

EXHIBIT A

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

**AMC Networks Broadcasting & Technology LLC
Bethpage, New York
(Call Sign: E010028)**

Satellite Earth Station

Prepared By:

COMSEARCH

19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
June 30, 2014

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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, based upon the restrictions noted in the Summary of Results (Section 2).

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 most cases.

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 and frequency separation are considered on the interfering paths, sufficient blockage exists to negate harmful interference from occurring with the proposed transmit and receive earth station. Further, the transmit spectrum will be restricted to frequencies 5925.0 to 6038.0 MHz and 6088.0 to 6425.0 MHz.

Company

Capital Communications of America
China Cat Productions LLC
Coralinks
CTAB Holdings, LLC.
Eastern MLG LLC
High Voltage Communications LLC
MVC Research, LLC
New York, City of
Port Authority of New York & New Jersey
Qconcept Holdings LLC
SCS Networks

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 May 9, 2014.

Company

256Q Networks
AB Services LLC
ALGONQUIN GAS TRANSMISSION, LLC
AT&T Corporation
AWC Networks
Adams County Department of Emergency Svc
Affiniti PA, LLC
Allentown SMSA Limited Partnership
Appalachian Broadcasting
Atlantic City Electric Company
Auburn Data Systems, LLC
BAY BROADBAND COMMUNICATIONS LLC
BFI Licenses, LLC
Baltimore County of Maryland
Beaver Springs Faith Baptist Church, Inc
Berks County Department of Emergency Ser
Bucks County Dept. of Emergency Communic
CONSOLIDATED EDISON COMPANY OF NEW YORK
CTAB Holdings LLC
Capital Communications of America
Capstar TX LLC
Carbon, County of 911 Center
Carroll, County of
Cellco Partnership - (W-NY)
Cellco Partnership - CT, W-MA, VT
Cellco Partnership - E-MA, NH, RI
Cellco Partnership- PA Region
Cellco Prtnrshp - Phil. Tri-State Rgn
Central Hudson Gas & Electric Corp.
Chester, County of
China Cat Productions LLC
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Connecticut State Police Department

Company (Continued)

Conterra Ultra Broadband, LLC
Converge Towers LLC
Coral Reef Technologies Ltd
Coralinks
County of Burlington, Public Safety Cntr
County of Camden
County of Warren, NJ
DAUPHIN COUNTY EMERGENCY MANAGEMENT
Delaware County (PA) Emergency Services
Delaware Division of Communications
Delmarva Power and Light Company
Direct Broadcast Services, Inc.
ECW Wireless, LLC
EG Broadcast Newco Corp
EMS OF NORTHEAST PENNSYLVANIA
Eastern MLG LLC
Eastern Pennsylvania EMS Council
Electric Railroad, LLC
Essex County Sherrif Office (NJ)
Exelon Generation Company, LLC
FELHC
Firstlevel Networks
Fundamental Broadcasting LLC
Garden State Transmissions
Geodesic Networks LLC
Global Crossing Telecommunications, Inc.
Gloucester, County of
Goosetown Network Services, LLC
High Voltage Communications LLC
Highway Networks, LLC
Jefferson Microwave, LLC
Kryptic Technologies
Lackawanna, County of
Lancaster County-Wide Communications
Luzerne County Department of Public Sfty
MCI Communications Services Inc.
MCIMetro Access Transmission Svcs LLC
MONMOUTH, COUNTY OF
MVC Research. LLC
Mahwah Communications
Maryland, State of - Dept.of Info & Tech
Massachusetts Commonwealth of
Massachusetts, Commonwealth of
Mifflin Mobilecom
Monroe County Control Center (PA)
Morris, County of
Nassau County Police Department
NeXXCom Wireless LLC
New Cingular Wireless PCS LLC -NJ
New Cingular Wireless PCS - Maryland
New Cingular Wireless PCS LLC - CT

Company (Continued)

