



February 3, 2005

# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@po.state.ct.us](mailto:siting.council@po.state.ct.us)

[www.ct.gov/csc](http://www.ct.gov/csc)

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103-3597

RE: **EM-VER-042-050118** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 94 East High Street, East Hampton, Connecticut.

Dear Attorney Baldwin:

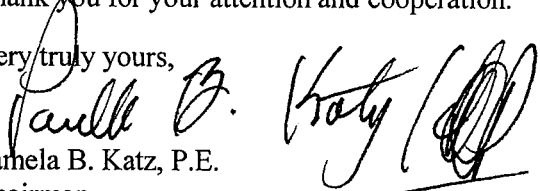
At a public meeting held on February 2, 2005, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that recommended reinforcements on page 3 of the structural analysis report sealed by Robert Semaan, P.E. be performed prior to the new antenna installation.

The proposed modifications are to be implemented as specified here and in your notice dated January 18, 2005, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

  
Pamela B. Katz, P.E.  
Chairman

PBK/laf

c: The Honorable Christopher J. Goff, Chairman Town Council, Town of East Hampton  
James Carey, Zoning Enforcement Officer, Town of East Hampton  
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP  
Michele G. Briggs, New Cingular Wireless PCS, LLC

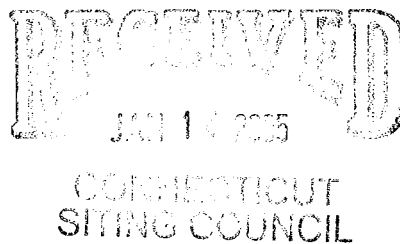
280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

EM-VER-042-050118

January 18, 2005

*Via Hand Delivery*

S. Derek Phelps  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051



Re: **Notice of Exempt Modification – Antenna Swap  
94 East High Street Telecommunications Facility  
East Hampton, Connecticut**

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility, on an existing tower owned by Sprint Sites USA, at 94 East High Street in East Hampton. The Cello facility consists of twelve (12) panel-type cellular antennas at the 105-foot level of the 120-foot tower. Equipment associated with the antennas is located in a shelter near the base of the tower.

The Connecticut Siting Council (“the Council”) approved Cellco’s shared use of the East High Street facility on September 19, 2000 (TS-BAM-042-000828). Cellco now intends to modify its facility by replacing six (6) cellular antennas with six (6) PCS antennas at the same 105-foot level on the tower. Attached behind Tab 1 are specifications for the existing cellular antennas and the proposed PCS antennas for the East High Street facility.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to East Hampton Town Manager, Alan H. Bergren.

The planned modifications to the East High Street facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).



*Law Offices*

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HART1-1227900-1

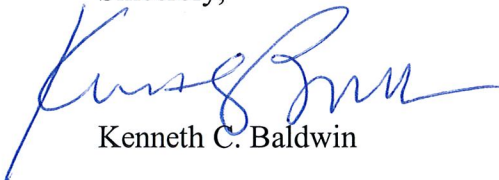
S. Derek Phelps  
January 18, 2005  
Page 2

1. The proposed modifications will not result in any increase in the overall height of the existing structure. Cellco's replacement antennas will be mounted at the same 105-foot level on the 120-foot tower.
2. The proposed modifications will not affect ground-mounted equipment and will not require the extension of the site boundaries.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more.
4. The proposed modifications will not result in radio frequency (RF) power density levels at the facility that exceed the Federal Communications Commission (FCC) adopted safety standard. Attached behind Tab 2 is a new Power Density Calculation Table.

Also attached behind Tab 3 is a structural analysis for the existing tower with the proposed modifications. The report states that the tower can support the proposed antenna modifications provided the baseplates are reinforced.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Enclosures

cc: Alan H. Bergren, Town Manager  
Sandy M. Carter



**DECIBEL**  
Base Station Antennas

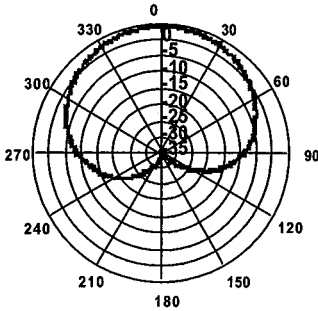
**DB844H90E-XY**

12 dBd, Directed Dipole Antenna  
806-896, 870-960 MHz

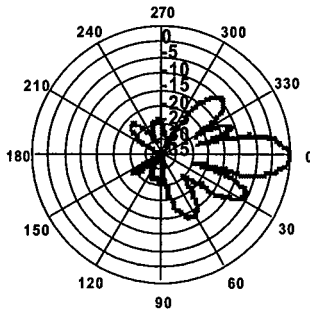
806-896 MHz  
870-960 MHz

- Excellent azimuth roll-off, 15-20% reduction in cell to cell overlap
- Superior front to back ratio
- Low profile, low wind load for easy zoning
- Outstanding field record, with thousands of units deployed, world wide

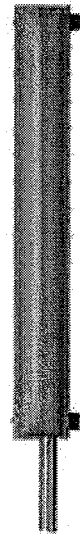
90°



Horizontal 940 MHz (Tilt=0)



Vertical 940 MHz (Tilt=0)



ELECTRICAL			MECHANICAL	
Frequency (MHz):	806-896	870-960	Weight:	14 lbs (6.4 kg)
Polarization:	Vertical	Vertical	Dimensions (LxWxD):	48 X 6.5 X 8 in (1219 X 165 X 203 mm)
Gain (dBd/dBi):	12/14.1	12.4/14.5	Max. Wind Area:	1.08 ft <sup>2</sup> (0.10 m <sup>2</sup> )
Azimuth BW:	90°	90°	Max. Wind Load (@ 100mph):	59 lbf (262 N)
Elevation BW:	15°	15°	Max. Wind Speed:	125 mph (201 km/h)
Beam Tilt:	0°	0°	Radiator Material:	Brass
USLS* (dB):	>15	>15	Reflector Material:	Aluminum
Front-to-Back Ratio* (dB):	40	40	Radome Material:	ABS, UV Resistant
VSWR:	<1.35:1	<1.35:1	Mounting Hardware Material:	Galvanized Steel
Impedance:	50 Ohms	50 Ohms	Connector Type:	7-16 DIN - Female (Back)
Max Input Power:	500 Watts	500 Watts	Alt. Connectors:	N Type - Female
Lightning Protection:	DC Ground	DC Ground	Color:	Light Gray
Opt Electrical Tilt:	6°	6°	Standard Mounting Hardware:	DB380 Pipe Mount Kit, included
			Downtilt Mounting Hardware:	DB5083, optional
			Opt. Mounting Hardware:	DB5084-AZ Azimuth Wall Mount



Andrew Corporation  
8635 Stemmons Freeway  
Dallas, Texas U.S.A 75247-3701  
Tel: 214.631.0310

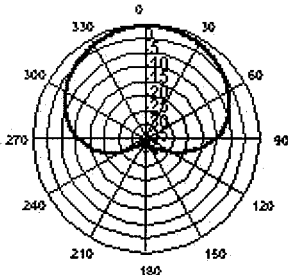
Fax: 214.631.4706  
Toll Free Tel: 1.800.676.5342  
Fax: 1.800.229.4706  
www.andrew.com

Warranty: Five years  
Date: 4/23/2004  
\* - Indicates Typical Values

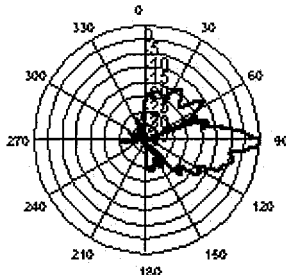
dh1tech@andrew.com

<b>DECIBEL®</b> Base Station Antennas	<b>948F85T2E-M</b> 16.1 dBi, Directed Dipole Antenna 1850-1990 MHz	<b>1850-1990 MHz</b>
		<b>MaxFill™</b> <b>dB Director®</b>
<ul style="list-style-type: none"> <li>• Exceptional azimuth roll-off reducing soft hand-offs and improving capacity</li> <li>• Excellent upper side lobe suppression</li> <li>• Deep null filling below the horizon assures improved signal intensity</li> <li>• Low profile appearance and low wind loading profile for easier zoning approvals</li> </ul>		

