



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@ct.gov](mailto:siting.council@ct.gov)

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

November 2, 2012

Jennifer Palumbo  
Sprint  
48 Spruce Street  
Oakland, NJ 07436

RE: **EM-SPRINT-162-121018A** – Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 15 Oakdale Avenue, Winchester, Connecticut.

Dear Ms. Palumbo:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

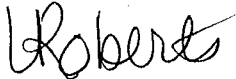
- Any deviation from the proposed modification as specified in this notice and supporting materials with Council shall render this acknowledgement invalid;
- Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
- Not less than 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- The validity of this action shall expire one year from the date of this letter; and
- The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration;

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated September 19, 2012. 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. Please be advised that the validity of this action shall expire one year from the date of this letter. 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. Thank you for your attention and cooperation.

Very truly yours,



Linda Roberts  
Executive Director

LR/CDM/CM

- c: The Honorable Maryann Welcome, First Selectman, Town of Winchester
- Wayne Dove, Town Manager, Town of Winchester
- Bruce Hillman, Planning and Zoning Chairman, Town of Winchester



...together with Nextel

48 Spruce Street  
Oakland, NJ 07436  
Phone: (845) 499-4712  
Jennifer Palumbo

September 19, 2012

**Hand Delivered**

Ms. Linda Roberts  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051



RE: Sprint Spectrum L.P. notice of intent to modify an existing telecommunications facility located at 15 Oakdale Avenue, Winchester, CT 06098. Known to Sprint Spectrum L.P. as site CT33XC081.

Dear Ms. Roberts:

In order to accommodate technological changes, implement Code Division Multiple Access ("CDMA") and/or Long Term Evolution ("LTE") capabilities, and enhance system performance in the state of Connecticut, Sprint Spectrum L.P. plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and its attachments is being sent to the chief elected official of the municipality in which affected cell site is located.

CDMA employs Spread-Spectrum technology and special coding scheme to allow multiple users to be multiplexed over the same physical channel. LTE is a new high-performance air interface for cellular mobile communications. It is designed to increase the capacity and speed of mobile telephone networks.

As part of the project the new multi-mode 800/1900 antenna will replace existing antennas. These antennas will provide more flexibility for optimization by allowing fast and easy electrical tilt adjustment from remote location and will enable the transmission of multiple technologies from a single antenna. As Sprint Nextel's network evolves to meet the demands of its customers, it is essential for Sprint Nextel to install modern equipment and antennas in order to provide reliable wireless voice and data services. The

proposed equipment will include multi-mode radios that will allow Sprint Nextel to transmit at different frequencies using different technologies, including LTE technology. Likewise, the proposed antennas are quad-pole multi-band high gain antennas that will allow Sprint to operate using its multiple frequency bands and technologies, including LTE technology. The proposed equipment and antennas will improve the reliability, coverage and capacity of Sprint Nextel's voice and data networks across Sprint Nextel's various FCC licensed frequency bands and significantly increase the data speeds of Sprint Nextel's network by utilizing the latest LTE technology. Without the proposed modifications Sprint Nextel will be unable to provide reliable wireless voice and data service using the latest technologies.

Sprint Spectrum L.P. will have an interim (testing) period during the modification/installation prior to the final configuration. This antenna configuration is shown on the attached drawings of the planned modifications. Also included is the power density calculation reflecting the change in Sprint's operations at the site and documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modification as defined Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for the R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will not be affected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by 6 decibels or more.
4. Radio Frequency power density may increase due to the use of one or more CDMA transmissions. Moreover, LTE will utilize additional radio frequencies newly licensed by the FCC for cellular mobile communications. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons Sprint Spectrum L.P. respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (845)-499-4712 or email [JPalumbo@Transcendwireless.com](mailto:JPalumbo@Transcendwireless.com) with questions concerning this matter. Thank you for your consideration.

Sincerely,

Jennifer Palumbo  
Real Estate Consultant



**AMERICAN TOWER®**  
CORPORATION

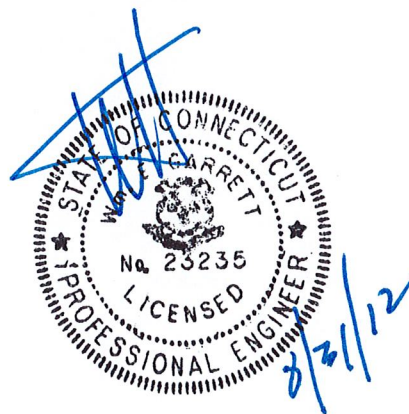
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## Structural Analysis Report

**Structure** : 180 ft Monopole  
**ATC Site Name** : Winchester CT 3, CT  
**ATC Site Number** : 302506  
**Engineering Number** : 49756723  
**Proposed Carrier** : Sprint Nextel  
**Carrier Site Name** : Horton-SNET  
**Carrier Site Number** : CT33XC081  
**Site Location** : 15 Oakdale Avenue  
Winsted, CT 06098-1862  
41.921694,-73.049500  
**County** : Litchfield  
**Date** : August 23, 2012  
**Max Usage** : 84%  
**Result** : Pass

Michael B. Davenport  
Project Engineer

*Michael B. Davenport*





## Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 180 ft monopole to reflect the change in loading by Sprint Nextel.

## Supporting Documents

<b>Tower Drawings</b>	EI Job #7676, dated September 22, 2000
<b>Foundation Drawing</b>	SNET Project No. F301804.10 / F04, dated August 23, 2000
<b>Geotechnical Report</b>	Clarence Welti Associates Report dated February 8, 2000
<b>Modifications</b>	ATC Engineering No. 42523432, dated October 24, 2008

## Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

<b>Basic Wind Speed:</b>	90 mph (3-Second Gust)
<b>Basic Wind Speed w/ Ice:</b>	40 mph (3-Second Gust) w/ 1"1/4 radial ice concurrent
<b>Code:</b>	ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2009 CT Amendment
<b>Structure Class:</b>	II
<b>Exposure Category:</b>	B
<b>Topographic Category:</b>	1

## Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact me via email at michael.davenport@americantower.com or call 919-466-5147.



**Existing and Reserved Equipment**

Mount Elev. <sup>1</sup> (ft)	Qty.	Antenna	Mount Type	Coax (in)	Carrier
180.0	1	10' Omni	Low Profile Platform	(1) 7/8	USA Mobility
	1	Andrew ABT-DMDF-ADBH		(2) 19.7 mm (12) 1 5/8 (1) 0.40 (1) 3" Conduit	AT&T Mobility
	6	Ericsson RRUS 11			
	3	KMW AM-X-CD-16-65-00T-RET			
	6	Powerwave 7770.00			
	6	Powerwave LGP21401			
166.0	6	CCI DTMA-1819-DD-12	T-Arms	(18) 1 5/8	T-Mobile
	9	RFS APX16PV-16PVL-E-00			
150.0	1	Sinclair SD210C2-SF2P4SNM	Side Arm	(1) 1 5/8	Litchfield County Dispatch
140.0	2	Bird 432-83H-01-T	Side Arms	(6) 1 5/8 (2) 3/8 (1) 1/2 (1) 7/8	CT Police Dept.
	3	Decibel DB809K-XT			
	1	Sinclair SC432D-HF6LDF			
	1	Telewave ANT150D			
134.0	6	Andrew DB980H90E-M	Low Profile Platform	(6) 1 5/8	Sprint Nextel
125.0	1	Antel BXA-171063/12CF	Low Profile Platform	(12) 1 5/8	Verizon
	2	Antel BXA-171085-12CF-EDIN-X			
	3	Antel BXA-70063/6CF			
	2	Antel LPA-80063/6CF			
	4	Antel LPA-80080/6CF			
	6	RFS FD9R6004/2C-3L			
114.5	12	Decibel DB844H90E-XY	Low Profile Platform	(12) 1 1/4	Sprint Nextel
105.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8	Youghioghney
95.0	1	Bird 429-83H-01-T	Side Arms	(2) 7/8 (1) 1/2	Connecticut Light & Power
	2	Decibel DB586			
78.0	1	PCTEL GPS-TMG-HR-26N	Flush	(1) 1/2	Sprint Nextel
30.0	1	GPS	Flush	(1) 7/8	Verizon

**Proposed Equipment**

Elevation <sup>1</sup> (ft)		Qty.	Antenna	Mount Type	Coax (in)	Carrier
Mount	RAD					
134.0	134.0	3	RFS APXVSP18-C-A20	Low Profile Platform	(3) 1 1/4 Hybriflex	Sprint Nextel
132.0	132.0	3	Alcatel-Lucent 1900MHz RRH			
		3	Alcatel-Lucent 800 MHz RRH w/			

<sup>1</sup>Mount elevation is defined as height above bottom of steel structure to the bottom of mount, RAD elevation is defined as center of antenna above ground level (AGL).

Install proposed coax inside the pole shaft.



