

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
3003 Moffitt LLC
MISSOURI CTY, TX
(9 Meter)
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
December 19, 2011

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	5
4. EARTH STATION COORDINATION DATA.....	6
5. CERTIFICATION.....	10

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.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-receive earth station.

Company

CENTERPOINT ENERGY INC
Great Western Communications, LLC
GTE Mobilnet of South Texas LTD Partners
Harris County ITC

No other carriers reported potential interference cases.

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 10/24/2011.

Company

American National Insurance Company
Austin Energy
BLUEBONNET ELECTRIC COOPERATIVE INC
Bell Atlantic Mobile Allentown-Verizon W
CENTERPOINT ENERGY INC
Central Telephone Company of Texas
Cequel III Communications I, LLC
Cingular Wireless of Texas RSA #16 LP
Dallas MTA, L.P.
Dobson Cellular Systems LLC - S Texas
Dobson Cellular Systems, Inc.
ENTERPRISE PRODUCTS OPERATING LLC
ERF Wireless Bundled Services, Inc.
Equistar Chemicals, LP
GTE Mobilnet of South Texas LTD Partners
GTE Mobilnet of Texas RSA #17 LTD Prtnsh
Great Western Communications, LLC
Greater Harris County 911 Emergency Net
Harris County ITC
Houston, City of
International Communications Group, Inc.
JASPER NEWTON ELECTRIC COOPERATIVE
LOWER COLORADO RIVER AUTHORITY
Lake Charles Harbor Police
MCI Communications Services Inc.
METROPOLITAN AREA NETWORKS, INC.
New Cingular Wireless PCS LLC - S Texas
SAN BERNARD ELECTRIC COOPERATIVE INC
SOUTH TEXAS ELECTRIC COOPERATIVE
Sam Houston Electric Cooperative
San Antonio MTA, L.P.
Stelera Wireless, LLC
Stratos Offshore Services Company
T-MOBILE USA, INC.
TEXAS NEW MEXICO POWER COMPANY
Texas Eastern Communications, Inc.
Texas RSA 18 Limited Partnership
Transcontinental Gas Pipeline Corp.
Trunkline Gas Company, LLC
Union Pacific Railroad Company
Verizon Wireless Texas, 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: 12/16/2011
Job Number: 111024COMSGE01

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign:
Licensee Code: MOFFIT
Licensee Name: 3003 Moffitt LLC

Site Information

MISSOURI CITY, TX
Venue Name:
Latitude (NAD 83): 29° 35' 3.0" N
Longitude (NAD 83): 95° 30' 8.7" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 24.38 m / 80.0 ft

Link Information

Satellite Type: Geostationary
Mode: TR - Transmit-Receive
Modulation: Digital
Satellite Arc: 24.5° W to 143° West Longitude
Azimuth Range: 99.6° to 245.7°
Corresponding Elevation Angles: 7.8° / 28.3°
Antenna Centerline (AGL): 5.49 m / 18.0 ft

Antenna Information

Receive - FCC32
Manufacturer: Harris
Model: 9 Meter
Gain / Diameter: 50.0 dBi / 9.0 m
3-dB / 15-dB Beamwidth: 0.56° / 1.20°

Transmit - FCC32

Harris
9 Meter
53.7 dBi / 9.0 m
0.40° / 0.80°

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

(1) -2.7 (2) -17.7
21.3 6.3

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

51.0 36.0
75.0 60.0

Interference Objectives: Long Term -156.0 dBW/MHz 20%
Short Term -146.0 dBW/MHz 0.01%

-154.0 dBW/4 kHz 20%
-131.0 dBW/4 kHz 0.0025%

Frequency Information

Receive 4.0 GHz
Emission / Frequency Range (MHz): 1M10G7D - 36M0G7D / 3700.0 - 4200.0

Transmit 6.1 GHz

1M10G7D - 36M0G7D
(1) 5925.0 - 5929.0, 6169.0 - 6181.0
(1) 6421.0 - 6425.0
(2) 5925.0 - 5929.0, 5991.0 - 6008.0
(2) 6110.0 - 6136.0, 6169.0 - 6181.0
(2) 6283.0 - 6299.0, 6332.0 - 6425.0

Max Great Circle Coordination Distance: 507.8 km / 315.5 mi
Precipitation Scatter Contour Radius: 567.7 km / 352.7 mi