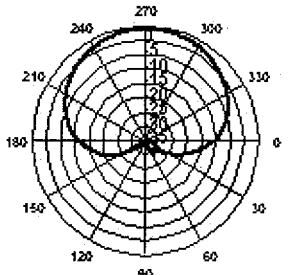
850



Azimuth 1850 MHz (Tilt=2)



Vertical 1850 MHz (Tilt=2)



Horizontal 1850 MHz (Tilt=2)



ELECTRICAL		MECHANICAL	
Frequency (MHz):	1850-1990	Weight:	8.5 lbs (3.9 kg)
Polarization:	Vertical	Dimensions (LxWxD):	48 X 3.5 X 7 in (1219 X 89 X 178 mm)
Gain (dBd/dBi):	14/16.1	Max. Wind Area:	1.18 ft² (0.11 m²)
Azimuth BW:	85°	Max. Wind Load (@ 100mph):	65 lbf (289 N)
Elevation BW:	8°	Max. Wind Speed:	125 mph (201 km/h)
Beam Tilt:	2°	Radiator Material:	Low Loss Circuit Board
USLS* (dB):	>18	Reflector Material:	Aluminum
Null Fill* (dB):	15	Radome Material:	ABS, UV Resistant
Front-to-Back Ratio* (dB):	40	Mounting Hardware Material:	Galvanized Steel
VSWR:	<1.33:1	Connector Type:	7-16 DIN - Female (Bottom)
IM Suppression - Two 20 Watt Carriers:	-150 dBc	Color:	Light Gray
Impedance:	50 Ohms	Standard Mounting Hardware:	DB390 Pipe Mount Kit, included
Max Input Power:	250 Watts	Downtilt Mounting Hardware:	DB5098, optional
Lightning Protection:	DC Ground	Opt. Mounting Hardware:	DB5094-AZ Azimuth Wall Mount
Opt Electrical Tilt:	0°, 4°, 6°		



Andrew Corporation  
 8635 Stemmons Freeway  
 Dallas, Texas U.S.A 75247-3701  
 Tel: 214.631.0310

Fax: 214.631.4706  
 Toll Free Tel: 1.800.676.5342  
 Fax: 1.800.229.4706  
 www.andrew.com

Date: 4/29/2004  
 \* - Indicates Typical Values

[dbtech@andrew.com](mailto:dbtech@andrew.com)

General Power Density

Site Name: East Hampton  
 Tower Height: 105 FT

Operator	Operating Frequency (MHz)	Number of Trans.	ERP Per Trans (watts)	Total ERP (watts)	Distance to Target (feet)	Calculated Power Density (mW/cm <sup>2</sup> )	Maximum Permissible Exposure (mW/cm <sup>2</sup> )	Fraction of MPE (%)
Verizon	880	9	200	1800	105	0.0587	0.586	10.02%
Verizon	1900	3	200	600	105	0.0196	1	1.96%
<b>Total Percentage of Maximum Permissible Exposure</b>								<b>11.98%</b>

\*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1-1992

MHz = Megahertz

mW/cm<sup>2</sup> = milliwatts per square centimeter

ERP = Effective Radiated Power



1047 N. 204<sup>th</sup> Avenue  
Elkhorn, NE 68022  
Ph: 402-289-1888  
Fax: 402-289-1861

# SEMAAN ENGINEERING SOLUTIONS

## 120 ft EEI Monopole Structural Analysis

Prepared for:  
Sprint Sites USA  
1 International Blvd  
Mahwah, NJ 07645

Site: CT03XC335  
Verizon  
East Hampton, CT



December 21, 2004

Mr. Alberto Arroyo  
Sprint Sites USA  
1 International Blvd  
Mahwah, NJ 07645

**Re: Site Number CT03XC335 – East Hampton, CT.**

Dear Mr. Arroyo:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the EIA/TIA-222-F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

**Description of Structure:**

The structure is a 120 ft EEI Monopole.

Refer to EEI drawing job #5069 dated May 28, 1999 for a detailed description of the structure.

**Method of analysis:**

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with **EIA/TIA-222-F and local building codes for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed.** This is in conformance with the IBC 2003: Section 1609.1.1, Exception (5) and Section 3108.4. Wind is applied to the structure, accessories and antennas.



**Structure loading:**

Per the loading sheet supplied, the analysis was performed using the following loading: (Proposed loading in bold)

Elev. (ft)	Qty	Antennas and Mounts	Coax	Owner
120.0	1	APC-301 On a Low Profile platform	(1) 1/2	Municipality
	1	DB264 On a Low Profile platform	(1) 7/8	
	1	DB420 On a Low Profile platform	(1) 7/8	
120.0	9	DB980H90 On a Low Profile platform	(9) 1-5/8	Sprint
105.0	6	<b>DB844H90 On a Low Profile Platform</b>	<b>(6) 1-5/8</b>	Verizon
	6	<b>DB948F On Same Platform</b>	<b>(6) 1-5/8</b>	
95.0	12	DUO1417-8686 On a Low Profile Platform	(12) 1-5/8	Cingular
	6	TMA-DD 1900 On Same Platform		
	3	DBC-750 combiner On Same Platform		
85.0	6	Allgon 7250 Strap Mounted	(12) 1-1/4	AT&T

**All transmission lines are assumed running inside of pole shaft.**

**Results of Analysis:**

Refer to the attached Computer Summary sheets for detailed analysis results.

**Structure:**

The existing monopole shaft is structurally capable of supporting the existing and proposed antennas. **However, the baseplate is overstressed by 50 % and needs to be re-enforced with gusset plates.**

The maximum pole usage is: 81.4% (shaft), 150% (baseplate).

**Foundation:**

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	1,667.90	1,596.29	95.7
Shear (kips)	18.89	18.12	95.9

The structure base reactions resulting from this analysis do not exceed the ones shown on the original structure drawings.

