FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
East Stroudsburg Univ Board of Trustees
EAST STROUDSBURG, PA
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
February 20, 2004

TABLE OF CONTENTS

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 receive-only earth station.

Company

AT&T CORP
MCI Network Services, Inc

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 02/17/2004.

Company
AT&T CORP
MCI Network Services, Inc.

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.

Date:	02/17/2004
Job Number:	

Administrative Information	
Status	ENGINEER PROPOSAL
Call Sign	
Licensee Code	WESSFM
Licensee Name	East Stroudsburg Univ Board of Trustees (WESS)

Site Information	**EAST STROUDSBURG, PA**
Venue Name	
Latitude (NAD 83)	40° 59' 41.0" N
Longitude (NAD 83)	75° 10' 25.4" W
Climate Zone	A
Rain Zone	2
Ground Elevation (AMSL)	156.67 m / 514.0 ft

Link Information	
Satellite Type	Geostationary
Mode	RO - Receive-Only
Modulation	Digital
Satellite Arc	60° W to 143° West Longitude
Azimuth Range	157.5° to 255.0°
Corresponding Elevation Angles	40.1° / 7.9°
Antenna Centerline (AGL)	11.58 m / 38.0 ft

Antenna Information		**Receive - C40381**	
Manufacturer		COMTECH ANTENNA SYSTEMS	
Model		3.8 METER PF	
Gain / Diameter		42.9 dBi / 3.8 m	
3-dB / 15-dB Beamwidth		1.4° / 2.8°	
Interference Objectives:	Long Term	-156.0 dBW/MHz	20%
	Short Term	-146.0 dBW/MHz	0.01%

Frequency Information	**Receive 4.0 GHz**
Emission / Frequency Range (MHz)	30K0F1D - 10M3G7W / 3700.0 - 4200.0
Max Great Circle Coordination Distance	470.9 km / 292.6 mi
Precipitation Scatter Contour Radius	566.1 km / 351.7 mi

Coordination Values	**EAST STROUDSBURG, PA**
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Antenna Mode	Receive 4.0 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz 20%
Short Term	-146.0 dBW/MHz 0.01%

			Receive 4.0 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
0	1.10	104.86	-8.10	227.10
5	0.86	109.81	-8.10	238.18
10	0.82	114.77	-8.10	240.84
15	0.74	119.71	-9.98	234.78
20	0.82	124.66	-11.03	224.57
25	1.04	121.66	-10.43	217.07
30	1.23	118.32	-9.43	215.92
35	1.03	114.68	-8.10	229.41
40	1.03	111.03	-8.10	229.44
45	0.89	107.28	-8.10	236.55
50	0.79	103.48	-8.10	242.55
55	1.01	99.70	-8.10	229.87
60	0.78	95.83	-8.10	243.24
65	0.96	91.97	-8.10	232.44
70	0.83	88.10	-8.10	239.91
75	0.51	84.26	-8.10	260.54
80	0.83	80.39	-8.10	239.82
85	1.93	76.36	-8.10	205.28
90	2.09	72.49	-8.10	201.45
95	2.34	68.63	-8.10	195.87
100	2.22	64.95	-8.10	198.60
105	2.35	61.26	-8.10	195.63
110	2.63	57.61	-8.10	189.45
115	2.70	54.19	-8.10	187.90
120	2.64	51.00	-8.10	189.09
125	2.05	48.42	-8.10	202.22
130	2.41	45.45	-8.10	194.23
135	2.74	42.78	-8.10	186.99
140	2.88	40.61	-7.35	187.57
145	2.86	39.02	-6.90	190.19
150	2.62	38.14	-6.73	196.26
155	2.80	37.39	-6.58	193.03
160	3.40	36.79	-6.46	180.62
165	2.98	37.77	-6.65	188.81
170	3.01	38.73	-6.85	187.22
175	2.88	39.51	-7.00	189.24
180	0.00	42.62	-8.15	297.34
185	2.57	39.82	-7.06	195.77

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Antenna Mode	Receive 4.0 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz 20%
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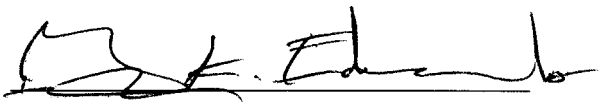
			Receive 4.0 GHz	
Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Horizon Gain (dBi)	Coordination Distance (km)
190	2.46	39.26	-6.95	198.58
195	2.11	38.49	-6.80	204.59
200	2.25	36.84	-6.47	205.39
205	2.19	35.01	-6.10	206.19
210	1.04	33.74	-6.10	240.19
215	0.75	31.43	-6.10	257.33
220	0.98	28.45	-5.48	246.71
225	0.86	25.54	-4.32	261.25
230	0.58	22.57	-3.13	288.31
235	0.28	19.47	-1.57	334.41
240	0.26	16.05	1.85	363.19
245	0.25	12.54	6.36	400.85
250	0.00	9.39	10.51	443.65
255	0.63	7.31	11.90	470.92
260	0.68	8.79	11.11	396.31
265	0.45	12.45	6.45	376.27
270	0.72	16.58	1.32	311.16
275	0.74	21.18	-2.57	281.16
280	0.80	25.91	-4.46	264.60
285	1.01	30.69	-6.10	241.30
290	1.04	35.56	-6.21	239.71
295	0.91	40.48	-7.29	239.95
300	1.08	45.38	-8.10	227.69
305	1.32	50.29	-8.10	220.06
310	1.20	55.25	-8.10	223.88
315	1.21	60.20	-8.10	223.51
320	0.62	65.19	-8.10	253.29
325	0.66	70.14	-8.10	251.04
330	0.70	75.09	-8.10	247.96
335	0.85	80.05	-8.10	238.98
340	0.95	85.01	-8.10	232.87
345	0.89	89.97	-8.10	236.32
350	1.18	94.94	-8.10	224.26
355	1.22	99.90	-8.10	223.22

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: _ 

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DATED: February 20, 2004