

STEPTOE & JOHNSON^{LLP}

ATTORNEYS AT LAW

Stephanie A. Roy
202.429.6278
sroy@steptoe.com

1330 Connecticut Avenue, NW
Washington, DC 20036-1795
Tel 202.429.3000
Fax 202.429.3902
steptoe.com

June 8, 2012

VIA ELECTRONIC SUBMISSION

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: File No. SES-MFS-20120607-00498

Dear Ms. Dortch:

EchoStar Broadcasting Corporation submits the attached supplement to the above referenced modification application providing the updated coordination report for Call Sign E080007 referenced in the application.

Sincerely,

/s/

Stephanie A. Roy
Counsel for EchoStar Broadcasting Corporation

Attachment

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
EchoStar Corporation
GILBERT, AZ
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
May 24, 2012

TABLE OF CONTENTS

| | |
|---|----|
| 1. CONCLUSIONS | 3 |
| 2. SUMMARY OF RESULTS | 4 |
| 3. SUPPLEMENTAL SHOWING | 5 |
| 4. EARTH STATION COORDINATION DATA..... | 7 |
| 5. CERTIFICATION..... | 11 |

1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 04/24/2012.

Company

ARIZONA BOARD OF REGENTS ARIZONA ST UNIV
AT&T CORP
ATL MDS, LLC
Agua Fria Unified School District
Airband Communications Inc
Alltel Comm Southwest Holdings Inc.
Arizona Conf Corp Seventh-day Adventist
Arizona State University - Tempe
BNCCORP INC.
Banner Health
Bluewire LLC
CNG Communications, Inc.
Camp Verde Fire District
City of Avondale
City of Casa Grande
Clearwire Spectrum Holdings III, LLC
Conterra Ultra Broadband, LLC
Coppernet Systems Inc
Cricket License Company, LLC
Deer Valley Unified School District
Dysart Unified School District
EVDI Medical Imaging, LLC
El Paso Natural Gas Company
FiberTower Network Services Corp.
Glendale Water Utilities Wireless Netwrk
Golder Ranch Fire District
GovNET Licenses, LLC
Gutierrez-Palmenberg, Inc.
Iridium Constellation LLC
J.O. Combs Elementary School District
KOLD License Subsidiary
MESA, CITY OF
Marana, Town of
Maricopa County Wireless Systems
Multimedia Holdings Corporation
NW Communications of Phoenix, Inc.
New Cingular Wireless PCS LLC - AZ
Next Level Solutions
Nextel License Holdings 4 Inc.
Nextlink Wireless, LLC

North West Fire District
PHOENIX , CITY OF
Paradise Valley Unified School District
Peoria, City of
QWEST CORPORATION
R/M Management Co., Inc
Renaissance Networking, Inc.
SPANISH INDEPENDENT BROADCAST NETWORK
SWWG, LLC
Saddleback Communications
Scottsdale, City of
Shamrock Foods Company
Silver Bell Mining LLC
Simply Bits, LLC
Sparkplug Southwest, LLC
Sprint PCS
Sprint Spectrum LP DBA Sprint PCS
Sun Health Corporation
Surprise City of
T-Mobile License LLC
Telink Networks SW, LLC
Tempe Union High School District #213
Tempe, City of
Town of Florence
Town of Gilbert
Trillion Partners, Inc.
Union Pacific Railroad Company
Verizon Wireless(VAW) LLC-AZ/CO/NM/NV/UT
Western Broadband, LLC
Western WiMax LLC

4. EARTH STATION COORDINATION DATA

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Date: 04/24/2012
Job Number: <PCNJobCode>

Administrative Information

Status ENGINEER PROPOSAL
Call Sign <PCNCallSign>
Licensee Code ZECHOS
Licensee Name EchoStar Corporation