**Structure Usages**

Structural Component	Controlling Usage	Pass/Fail
Anchor Bolts	84%	Pass
Shaft	84%	Pass
Base Plate	64%	Pass

**Foundations**

Reaction Component	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (Kips-Ft)	3,377.9	4,560.2	4,359.0	96%
Shear (Kips)	28.4	38.3	38.5	101%

\* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis are less than those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

**Deflection and Sway\***

Antenna Elevation (ft)	Deflection (ft)	Sway (Rotation) (°)
134.0	2.387	-2.241

\*Deflection and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G





## **Standard Conditions**

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

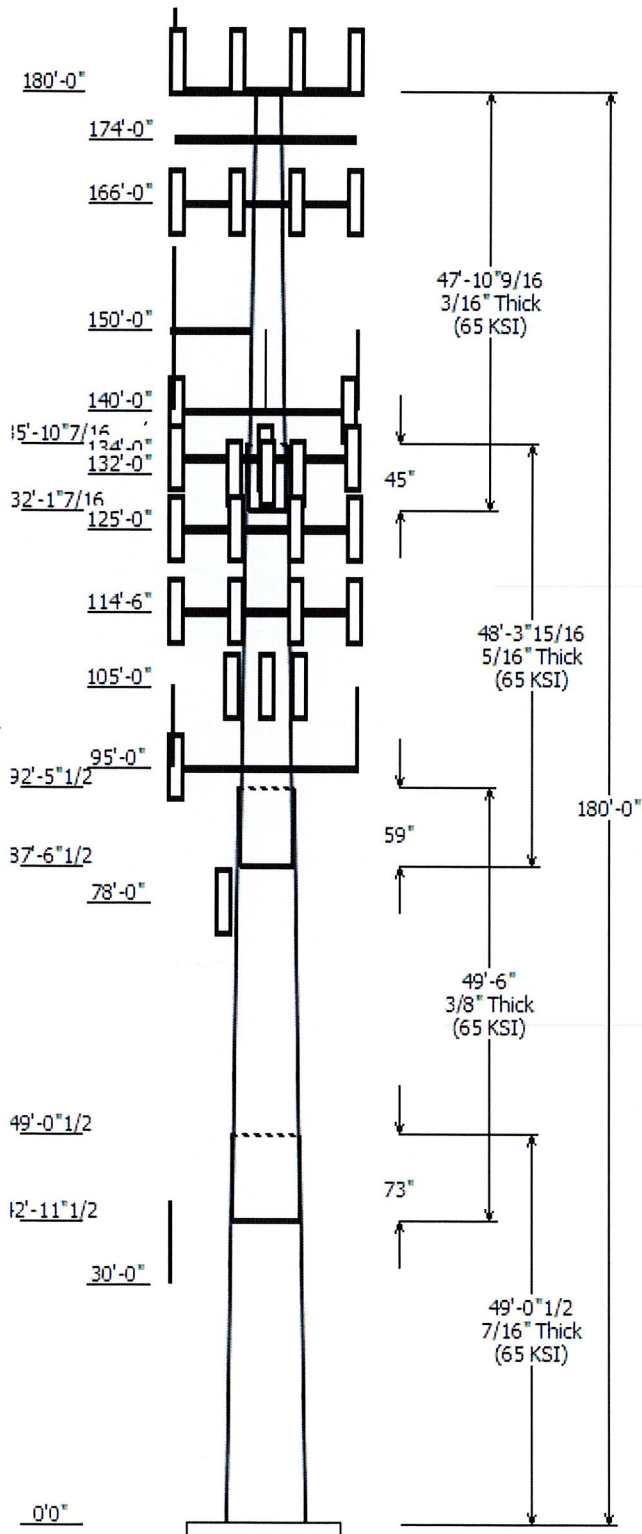
- Information supplied by the client regarding the structure itself, antenna, mounts and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and that their capacity has not significantly changed from the "as new" condition.

Unless explicitly agreed by both the client and American Tower Corporation, all services will be performed in accordance with the current revision of ANSI/TIA -222. The design basic wind speed will be determined based on the minimum basic wind speed as prescribed in ANSI/TIA-222. Although every effort is taken to ensure that the loading considered is adequate to meet the requirements of all applicable regulatory entities, we can provide no assurance to meet any other local and state codes or requirements. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

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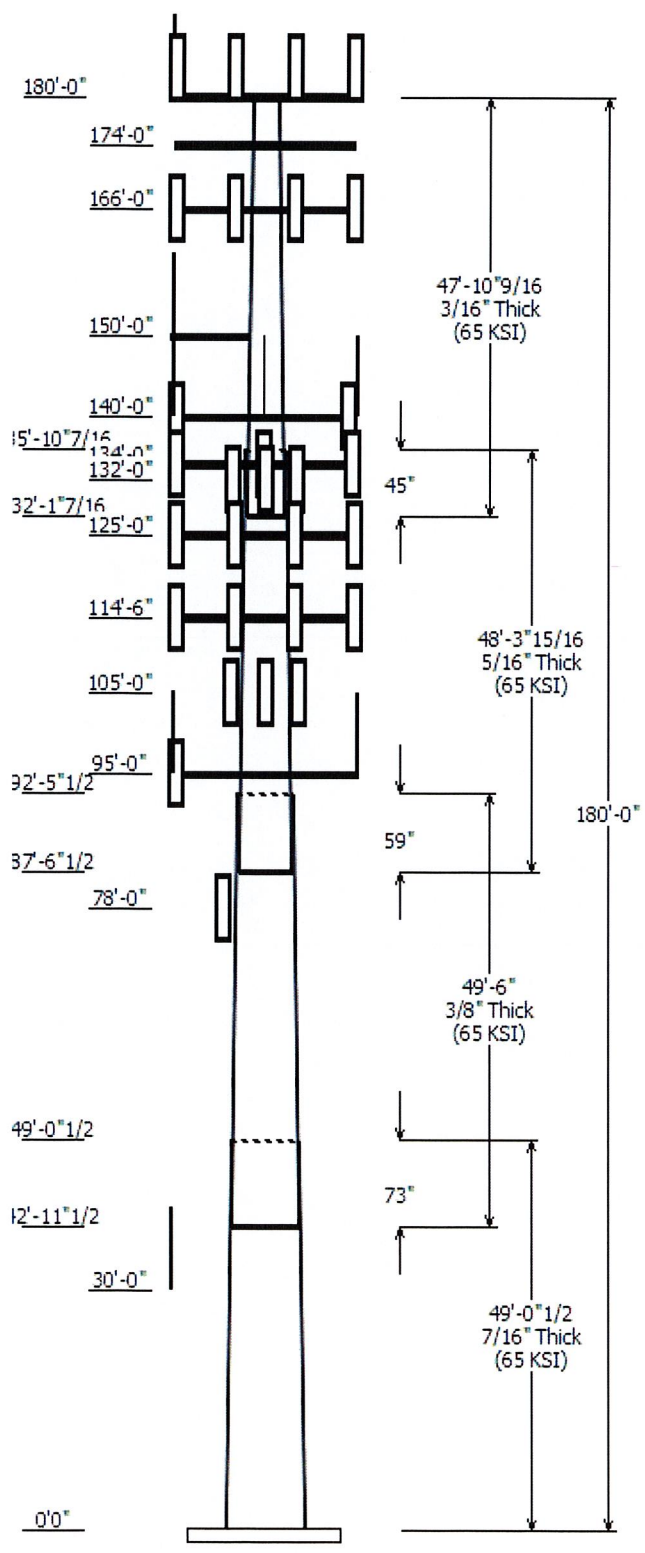


Job Information			
Pole :	302506	Code :	ANSI/TIA-222 Rev G
Description :	180 ft EEI Monopole	Client :	Sprint Nextel
Location :	Winchester CT 3, CT	Struct Class :	II
Shape :	18 Sides	Exposure :	B
Height :	180.00 (ft)	Topo :	1
Base Elev (ft):	0.00		
Taper:	0.21944(in/ft)		

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom				
1	49.040	41.98	52.75	0.438	0.000	0.219444	65
2	49.500	33.21	44.07	0.375 Slip Joint	73.000	0.219444	65
3	48.330	24.30	34.91	0.313 Slip Joint	59.000	0.219444	65
4	47.880	15.00	25.50	0.188 Slip Joint	45.000	0.219444	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
180.000	184.000	3	KMW AM-X-CD-16-65-00T-RET	
180.000	184.000	1	Andrew ABT-D MDF-ADBH	
180.000	184.000	6	Ericsson RRUS 11	
180.000	184.000	6	Powerwave 7770.00	
180.000	184.000	6	Powerwave LGP21401	
180.000	189.000	1	10' Omni	
180.000	180.000	1	Flat Low Profile Platform	
174.000	174.000	1	Flat Low Profile Platform	
166.000	166.000	3	T-Arms	
166.000	166.000	6	CCI DTMA-1819-DD-12	
166.000	166.000	9	RFS APX16PV-16PVL-E-00	
150.000	155.000	1	Sinclair SD210C2-SF2P4SNM	
150.000	150.000	1	Flat Side Arm	
140.000	140.000	2	Bird 432-83H-01-T	
140.000	146.100	3	Decibel DB809K-XT	
140.000	146.540	1	Sinclair SC432D-HF6LDF	
140.000	145.000	1	Telewave ANT150D	
140.000	140.000	3	Flat Side Arm	
134.000	134.000	3	RFS APXVSP18-C-A20	
134.000	134.000	1	Flat Low Profile Platform	
134.000	134.000	6	Andrew DB980H90E-M	
132.000	132.000	3	Alcatel-Lucent 800 MHz RRH w/	
132.000	132.000	3	Alcatel-Lucent 1900MHz RRH	
125.000	125.000	6	RFS FD9R6004/2C-3L	
125.000	125.000	1	Antel BXA-171063/12CF	
125.000	125.000	2	Antel BXA-171085-12CF-EDIN-X	
125.000	125.000	3	Antel BXA-70063/6CF	
125.000	125.000	1	Round Low Profile Platform	
125.000	125.000	2	Antel LPA-80063/6CF	
125.000	125.000	4	Antel LPA-80080/6CF	
114.500	114.500	1	Round Low Profile Platform	
114.500	114.500	12	Decibel DB844H90E-XY	
105.000	105.000	3	RFS APXV18-206517S-C	
95.000	95.000	1	Bird 429-83H-01-T	
95.000	97.460	2	Decibel DB586	
95.000	95.000	3	Flat Side Arm	
78.000	78.000	1	PCTEL GPS-TMG-HR-26N	
30.000	30.500	1	GPS	