New Cingular Wireless PCS LLC - MA
New Cingular Wireless PCS LLC-DE/NH/RI
New Cingular Wireless PCS of PA LLC
New Cingular Wireless PCS, LLC (NY)
New Cingular Wireless PCS, LLC - PA
New Jersey State Police
New Jersey Transit Rail Operations, Inc.
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit
New York Communications Co., Inc
New York, City of
New York, City of
Newgig Networks, LLC
Norfolk Southern Railway
Northeast Pennsylvania SMSA LTD Prtnrsh
Northeast Utilities Service Company
Northumberland, County of
Norton, Douglas R
OCEAN, COUNTY OF
Ocean, County of - Div of Wireless Tech.
Office of Emergency Telecom Services, NJ
Open Line Communications
Orange Poughkeepsie SMSA LTD Partnership
Orange and Rockland Utilities, Inc.
PEG Bandwidth, LLC
PSEG Services Corporation
Peco Energy Company
Penn Service Microwave Co., Inc.
Pennsylvania Turnpike Commission
Pike, County of PA
Pitt Power
Port Authority of New York & New Jersey
Qoncept Holdings LLC
SCRANTON TIMES, LP
SCS Networks
SCTF NET
SW Networks
State of Maryland, MIEMSS
State of Rhode Island
Stevens Institute of Technology
Suffolk, County of
TRF SERVICES LLC
Texas Eastern Communications, LLC
Thought Transmissions, LLC
Turtle Networks 6559
Turtle Networks 6562
Velox Networks LLC
Verizon New England Inc.
Verizon Wireless (VAW) LLC (NY)
Verizon Wireless (VAW) LLC - Delaware/NJ
Verizon Wireless (VAW) LLC - Maryland
Verizon Wireless (VAW) LLC-Pennsylvania

Company (Continued)

WITF Inc.
Weblin Holdings LLC
White Rabbit Networks
Wireless Internetwork LLC
Wireless Internetwork II
Wireless World Enterprises, LLC
World Class Wireless, LLC
York County Dept of Emergency Services
Zen Networks, Inc
iSignal

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: 06/30/2014
Job Number: 140509COMSJC02

Administrative Information

Status: ENGINEER PROPOSAL
Call Sign: E010028
Licensee Code: RAINC
Licensee Name: AMC Networks Broadcasting and Technology LLC

Site Information

BETHPAGE, NEW YORK

Venue Name
Latitude (NAD 83): 40° 44' 39.6" N
Longitude (NAD 83): 73° 29' 38.1" W
Climate Zone: B
Rain Zone: 2
Ground Elevation (AMSL): 32.0 m / 105.0 ft

Link Information

Satellite Type: Geostationary
Mode: TR - Transmit-Receive
Modulation: Digital
Satellite Arc: 60° W to 143° West Longitude
Azimuth Range: 159.8° to 256.3°
Corresponding Elevation Angles: 40.9° / 6.7°
Antenna Centerline (AGL): 5.49 m / 18.0 ft

Antenna Information

Receive

Manufacturer: Vertex
Model: 9 Meter
Gain / Diameter: 50.1 dBi / 9.0 m
3-dB / 15-dB Beamwidth: 0.50° / 1.20°

Transmit

Vertex
9.0 Meter
53.5 dBi / 9.0 m
0.40° / 0.80°

36M0F3F and 36M0G7F

Max Available RF Power	(dBW/4 kHz)	-2.8	-15.3		
	(dBW/MHz)	21.2	8.7		
Maximum EIRP	(dBW/4 kHz)	50.7	38.2		
	(dBW/MHz)	74.7	62.2		
	(dBW)	77.7	77.7		
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

Emission / Frequency Range (MHz)
36M0F3F / 3700.0 - 4200.0
36M0G7F / 3700.0 - 4200.0

Transmit 6.1 GHz

36M0F3F / 5925.0 - 6038.0
36M0G7F / 5925.0 - 6038.0
36M0F3F / 6088.0 - 6425.0
36M0G7F / 6088.0 - 6425.0

Max Great Circle Coordination Distance	769.8 km / 478.3 mi	356.0 km / 221.2 mi
Precipitation Scatter Contour Radius	585.3 km / 363.6 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