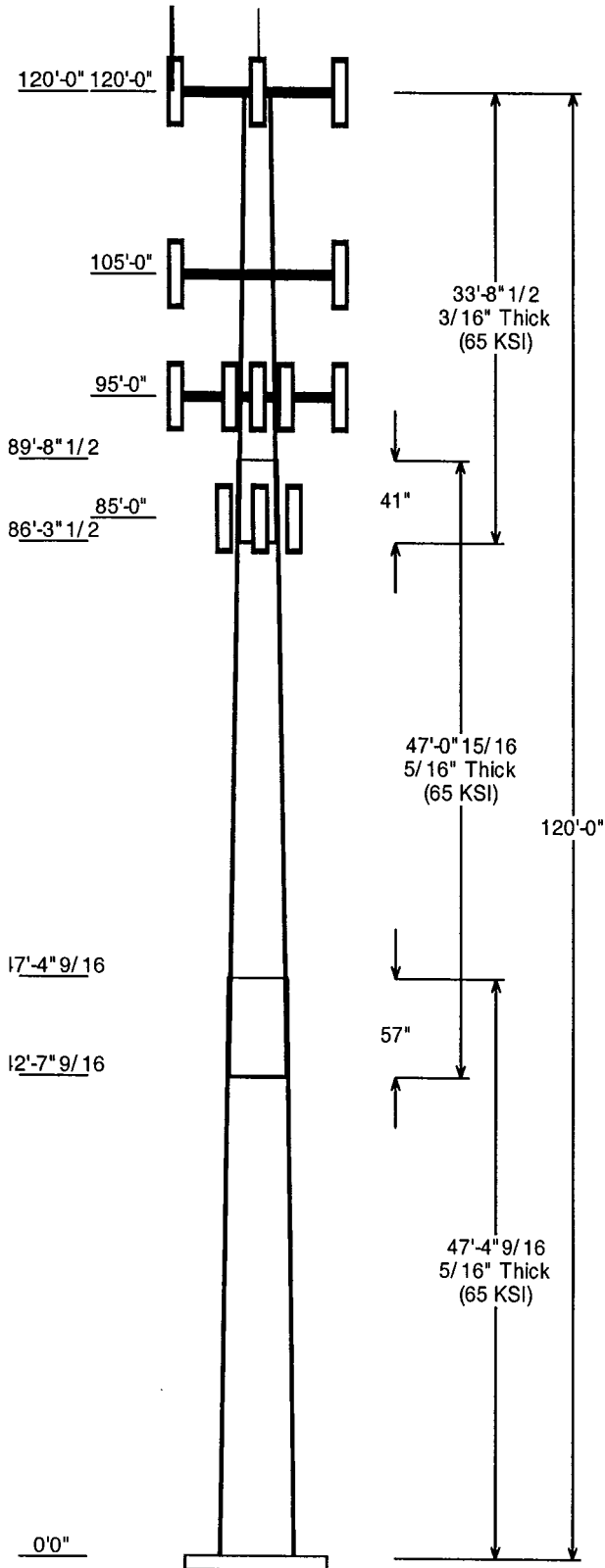
**Review and Recommendations:**

Based on the analysis results, the existing structure **does not** meet the requirements per the EIA/TIA-222-F standards for a basic wind speed of 85 mph and 1/2" radial ice with reduced wind speed. The pole can be fixed by re-enforcing the baseplate.

**SEMAAN ENGINEERING SOLUTIONS**

1079 N.204<sup>th</sup> Avenue  
 Elkhorn, NE 68022  
 Phone: 402-289-1888  
 Fax: 402-289-1861

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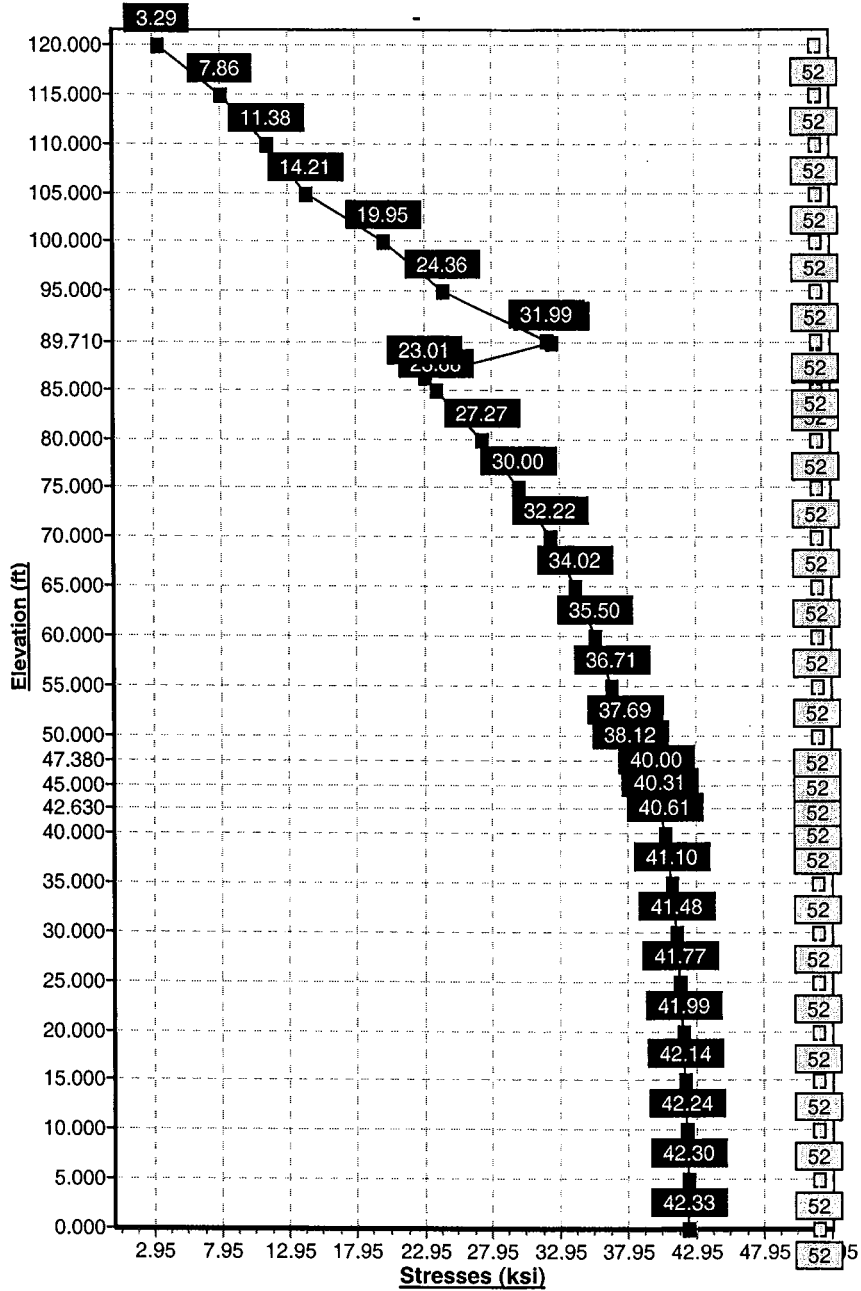
Job Information			
Pole :	CT03XC335		
Description :	Client : Sprint Sites USA - NJ		
Location :	East Hampton, CT		
Type :	18 Sides	Base Elev (ft):	0.00
Height :(ft)	120.00	Taper:	0.245830 (in/ft)

Sections Properties								
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
		Across Flats Top	Across Flats Bottom					
1	47.380	31.85	43.50	0.313		0.000	0.245830	65
2	47.080	22.07	33.64	0.313	Slip Joint	57.000	0.245830	65
3	33.707	15.00	23.28	0.188	Slip Joint	41.000	0.245830	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
120.000	120.000	9	DB980H90	
120.000	120.000	1	Low Profile platform	
120.000	129.040	1	DB420	
120.000	130.750	1	DB264	
120.000	130.000	1	APC-301	
120.000	122.500	1	Lightning Rod, 5'	
105.000	105.000	6	DB948F	
105.000	105.000	6	DB844H90	
105.000	105.000	1	Low Profile Platform	
95.000	95.000	3	DBC-750 combiner	
95.000	95.000	12	DUO1417-8686	
95.000	95.000	6	TMA-DD 1900	
95.000	95.000	1	Low Profile Platform	
85.000	85.000	1	Tri-Antenna Mount	
85.000	85.000	6	Allgon 7250	

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
85.00 mph Wind w/ No Ice	1,596.293	18.117	-16.821
73.61 mph Wind w/ 0.50 in Ice	1,386.166	15.178	-22.748