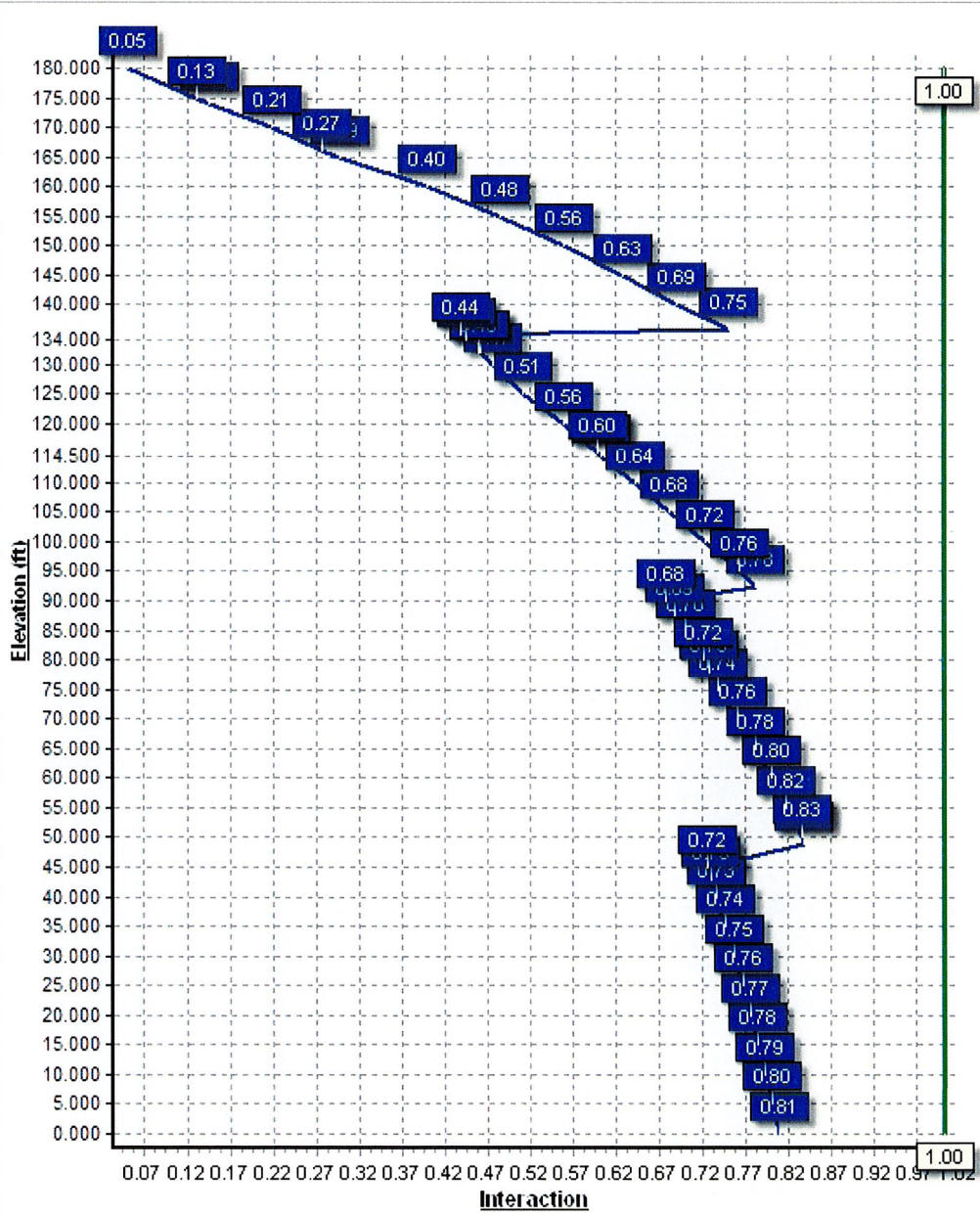
Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
180.000	184.000	KMW AM-X-CD-16-65-00T-RET	
180.000	184.000	Andrew ABT-D MDF-ADBH	
180.000	184.000	Ericsson RRUS 11	
180.000	184.000	Powerwave 7770.00	
180.000	184.000	Powerwave LGP21401	
180.000	189.000	10' Omni	
180.000	180.000	Flat Low Profile Platform	
174.000	174.000	Flat Low Profile Platform	
166.000	166.000	T-Arms	
166.000	166.000	CCI DTMA-1819-DD-12	
166.000	166.000	RFS APX16PV-16PVL-E-00	
150.000	155.000	Sinclair SD210C2-SF2P4SNM	
150.000	150.000	Flat Side Arm	
140.000	140.000	Bird 432-83H-01-T	
140.000	146.100	Decibel DB809K-XT	
140.000	146.540	Sinclair SC432D-HF6LDF	
140.000	145.000	Telewave ANT150D	
140.000	140.000	Flat Side Arm	
134.000	134.000	RFS APXVSP18-C-A20	
134.000	134.000	Flat Low Profile Platform	
134.000	134.000	Andrew DB980H90E-M	
132.000	132.000	Alcatel-Lucent 800 MHz RRH w/	
132.000	132.000	Alcatel-Lucent 1900MHz RRH	
125.000	125.000	RFS FD9R6004/2C-3L	
125.000	125.000	Antel BXA-171063/12CF	
125.000	125.000	Antel BXA-171085-12CF-EDIN-X	
125.000	125.000	Antel BXA-70063/6CF	
125.000	125.000	Round Low Profile Platform	
125.000	125.000	Antel LPA-80063/6CF	
125.000	125.000	Antel LPA-80080/6CF	
114.500	114.500	Round Low Profile Platform	
114.500	114.500	Decibel DB844H90E-XY	
105.000	105.000	RFS APXV18-206517S-C	
95.000	95.000	Bird 429-83H-01-T	
95.000	97.460	Decibel DB586	
95.000	95.000	Flat Side Arm	
78.000	78.000	PCTEL GPS-TMG-HR-26N	
30.000	30.500	GPS	



0.000	30.000	7/8" Coax	Yes
0.000	78.000	1/2" Coax	No
0.000	95.000	1/2" Coax	No
0.000	95.000	7/8" Coax	No
0.000	105.0	1 5/8" Coax	Yes
0.000	114.5	1 1/4" Coax	Yes
0.000	125.0	1 5/8" Coax	Yes
0.000	134.0	1 1/4" Hybriflex	No
0.000	134.0	1 5/8" Coax	No
0.000	140.0	1 5/8" Coax	No
0.000	140.0	1/2" Coax	No
0.000	140.0	3/8" Coax	No
0.000	140.0	7/8" Coax	No
0.000	150.0	1 5/8" Coax	No
0.000	166.0	1 5/8" Coax	Yes
0.000	180.0	0.40" Fiber Cable	No
0.000	180.0	1 5/8" Coax	No
0.000	180.0	19.7 mm Cable	No
0.000	180.0	3" Conduit	No
0.000	180.0	7/8" Coax	No

Load Cases	
1.2D + 1.6W	90.00 mph with No Ice
0.9D + 1.6W	90.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice

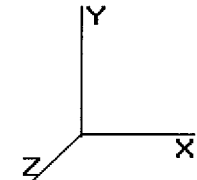
Reactions			
Load Case	Moment (kip-ft)	Shear (kip)	Axial (kip)
1.2D + 1.6W	4359.04	38.52	57.08
0.9D + 1.6W	4224.92	38.14	42.79
1.2D + 1.0Di + 1.0Wi	1063.83	7.66	138.25



Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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 Page: 1



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**Shaft Section Properties**

Sect Info	Length (ft)	Thick (in)	Fy (ksi)	Slip		Weight (lb)	Bottom					Top					Taper (in/ft)		
				Joint Type	Joint Len (in)		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
1-18	49.040	0.4375	65		0.00	10,875	52.75	0.00	72.64	25115.3	19.85	120.57	41.98	49.04	57.70	12585.4	15.51	95.97	0.219444
2-18	49.500	0.3750	65	Slip	73.00	7,672	44.07	42.96	52.01	12548.0	19.31	117.53	33.21	92.46	39.08	5323.8	14.21	88.56	0.219444
3-18	48.330	0.3125	65	Slip	59.00	4,779	34.91	87.54	34.32	5191.7	18.29	111.73	24.30	135.87	23.80	1731.6	12.31	77.79	0.219444
4-18	47.880	0.1875	65	Slip	45.00	1,946	25.50	132.12	15.07	1220.4	22.58	136.04	15.00	180.00	8.81	244.4	12.70	80.00	0.219444
Shaft Weight						25,271													