Site Information

GILBERT, AZ
Venue Name
Latitude (NAD 83) 33° 22' 0.3" N
Longitude (NAD 83) 111° 48' 53.9" W
Climate Zone A
Rain Zone 5
Ground Elevation (AMSL) 372.01 m / 1220.5 ft

Link Information

Satellite Type Geostationary
Mode TR - Transmit-Receive
Modulation Digital
Satellite Arc 45° W to 148° West Longitude
Azimuth Range 103.3° to 233.1°
Corresponding Elevation Angles 10.6° / 35.3°
Antenna Centerline (AGL) 6.4 m / 21.0 ft

Antenna Information

| | | Receive - FCC32 | | Transmit - FCC32 | |
|--------------------------|--------------------------|------------------------|-------|-------------------------|---------|
| Manufacturer | | TIW | | TIW | |
| Model | | LMA | | LMA | |
| Gain / Diameter | | 60.5 dBi / 11.0 m | | 64.0 dBi / 11.0 m | |
| 3-dB / 15-dB Beamwidth | | 0.04° / 0.07° | | 0.05° / 0.10° | |
| Max Available RF Power | (dBW/4 kHz) (dBW/MHz) | | | -7.3 16.7 | |
| Maximum EIRP | (dBW/4 kHz) (dBW/MHz) | | | 56.7 80.7 | |
| Interference Objectives: | Long Term | -156.0 dBW/MHz | 20% | -151.0 dBW/4 kHz | 20% |
| | Short Term | -146.0 dBW/MHz | 0.01% | -128.0 dBW/4 kHz | 0.0025% |

Frequency Information

| | Receive 12.2 GHz | Transmit 17.3 GHz |
|--|---------------------------------------|---------------------------------------|
| Emission / Frequency Range (MHz) | 800KG2D - 24M0G7W / 12200.0 - 12700.0 | 800KG2D - 24M0G7W / 17300.0 - 17800.0 |
| Max Great Circle Coordination Distance | 309.6 km / 192.4 mi | 189.6 km / 117.8 mi |
| Precipitation Scatter Contour Radius | 374.4 km / 232.6 mi | 100.0 km / 62.1 mi |

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Coordination Values

GILBERT, AZ

Licensee Name EchoStar Corporation
Latitude (NAD 83) 33° 22' 0.3" N
Longitude (NAD 83) 111° 48' 53.9" W
Ground Elevation (AMSL) 372.01 m / 1220.5 ft
Antenna Centerline (AGL) 6.4 m / 21.0 ft
Antenna Model TIW 11 Meter
Antenna Mode Receive 12.2 GHz Transmit 17.3 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -151.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -128.0 dBW/4 kHz 0.0025%
Max Available RF Power -7.3 (dBW/4 kHz)