291.2 km / 180.9 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

MISSOURI CITY, TX

Licensee Name 3003 Moffitt LLC
Latitude (NAD 83) 29° 35' 3.0" N
Longitude (NAD 83) 95° 30' 8.7" W
Ground Elevation (AMSL) 24.38 m / 80.0 ft
Antenna Centerline (AGL) 5.49 m / 18.0 ft
Antenna Model Harris 9 Meter
Antenna Mode Receive 4.0 GHz Transmit 6.1 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -154.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	99.56	-10.00	285.28	-10.00	170.66
5	0.00	94.61	-10.00	285.28	-10.00	170.66
10	0.00	89.65	-10.00	285.28	-10.00	170.66
15	0.00	84.70	-10.00	285.28	-10.00	170.66
20	0.00	79.75	-10.00	285.28	-10.00	170.66
25	0.00	74.80	-10.00	285.28	-10.00	170.66
30	0.00	69.85	-10.00	285.28	-10.00	170.66
35	0.00	64.90	-10.00	285.28	-10.00	170.66
40	0.00	59.96	-10.00	285.28	-10.00	170.66
45	0.00	55.03	-10.00	285.28	-10.00	170.66
50	0.00	50.10	-10.00	285.28	-10.00	170.66
55	0.00	45.19	-9.38	289.28	-9.38	173.09
60	0.00	40.29	-8.13	297.46	-8.13	177.92
65	0.00	35.41	-6.73	306.94	-6.73	183.33
70	0.00	30.57	-5.13	318.73	-5.13	189.48
75	0.00	25.79	-3.29	332.03	-3.29	196.57
80	0.00	21.09	-1.10	348.22	-1.10	204.89
85	0.00	16.57	1.52	368.36	1.52	213.54
90	0.00	12.40	4.66	392.91	4.66	226.95
95	0.00	9.10	8.03	421.42	8.03	242.62
100	0.00	7.84	9.65	507.76	9.65	291.24
105	0.00	9.47	7.59	417.59	7.59	240.49
110	0.00	12.95	4.19	389.05	4.19	224.87
115	0.00	17.13	1.16	365.53	1.16	212.07
120	0.00	21.31	-1.21	347.39	-1.21	204.47
125	0.00	25.42	-3.13	333.16	-3.13	197.16
130	0.00	29.45	-4.73	321.62	-4.73	191.04
135	0.00	33.38	-6.09	311.39	-6.09	185.81
140	0.00	37.17	-7.25	303.35	-7.25	181.31
145	0.00	40.78	-8.26	296.59	-8.26	177.41
150	0.00	44.17	-9.13	290.89	-9.13	174.05
155	0.00	47.27	-9.86	286.14	-9.86	171.18
160	0.00	50.01	-10.00	285.28	-10.00	170.66
165	0.00	52.30	-10.00	285.28	-10.00	170.66
170	0.00	54.04	-10.00	285.28	-10.00	170.66
175	0.00	55.13	-10.00	285.28	-10.00	170.66
180	0.00	55.50	-10.00	285.28	-10.00	170.66
185	0.00	55.13	-10.00	285.28	-10.00	170.66

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

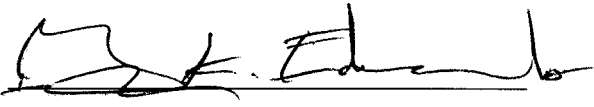
MISSOURI CITY, TX

Licensee Name	3003 Moffitt LLC			
Latitude (NAD 83)	29° 35' 3.0" N			
Longitude (NAD 83)	95° 30' 8.7" W			
Ground Elevation (AMSL)	24.38 m / 80.0 ft			
Antenna Centerline (AGL)	5.49 m / 18.0 ft			
Antenna Model	Harris 9 Meter			
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz	
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%
Max Available RF Power			-2.7 (dBW/4 kHz)	