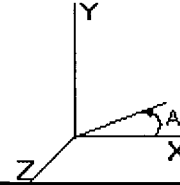
**Load Case : No Ice**



Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ

Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



Shaft Section Properties

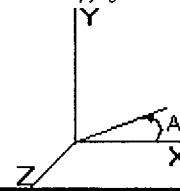
Sect Num	Length (ft)	Thick (in)	Fv (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom						Top						
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1	47.380	0.3125	65		0.00	5,975	43.50	0.000	42.84	10094.1	23.13	139.2	31.85	47.38	31.28	3931.7	16.56	101.93	0.24583
2	47.080	0.3125	65	Slip Joint	57.00	4,377	33.64	42.63	33.06	4641.0	17.57	107.6	22.07	89.71	21.58	1291.0	11.04	70.63	0.24583
3	33.707	0.1875	65	Slip Joint	41.00	1,294	23.28	86.29	13.75	926.7	20.49	124.1	15.00	120.0	8.82	244.4	12.70	80.00	0.24583
Shaft Weight						11,646													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
120.0	DB980H90	9	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
120.0	Low Profile platform	1	1500.00	22.500	1.00	2250.00	28.200	1.00	0.000	0.00	0.000
120.0	DB420	1	34.00	6.000	1.00	77.00	7.810	1.00	0.000	0.00	9.040
120.0	DB264	1	36.00	5.690	1.00	84.00	10.300	1.00	0.000	0.00	10.750
120.0	APC-301	1	50.00	6.000	1.00	93.00	8.030	1.00	0.000	0.00	10.000
120.0	Lightning Rod, 5'	1	35.00	1.050	1.00	44.00	1.730	1.00	0.000	0.00	2.500
105.0	DB948F	6	8.50	3.270	1.00	27.20	3.810	1.00	0.000	0.00	0.000
105.0	DB844H90	6	10.00	3.960	1.00	35.00	4.520	1.00	0.000	0.00	0.000
105.0	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
95.00	DBC-750 combiner	3	5.00	0.550	1.00	7.85	0.700	1.00	0.000	0.00	0.000
95.00	DUO1417-8686	12	30.80	6.530	1.00	73.00	7.150	1.00	0.000	0.00	0.000
95.00	TMA-DD 1900	6	5.60	0.387	1.00	8.86	0.531	1.00	0.000	0.00	0.000
95.00	Low Profile Platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
85.00	Tri-Antenna Mount	1	250.00	5.000	1.00	425.00	7.500	1.00	0.000	0.00	0.000
85.00	Allgon 7250	6	16.00	4.300	0.67	36.00	5.000	0.67	0.000	0.00	0.000
Totals		56	5211.20			8966.91			Number of Loadings : 15		

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



**Segment Properties** (Max Len : 5 ft)

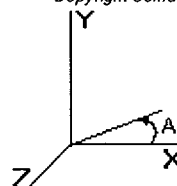
Seg Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.3125	43.500	42.835	10,094.1	23.13	139.20	65	52	0.0
5.00		0.3125	42.271	41.616	9,256.6	22.44	135.27	65	52	718.4
10.00		0.3125	41.042	40.397	8,466.7	21.75	131.33	65	52	697.7
15.00		0.3125	39.813	39.178	7,723.0	21.05	127.40	65	52	676.9
20.00		0.3125	38.583	37.959	7,024.3	20.36	123.47	65	52	656.2
25.00		0.3125	37.354	36.739	6,369.0	19.67	119.53	65	52	635.5
30.00		0.3125	36.125	35.520	5,755.8	18.97	115.60	65	52	614.7
35.00		0.3125	34.896	34.301	5,183.2	18.28	111.67	65	52	594.0
40.00		0.3125	33.667	33.082	4,650.0	17.59	107.73	65	52	573.2
42.63	Bot - Section 2	0.3125	33.020	32.441	4,384.8	17.22	105.66	65	52	293.2
45.00		0.3125	32.438	31.863	4,154.6	16.89	103.80	65	52	523.6
47.38	Top - Section 1	0.3125	32.478	31.903	4,170.1	16.91	103.93	65	52	516.4
50.00		0.3125	31.833	31.264	3,924.6	16.55	101.87	65	52	281.6
55.00		0.3125	30.604	30.045	3,483.1	15.86	97.93	65	52	521.5
60.00		0.3125	29.375	28.826	3,076.1	15.16	94.00	65	52	500.8
65.00		0.3125	28.146	27.606	2,702.1	14.47	90.07	65	52	480.1
70.00		0.3125	26.917	26.387	2,359.7	13.78	86.13	65	52	459.3
75.00		0.3125	25.688	25.168	2,047.5	13.08	82.20	65	52	438.6
80.00		0.3125	24.459	23.949	1,764.1	12.39	78.27	65	52	417.8
85.00		0.3125	23.229	22.730	1,508.2	11.70	74.33	65	52	397.1
86.29	Bot - Section 3	0.3125	22.912	22.415	1,446.3	11.52	73.32	65	52	99.3
89.71	Top - Section 2	0.1875	22.447	13.246	829.2	19.70	119.72	65	52	412.7
90.00		0.1875	22.375	13.204	821.3	19.63	119.33	65	52	13.1
95.00		0.1875	21.146	12.473	692.2	18.48	112.78	65	52	218.4
100.00		0.1875	19.917	11.741	577.4	17.32	106.22	65	52	206.0
105.00		0.1875	18.688	11.010	476.1	16.16	99.67	65	52	193.5
110.00		0.1875	17.459	10.278	387.4	15.01	93.11	65	52	181.1
115.00		0.1875	16.230	9.547	310.4	13.85	86.56	65	52	168.6
120.00		0.1875	15.000	8.815	244.4	12.70	80.00	65	52	156.2
										11,645.5

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)

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**Load Case:** No Ice      85 mph - No Ice      23 Iterations  
 Gust Response Factor : 1.69      Effective Wind Speed : 85.00 (mph)  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

**Shaft Forces**

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	18.49	31.25	308.13	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	18.49	31.25	299.42	0.650	5.00	17.869	11.615	363.06	0.00	718.4
10.00		1.00	18.49	31.25	290.71	0.650	5.00	17.357	11.282	352.65	0.00	697.7
15.00		1.00	18.49	31.25	282.01	0.650	5.00	16.845	10.949	342.25	0.00	676.9
20.00		1.00	18.49	31.25	273.30	0.650	5.00	16.332	10.616	331.84	0.00	656.2
25.00		1.00	18.49	31.25	264.59	0.650	5.00	15.820	10.283	321.44	0.00	635.5
30.00		1.00	18.49	31.25	255.89	0.650	5.00	15.308	9.950	311.03	0.00	614.7
35.00		1.01	18.81	31.78	249.27	0.650	5.00	14.796	9.617	305.72	0.00	594.0
40.00		1.05	19.54	33.02	245.12	0.650	5.00	14.284	9.285	306.62	0.00	573.2
42.63	Bot - Section 2	1.07	19.90	33.63	242.61	0.650	2.63	7.308	4.750	159.75	0.00	293.2
45.00		1.09	20.21	34.15	240.18	0.650	2.37	6.587	4.282	146.24	0.00	523.6
47.38	Top - Section 1	1.10	20.51	34.66	237.59	0.650	2.38	6.499	4.225	146.43	0.00	516.4
50.00		1.12	20.82	35.19	239.28	0.650	2.62	7.021	4.563	160.62	0.00	281.6
55.00		1.15	21.40	36.17	233.19	0.650	5.00	13.008	8.455	305.82	0.00	521.5
60.00		1.18	21.94	37.08	226.63	0.650	5.00	12.496	8.122	301.18	0.00	500.8
65.00		1.21	22.44	37.93	219.64	0.650	5.00	11.984	7.789	295.51	0.00	480.1
70.00		1.24	22.92	38.75	212.28	0.650	5.00	11.471	7.456	288.94	0.00	459.3
75.00		1.26	23.38	39.52	204.60	0.650	5.00	10.959	7.124	281.53	0.00	438.6
80.00		1.28	23.82	40.25	196.61	0.650	5.00	10.447	6.791	273.37	0.00	417.8
85.00	Appertunance(s)	1.31	24.23	40.96	188.36	0.650	5.00	9.935	6.458	264.51	0.00	397.1
86.29	Bot - Section 3	1.31	24.34	41.13	186.18	0.650	1.29	2.486	1.616	66.48	0.00	99.3
89.71	Top - Section 2	1.33	24.61	41.59	180.35	0.650	3.42	6.511	4.232	176.03	0.00	412.7
90.00		1.33	24.63	41.63	182.92	0.650	0.29	0.542	0.352	14.66	0.00	13.1
95.00	Appertunance(s)	1.35	25.02	42.28	174.21	0.650	5.00	9.067	5.894	249.20	0.00	218.4
100.00		1.37	25.38	42.90	165.29	0.650	5.00	8.555	5.561	238.59	0.00	206.0
105.00	Appertunance(s)	1.39	25.74	43.51	156.17	0.650	5.00	8.043	5.228	227.46	0.00	193.5
110.00		1.41	26.09	44.09	146.87	0.650	5.00	7.531	4.895	215.82	0.00	181.1
115.00		1.42	26.42	44.65	137.40	0.650	5.00	7.018	4.562	203.72	0.00	168.6
120.00	Appertunance(s)	1.44	26.74	45.20	127.77	0.650	5.00	6.506	4.229	191.16	0.00	156.2
<b>Totals:</b>							120.00			6,841.65	0.00	11,645.5

