94.29                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 305         | 0.36                     | 89.93                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 310         | 0.41                     | 85.56                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 315         | 0.36                     | 81.20                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 320         | 0.36                     | 76.85                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 325         | 0.36                     | 72.53                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 330         | 0.36                     | 68.25                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 335         | 0.36                     | 64.01                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 340         | 0.36                     | 59.84                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 345         | 0.36                     | 55.75                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 350         | 0.36                     | 51.76                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |
| 355         | 0.36                     | 47.90                         | 2.60                  | 226.00                        | 11.50                 | 100.00                        |



## **5. Contact Information**

For questions or information regarding the 28 GHz Frequency Coordination Report, please contact:

|                 |                                                                |
|-----------------|----------------------------------------------------------------|
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