BETHPAGE, NY

Licensee Name AMC Networks Broadcasting and Technology LLC
Latitude (NAD 83) 40° 44' 39.6" N
Longitude (NAD 83) 73° 29' 38.1" W
Ground Elevation (AMSL) 32.0 m / 105.0 ft
Antenna Centerline (AGL) 5.49 m / 18.0 ft
Antenna Model Vertex 9.0 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 -2.8 (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	0.24	103.62	-10.00	399.65	-10.00	193.53
5	0.32	108.59	-10.00	373.50	-10.00	180.33
10	0.24	113.55	-10.00	398.89	-10.00	193.14
15	0.29	118.51	-10.00	382.81	-10.00	185.04
20	0.43	123.48	-10.00	341.75	-10.00	163.47
25	0.42	122.42	-10.00	344.91	-10.00	165.08
30	0.39	119.14	-10.00	350.00	-10.00	168.43
35	0.36	115.72	-10.00	360.59	-10.00	173.80
40	0.37	112.21	-10.00	356.93	-10.00	171.94
45	0.36	108.60	-10.00	360.44	-10.00	173.72
50	0.36	104.93	-10.00	358.62	-10.00	172.80
55	0.34	101.21	-10.00	364.38	-10.00	175.72
60	0.28	97.44	-10.00	383.42	-10.00	185.35
65	0.00	93.64	-10.00	412.20	-10.00	200.20
70	0.00	89.86	-10.00	412.20	-10.00	200.20
75	0.00	86.08	-10.00	412.20	-10.00	200.20
80	0.00	82.32	-10.00	412.20	-10.00	200.20
85	0.00	78.58	-10.00	412.20	-10.00	200.20
90	0.00	74.88	-10.00	412.20	-10.00	200.20
95	0.00	71.23	-10.00	412.20	-10.00	200.20
100	0.00	67.66	-10.00	412.20	-10.00	200.20
105	0.00	64.18	-10.00	412.20	-10.00	200.20
110	0.00	60.80	-10.00	412.20	-10.00	200.20
115	0.00	57.57	-10.00	412.20	-10.00	200.20
120	0.00	54.50	-10.00	412.20	-10.00	200.20
125	0.00	51.64	-10.00	412.20	-10.00	200.20
130	0.00	49.01	-10.00	412.20	-10.00	200.20
135	0.00	46.67	-9.73	415.61	-9.73	201.76
140	0.00	44.67	-9.25	421.62	-9.25	204.51
145	0.00	43.04	-8.85	426.76	-8.85	206.85
150	0.00	41.85	-8.54	430.71	-8.54	208.64
155	0.00	41.12	-8.35	433.18	-8.35	209.76
160	0.00	40.89	-8.29	433.99	-8.29	210.12
165	0.00	41.16	-8.36	433.06	-8.36	209.70
170	0.00	41.92	-8.56	430.46	-8.56	208.53
175	0.00	42.65	-8.75	428.04	-8.75	207.43
180	0.00	42.90	-8.81	427.23	-8.81	207.06

COMSEARCH

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Coordination Values

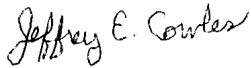
BETHPAGE, NY

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Latitude (NAD 83) 40° 44' 39.6" N
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Ground Elevation (AMSL) 32.0 m / 105.0 ft
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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 -2.8 (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)
185	0.00	42.65	-8.75	428.04	-8.75	207.43
190	0.00	41.92	-8.56	430.46	-8.56	208.53
195	0.00	40.73	-8.25	434.54	-8.25	210.37
200	0.00	39.12	-7.81	440.31	-7.81	212.97
205	0.00	37.14	-7.24	447.88	-7.24	216.37
210	0.00	34.82	-6.55	457.41	-6.55	220.62
215	0.00	32.23	-5.71	468.52	-5.71	225.83
220	0.00	29.39	-4.70	482.90	-4.70	232.15
225	0.00	26.35	-3.52	500.47	-3.52	239.79
230	0.00	23.15	-2.11	522.21	-2.11	249.11
235	0.00	19.81	-0.42	549.51	-0.42	259.04
240	0.00	16.36	1.66	584.77	1.66	274.08
245	0.00	12.81	4.32	632.10	4.32	294.95
250	0.00	9.21	7.89	702.05	7.89	325.94
255	0.00	6.87	11.08	769.84	11.08	355.95
260	0.00	7.69	9.85	742.96	9.85	343.78
265	0.00	11.00	5.96	663.55	5.96	308.82
270	0.00	15.25	2.42	598.15	2.42	279.85
275	0.00	19.85	-0.44	549.11	-0.44	258.88
280	0.00	24.60	-2.77	511.90	-2.77	244.71
285	0.00	29.43	-4.72	482.68	-4.72	232.06
290	0.00	34.30	-6.38	459.67	-6.38	221.63
295	0.00	39.20	-7.83	440.01	-7.83	212.83
300	0.00	44.13	-9.12	423.30	-9.12	205.28
305	0.00	49.06	-10.00	412.20	-10.00	200.20
310	0.00	54.00	-10.00	412.20	-10.00	200.20
315	0.23	58.94	-10.00	400.14	-10.00	193.77
320	0.21	63.90	-10.00	407.28	-10.00	197.74
325	0.25	68.86	-10.00	395.16	-10.00	191.26
330	0.31	73.82	-10.00	374.86	-10.00	181.02
335	0.30	78.78	-10.00	378.74	-10.00	182.98
340	0.41	83.75	-10.00	346.40	-10.00	165.84
345	0.22	88.72	-10.00	406.07	-10.00	197.13
350	0.20	93.69	-10.00	411.97	-10.00	200.09
355	0.00	98.65	-10.00	412.20	-10.00	200.20

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.



Jeffrey E. Cowles
Engineer III, Telecommunications
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Va. 20147

DATED: June 30, 2014