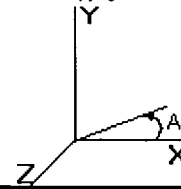
Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)

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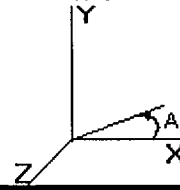
<b>Load Case:</b> No Ice	85 mph - No Ice	23 Iterations
Gust Response Factor : 1.69	Effective Wind Speed : 85.00 (mph)	
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Discrete Appurtenance Forces**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
85.00	Tri-Antenna Mount	1	24.23	40.96	5.000	1.000	0.000	0.0	0.0	204.80	0.00	0.00	0.00	0.00	250.0
85.00	Allgon 7250	6	24.23	40.96	17.209	0.667	0.000	0.0	0.0	704.87	0.00	0.00	0.00	0.00	96.0
95.00	DBC-750 combiner	3	25.02	42.28	1.650	1.000	0.000	0.0	0.0	69.77	0.00	0.00	0.00	0.00	15.0
95.00	DUO1417-8686	12	25.02	42.28	78.360	1.000	0.000	0.0	0.0	3313.31	0.00	0.00	0.00	0.00	369.6
95.00	TMA-DD 1900	6	25.02	42.28	2.322	1.000	0.000	0.0	0.0	98.18	0.00	0.00	0.00	0.00	33.6
95.00	Low Profile Platform	1	25.02	42.28	25.550	1.000	0.000	0.0	0.0	1080.33	0.00	0.00	0.00	0.00	1300.0
105.00	DB948F	6	25.74	43.51	19.620	1.000	0.000	0.0	0.0	853.66	0.00	0.00	0.00	0.00	51.0
105.00	DB844H90	6	25.74	43.51	23.760	1.000	0.000	0.0	0.0	1033.79	0.00	0.00	0.00	0.00	60.0
105.00	Low Profile Platform	1	25.74	43.51	25.550	1.000	0.000	0.0	0.0	1111.67	0.00	0.00	0.00	0.00	1300.0
120.00	DB980H90	9	26.74	45.20	19.690	0.667	0.000	0.0	0.0	890.02	0.00	0.00	0.00	0.00	81.0
120.00	Low Profile platform	1	26.74	45.20	22.500	1.000	0.000	0.0	0.0	1017.04	0.00	0.00	0.00	0.00	1500.0
120.00	DB420	1	27.30	46.15	6.000	1.000	0.000	9.0	0.0	276.90	0.00	0.00	0.00	2503.12	34.0
120.00	DB264	1	27.41	46.32	5.690	1.000	0.000	10.8	0.0	263.58	0.00	0.00	0.00	2833.49	36.0
120.00	APC-301	1	27.36	46.24	6.000	1.000	0.000	10.0	0.0	277.48	0.00	0.00	0.00	2774.84	50.0
120.00	Lightning Rod, 5'	1	26.90	45.46	1.050	1.000	0.000	2.5	0.0	47.74	0.00	0.00	0.00	119.36	35.0
										11,243.1	0.00				5,211.2

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



**Load Case:** No Ice      85 mph - No Ice      23 Iterations

Gust Response Factor : 1.69      Effective Wind Speed : 85.00 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

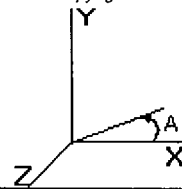
**Applied Forces Summary**

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	363.06	718.42	0.00	0.00	0.00	0.00
10.00	0.00	0.00	352.65	697.68	0.00	0.00	0.00	0.00
15.00	0.00	0.00	342.25	676.94	0.00	0.00	0.00	0.00
20.00	0.00	0.00	331.84	656.19	0.00	0.00	0.00	0.00
25.00	0.00	0.00	321.44	635.45	0.00	0.00	0.00	0.00
30.00	0.00	0.00	311.03	614.71	0.00	0.00	0.00	0.00
35.00	0.00	0.00	305.72	593.97	0.00	0.00	0.00	0.00
40.00	0.00	0.00	306.62	573.23	0.00	0.00	0.00	0.00
42.63	0.00	0.00	159.75	293.19	0.00	0.00	0.00	0.00
45.00	0.00	0.00	146.24	523.58	0.00	0.00	0.00	0.00
47.38	0.00	0.00	146.43	516.41	0.00	0.00	0.00	0.00
50.00	0.00	0.00	160.62	281.57	0.00	0.00	0.00	0.00
55.00	0.00	0.00	305.82	521.55	0.00	0.00	0.00	0.00
60.00	0.00	0.00	301.18	500.81	0.00	0.00	0.00	0.00
65.00	0.00	0.00	295.51	480.06	0.00	0.00	0.00	0.00
70.00	0.00	0.00	288.94	459.32	0.00	0.00	0.00	0.00
75.00	0.00	0.00	281.53	438.58	0.00	0.00	0.00	0.00
80.00	0.00	0.00	273.37	417.84	0.00	0.00	0.00	0.00
85.00	0.00	0.00	1,174.19	743.10	0.00	0.00	0.00	0.00
86.29	0.00	0.00	66.48	99.33	0.00	0.00	0.00	0.00
89.71	0.00	0.00	176.03	412.67	0.00	0.00	0.00	0.00
90.00	0.00	0.00	14.66	13.06	0.00	0.00	0.00	0.00
95.00	0.00	0.00	4,810.78	1,936.63	0.00	0.00	0.00	0.00
100.00	0.00	0.00	238.59	205.98	0.00	0.00	0.00	0.00
105.00	0.00	0.00	3,226.58	1,604.54	0.00	0.00	0.00	0.00
110.00	0.00	0.00	215.82	181.09	0.00	0.00	0.00	0.00
115.00	0.00	0.00	203.72	168.65	0.00	0.00	0.00	0.00
120.00	0.00	0.00	2,963.92	1,892.20	0.00	0.00	0.00	8,230.81
		Totals:	18,084.79	16,856.75	0.00	0.00	0.00	8,230.81



Pole : CT03XC335  
 Location: East Hampton, CT  
 Height: 120.0 (ft)  
 Shape: 18 Sides  
 Base Dia: 43.50 (in)  
 Taper: 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev: 0.000 (ft)  
 Top Dia: 15.00 (in)



**Load Case:** No Ice      85 mph - No Ice      23 Iterations  
 Gust Response Factor : 1.69      Effective Wind Speed : 85.00 (mph)  
 Dead Load Factor : 1.00  
 Wind Load Factor : 1.00