| Azimuth (°) | Horizon Elevation (°) | Antenna Discrimination (°) | Receive 12.2 GHz | | Transmit 17.3 GHz | |
|-------------|-----------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|
| | | | Horizon Gain (dBi) | Coordination Distance (km) | Horizon Gain (dBi) | Coordination Distance (km) |
| 0 | 0.00 | 103.02 | -10.00 | 227.19 | -10.00 | 131.67 |
| 5 | 0.00 | 98.11 | -10.00 | 227.19 | -10.00 | 131.67 |
| 10 | 0.00 | 93.20 | -10.00 | 227.19 | -10.00 | 131.67 |
| 15 | 0.00 | 88.29 | -10.00 | 227.19 | -10.00 | 131.67 |
| 20 | 0.00 | 83.37 | -10.00 | 227.19 | -10.00 | 131.67 |
| 25 | 0.00 | 78.46 | -10.00 | 227.19 | -10.00 | 131.67 |
| 30 | 0.00 | 73.55 | -10.00 | 227.19 | -10.00 | 131.67 |
| 35 | 0.00 | 68.65 | -10.00 | 227.19 | -10.00 | 131.67 |
| 40 | 0.00 | 63.75 | -10.00 | 227.19 | -10.00 | 131.67 |
| 45 | 0.00 | 58.87 | -10.00 | 227.19 | -10.00 | 131.67 |
| 50 | 0.00 | 53.99 | -10.00 | 227.19 | -10.00 | 131.67 |
| 55 | 0.00 | 49.13 | -10.00 | 227.19 | -10.00 | 131.67 |
| 60 | 0.00 | 44.30 | -9.16 | 230.88 | -9.16 | 133.98 |
| 65 | 0.00 | 39.49 | -7.91 | 236.53 | -7.91 | 137.56 |
| 70 | 0.00 | 34.73 | -6.52 | 243.08 | -6.52 | 141.79 |
| 75 | 0.00 | 30.04 | -4.94 | 251.25 | -4.94 | 146.85 |
| 80 | 0.00 | 25.46 | -3.14 | 260.27 | -3.14 | 152.99 |
| 85 | 0.00 | 21.04 | -1.08 | 271.00 | -1.08 | 160.52 |
| 90 | 0.00 | 16.94 | 1.27 | 283.68 | 1.27 | 170.95 |
| 95 | 0.00 | 13.45 | 3.79 | 294.89 | 3.79 | 180.50 |
| 100 | 0.00 | 11.13 | 5.84 | 307.42 | 5.84 | 188.29 |
| 105 | 0.00 | 10.79 | 6.18 | 309.62 | 6.18 | 189.58 |
| 110 | 0.00 | 12.58 | 4.51 | 299.14 | 4.51 | 183.23 |
| 115 | 0.00 | 15.80 | 2.03 | 287.87 | 2.03 | 173.83 |
| 120 | 0.00 | 19.70 | -0.36 | 274.80 | -0.36 | 164.73 |
| 125 | 0.00 | 23.60 | -2.32 | 264.48 | -2.32 | 155.91 |
| 130 | 0.00 | 27.41 | -3.95 | 256.20 | -3.95 | 150.19 |
| 135 | 0.00 | 31.10 | -5.32 | 249.40 | -5.32 | 145.61 |
| 140 | 0.00 | 34.64 | -6.49 | 243.23 | -6.49 | 141.88 |
| 145 | 0.00 | 37.98 | -7.49 | 238.49 | -7.49 | 138.82 |
| 150 | 0.00 | 41.09 | -8.34 | 234.55 | -8.34 | 136.30 |
| 155 | 0.00 | 43.91 | -9.07 | 231.30 | -9.07 | 134.24 |
| 160 | 0.00 | 46.38 | -9.66 | 228.68 | -9.66 | 132.60 |
| 165 | 0.00 | 48.41 | -10.00 | 227.19 | -10.00 | 131.67 |
| 170 | 0.00 | 49.93 | -10.00 | 227.19 | -10.00 | 131.67 |
| 175 | 0.00 | 50.87 | -10.00 | 227.19 | -10.00 | 131.67 |
| 180 | 0.00 | 51.20 | -10.00 | 227.19 | -10.00 | 131.67 |
| 185 | 0.00 | 50.88 | -10.00 | 227.19 | -10.00 | 131.67 |

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Coordination Values

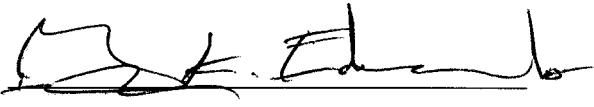
GILBERT, AZ

Licensee Name EchoStar Corporation
Latitude (NAD 83) 33° 22' 0.3" N
Longitude (NAD 83) 111° 48' 53.9" W
Ground Elevation (AMSL) 372.01 m / 1220.5 ft
Antenna Centerline (AGL) 6.4 m / 21.0 ft
Antenna Model TIW 11 Meter
Antenna Mode Receive 12.2 GHz Transmit 17.3 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -151.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -128.0 dBW/4 kHz 0.0025%
Max Available RF Power -7.3 (dBW/4 kHz)