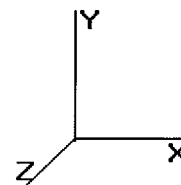
**Discrete Appurtenance Properties**

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
180.00	10' Omni	1	10.00	3.000	1.00	300.02	7.476	1.00	0.000	9.000
180.00	Andrew ABT-DMDf-ADBH	1	1.10	0.050	1.00	17.78	0.288	1.00	0.000	4.000
180.00	Ericsson RRUS 11	6	50.00	2.990	0.71	212.49	3.748	0.71	0.000	4.000
180.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,601.94	58.572	1.00	0.000	0.000
180.00	KMW AM-X-CD-16-65-00T-	3	48.50	8.260	0.78	415.31	10.317	0.78	0.000	4.000
180.00	Powerwave 7770.00	6	35.00	5.941	0.75	303.00	7.460	0.76	0.000	4.000
180.00	Powerwave LGP21401	6	14.10	1.290	0.50	87.86	1.954	0.50	0.000	4.000
174.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,598.21	58.462	1.00	0.000	0.000
166.00	CCI DTMA-1819-DD-12	6	14.30	0.710	0.50	70.61	1.307	0.50	0.000	0.000
166.00	RFS APX16PV-16PVL-E-00	9	39.60	6.647	0.65	292.53	7.924	0.67	0.000	0.000
166.00	T-Arms	3	250.00	12.900	0.67	602.60	26.697	0.67	0.000	0.000
150.00	Flat Side Arm	1	150.00	6.300	1.00	272.17	10.405	1.00	0.000	0.000
150.00	Sinclair SD210C2-SF2P4SNM	1	16.00	1.370	1.00	154.56	6.640	1.00	0.000	5.000
140.00	Bird 432-83H-01-T	2	20.00	1.630	1.00	105.88	1.736	1.00	0.000	0.000
140.00	Decibel DB809K-XT	3	37.50	3.660	1.00	374.75	9.551	1.00	0.000	6.100
140.00	Flat Side Arm	3	150.00	6.300	0.67	271.33	10.377	0.67	0.000	0.000
140.00	Sinclair SC432D-HF6LDF	1	50.00	5.030	1.00	441.61	10.844	1.00	0.000	6.540
140.00	Telewave ANT150D	1	18.00	1.090	1.00	2,092.25	25.958	1.00	0.000	5.000
134.00	Andrew DB980H90E-M	6	8.50	3.900	0.79	196.52	5.699	0.82	0.000	0.000
134.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	2,569.90	57.627	1.00	0.000	0.000
134.00	RFS APXVSP18-C-A20	3	57.00	8.260	0.82	428.25	10.243	0.82	0.000	0.000
132.00	Alcatel-Lucent 1900MHz RRH	3	44.00	3.800	0.88	276.36	4.535	0.88	0.000	0.000
132.00	Alcatel-Lucent 800 MHz RRH	3	61.80	2.910	0.93	259.32	3.630	0.93	0.000	0.000
125.00	Antel BXA-171063/12CF	1	15.00	4.790	1.00	249.82	6.869	1.00	0.000	0.000
125.00	Antel BXA-171085-12CF-EDIN-	2	15.00	4.770	0.91	249.71	6.884	0.91	0.000	0.000
125.00	Antel BXA-70063/6CF	3	17.00	7.730	0.74	330.09	9.713	0.74	0.000	0.000
125.00	Antel LPA-80063/6CF	2	27.00	10.340	0.94	541.03	11.857	0.94	0.000	0.000
125.00	Antel LPA-80080/6CF	4	21.00	9.100	0.74	380.76	10.867	0.75	0.000	0.000
125.00	RFS FD9R6004/2C-3L	6	3.10	0.370	0.50	34.12	0.814	0.50	0.000	0.000
125.00	Round Low Profile Platform	1	1500.00	21.700	1.00	2,562.48	53.185	1.00	0.000	0.000
114.50	Decibel DB844H90E-XY	12	14.00	3.730	0.93	222.09	5.143	0.93	0.000	0.000
114.50	Round Low Profile Platform	1	1500.00	21.700	1.00	2,553.20	52.909	1.00	0.000	0.000
105.00	RFS APXV18-206517S-C	3	26.40	5.160	0.80	250.81	7.225	0.82	0.000	0.000
95.00	Bird 429-83H-01-T	1	20.00	1.050	1.00	100.98	1.699	1.00	0.000	0.000
95.00	Decibel DB586	2	10.00	0.740	1.00	109.97	2.684	1.00	0.000	2.460
95.00	Flat Side Arm	3	150.00	6.300	1.00	266.71	10.222	1.00	0.000	0.000
78.00	PCTEL GPS-TMG-HR-26N	1	0.60	0.090	1.00	24.27	0.495	1.00	0.000	0.000
30.00	GPS	1	10.00	1.000	1.00	72.96	1.150	1.00	0.000	0.500
Totals		114	11819.70			41,300.35			Number of Loadings :	38

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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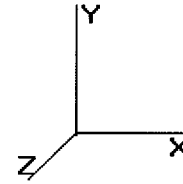
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### Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Exposed Width (in)	Exposed To Wind
0.00	180.00	(1) 0.40" Fiber Cable	0.00	N
0.00	180.00	(12) 1 5/8" Coax	0.00	N
0.00	180.00	(2) 19.7 mm Cable	0.00	N
0.00	180.00	(1) 3" Conduit	0.00	N
0.00	180.00	(1) 7/8" Coax	0.00	N
0.00	166.00	(18) 1 5/8" Coax	3.96	Y
0.00	150.00	(1) 1 5/8" Coax	0.00	N
0.00	140.00	(6) 1 5/8" Coax	0.00	N
0.00	140.00	(1) 1/2" Coax	0.00	N
0.00	140.00	(2) 3/8" Coax	0.00	N
0.00	140.00	(1) 7/8" Coax	0.00	N
0.00	134.00	(3) 1 1/4" Hybriflex	0.00	N
0.00	134.00	(6) 1 5/8" Coax	0.00	N
0.00	125.00	(12) 1 5/8" Coax	3.96	Y
0.00	114.50	(12) 1 1/4" Coax	3.10	Y
0.00	105.00	(6) 1 5/8" Coax	0.00	Y
0.00	95.00	(1) 1/2" Coax	0.00	N
0.00	95.00	(2) 7/8" Coax	0.00	N
0.00	78.00	(1) 1/2" Coax	0.00	N
0.00	30.00	(1) 7/8" Coax	0.00	Y

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
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 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



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

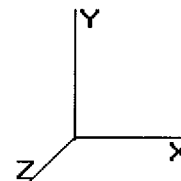
Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	S (in3)	Weight (lb)
0.00		0.4375	52.750	72.640	25,115.3	19.85	120.57	78.1	937.8	0.0
5.00		0.4375	51.653	71.116	23,567.9	19.41	118.06	78.6	898.7	1,222.9
10.00		0.4375	50.556	69.593	22,085.4	18.96	115.56	79.1	860.4	1,197.0
15.00		0.4375	49.458	68.069	20,666.4	18.52	113.05	79.6	823.0	1,171.1
20.00		0.4375	48.361	66.546	19,309.5	18.08	110.54	80.1	786.4	1,145.2
25.00		0.4375	47.264	65.022	18,013.3	17.64	108.03	80.7	750.7	1,119.2
30.00		0.4375	46.167	63.498	16,776.5	17.20	105.52	81.2	715.7	1,093.3
35.00		0.4375	45.069	61.975	15,597.7	16.75	103.02	81.7	681.6	1,067.4
40.00		0.4375	43.972	60.451	14,475.4	16.31	100.51	82.2	648.4	1,041.5
42.96	Bot - Section 2	0.4375	43.323	59.550	13,837.8	16.05	99.02	82.5	629.1	603.6
45.00		0.4375	42.875	58.928	13,408.2	15.87	98.00	82.6	616.0	771.7
49.04	Top - Section 1	0.3750	42.738	50.421	11,432.7	18.69	113.97	79.4	526.9	1,502.0
50.00		0.3750	42.528	50.171	11,263.0	18.59	113.41	79.5	521.6	164.3
55.00		0.3750	41.431	48.865	10,406.2	18.07	110.48	80.1	494.7	842.5
60.00		0.3750	40.333	47.559	9,594.0	17.55	107.56	80.8	468.5	820.3
65.00		0.3750	39.236	46.253	8,825.1	17.04	104.63	81.4	443.0	798.0
70.00		0.3750	38.139	44.947	8,098.5	16.52	101.70	82.0	418.2	775.8
75.00		0.3750	37.042	43.641	7,412.9	16.01	98.78	82.6	394.2	753.6
78.00		0.3750	36.383	42.857	7,020.8	15.70	97.02	82.6	380.1	441.5
80.00		0.3750	35.944	42.335	6,767.2	15.49	95.85	82.6	370.8	289.9
85.00		0.3750	34.847	41.029	6,160.0	14.97	92.93	82.6	348.2	709.2
87.54	Bot - Section 3	0.3750	34.290	40.366	5,866.0	14.71	91.44	82.6	336.9	351.7
90.00		0.3750	33.750	39.723	5,590.4	14.46	90.00	82.6	326.2	620.3
92.46	Top - Section 2	0.3125	33.836	33.250	4,721.1	17.68	108.27	80.6	274.8	609.5
95.00		0.3125	33.278	32.696	4,489.2	17.37	106.49	81.0	265.7	285.4
100.00		0.3125	32.181	31.608	4,055.7	16.75	102.98	81.7	248.2	547.0
105.00		0.3125	31.083	30.520	3,651.0	16.13	99.47	82.4	231.3	528.5
110.00		0.3125	29.986	29.431	3,274.2	15.51	95.96	82.6	215.1	510.0
114.50		0.3125	28.999	28.452	2,958.1	14.95	92.80	82.6	200.9	443.2
115.00		0.3125	28.889	28.343	2,924.3	14.89	92.44	82.6	199.4	48.3
120.00		0.3125	27.792	27.255	2,600.2	14.27	88.93	82.6	184.3	473.0
125.00		0.3125	26.694	26.167	2,301.0	13.65	85.42	82.6	169.8	454.5
130.00		0.3125	25.597	25.078	2,025.7	13.03	81.91	82.6	155.9	435.9
132.00		0.3125	25.158	24.643	1,922.0	12.78	80.51	82.6	150.5	169.2
132.10	Bot - Section 4	0.3125	25.132	24.617	1,915.9	12.77	80.42	82.6	150.2	10.0
134.00		0.3125	24.719	24.208	1,821.9	12.54	79.10	82.6	145.2	251.8
135.00		0.3125	24.500	23.990	1,773.2	12.41	78.40	82.6	142.6	132.2
135.80	Top - Section 3	0.1875	24.684	14.578	1,105.3	21.80	131.65	75.8	88.2	114.0
140.00		0.1875	23.778	14.039	987.1	20.95	126.81	76.8	81.8	201.1
145.00		0.1875	22.681	13.386	855.6	19.92	120.96	78.0	74.3	233.3
150.00		0.1875	21.583	12.733	736.4	18.89	115.11	79.2	67.2	222.2
155.00		0.1875	20.486	12.080	628.8	17.85	109.26	80.4	60.5	211.1
160.00		0.1875	19.389	11.427	532.3	16.82	103.41	81.6	54.1	200.0
165.00		0.1875	18.292	10.774	446.2	15.79	97.56	82.6	48.0	188.9
166.00		0.1875	18.072	10.643	430.1	15.58	96.39	82.6	46.9	36.4
170.00		0.1875	17.194	10.121	369.8	14.76	91.70	82.6	42.4	141.3
174.00		0.1875	16.317	9.599	315.5	13.93	87.02	82.6	38.1	134.2
175.00		0.1875	16.097	9.468	302.8	13.73	85.85	82.6	37.0	32.4
180.00		0.1875	15.000	8.815	244.4	12.70	80.00	82.6	32.1	155.5
										25,271.1