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	54.04	-10.00	285.28	-10.00	170.66
195	0.00	52.30	-10.00	285.28	-10.00	170.66
200	0.00	50.01	-10.00	285.28	-10.00	170.66
205	0.00	47.27	-9.86	286.14	-9.86	171.18
210	0.00	44.17	-9.13	290.89	-9.13	174.05
215	0.00	40.78	-8.26	296.58	-8.26	177.41
220	0.00	37.49	-7.35	302.71	-7.35	180.94
225	0.00	34.55	-6.46	308.79	-6.46	184.37
230	0.00	32.05	-5.65	315.10	-5.65	187.51
235	0.00	30.11	-4.97	319.90	-4.97	190.11
240	0.00	28.85	-4.50	323.23	-4.50	191.90
245	0.00	28.34	-4.31	324.61	-4.31	192.64
250	0.00	28.64	-4.42	323.80	-4.42	192.21
255	0.00	29.71	-4.82	320.93	-4.82	190.67
260	0.00	31.49	-5.45	316.47	-5.45	188.25
265	0.00	33.85	-6.24	310.33	-6.24	185.23
270	0.00	36.69	-7.11	304.31	-7.11	181.85
275	0.00	39.89	-8.02	298.17	-8.02	178.34
280	0.00	43.39	-8.93	292.15	-8.93	174.80
285	0.00	47.10	-9.83	286.39	-9.83	171.33
290	0.00	50.99	-10.00	285.28	-10.00	170.66
295	0.00	55.01	-10.00	285.28	-10.00	170.66
300	0.00	59.13	-10.00	285.28	-10.00	170.66
305	0.00	63.33	-10.00	285.28	-10.00	170.66
310	0.00	67.60	-10.00	285.28	-10.00	170.66
315	0.00	71.91	-10.00	285.28	-10.00	170.66
320	0.00	76.26	-10.00	285.28	-10.00	170.66
325	0.00	80.63	-10.00	285.28	-10.00	170.66
330	0.00	85.02	-10.00	285.28	-10.00	170.66
335	0.00	89.42	-10.00	285.28	-10.00	170.66
340	0.00	93.82	-10.00	285.28	-10.00	170.66
345	0.00	98.22	-10.00	285.28	-10.00	170.66
350	0.00	102.60	-10.00	285.28	-10.00	170.66
355	0.00	104.51	-10.00	285.28	-10.00	170.66

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: December 19, 2011

COMSEARCH

Earth Station Data Sheet

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

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
3003 Moffitt LLC
MISSOURI CITY, TX
(5.5 Meter)
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
December 19, 2011

TABLE OF CONTENTS

1. CONCLUSIONS 3
2. SUMMARY OF RESULTS 4
3. SUPPLEMENTAL SHOWING 5
4. EARTH STATION COORDINATION DATA 6
5. CERTIFICATION 10

COMSEARCH

Earth Station Data Sheet

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

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.

The following companies reported potential great circle interference conflicts that did not meet the objectives on a line-of-sight basis. When over-the-horizon losses are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit-receive earth station.

Company

CENTERPOINT ENERGY INC
Great Western Communications, LLC
GTE Mobilnet of South Texas LTD Partners
Harris County ITC

No other carriers reported potential interference cases.

COMSEARCH

Earth Station Data Sheet

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

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 10/24/2011.

Company

American National Insurance Company
Austin Energy
BLUEBONNET ELECTRIC COOPERATIVE INC
Bell Atlantic Mobile Allentown-Verizon W
CENTERPOINT ENERGY INC
Central Telephone Company of Texas
Cequel III Communications I, LLC
Cingular Wireless of Texas RSA #16 LP
Dallas MTA, L.P.
Dobson Cellular Systems LLC - S Texas
Dobson Cellular Systems, Inc.
ENTERPRISE PRODUCTS OPERATING LLC
ERF Wireless Bundled Services, Inc.
Equistar Chemicals, LP
GTE Mobilnet of South Texas LTD Partners
GTE Mobilnet of Texas RSA #17 LTD Prtnsh
Great Western Communications, LLC
Greater Harris County 911 Emergency Net
Harris County ITC
Houston, City of
International Communications Group, Inc.
JASPER NEWTON ELECTRIC COOPERATIVE
LOWER COLORADO RIVER AUTHORITY
Lake Charles Harbor Police
MCI Communications Services Inc.
METROPOLITAN AREA NETWORKS, INC.
New Cingular Wireless PCS LLC - S Texas
SAN BERNARD ELECTRIC COOPERATIVE INC
SOUTH TEXAS ELECTRIC COOPERATIVE
Sam Houston Electric Cooperative
San Antonio MTA, L.P.
Stelera Wireless, LLC
Stratos Offshore Services Company
T-MOBILE USA, INC.
TEXAS NEW MEXICO POWER COMPANY
Texas Eastern Communications, Inc.
Texas RSA 18 Limited Partnership
Transcontinental Gas Pipeline Corp.
Trunkline Gas Company, LLC
Union Pacific Railroad Company
Verizon Wireless Texas, 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: 12/16/2011
Job Number: 111024COMSGE02

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign:
Licensee Code: MOFFIT
Licensee Name: 3003 Moffitt LLC