| Azimuth (°) | Horizon Elevation (°) | Antenna Discrimination (°) | Receive 12.2 GHz | | Transmit 17.3 GHz | |
|-------------|-----------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|
| | | | Horizon Gain (dBi) | Coordination Distance (km) | Horizon Gain (dBi) | Coordination Distance (km) |
| 190 | 0.00 | 49.93 | -10.00 | 227.19 | -10.00 | 131.67 |
| 195 | 0.00 | 48.41 | -10.00 | 227.19 | -10.00 | 131.67 |
| 200 | 0.00 | 46.37 | -9.66 | 228.68 | -9.66 | 132.60 |
| 205 | 0.00 | 43.91 | -9.06 | 231.30 | -9.06 | 134.24 |
| 210 | 0.00 | 41.32 | -8.40 | 234.28 | -8.40 | 136.13 |
| 215 | 0.00 | 39.10 | -7.81 | 237.02 | -7.81 | 137.88 |
| 220 | 0.00 | 37.33 | -7.30 | 239.36 | -7.30 | 139.38 |
| 225 | 0.00 | 36.08 | -6.93 | 241.11 | -6.93 | 140.51 |
| 230 | 0.00 | 35.41 | -6.73 | 242.08 | -6.73 | 141.14 |
| 235 | 0.00 | 35.34 | -6.71 | 242.19 | -6.71 | 141.21 |
| 240 | 0.00 | 35.88 | -6.87 | 241.40 | -6.87 | 140.70 |
| 245 | 0.00 | 37.01 | -7.21 | 239.81 | -7.21 | 139.67 |
| 250 | 0.00 | 38.67 | -7.68 | 237.59 | -7.68 | 138.24 |
| 255 | 0.00 | 40.79 | -8.26 | 234.92 | -8.26 | 136.53 |
| 260 | 0.00 | 43.31 | -8.92 | 231.97 | -8.92 | 134.67 |
| 265 | 0.00 | 46.16 | -9.61 | 228.90 | -9.61 | 132.74 |
| 270 | 0.00 | 49.28 | -10.00 | 227.19 | -10.00 | 131.67 |
| 275 | 0.00 | 52.62 | -10.00 | 227.19 | -10.00 | 131.67 |
| 280 | 0.00 | 56.13 | -10.00 | 227.19 | -10.00 | 131.67 |
| 285 | 0.00 | 59.79 | -10.00 | 227.19 | -10.00 | 131.67 |
| 290 | 0.00 | 63.56 | -10.00 | 227.19 | -10.00 | 131.67 |
| 295 | 0.00 | 67.42 | -10.00 | 227.19 | -10.00 | 131.67 |
| 300 | 0.00 | 71.36 | -10.00 | 227.19 | -10.00 | 131.67 |
| 305 | 0.00 | 75.34 | -10.00 | 227.19 | -10.00 | 131.67 |
| 310 | 0.00 | 79.37 | -10.00 | 227.19 | -10.00 | 131.67 |
| 315 | 0.00 | 83.43 | -10.00 | 227.19 | -10.00 | 131.67 |
| 320 | 0.00 | 87.50 | -10.00 | 227.19 | -10.00 | 131.67 |
| 325 | 0.00 | 91.58 | -10.00 | 227.19 | -10.00 | 131.67 |
| 330 | 0.00 | 95.66 | -10.00 | 227.19 | -10.00 | 131.67 |
| 335 | 0.00 | 99.72 | -10.00 | 227.19 | -10.00 | 131.67 |
| 340 | 0.00 | 103.76 | -10.00 | 227.19 | -10.00 | 131.67 |
| 345 | 0.00 | 107.76 | -10.00 | 227.19 | -10.00 | 131.67 |
| 350 | 0.00 | 111.70 | -10.00 | 227.19 | -10.00 | 131.67 |
| 355 | 0.00 | 107.93 | -10.00 | 227.19 | -10.00 | 131.67 |

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: 

Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: May 24, 2012