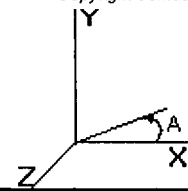
**Calculated Forces and Deflections**

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	18.117	16.821	0.000	0.000	0.000	1,596.293	0.000	0.000	0.000	0.000
5.00	17.815	16.035	0.000	0.000	0.000	1,505.708	-0.117	0.000	0.117	-0.219
10.00	17.519	15.270	0.000	0.000	0.000	1,416.634	-0.467	0.000	0.467	-0.443
15.00	17.230	14.526	0.000	0.000	0.000	1,329.039	-1.055	0.000	1.055	-0.674
20.00	16.947	13.804	0.000	0.000	0.000	1,242.892	-1.887	0.000	1.887	-0.911
25.00	16.670	13.102	0.000	0.000	0.000	1,158.159	-2.972	0.000	2.972	-1.154
30.00	16.401	12.423	0.000	0.000	0.000	1,074.808	-4.314	0.000	4.314	-1.403
35.00	16.132	11.764	0.000	0.000	0.000	992.806	-5.920	0.000	5.920	-1.659
40.00	15.847	11.145	0.000	0.000	0.000	912.145	-7.798	0.000	7.798	-1.920
42.63	15.703	10.820	0.000	0.000	0.000	870.467	-8.896	0.000	8.896	-2.063
45.00	15.561	10.267	0.000	0.000	0.000	833.250	-9.954	0.000	9.954	-2.194
47.38	15.419	9.719	0.000	0.000	0.000	796.215	-11.081	0.000	11.081	-2.327
50.00	15.280	9.390	0.000	0.000	0.000	755.818	-12.400	0.000	12.400	-2.474
55.00	14.991	8.814	0.000	0.000	0.000	679.419	-15.131	0.000	15.131	-2.734
60.00	14.703	8.262	0.000	0.000	0.000	604.465	-18.135	0.000	18.135	-2.997
65.00	14.417	7.733	0.000	0.000	0.000	530.949	-21.414	0.000	21.414	-3.259
70.00	14.135	7.228	0.000	0.000	0.000	458.862	-24.967	0.000	24.967	-3.520
75.00	13.855	6.747	0.000	0.000	0.000	388.190	-28.789	0.000	28.789	-3.775
80.00	13.581	6.293	0.000	0.000	0.000	318.913	-32.875	0.000	32.875	-4.021
85.00	12.370	5.606	0.000	0.000	0.000	251.011	-37.209	0.000	37.209	-4.250
86.29	12.306	5.490	0.000	0.000	0.000	235.015	-38.368	0.000	38.368	-4.310
89.71	12.105	5.076	0.000	0.000	0.000	192.971	-41.503	0.000	41.503	-4.454
90.00	12.103	5.031	0.000	0.000	0.000	189.459	-41.774	0.000	41.774	-4.466
95.00	7.167	3.457	0.000	0.000	0.000	128.943	-46.602	0.000	46.602	-4.742
100.00	6.924	3.247	0.000	0.000	0.000	93.106	-51.690	0.000	51.690	-4.970
105.00	3.574	1.924	0.000	0.000	0.000	58.486	-56.995	0.000	56.995	-5.156
110.00	3.347	1.755	0.000	0.000	0.000	40.617	-62.470	0.000	62.470	-5.304
115.00	3.131	1.601	0.000	0.000	0.000	23.884	-68.086	0.000	68.086	-5.423
120.00	2.964	0.000	0.000	0.000	0.000	8.231	-73.802	0.000	73.802	-5.496

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)

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 Page: 7



**Load Case:** No Ice      85 mph - No Ice      23 Iterations

Gust Response Factor : 1.69      Effective Wind Speed : 85.00 (mph)

Dead Load Factor : 1.00

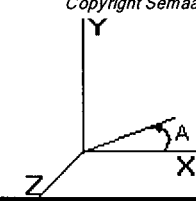
Wind Load Factor : 1.00

**Calculated Stresses**

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.393	0.852	0.000	0.000	0.000	41.911	42.330	52.0	0.814
5.00	0.385	0.863	0.000	0.000	0.000	41.892	42.304	52.0	0.814
10.00	0.378	0.874	0.000	0.000	0.000	41.838	42.243	52.0	0.813
15.00	0.371	0.886	0.000	0.000	0.000	41.742	42.140	52.0	0.811
20.00	0.364	0.900	0.000	0.000	0.000	41.594	41.987	52.0	0.808
25.00	0.357	0.914	0.000	0.000	0.000	41.385	41.771	52.0	0.804
30.00	0.350	0.931	0.000	0.000	0.000	41.100	41.481	52.0	0.798
35.00	0.343	0.948	0.000	0.000	0.000	40.723	41.099	52.0	0.791
40.00	0.337	0.965	0.000	0.000	0.000	40.236	40.607	52.0	0.781
42.63	0.334	0.976	0.000	0.000	0.000	39.938	40.307	52.0	0.775
45.00	0.322	0.984	0.000	0.000	0.000	39.636	39.995	52.0	0.769
47.38	0.305	0.974	0.000	0.000	0.000	37.780	38.122	52.0	0.733
50.00	0.300	0.985	0.000	0.000	0.000	37.351	37.690	52.0	0.725
55.00	0.293	1.006	0.000	0.000	0.000	36.370	36.705	52.0	0.706
60.00	0.287	1.028	0.000	0.000	0.000	35.168	35.499	52.0	0.683
65.00	0.280	1.053	0.000	0.000	0.000	33.695	34.024	52.0	0.655
70.00	0.274	1.080	0.000	0.000	0.000	31.890	32.218	52.0	0.620
75.00	0.268	1.110	0.000	0.000	0.000	29.672	30.002	52.0	0.577
80.00	0.263	1.143	0.000	0.000	0.000	26.938	27.273	52.0	0.525
85.00	0.247	1.097	0.000	0.000	0.000	23.554	23.876	52.0	0.459
86.29	0.245	1.106	0.000	0.000	0.000	22.682	23.007	52.0	0.443
89.71	0.383	1.842	0.000	0.000	0.000	31.825	32.366	52.0	0.623
90.00	0.381	1.847	0.000	0.000	0.000	31.448	31.990	52.0	0.615
95.00	0.277	1.158	0.000	0.000	0.000	23.999	24.359	52.0	0.469
100.00	0.277	1.189	0.000	0.000	0.000	19.566	19.949	52.0	0.384
105.00	0.175	0.654	0.000	0.000	0.000	13.987	14.207	52.0	0.273
110.00	0.171	0.656	0.000	0.000	0.000	11.153	11.381	52.0	0.219
115.00	0.168	0.661	0.000	0.000	0.000	7.608	7.860	52.0	0.151
120.00	0.000	0.678	0.000	0.000	0.000	3.078	3.294	52.0	0.063

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



**Load Case:** Ice      85 mph - With Ice - Ice Thickness = 0.5 in      23 Iterations

Gust Response Factor : 1.69      Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

