

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for

Globecomm Systems, Inc.
Hauppauge, New York
(Call Sign: E070227)

Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, Virginia 20147
May 28, 2013

TABLE OF CONTENTS

1. CONCLUSIONS	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING	5
4. EARTH STATION COORDINATION DATA.....	10
5. CERTIFICATION.....	14

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

Towerstream Corporation
Turtle Networks 6465
Wireless Backhaul Infrastructure, LLC

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.

Expedited coordination data for this earth station was emailed and sent to the below listed carriers with a letter dated May 8, 2013.

Company

ADAMS COUNTY EMERGENCY MANAGEMENT AGENCY
ALBANY, COUNTY OF
ALGONQUIN GAS TRANSMISSION CO
AMFM RADIO LICENSES, LLC
ART Licensing Corp.
AT&T Corp.
AT&T Mobility - New England
AWC Networks
Aerbender, LLC
Airband Communications Inc
Allentown SMSA Limited Partnership
Appalachian Broadcasting
Archdiocese of New York Dept of Educatio
Atlantic Telecommunications
Auburn Data Systems, LLC
BAY BROADBAND COMMUNICATIONS LLC
BFI Licenses, LLC
BJ'S Wholesale Club, Inc
Bergen, County of
Berks, County of
Bucks, County of
Business Only Broadband, LLC
CAMDEN COUNTY
CBS Radio Inc. of New York
CHESTER, COUNTY OF
CMEEC
CONNECTICUT STATE OF
Cape May County Municipal Utilities Auth
Cape May County, MIS Department
Capital Communications of America
Cellco Partnership - (W-NY)
Cellco Partnership - CT, W-MA, VT
Cellco Partnership - E-MA, NH, RI
Cellco Partnership- PA Region
Cellco Partnership-Newark-Dallas Verizon
Cellco Prtnrshp - Phil. Tri-State Rgn

Company (Continued)

China Cat Productions LLC
City of Bristol Mayor's Office
City of New Haven Police Services
City of New York
City of Providence RI Public Safety Comm
Clarity Connect, Inc.
Clearwire Spectrum Holdings III, LLC
Commonwealth of Pennsylvania-Radio Proj.
Comprehensive Wireless LLC
Connecticut State Police Department
Conterra Ultra Broadband, LLC
Converge Towers LLC
Coralinks
County of Burlington
County of Rensselaer
County of Warren, NJ
D&E Communications, Inc.
DAUPHIN COUNTY EMERGENCY MANAGEMENT
Delaware Division of Communications
Direct Broadcast Services, Inc.
EAST HAMPTON TOWN POLICE DEPARTMENT
ECW Wireless, LLC
EG Broadcast Newco Corp
East Brunswick, Township of, NJ
Eastern Energy Transport LLC
Eastern MLG LLC
Eduro Networks LLC
Electric Railroad, LLC
Enoch Pratt Free Library
Essex County Sherrif Office (NJ)
Exelon Generation Company, L.L.C
FELHC, Inc.
FORDHAM UNIVERSITY(WFUV)
FiberTower Network Services Corp.-DIP
Fibertrack, LLC
First State Communications LLC
Franklin County Dept. of Emergency Servi
Fundamental Broadcasting LLC
GAW High Speed Internet
GREATER PHILADELPHIA RADIO INC
Garden State Transmissions
Global Crossing Telecommunications, Inc.
Gloucester Township
Goosetown Network Services, LLC
Greenwich, Town of (CT)
Hardy Cellular Telephone Company
High Voltage Communications LLC
Highway Networks, LLC
Hopewell Radiology Group
Hudson County MIS Department
Hudson County Prosecutor's Office

Company (Continued)

Industrial Tower and Wireless, LLC
Jefferson Microwave, LLC
Kreider Networks
Kryptic Technologies
LACKAWANNA, COUNTY OF
Lancaster County of
Last Mile Inc.
Lehigh, County of
Local Media TV Philadelphia
MB Microwave, LLC
MONMOUTH, COUNTY OF
MVC Research. LLC
Mahwah Communications
Manchester, Township of
Maryland Public Broadcasting Commission
Maryland State Highway Administration
Massachusetts Department of State Police
Massachusetts Water Resources Authority
Massachusetts, Commonwealth Public Works
Metro Networks Communications, Inc.
MetroPCS AWS, LLC
Metropolitan Broadband Systems, LLC
Mid-Hudson Data Corp
Monroe County Control Center (PA)
Morris, County of
NBC TELEMUNDO LICENSE LLC
NOROC Broadband LLC
NSTAR Electric Company
NY Dept of Health and Mental Hygiene
NYC DOT Staten Island Ferry
NYNEX Mobile Limited Partnership 2
Nassau County Police Department
National Grid USA Service Company, Inc
National Tower Company
Nep Cellcorp Inc
Netrepid, Inc.
New Britain, City of
New Cingular Wireless PCS LLC -NJ
New Cingular Wireless PCS - Maryland
New Cingular Wireless PCS LLC - DC
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 Dept of Transportation
New Jersey State Police
New Jersey Transit Rail Operations, Inc.
New Jersey Turnpike Authority-Pkwy Div
New Jersey, State of -NJ Transit

Company (Continued)