Site Information

Venue Name: MISSOURI CITY, TX
Latitude (NAD 83): 29° 35' 3.0" N
Longitude (NAD 83): 95° 30' 8.7" W
Climate Zone: A
Rain Zone: 2
Ground Elevation (AMSL): 24.38 m / 80.0 ft

Link Information

Satellite Type: Geostationary
Mode: TR - Transmit-Receive
Modulation: Digital
Satellite Arc: 24.5° W to 143° West Longitude
Azimuth Range: 99.6° to 245.7°
Corresponding Elevation Angles: 7.8° / 28.3°
Antenna Centerline (AGL): 3.66 m / 12.0 ft

Antenna Information

		Receive - FCC32		Transmit - FCC32	
Manufacturer		Comtech		Comtech	
Model		5.5 Meter		5.5 Meter	
Gain / Diameter		42.0 dBi / 5.5 m		45.9 dBi / 5.5 m	
3-dB / 15-dB Beamwidth		1.00° / 2.00°		0.60° / 1.60°	
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)			(1) -2.7 (2) -17.7 21.3 6.3	
Maximum EIRP	(dBW/4 kHz) (dBW/MHz)			43.2 28.2 67.2 52.2	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz	20%
	Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz	0.0025%

Frequency Information

	Receive 4.0 GHz	Transmit 6.1 GHz
Emission / Frequency Range (MHz)	1M10G7D - 36M0G7D / 3700.0 - 4200.0	1M10G7D - 36M0G7D (1) 5925.0 - 5929.0, 6169.0 - 6181.0 (1) 6421.0 - 6425.0 (2) 5925.0 - 5929.0, 5991.0 - 6008.0, (2) 6110.0 - 6136.0, 6169.0 - 6181.0 (2) 6283.0 - 6425.0
Max Great Circle Coordination Distance	461.9 km / 287.0 mi	259.0 km / 160.9 mi
Precipitation Scatter Contour Radius	567.7 km / 352.7 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

MISSOURI CITY, TX

Licensee Name 3003 Moffitt LLC
Latitude (NAD 83) 29° 35' 3.0" N
Longitude (NAD 83) 95° 30' 8.7" W
Ground Elevation (AMSL) 24.38 m / 80.0 ft
Antenna Centerline (AGL) 3.66 m / 12.0 ft
Antenna Model Comtech 5.5 Meter
Antenna Mode Receive 4.0 GHz Transmit 6.1 GHz
Interference Objectives: Long Term -156.0 dBW/MHz 20% -154.0 dBW/4 kHz 20%
Short Term -146.0 dBW/MHz 0.01% -131.0 dBW/4 kHz 0.0025%
Max Available RF Power -2.7 (dBW/4 kHz)

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
0	0.00	99.56	-10.00	285.28	-10.00	170.66
5	0.00	94.61	-10.00	285.28	-10.00	170.66
10	0.00	89.65	-10.00	285.28	-10.00	170.66
15	0.00	84.70	-10.00	285.28	-10.00	170.66
20	0.00	79.75	-10.00	285.28	-10.00	170.66
25	0.00	74.80	-10.00	285.28	-10.00	170.66
30	0.00	69.85	-10.00	285.28	-10.00	170.66
35	0.00	64.90	-10.00	285.28	-10.00	170.66
40	0.00	59.96	-10.00	285.28	-10.00	170.66
45	0.00	55.03	-10.00	285.28	-10.00	170.66
50	0.00	50.10	-10.00	285.28	-10.00	170.66
55	0.00	45.19	-9.38	289.28	-9.38	173.09
60	0.00	40.29	-8.13	297.46	-8.13	177.92
65	0.00	35.41	-6.73	306.94	-6.73	183.33
70	0.00	30.57	-5.13	318.73	-5.13	189.48
75	0.00	25.79	-3.29	332.03	-3.29	196.57
80	0.00	21.09	-1.10	348.22	-1.10	204.89
85	0.00	16.57	1.52	368.36	1.52	213.54
90	0.00	12.40	4.66	392.91	4.66	226.95
95	0.00	9.10	8.03	421.42	8.03	242.62
100	0.00	7.84	9.65	461.91	9.65	259.00
105	0.00	9.47	7.59	417.59	7.59	240.49
110	0.00	12.95	4.19	389.05	4.19	224.87
115	0.00	17.13	1.16	365.53	1.16	212.07
120	0.00	21.31	-1.21	347.39	-1.21	204.47
125	0.00	25.42	-3.13	333.16	-3.13	197.16
130	0.00	29.45	-4.73	321.62	-4.73	191.04
135	0.00	33.38	-6.09	311.39	-6.09	185.81
140	0.00	37.17	-7.25	303.35	-7.25	181.31
145	0.00	40.78	-8.26	296.59	-8.26	177.41
150	0.00	44.17	-9.13	290.89	-9.13	174.05
155	0.00	47.27	-9.86	286.14	-9.86	171.18
160	0.00	50.01	-10.00	285.28	-10.00	170.66
165	0.00	52.30	-10.00	285.28	-10.00	170.66
170	0.00	54.04	-10.00	285.28	-10.00	170.66
175	0.00	55.13	-10.00	285.28	-10.00	170.66
180	0.00	55.50	-10.00	285.28	-10.00	170.66
185	0.00	55.13	-10.00	285.28	-10.00	170.66