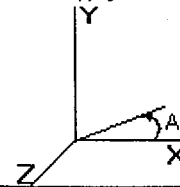
**Shaft Forces**

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	13.87	23.44	266.84	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	13.87	23.44	259.30	0.650	5.00	18.286	11.886	278.63	0.00	850.4
10.00		1.00	13.87	23.44	251.76	0.650	5.00	17.773	11.553	270.82	0.00	825.9
15.00		1.00	13.87	23.44	244.22	0.650	5.00	17.261	11.220	263.02	0.00	801.3
20.00		1.00	13.87	23.44	236.68	0.650	5.00	16.749	10.887	255.21	0.00	776.8
25.00		1.00	13.87	23.44	229.14	0.650	5.00	16.237	10.554	247.41	0.00	752.3
30.00		1.00	13.87	23.44	221.60	0.650	5.00	15.725	10.221	239.61	0.00	727.7
35.00		1.01	14.10	23.84	215.86	0.650	5.00	15.213	9.888	235.73	0.00	703.2
40.00		1.05	14.65	24.76	212.27	0.650	5.00	14.701	9.555	236.66	0.00	678.7
42.63	Bot - Section 2	1.07	14.92	25.22	210.10	0.650	2.63	7.527	4.893	123.40	0.00	347.6
45.00		1.09	15.15	25.61	207.99	0.650	2.37	6.785	4.410	112.96	0.00	572.7
47.38	Top - Section 1	1.10	15.38	25.99	205.75	0.650	2.38	6.698	4.354	113.17	0.00	564.9
50.00		1.12	15.62	26.39	207.21	0.650	2.62	7.239	4.705	124.21	0.00	333.9
55.00		1.15	16.05	27.12	201.94	0.650	5.00	13.425	8.726	236.70	0.00	617.5
60.00		1.18	16.45	27.80	196.26	0.650	5.00	12.912	8.393	233.40	0.00	593.0
65.00		1.21	16.83	28.45	190.21	0.650	5.00	12.400	8.060	229.33	0.00	568.5
70.00		1.24	17.19	29.06	183.84	0.650	5.00	11.888	7.727	224.56	0.00	543.9
75.00		1.26	17.53	29.63	177.18	0.650	5.00	11.376	7.394	219.17	0.00	519.4
80.00		1.28	17.86	30.19	170.27	0.650	5.00	10.864	7.061	213.19	0.00	494.9
85.00	Appertunance(s)	1.31	18.17	30.71	163.12	0.650	5.00	10.352	6.729	206.69	0.00	470.3
86.29	Bot - Section 3	1.31	18.25	30.85	161.23	0.650	1.29	2.594	1.686	52.02	0.00	118.0
89.71	Top - Section 2	1.33	18.45	31.19	156.18	0.650	3.42	6.795	4.417	137.79	0.00	461.0
90.00		1.33	18.47	31.22	158.41	0.650	0.29	0.566	0.368	11.49	0.00	17.2
95.00	Appertunance(s)	1.35	18.76	31.71	150.86	0.650	5.00	9.484	6.164	195.47	0.00	285.2
100.00		1.37	19.04	32.17	143.14	0.650	5.00	8.971	5.831	187.65	0.00	269.0
105.00	Appertunance(s)	1.39	19.30	32.63	135.25	0.650	5.00	8.459	5.499	179.42	0.00	252.7
110.00		1.41	19.56	33.06	127.19	0.650	5.00	7.947	5.166	170.81	0.00	236.5
115.00		1.42	19.81	33.49	118.99	0.650	5.00	7.435	4.833	161.85	0.00	220.3
120.00	Appertunance(s)	1.44	20.05	33.89	110.65	0.650	5.00	6.923	4.500	152.54	0.00	204.0
<b>Totals:</b>							<b>120.00</b>			<b>5,312.91</b>	<b>0.00</b>	<b>13,806.6</b>

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)

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**Load Case:** Ice                      85 mph - With Ice - Ice Thickness = 0.5 in                      23 Iterations

Gust Response Factor : 1.69                      Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00

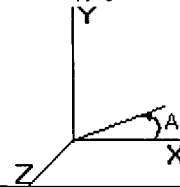
Wind Load Factor : 1.00

**Discrete Appurtenance Forces**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
85.00	Tri-Antenna Mount	1	18.17	30.71	7.500	1.000	0.000	0.0	0.0	230.39	0.00	0.00	0.00	0.00	425.0
85.00	Allgon 7250	6	18.17	30.71	20.010	0.667	0.000	0.0	0.0	614.68	0.00	0.00	0.00	0.00	216.0
95.00	DBC-750 combiner	3	18.76	31.71	2.100	1.000	0.000	0.0	0.0	66.59	0.00	0.00	0.00	0.00	23.5
95.00	DUO1417-8686	12	18.76	31.71	85.800	1.000	0.000	0.0	0.0	2720.75	0.00	0.00	0.00	0.00	876.0
95.00	TMA-DD 1900	6	18.76	31.71	3.186	1.000	0.000	0.0	0.0	101.03	0.00	0.00	0.00	0.00	53.2
95.00	Low Profile Platform	1	18.76	31.71	27.320	1.000	0.000	0.0	0.0	866.33	0.00	0.00	0.00	0.00	2100.0
105.00	DB948F	6	19.30	32.63	22.860	1.000	0.000	0.0	0.0	745.93	0.00	0.00	0.00	0.00	163.2
105.00	DB844H90	6	19.30	32.63	27.120	1.000	0.000	0.0	0.0	884.93	0.00	0.00	0.00	0.00	210.0
105.00	Low Profile Platform	1	19.30	32.63	27.320	1.000	0.000	0.0	0.0	891.46	0.00	0.00	0.00	0.00	2100.0
120.00	DB980H90	9	20.05	33.89	23.112	0.667	0.000	0.0	0.0	783.46	0.00	0.00	0.00	0.00	252.0
120.00	Low Profile platform	1	20.05	33.89	28.200	1.000	0.000	0.0	0.0	955.95	0.00	0.00	0.00	0.00	2250.0
120.00	DB420	1	20.47	34.61	7.810	1.000	0.000	9.0	0.0	270.30	0.00	0.00	0.00	2443.52	77.0
120.00	DB264	1	20.55	34.74	10.300	1.000	0.000	10.8	0.0	357.83	0.00	0.00	0.00	3846.64	84.0
120.00	APC-301	1	20.52	34.68	8.030	1.000	0.000	10.0	0.0	278.50	0.00	0.00	0.00	2785.04	93.0
120.00	Lightning Rod, 5'	1	20.17	34.10	1.730	1.000	0.000	2.5	0.0	58.99	0.00	0.00	0.00	147.48	44.0
										9,827.13	0.00				8,966.9

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
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Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



**Load Case:** Ice                      85 mph - With Ice - Ice Thickness = 0.5 in                      23 Iterations

Gust Response Factor : 1.69                      Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

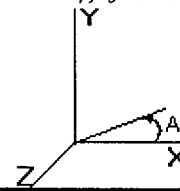
**Applied Forces Summary**

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	278.63	850.40	0.00	0.00	0.00	0.00
10.00	0.00	0.00	270.82	825.86	0.00	0.00	0.00	0.00
15.00	0.00	0.00	263.02	801.33	0.00	0.00	0.00	0.00
20.00	0.00	0.00	255.21	776.79	0.00	0.00	0.00	0.00
25.00	0.00	0.00	247.41	752.26	0.00	0.00	0.00	0.00
30.00	0.00	0.00	239.61	727.73	0.00	0.00	0.00	0.00
35.00	0.00	0.00	235.73	703.19	0.00	0.00	0.00	0.00
40.00	0.00	0.00	236.66	678.66	0.00	0.00	0.00	0.00
42.63	0.00	0.00	123.40	347.60	0.00	0.00	0.00	0.00
45.00	0.00	0.00	112.96	572.67	0.00	0.00	0.00	0.00
47.38	0.00	0.00	113.17	564.85	0.00	0.00	0.00	0.00
50.00	0.00	0.00	124.21	333.85	0.00	0.00	0.00	0.00
55.00	0.00	0.00	236.70	617.53	0.00	0.00	0.00	0.00
60.00	0.00	0.00	233.40	592.99	0.00	0.00	0.00	0.00
65.00	0.00	0.00	229.33	568.46	0.00	0.00	0.00	0.00
70.00	0.00	0.00	224.56	543.92	0.00	0.00	0.00	0.00
75.00	0.00	0.00	219.17	519.39	0.00	0.00	0.00	0.00
80.00	0.00	0.00	213.19	494.85	0.00	0.00	0.00	0.00
85.00	0.00	0.00	1,051.76	1,111.32	0.00	0.00	0.00	0.00
86.29	0.00	0.00	52.02	118.02	0.00	0.00	0.00	0.00
89.71	0.00	0.00	137.79	461.05	0.00	0.00	0.00	0.00
90.00	0.00	0.00	11.49	17.15	0.00	0.00	0.00	0.00
95.00	0.00	0.00	3,950.17	3,337.93	0.00	0.00	0.00	0.00
100.00	0.00	0.00	187.65	268.99	0.00	0.00	0.00	0.00
105.00	0.00	0.00	2,701.74	2,725.95	0.00	0.00	0.00	0.00
110.00	0.00	0.00	170.81	236.51	0.00	0.00	0.00	0.00
115.00	0.00	0.00	161.85	220.27	0.00	0.00	0.00	0.00
120.00	0.00	0.00	2,857.59	3,004.03	0.00	0.00	0.00	9,222.69
<b>Totals:</b>			<b>15,140.04</b>	<b>22,773.54</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9,222.69</b>