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
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Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
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 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 1.2D + 1.6W	90.00 mph with No Ice	30 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

**Shaft Segment Forces (Factored)**

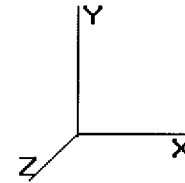
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	13.789	15.16	336.11	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	13.789	15.16	329.11	1.200	* 0.000	5.00	22.086	26.50	643.2	0.0	1,467.5
10.00		1.00	0.70	13.789	15.16	322.12	1.200	* 0.000	5.00	21.622	25.95	629.7	0.0	1,436.4
15.00		1.00	0.70	13.789	15.16	315.13	1.200	* 0.000	5.00	21.158	25.39	616.2	0.0	1,405.3
20.00		1.00	0.70	13.789	15.16	308.14	1.200	* 0.000	5.00	20.693	24.83	602.7	0.0	1,374.2
25.00		1.00	0.70	13.789	15.16	301.15	1.200	* 0.000	5.00	20.229	24.28	589.1	0.0	1,343.1
30.00	Appertunance(s)	1.00	0.70	13.801	15.18	294.28	1.200	* 0.000	5.00	19.765	23.72	576.1	0.0	1,312.0
35.00		1.00	0.73	14.423	15.86	293.68	1.200	* 0.000	5.00	19.301	23.16	587.9	0.0	1,280.9
40.00		1.00	0.76	14.983	16.48	292.05	1.200	* 0.000	5.00	18.837	22.60	596.1	0.0	1,249.8
42.96	Bot - Section 2	1.00	0.77	15.292	16.82	290.69	1.200	* 0.000	2.96	10.920	13.10	352.7	0.0	724.4
45.00		1.00	0.78	15.496	17.04	289.60	1.200	* 0.000	2.04	7.582	9.10	248.1	0.0	926.0
49.04	Top - Section 1	1.00	0.80	15.882	17.47	287.11	1.200	* 0.000	4.04	14.762	17.71	495.1	0.0	1,802.4
50.00		1.00	0.81	15.970	17.56	291.61	1.200	* 0.000	0.96	3.464	4.16	116.8	0.0	197.2
55.00		1.00	0.83	16.411	18.05	287.98	1.200	* 0.000	5.00	17.761	21.31	615.6	0.0	1,011.0
60.00		1.00	0.85	16.824	18.50	283.86	1.200	* 0.000	5.00	17.297	20.76	614.6	0.0	984.3
65.00		1.00	0.87	17.213	18.93	279.31	1.200	* 0.000	5.00	16.833	20.20	611.9	0.0	957.7
70.00		1.00	0.89	17.581	19.33	274.39	1.200	* 0.000	5.00	16.368	19.64	607.8	0.0	931.0
75.00		1.00	0.91	17.931	19.72	269.14	1.200	* 0.000	5.00	15.904	19.09	602.3	0.0	904.3
78.00	Appertunance(s)	1.00	0.92	18.133	19.94	265.84	1.200	* 0.000	3.00	9.320	11.18	356.9	0.0	529.8
80.00		1.00	0.92	18.265	20.09	263.58	1.200	* 0.000	2.00	6.120	7.34	236.1	0.0	347.9
85.00		1.00	0.94	18.584	20.44	257.76	1.200	* 0.000	5.00	14.976	17.97	587.8	0.0	851.0
87.54	Bot - Section 3	1.00	0.95	18.741	20.61	254.71	1.200	* 0.000	2.54	7.430	8.92	294.1	0.0	422.1
90.00		1.00	0.95	18.890	20.77	251.69	1.200	* 0.000	2.46	7.212	8.65	287.7	0.0	744.3
92.46	Top - Section 2	1.00	0.96	19.036	20.94	248.63	1.200	* 0.000	2.46	7.090	8.51	285.0	0.0	731.5
95.00	Appertunance(s)	1.00	0.97	19.184	21.10	250.09	1.200	* 0.000	2.54	7.222	8.67	292.6	0.0	342.4
100.0		1.00	0.98	19.467	21.41	243.63	1.200	* 0.000	5.00	13.848	16.62	569.3	0.0	656.4
105.0	Appertunance(s)	1.00	1.00	19.741	21.71	236.97	1.200	* 0.000	5.00	13.383	16.06	558.0	0.0	634.2
110.0		1.00	1.01	20.005	22.00	230.13	1.200	* 0.000	5.00	12.919	15.50	545.8	0.0	612.0
114.5	Appertunance(s)	1.00	1.02	20.235	22.25	223.82	1.200	* 0.000	4.50	11.230	13.48	479.9	0.0	531.8
115.0		1.00	1.02	20.260	22.28	223.12	1.200	* 0.000	0.50	1.225	1.47	52.4	0.0	58.0
120.0		1.00	1.04	20.508	22.55	215.95	1.200	* 0.000	5.00	11.991	14.39	519.4	0.0	567.6
125.0	Appertunance(s)	1.00	1.05	20.749	22.82	208.64	1.200	* 0.000	5.00	11.526	13.83	505.1	0.0	545.3
130.0		1.00	1.06	20.983	23.08	201.19	0.746	* 0.000	5.00	11.062	8.25	304.7	0.0	523.1
132.0	Appertunance(s)	1.00	1.07	21.074	23.18	198.17	0.755	* 0.000	2.00	4.295	3.24	120.2	0.0	203.0
132.1	Bot - Section 4	1.00	1.07	21.080	23.18	197.99	0.757	* 0.000	0.12	0.255	0.19	7.2	0.0	12.0
134.0	Appertunance(s)	1.00	1.07	21.165	23.28	195.13	0.760	* 0.000	1.88	4.025	3.06	114.0	0.0	302.2
135.0		1.00	1.07	21.210	23.33	193.60	0.764	* 0.000	1.00	2.114	1.62	60.3	0.0	158.7
135.8	Top - Section 3	1.00	1.07	21.249	23.37	192.27	0.767	* 0.000	0.87	1.824	1.40	52.3	0.0	136.8
140.0	Appertunance(s)	1.00	1.08	21.432	23.57	188.88	0.769	* 0.000	4.13	8.469	6.51	245.6	0.0	241.3
145.0		1.00	1.09	21.648	23.81	181.07	0.782	* 0.000	5.00	9.828	7.69	293.0	0.0	280.0
150.0	Appertunance(s)	1.00	1.11	21.858	24.04	173.14	0.799	* 0.000	5.00	9.364	7.48	287.7	0.0	266.6
155.0		1.00	1.12	22.064	24.27	165.11	0.817	* 0.000	5.00	8.900	7.27	282.2	0.0	253.3
160.0		1.00	1.13	22.265	24.49	156.98	0.836	* 0.000	5.00	8.435	7.06	276.5	0.0	240.0
165.0		1.00	1.14	22.462	24.70	148.75	1.200	* 0.000	5.00	7.971	9.57	378.1	0.0	226.6
166.0	Appertunance(s)	1.00	1.14	22.501	24.75	147.09	1.200	* 0.000	1.00	1.539	1.85	73.1	0.0	43.7
170.0		1.00	1.15	22.654	24.92	140.42	0.650	0.000	4.00	5.968	3.88	154.7	0.0	169.6
174.0	Appertunance(s)	1.00	1.15	22.805	25.08	133.70	0.650	0.000	4.00	5.671	3.69	148.0	0.0	161.0
175.0		1.00	1.16	22.843	25.12	132.01	0.650	0.000	1.00	1.371	0.89	35.8	0.0	38.9
180.0	Appertunance(s)	1.00	1.16	23.027	25.33	123.50	0.650	0.000	5.00	6.579	4.28	173.3	0.0	186.6
* = Cf Adjusted By Linear Load Ra Effect								Totals:	180.00			17,682.8	0.0	30,325.3



Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      90.00 mph with No Ice      30 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.20  
**Wind Load Factor:** 1.60

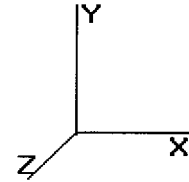
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	GPS	1	13.866	15.253	1.00	1.00	1.00	0.000	0.500	24.40	0.00	12.20	12.00
78.00	PCTEL GPS-TMG-HR-	1	18.133	19.947	1.00	1.00	0.09	0.000	0.000	2.87	0.00	0.00	0.72
95.00	Bird 429-83H-01-T	1	19.184	21.103	1.00	1.00	1.05	0.000	0.000	35.45	0.00	0.00	24.00
95.00	Decibel DB586	2	19.325	21.257	1.00	1.00	1.48	0.000	2.460	50.34	0.00	123.83	24.00
95.00	Flat Side Arm	3	19.184	21.103	1.00	1.00	18.90	0.000	0.000	638.14	0.00	0.00	540.00
105.0	RFS APXV18-206517S-	3	19.741	21.715	0.80	1.00	12.38	0.000	0.000	430.26	0.00	0.00	95.04
114.5	Decibel DB844H90E-	12	20.235	22.259	0.74	0.80	33.30	0.000	0.000	1,186.00	0.00	0.00	201.60
114.5	Round Low Profile PI	1	20.235	22.259	1.00	1.00	21.70	0.000	0.000	772.82	0.00	0.00	1,800.00
125.0	Antel BXA-171063/12C	1	20.749	22.824	0.80	0.80	3.83	0.000	0.000	139.94	0.00	0.00	18.00
125.0	Antel BXA-171085-12C	2	20.749	22.824	0.73	0.80	6.95	0.000	0.000	253.62	0.00	0.00	36.00
125.0	Antel BXA-70063/6CF	3	20.749	22.824	0.59	0.80	13.73	0.000	0.000	501.34	0.00	0.00	61.20
125.0	Antel LPA-80063/6CF	2	20.749	22.824	0.75	0.80	15.55	0.000	0.000	567.91	0.00	0.00	64.80
125.0	Antel LPA-80080/6CF	4	20.749	22.824	0.59	0.80	21.55	0.000	0.000	786.92	0.00	0.00	100.80
125.0	RFS FD9R6004/2C-3L	6	20.749	22.824	0.40	0.80	0.89	0.000	0.000	32.43	0.00	0.00	22.32
125.0	Round Low Profile PI	1	20.749	22.824	1.00	1.00	21.70	0.000	0.000	792.44	0.00	0.00	1,800.00
132.0	Alcatel-Lucent 1900M	3	21.074	23.182	0.70	0.80	8.03	0.000	0.000	297.68	0.00	0.00	158.40
132.0	Alcatel-Lucent 800 M	3	21.074	23.182	0.74	0.80	6.50	0.000	0.000	240.91	0.00	0.00	222.48
134.0	Andrew DB980H90E-M	6	21.165	23.282	0.63	0.80	14.79	0.000	0.000	550.89	0.00	0.00	61.20
134.0	Flat Low Profile Pla	1	21.165	23.282	1.00	1.00	26.10	0.000	0.000	972.25	0.00	0.00	1,800.00
134.0	RFS APXVSP18-C-	3	21.165	23.282	0.66	0.80	16.26	0.000	0.000	605.54	0.00	0.00	205.20
140.0	Bird 432-83H-01-T	2	21.432	23.575	0.80	0.80	2.61	0.000	0.000	98.37	0.00	0.00	48.00
140.0	Decibel DB809K-XT	3	21.695	23.864	0.80	0.80	8.78	0.000	6.100	335.39	0.00	2,045.87	135.00
140.0	Flat Side Arm	3	21.432	23.575	0.67	1.00	12.66	0.000	0.000	477.65	0.00	0.00	540.00
140.0	Sinclair SC432D-HF6L	1	21.713	23.884	0.80	0.80	4.02	0.000	6.540	153.78	0.00	1,005.71	60.00
140.0	Telewave ANT150D	1	21.648	23.813	0.80	0.80	0.87	0.000	5.000	33.22	0.00	166.12	21.60
150.0	Flat Side Arm	1	21.858	24.044	1.00	1.00	6.30	0.000	0.000	242.37	0.00	0.00	180.00
150.0	Sinclair SD210C2-SF2	1	22.064	24.271	1.00	1.00	1.37	0.000	5.000	53.20	0.00	266.01	19.20
166.0	CCI DTMA-1819-DD-12	6	22.501	24.751	0.40	0.80	1.70	0.000	0.000	67.48	0.00	0.00	102.96
166.0	RFS APX16PV-16PVL-	9	22.501	24.751	0.52	0.80	31.11	0.000	0.000	1,231.91	0.00	0.00	427.68
166.0	T-Arms	3	22.501	24.751	0.50	0.75	19.45	0.000	0.000	770.11	0.00	0.00	900.00
174.0	Flat Low Profile Pla	1	22.805	25.086	1.00	1.00	26.10	0.000	0.000	1,047.58	0.00	0.00	1,800.00
180.0	10' Omni	1	23.351	25.686	1.00	1.00	3.00	0.000	9.000	123.29	0.00	1,109.62	12.00
180.0	Andrew ABT-DMDF-	1	23.172	25.490	0.80	0.80	0.04	0.000	4.000	1.63	0.00	6.53	1.32
180.0	Ericsson RRUS 11	6	23.172	25.490	0.57	0.80	10.19	0.000	4.000	415.58	0.00	1,662.31	360.00
180.0	Flat Low Profile Pla	1	23.027	25.330	1.00	1.00	26.10	0.000	0.000	1,057.78	0.00	0.00	1,800.00
180.0	KMW AM-X-CD-16-65-	3	23.172	25.490	0.62	0.80	15.46	0.000	4.000	630.62	0.00	2,522.48	174.60
180.0	Powerwave 7770.00	6	23.172	25.490	0.60	0.80	21.39	0.000	4.000	872.26	0.00	3,489.03	252.00
180.0	Powerwave LGP21401	6	23.172	25.490	0.40	0.80	3.10	0.000	4.000	126.27	0.00	505.06	101.52
										16,620.65			14,183.64

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.6W      90.00 mph with No Ice      30 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 1.20  
**Wind Load Factor:** 1.60

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.208	0.000	48.05	88.55
5.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.208	0.000	48.05	59.03
5.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.208	0.000	37.62	45.35
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.208	0.000	0.00	29.52
5.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.208	0.000	0.00	1.98
10.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.212	0.000	48.05	88.55
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.212	0.000	48.05	59.03
10.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.212	0.000	37.62	45.35
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.212	0.000	0.00	29.52
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.212	0.000	0.00	1.98
15.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.217	0.000	48.05	88.55
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.217	0.000	48.05	59.03
15.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.217	0.000	37.62	45.35
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.217	0.000	0.00	29.52
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.217	0.000	0.00	1.98
20.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.222	0.000	48.05	88.55
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.222	0.000	48.05	59.03
20.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.222	0.000	37.62	45.35
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.222	0.000	0.00	29.52
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.222	0.000	0.00	1.98
25.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.227	0.000	48.05	88.55
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.227	0.000	48.05	59.03
25.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.227	0.000	37.62	45.35
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.227	0.000	0.00	29.52
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.227	0.000	0.00	1.98
30.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.801	0.232	0.000	48.09	88.55
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.801	0.232	0.000	48.09	59.03
30.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.801	0.232	0.000	37.65	45.35
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.801	0.232	0.000	0.00	29.52
30.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.801	0.232	0.000	0.00	1.98
35.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.423	0.238	0.000	50.26	88.55
35.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.423	0.238	0.000	50.26	59.03
35.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	14.423	0.238	0.000	39.34	45.35
35.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	14.423	0.238	0.000	0.00	29.52
40.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.983	0.244	0.000	52.21	88.55
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.983	0.244	0.000	52.21	59.03
40.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	14.983	0.244	0.000	40.87	45.35
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	14.983	0.244	0.000	0.00	29.52
42.96	(18) 1 5/8" Coax	Yes	2.96	1.200	3.96	0.98	1.17	15.292	0.249	0.000	31.51	52.36
42.96	(12) 1 5/8" Coax	Yes	2.96	1.200	3.96	0.98	1.17	15.292	0.249	0.000	31.51	34.91
42.96	(12) 1 1/4" Coax	Yes	2.96	1.200	3.10	0.76	0.92	15.292	0.249	0.000	24.67	26.82
42.96	(6) 1 5/8" Coax	Yes	2.96	0.000	0.00	0.00	0.00	15.292	0.249	0.000	0.00	17.45
45.00	(18) 1 5/8" Coax	Yes	2.04	1.200	3.96	0.67	0.81	15.496	0.252	0.000	22.07	36.19
45.00	(12) 1 5/8" Coax	Yes	2.04	1.200	3.96	0.67	0.81	15.496	0.252	0.000	22.07	24.13
45.00	(12) 1 1/4" Coax	Yes	2.04	1.200	3.10	0.53	0.63	15.496	0.252	0.000	17.28	18.54
45.00	(6) 1 5/8" Coax	Yes	2.04	0.000	0.00	0.00	0.00	15.496	0.252	0.000	0.00	12.06
49.04	(18) 1 5/8" Coax	Yes	4.04	1.200	3.96	1.33	1.60	15.882	0.256	0.000	44.72	71.55
49.04	(12) 1 5/8" Coax	Yes	4.04	1.200	3.96	1.33	1.60	15.882	0.256	0.000	44.72	47.70
49.04	(12) 1 1/4" Coax	Yes	4.04	1.200	3.10	1.04	1.25	15.882	0.256	0.000	35.01	36.64
49.04	(6) 1 5/8" Coax	Yes	4.04	0.000	0.00	0.00	0.00	15.882	0.256	0.000	0.00	23.85
50.00	(18) 1 5/8" Coax	Yes	0.96	1.200	3.96	0.32	0.38	15.970	0.255	0.000	10.69	17.00