New York Communications Co., Inc
New York SMSA LP (Northern NJ)
New York SMSA Limited Partnership
New York State Police
New York, City of (Police Department)
Newgig Networks, LLC
Norcom Communications Corp.
Norfolk Southern Railway
Northeast Pennsylvania SMSA LTD Prtnrsh
Northeast Utilities Services Company
Northrop Grumman Information Technology
Northrop Grumman Systems Corporation Inc
Norton, Douglas R
Ocean, County of-Div of Wireless Tech.
Office of Emergency Telecom Services, NJ
OpenCape Corporation
Orange Poughkeepsie SMSA LTD Partnership
Orange and Rockland Utilities, Inc.
Orangetown, Town of NY
PEG Bandwidth
PENNSYLVANIA TURNPIKE COMMISSION
PISCATAWAY, TOWNSHIP OF
PSEG Services Corporation
Peco Energy Company
PhillieCo, L.P.
Philly Sports Wireless
Pines Pantry, Inc.
Pitt Power
Port Authority of New York & New Jersey
QUALCOMM INC.
Qoncept Holdings LLC
Rockland, County of
SANOFI PASTEUR
SCHUYLKILL, COUNTY OF
SCS Networks
SCTF NET
SECOM NET
SOUTHEASTERN PENNSYLVANIA TRANSIT AUTH
STAMFORD, CITY OF
STATE OF NEW JERSEY - OFFICE OF PUBLIC
SUFFOLK, COUNTY OF
SW Networks
Salem County Information Technology
San Juan Wireless
Saratoga County Office of Emergency Svcs
Shenandoah Personal Communications, LLC
Somerset, County of - Emergency Manageme
Spot On Networks
Sprint Spectrum, LP
Stafford Township
Standard Backhaul Communications LLC

Company (Continued)

State of Maryland, MIEMSS
Stevens Institute of Technology
Suffolk, County of
T-Mobile License LLC
THE BROOKLYN HOSPITAL CENTER
THE HERSHEY COMPANY
TOWNSQUARE MEDIA ATLANTIC CITY LICENSE,
TRF SERVICES LLC
Telecom Transport Management, Inc
Thacher, Proffitt & Wood LLP
Thought Transmissions, LLC
Towerstream Corp
Town of Narragansett, Rhode Island
Town of Woodbridge, Police Department
Township of Jackson
Townsquare Media Monmouth-Ocean License
Transcontinental Gas Pipeline Corp.
Turtle Networks 6386
Turtle Networks 6423
Turtle Networks 6444
Turtle Networks 6457
Turtle Networks 6465
Turtle Networks 6467
USCOC of Cumberland, Inc.
Velox Networks LLC
Verizon New England Inc.
Verizon New Jersey, Inc.
Verizon Wireless (VAW) LLC (NY)
Verizon Wireless (VAW) LLC - NJ
Verizon Wireless (VAW) LLC-Pennsylvania
WESTCHESTER, COUNTY OF
WHYY, INC.
Wayne, County of
Wayne, Township of
Weblin Holdings LLC
White Rabbit Networks
Wico, LLC
Wireless Backhaul Infrastructure, LLC
Wireless Holdings Network, LLC
Wireless Internet Work II.
Wireless Internetwork 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: 05/28/2013
Job Number: 130508COMSJC04

Administrative Information

Status ENGINEER PROPOSAL
Call Sign E070227
Licensee Code SWSITE
Licensee Name Globecom Systems, Inc.

Site Information HAUPPAUGE, NEW YORK

Venue Name
Latitude (NAD 83) 40° 48' 54.2" N
Longitude (NAD 83) 73° 14' 12.2" W
Climate Zone A
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 3° W to 143° West Longitude
Azimuth Range 103.2° to 256.4°
Corresponding Elevation Angles 6.2° / 6.5°
Antenna Centerline (AGL) 11.89 m / 39.0 ft

Antenna Information

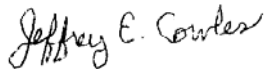
		Receive		Transmit	
Manufacturer		GD Satcom		GD Satcom	
Model		4.8 Meter		4.8 Meter	
Gain / Diameter		53.5 dBi / 4.8 m		55.2 dBi / 4.8 m	
3-dB / 15-dB Beamwidth		0.36° / 0.68°		0.30° / 0.56°	
Max Available RF Power	(dBW/4 kHz) (dBW/MHz)			-14.0 10.0	
Maximum EIRP	(dBW/4 kHz) (dBW/MHz)			41.2 65.2	
Interference Objectives:	Long Term Short Term	-156.0 dBW/MHz -146.0 dBW/MHz	20% 0.01%	-151.0 dBW/4 kHz -128.0 dBW/4 kHz	20% 0.0025%

Frequency Information

	Receive 11.0 GHz	Transmit 14.0 GHz
Emission / Frequency Range (MHz)	44K0G7W - 30M5G7W / 10950.0 - 11200.0 44K0G7W - 30M5G7W / 11450.0 - 12200.0	44K0G7W - 30M5G7W / 14000.0 - 14500.0
Max Great Circle Coordination Distance	437.7 km / 271.9 mi	200.8 km / 124.8 mi
Precipitation Scatter Contour Radius	584.8 km / 363.3 mi	100.0 km / 62.1 mi

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, Virginia 20147

DATED: May 28, 2013