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
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Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
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**Load Case:** Ice                      85 mph - With Ice - Ice Thickness = 0.5 in                      23 Iterations

Gust Response Factor : 1.69                      Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

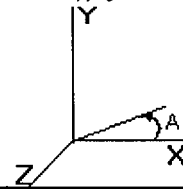
**Calculated Forces and Deflections**

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	15.178	22.748	0.000	0.000	0.000	1,386.166	0.000	0.000	0.000	0.000
5.00	14.972	21.848	0.000	0.000	0.000	1,310.275	-0.102	0.000	0.102	-0.190
10.00	14.770	20.972	0.000	0.000	0.000	1,235.417	-0.406	0.000	0.406	-0.386
15.00	14.572	20.121	0.000	0.000	0.000	1,161.570	-0.918	0.000	0.918	-0.587
20.00	14.378	19.295	0.000	0.000	0.000	1,088.713	-1.643	0.000	1.643	-0.794
25.00	14.189	18.493	0.000	0.000	0.000	1,016.824	-2.590	0.000	2.590	-1.007
30.00	14.004	17.716	0.000	0.000	0.000	945.881	-3.762	0.000	3.762	-1.227
35.00	13.819	16.964	0.000	0.000	0.000	875.864	-5.168	0.000	5.168	-1.452
40.00	13.615	16.250	0.000	0.000	0.000	806.768	-6.812	0.000	6.812	-1.683
42.63	13.514	15.877	0.000	0.000	0.000	770.962	-7.775	0.000	7.775	-1.810
45.00	13.414	15.281	0.000	0.000	0.000	738.934	-8.702	0.000	8.702	-1.926
47.38	13.313	14.692	0.000	0.000	0.000	707.009	-9.692	0.000	9.692	-2.043
50.00	13.223	14.321	0.000	0.000	0.000	672.128	-10.851	0.000	10.851	-2.174
55.00	13.017	13.660	0.000	0.000	0.000	606.016	-13.252	0.000	13.252	-2.406
60.00	12.811	13.026	0.000	0.000	0.000	540.932	-15.897	0.000	15.897	-2.640
65.00	12.606	12.417	0.000	0.000	0.000	476.876	-18.788	0.000	18.788	-2.875
70.00	12.402	11.835	0.000	0.000	0.000	413.847	-21.925	0.000	21.925	-3.110
75.00	12.198	11.281	0.000	0.000	0.000	351.840	-25.306	0.000	25.306	-3.341
80.00	11.997	10.754	0.000	0.000	0.000	290.849	-28.925	0.000	28.925	-3.564
85.00	10.898	9.688	0.000	0.000	0.000	230.867	-32.771	0.000	32.771	-3.774
86.29	10.854	9.556	0.000	0.000	0.000	216.775	-33.800	0.000	33.800	-3.829
89.71	10.696	9.092	0.000	0.000	0.000	179.691	-36.588	0.000	36.588	-3.962
90.00	10.706	9.049	0.000	0.000	0.000	176.588	-36.829	0.000	36.829	-3.973
95.00	6.552	5.976	0.000	0.000	0.000	123.057	-41.134	0.000	41.134	-4.233
100.00	6.364	5.700	0.000	0.000	0.000	90.300	-45.685	0.000	45.685	-4.452
105.00	3.464	3.187	0.000	0.000	0.000	58.478	-50.447	0.000	50.447	-4.635
110.00	3.281	2.957	0.000	0.000	0.000	41.159	-55.380	0.000	55.380	-4.784
115.00	3.106	2.746	0.000	0.000	0.000	24.753	-60.454	0.000	60.454	-4.905
120.00	2.858	0.000	0.000	0.000	0.000	9.223	-65.632	0.000	65.632	-4.983

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
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**Load Case:** Ice                      85 mph - With Ice - Ice Thickness = 0.5 in                      23 Iterations

Gust Response Factor : 1.69                      Effective Wind Speed : 73.61 (mph)

Dead Load Factor : 1.00

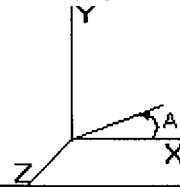
Wind Load Factor : 1.00

**Calculated Stresses**

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.531	0.714	0.000	0.000	0.000	36.394	36.946	52.0	0.711
5.00	0.525	0.725	0.000	0.000	0.000	36.455	37.001	52.0	0.712
10.00	0.519	0.737	0.000	0.000	0.000	36.486	37.027	52.0	0.712
15.00	0.514	0.750	0.000	0.000	0.000	36.482	37.018	52.0	0.712
20.00	0.508	0.763	0.000	0.000	0.000	36.435	36.967	52.0	0.711
25.00	0.503	0.778	0.000	0.000	0.000	36.334	36.862	52.0	0.709
30.00	0.499	0.795	0.000	0.000	0.000	36.170	36.694	52.0	0.706
35.00	0.495	0.812	0.000	0.000	0.000	35.926	36.448	52.0	0.701
40.00	0.491	0.829	0.000	0.000	0.000	35.588	36.108	52.0	0.695
42.63	0.489	0.840	0.000	0.000	0.000	35.373	35.891	52.0	0.691
45.00	0.480	0.848	0.000	0.000	0.000	35.150	35.660	52.0	0.686
47.38	0.461	0.841	0.000	0.000	0.000	33.547	34.039	52.0	0.655
50.00	0.458	0.852	0.000	0.000	0.000	33.216	33.706	52.0	0.648
55.00	0.455	0.873	0.000	0.000	0.000	32.441	32.931	52.0	0.634
60.00	0.452	0.896	0.000	0.000	0.000	31.472	31.961	52.0	0.615
65.00	0.450	0.920	0.000	0.000	0.000	30.264	30.755	52.0	0.592
70.00	0.449	0.947	0.000	0.000	0.000	28.761	29.256	52.0	0.563
75.00	0.448	0.977	0.000	0.000	0.000	26.893	27.394	52.0	0.527
80.00	0.449	1.010	0.000	0.000	0.000	24.568	25.078	52.0	0.482
85.00	0.426	0.966	0.000	0.000	0.000	21.664	22.153	52.0	0.426
86.29	0.426	0.976	0.000	0.000	0.000	20.922	21.415	52.0	0.412
89.71	0.686	1.627	0.000	0.000	0.000	29.635	30.452	52.0	0.586
90.00	0.685	1.634	0.000	0.000	0.000	29.312	30.130	52.0	0.580
95.00	0.479	1.059	0.000	0.000	0.000	22.904	23.454	52.0	0.451
100.00	0.485	1.092	0.000	0.000	0.000	18.976	19.554	52.0	0.376
105.00	0.289	0.634	0.000	0.000	0.000	13.985	14.317	52.0	0.275
110.00	0.288	0.643	0.000	0.000	0.000	11.302	11.643	52.0	0.224
115.00	0.288	0.656	0.000	0.000	0.000	7.885	8.251	52.0	0.159
120.00	0.000	0.653	0.000	0.000	0.000	3.449	3.630	52.0	0.070

Pole : CT03XC335  
 Location: East Hampton, CT  
 Height : 120.0 (ft)  
 Shape : 18 Sides  
 Base Dia : 43.50 (in)  
 Taper : 0.245830 (in/ft)

Sprint Sites USA - NJ  
 Base Elev : 0.000 (ft)  
 Top Dia : 15.00 (in)



<b>Load Case:</b> No Ice	85 mph - No Ice	23 Iterations
Gust Response Factor : 1.69	Effective Wind Speed : 85.00 (mph)	
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

**Analysis Summary**

Load Case	Reactions						Max Stresses			
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	18.117	0.000	16.821	0.000	0.000	1,596.293	42.330	52.0	0.000	0.814
Ice	15.178	0.000	22.748	0.000	0.000	1,386.166	37.001	52.0	5.000	0.712