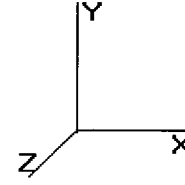




Pole : 302506  
Location : Winchester CT 3, CT  
Height : 180.0 (ft)  
Base Dia : 52.75 (in)  
Top Dia : 15.00 (in)  
Shape : 18 Sides  
Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
Struct Class : II  
Exposure Category : B  
Topographic Category : 1  
Base Elev : 0.000 (ft)

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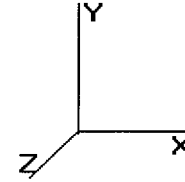
<b>Load Case:</b> 1.2D + 1.6W	90.00 mph with No Ice	30 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 1.20		
Wind Load Factor : 1.60		

Totals: 38,398.79 57,164.36 0.00 12,914.75

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case: 1.2D + 1.6W**

90.00 mph with No Ice

30 Iterations

Gust Response Factor : 1.10  
 Dead Load Factor : 1.20  
 Wind Load Factor : 1.60

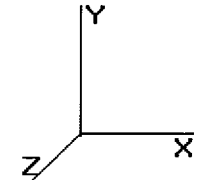
Wind Importance Factor : 1.00

**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-57.08	-38.52	0.00	-4,359.04	0.00	4,359.04	5,102.86	2,551.43	10,963.2	5,489.79	0.00	0.00	0.805
5.00	-55.02	-37.97	0.00	-4,166.43	0.00	4,166.43	5,029.12	2,514.56	10,576.3	5,296.03	0.13	-0.24	0.798
10.00	-53.00	-37.43	0.00	-3,976.56	0.00	3,976.56	4,953.95	2,476.98	10,193.1	5,104.17	0.51	-0.49	0.790
15.00	-51.01	-36.88	0.00	-3,789.42	0.00	3,789.42	4,877.36	2,438.68	9,813.98	4,914.28	1.16	-0.74	0.782
20.00	-49.06	-36.34	0.00	-3,605.00	0.00	3,605.00	4,799.34	2,399.67	9,438.93	4,726.48	2.07	-0.99	0.773
25.00	-47.14	-35.80	0.00	-3,423.30	0.00	3,423.30	4,719.90	2,359.95	9,068.23	4,540.86	3.24	-1.25	0.764
30.00	-45.24	-35.23	0.00	-3,244.30	0.00	3,244.30	4,639.03	2,319.51	8,702.08	4,357.51	4.70	-1.51	0.755
35.00	-43.39	-34.66	0.00	-3,068.14	0.00	3,068.14	4,556.73	2,278.36	8,340.67	4,176.53	6.42	-1.78	0.744
40.00	-41.61	-34.02	0.00	-2,894.84	0.00	2,894.84	4,473.00	2,236.50	7,984.18	3,998.03	8.44	-2.05	0.734
42.96	-40.56	-33.64	0.00	-2,794.26	0.00	2,794.26	4,422.82	2,211.41	7,775.79	3,893.68	9.76	-2.22	0.727
45.00	-39.37	-33.41	0.00	-2,725.51	0.00	2,725.51	4,378.03	2,189.01	7,615.75	3,813.53	10.73	-2.33	0.724
49.04	-37.17	-32.79	0.00	-2,590.53	0.00	2,590.53	4,304.17	1,802.08	7,456.83	3,738.50	12.81	-2.56	0.836
50.00	-36.80	-32.75	0.00	-2,559.05	0.00	2,559.05	4,273.50	1,795.75	7,404.33	3,711.78	13.33	-2.62	0.833
55.00	-35.22	-32.10	0.00	-2,395.30	0.00	2,395.30	4,204.70	1,762.35	7,256.60	3,637.71	16.24	-2.93	0.816
60.00	-33.68	-31.44	0.00	-2,234.79	0.00	2,234.79	4,146.48	1,728.24	7,114.58	3,571.51	19.48	-3.25	0.798
65.00	-32.17	-30.76	0.00	-2,077.61	0.00	2,077.61	4,093.83	1,693.41	6,977.53	3,505.28	23.05	-3.57	0.778
70.00	-30.69	-30.07	0.00	-1,923.82	0.00	1,923.82	4,046.75	1,657.87	6,845.58	3,438.11	26.96	-3.89	0.758
75.00	-29.29	-29.33	0.00	-1,773.49	0.00	1,773.49	4,005.30	1,621.15	6,718.54	3,371.39	31.20	-4.21	0.736
78.00	-28.45	-28.89	0.00	-1,685.50	0.00	1,685.50	3,968.09	1,592.04	6,593.23	3,305.11	33.91	-4.41	0.726
80.00	-27.84	-28.66	0.00	-1,627.72	0.00	1,627.72	3,942.28	1,572.64	6,527.79	3,295.80	35.79	-4.55	0.718
85.00	-26.51	-27.90	0.00	-1,484.44	0.00	1,484.44	3,920.26	1,524.13	6,404.87	3,255.63	40.72	-4.88	0.698
87.54	-25.83	-27.54	0.00	-1,413.57	0.00	1,413.57	3,902.97	1,499.48	6,340.05	3,246.12	43.36	-5.05	0.687
90.00	-24.83	-27.15	0.00	-1,345.83	0.00	1,345.83	3,889.23	1,475.62	6,277.76	3,237.88	46.00	-5.21	0.675
92.46	-23.85	-26.76	0.00	-1,279.14	0.00	1,279.14	3,879.07	1,406.04	6,217.78	3,231.36	48.72	-5.37	0.780
95.00	-22.70	-25.65	0.00	-1,210.97	0.00	1,210.97	3,872.81	1,191.41	6,161.61	3,224.62	51.62	-5.54	0.760
100.00	-21.54	-24.92	0.00	-1,082.74	0.00	1,082.74	3,870.22	1,162.11	6,107.61	3,217.06	57.61	-5.91	0.722
105.00	-20.38	-23.75	0.00	-958.14	0.00	958.14	3,870.20	1,132.10	6,056.29	3,210.27	63.98	-6.26	0.679
110.00	-19.33	-23.02	0.00	-839.38	0.00	839.38	3,870.61	1,093.30	6,009.07	3,203.51	70.72	-6.61	0.640
114.50	-16.71	-20.13	0.00	-735.81	0.00	735.81	3,871.84	1,056.92	5,964.15	3,197.92	77.09	-6.92	0.600
115.00	-16.56	-20.10	0.00	-725.75	0.00	725.75	3,870.76	1,052.88	5,960.08	3,194.37	77.81	-6.96	0.596
120.00	-15.63	-19.42	0.00	-625.23	0.00	625.23	3,870.90	1,012.45	5,918.43	3,188.91	85.26	-7.29	0.556
125.00	-13.06	-15.41	0.00	-528.13	0.00	528.13	3,870.05	972.03	5,880.13	3,181.12	93.04	-7.60	0.509
130.00	-12.24	-15.04	0.00	-451.08	0.00	451.08	3,863.20	931.60	5,845.17	3,172.02	101.14	-7.90	0.474
132.00	-11.62	-14.31	0.00	-421.00	0.00	421.00	3,830.86	915.43	5,804.45	3,161.61	104.47	-8.03	0.458
132.12	-11.59	-14.31	0.00	-419.28	0.00	419.28	3,828.92	914.46	5,800.49	3,160.63	104.67	-8.03	0.458
134.00	-9.43	-11.75	0.00	-392.38	0.00	392.38	3,798.52	899.26	5,774.90	3,151.78	107.85	-8.15	0.442
135.00	-9.23	-11.67	0.00	-380.62	0.00	380.62	3,782.81	891.17	5,762.57	3,149.59	109.55	-8.21	0.437
135.87	-9.03	-11.62	0.00	-370.47	0.00	370.47	3,993.95	496.97	5,000.68	501.09	111.05	-8.26	0.749
140.00	-7.93	-10.16	0.00	-319.26	0.00	319.26	969.84	484.92	940.01	470.70	118.27	-8.50	0.687
145.00	-7.42	-9.85	0.00	-268.48	0.00	268.48	939.35	469.68	867.78	434.53	127.37	-8.92	0.626
150.00	-6.79	-9.21	0.00	-218.98	0.00	218.98	907.44	453.72	797.07	399.13	136.89	-9.32	0.557
155.00	-6.33	-8.90	0.00	-172.93	0.00	172.93	874.09	437.05	728.06	364.57	146.82	-9.70	0.482
160.00	-5.90	-8.58	0.00	-128.45	0.00	128.45	839.33	419.66	660.97	330.98	157.12	-10.04	0.396
165.00	-5.53	-8.07	0.00	-85.54	0.00	85.54	800.44	400.22	593.98	297.43	167.74	-10.33	0.295
166.00	-4.42	-5.68	0.00	-77.47	0.00	77.47	790.74	395.37	579.60	290.23	169.90	-10.38	0.273
170.00	-4.17	-5.50	0.00	-54.74	0.00	54.74	751.93	375.97	523.82	262.30	178.63	-10.56	0.214
174.00	-2.37	-3.95	0.00	-32.75	0.00	32.75	713.12	356.56	470.86	235.78	187.48	-10.69	0.142
175.00	-2.31	-3.90	0.00	-28.80	0.00	28.80	703.42	351.71	458.07	229.37	189.71	-10.72	0.129
180.00	0.00	-3.40	0.00	-9.30	0.00	9.30	654.91	327.45	396.72	198.65	200.93	-10.81	0.047