COMSEARCH

Earth Station Data Sheet

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

Coordination Values

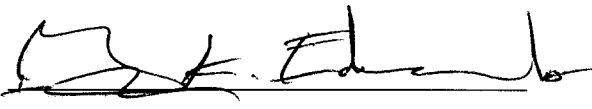
MISSOURI CITY, TX

Licensee Name	3003 Moffitt LLC		
Latitude (NAD 83)	29° 35' 3.0" N		
Longitude (NAD 83)	95° 30' 8.7" W		
Ground Elevation (AMSL)	24.38 m / 80.0 ft		
Antenna Centerline (AGL)	3.66 m / 12.0 ft		
Antenna Model	Comtech 5.5 Meter		
Antenna Mode	Receive 4.0 GHz		Transmit 6.1 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz	20%	-154.0 dBW/4 kHz
Short Term	-146.0 dBW/MHz	0.01%	-131.0 dBW/4 kHz
Max Available RF Power			-2.7 (dBW/4 kHz)
			0.0025%

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 4.0 GHz		Transmit 6.1 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)	Horizon Gain (dBi)	Coordination Distance (km)
190	0.00	54.04	-10.00	285.28	-10.00	170.66
195	0.00	52.30	-10.00	285.28	-10.00	170.66
200	0.00	50.01	-10.00	285.28	-10.00	170.66
205	0.00	47.27	-9.86	286.14	-9.86	171.18
210	0.00	44.17	-9.13	290.89	-9.13	174.05
215	0.00	40.78	-8.26	296.58	-8.26	177.41
220	0.00	37.49	-7.35	302.71	-7.35	180.94
225	0.00	34.55	-6.46	308.79	-6.46	184.37
230	0.00	32.05	-5.65	315.10	-5.65	187.51
235	0.00	30.11	-4.97	319.90	-4.97	190.11
240	0.00	28.85	-4.50	323.23	-4.50	191.90
245	0.00	28.34	-4.31	324.61	-4.31	192.64
250	0.00	28.64	-4.42	323.80	-4.42	192.21
255	0.00	29.71	-4.82	320.93	-4.82	190.67
260	0.00	31.49	-5.45	316.47	-5.45	188.25
265	0.00	33.85	-6.24	310.33	-6.24	185.23
270	0.00	36.69	-7.11	304.31	-7.11	181.85
275	0.00	39.89	-8.02	298.17	-8.02	178.34
280	0.00	43.39	-8.93	292.15	-8.93	174.80
285	0.00	47.10	-9.83	286.39	-9.83	171.33
290	0.00	50.99	-10.00	285.28	-10.00	170.66
295	0.00	55.01	-10.00	285.28	-10.00	170.66
300	0.00	59.13	-10.00	285.28	-10.00	170.66
305	0.00	63.33	-10.00	285.28	-10.00	170.66
310	0.00	67.60	-10.00	285.28	-10.00	170.66
315	0.00	71.91	-10.00	285.28	-10.00	170.66
320	0.00	76.26	-10.00	285.28	-10.00	170.66
325	0.00	80.63	-10.00	285.28	-10.00	170.66
330	0.00	85.02	-10.00	285.28	-10.00	170.66
335	0.00	89.42	-10.00	285.28	-10.00	170.66
340	0.00	93.82	-10.00	285.28	-10.00	170.66
345	0.00	98.22	-10.00	285.28	-10.00	170.66
350	0.00	102.60	-10.00	285.28	-10.00	170.66
355	0.00	104.51	-10.00	285.28	-10.00	170.66

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: December 19, 2011