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



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<b>Load Case:</b> 0.9D + 1.6W	90.00 mph with No Ice (Reduced DL)	29 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

**Shaft Segment Forces (Factored)**

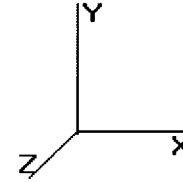
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	13.789	15.16	336.11	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	13.789	15.16	329.11	1.200	* 0.000	5.00	22.086	26.50	643.2	0.0	1,100.6
10.00		1.00	0.70	13.789	15.16	322.12	1.200	* 0.000	5.00	21.622	25.95	629.7	0.0	1,077.3
15.00		1.00	0.70	13.789	15.16	315.13	1.200	* 0.000	5.00	21.158	25.39	616.2	0.0	1,054.0
20.00		1.00	0.70	13.789	15.16	308.14	1.200	* 0.000	5.00	20.693	24.83	602.7	0.0	1,030.6
25.00		1.00	0.70	13.789	15.16	301.15	1.200	* 0.000	5.00	20.229	24.28	589.1	0.0	1,007.3
30.00	Appertunance(s)	1.00	0.70	13.801	15.18	294.28	1.200	* 0.000	5.00	19.765	23.72	576.1	0.0	984.0
35.00		1.00	0.73	14.423	15.86	293.68	1.200	* 0.000	5.00	19.301	23.16	567.9	0.0	960.7
40.00		1.00	0.76	14.983	16.48	292.05	1.200	* 0.000	5.00	18.837	22.60	559.1	0.0	937.3
42.96	Bot - Section 2	1.00	0.77	15.292	16.82	290.69	1.200	* 0.000	2.96	10.920	13.10	352.7	0.0	543.3
45.00		1.00	0.78	15.496	17.04	289.60	1.200	* 0.000	2.04	7.582	9.10	248.1	0.0	694.5
49.04	Top - Section 1	1.00	0.80	15.882	17.47	287.11	1.200	* 0.000	4.04	14.762	17.71	495.1	0.0	1,351.8
50.00		1.00	0.81	15.970	17.56	291.61	1.200	* 0.000	0.96	3.464	4.16	116.8	0.0	147.9
55.00		1.00	0.83	16.411	18.05	287.98	1.200	* 0.000	5.00	17.761	21.31	615.6	0.0	758.2
60.00		1.00	0.85	16.824	18.50	283.86	1.200	* 0.000	5.00	17.297	20.76	614.6	0.0	738.2
65.00		1.00	0.87	17.213	18.93	279.31	1.200	* 0.000	5.00	16.833	20.20	611.9	0.0	718.2
70.00		1.00	0.89	17.581	19.33	274.39	1.200	* 0.000	5.00	16.368	19.64	607.8	0.0	698.2
75.00		1.00	0.91	17.931	19.72	269.14	1.200	* 0.000	5.00	15.904	19.09	602.3	0.0	678.3
78.00	Appertunance(s)	1.00	0.92	18.133	19.94	265.84	1.200	* 0.000	3.00	9.320	11.18	356.9	0.0	397.4
80.00		1.00	0.92	18.265	20.09	263.58	1.200	* 0.000	2.00	6.120	7.34	236.1	0.0	260.9
85.00		1.00	0.94	18.584	20.44	257.76	1.200	* 0.000	5.00	14.976	17.97	587.8	0.0	638.3
87.54	Bot - Section 3	1.00	0.95	18.741	20.61	254.71	1.200	* 0.000	2.54	7.430	8.92	294.1	0.0	316.6
90.00		1.00	0.95	18.890	20.77	251.69	1.200	* 0.000	2.46	7.212	8.65	287.7	0.0	558.2
92.46	Top - Section 2	1.00	0.96	19.036	20.94	248.63	1.200	* 0.000	2.46	7.090	8.51	285.0	0.0	548.6
95.00	Appertunance(s)	1.00	0.97	19.184	21.10	250.09	1.200	* 0.000	2.54	7.222	8.67	292.6	0.0	256.8
100.00		1.00	0.98	19.467	21.41	243.63	1.200	* 0.000	5.00	13.848	16.62	569.3	0.0	492.3
105.00	Appertunance(s)	1.00	1.00	19.741	21.71	236.97	1.200	* 0.000	5.00	13.383	16.06	558.0	0.0	475.7
110.00		1.00	1.01	20.005	22.00	230.13	1.200	* 0.000	5.00	12.919	15.50	545.8	0.0	459.0
114.50	Appertunance(s)	1.00	1.02	20.235	22.25	223.82	1.200	* 0.000	4.50	11.230	13.48	479.9	0.0	398.9
115.00		1.00	1.02	20.260	22.28	223.12	1.200	* 0.000	0.50	1.225	1.47	52.4	0.0	43.5
120.00		1.00	1.04	20.508	22.55	215.95	1.200	* 0.000	5.00	11.991	14.39	519.4	0.0	425.7
125.00	Appertunance(s)	1.00	1.05	20.749	22.82	208.64	1.200	* 0.000	5.00	11.526	13.83	505.1	0.0	409.0
130.00		1.00	1.06	20.983	23.08	201.19	0.650	* 0.000	5.00	11.062	7.19	265.5	0.0	392.3
132.00	Appertunance(s)	1.00	1.07	21.074	23.18	198.17	0.650	* 0.000	2.00	4.295	2.79	103.5	0.0	152.3
132.10	Bot - Section 4	1.00	1.07	21.080	23.18	197.99	0.650	* 0.000	0.12	0.255	0.17	6.1	0.0	9.0
134.00	Appertunance(s)	1.00	1.07	21.165	23.28	195.13	0.650	* 0.000	1.88	4.025	2.62	97.5	0.0	226.6
135.00		1.00	1.07	21.210	23.33	193.60	0.650	* 0.000	1.00	2.114	1.37	51.3	0.0	119.0
135.80	Top - Section 3	1.00	1.07	21.249	23.37	192.27	0.650	* 0.000	0.87	1.824	1.19	44.3	0.0	102.6
140.00	Appertunance(s)	1.00	1.08	21.432	23.57	188.88	0.650	* 0.000	4.13	8.469	5.50	207.6	0.0	181.0
145.00		1.00	1.09	21.648	23.81	181.07	0.650	* 0.000	5.00	9.828	6.39	243.4	0.0	210.0
150.00	Appertunance(s)	1.00	1.11	21.858	24.04	173.14	0.650	* 0.000	5.00	9.364	6.09	234.2	0.0	200.0
155.00		1.00	1.12	22.064	24.27	165.11	0.650	* 0.000	5.00	8.900	5.78	224.6	0.0	190.0
160.00		1.00	1.13	22.265	24.49	156.98	0.650	* 0.000	5.00	8.435	5.48	214.9	0.0	180.0
165.00		1.00	1.14	22.462	24.70	148.75	1.200	* 0.000	5.00	7.971	9.57	378.1	0.0	170.0
166.00	Appertunance(s)	1.00	1.14	22.501	24.75	147.09	1.200	* 0.000	1.00	1.539	1.85	73.1	0.0	32.8
170.00		1.00	1.15	22.654	24.92	140.42	0.650	0.000	4.00	5.968	3.88	154.7	0.0	127.2
174.00	Appertunance(s)	1.00	1.15	22.805	25.08	133.70	0.650	0.000	4.00	5.671	3.69	148.0	0.0	120.8
175.00		1.00	1.16	22.843	25.12	132.01	0.650	0.000	1.00	1.371	0.89	35.8	0.0	29.2
180.00	Appertunance(s)	1.00	1.16	23.027	25.33	123.50	0.650	0.000	5.00	6.579	4.28	173.3	0.0	140.0
* = Cf Adjusted By Linear Load Ra Effect								Totals:	180.00			17,332.3	0.0	22,744.0



Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code : ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 0.9D + 1.6W	90.00 mph with No Ice (Reduced DL)	29 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

**Discrete Appurtenance Segment Forces (Factored)**

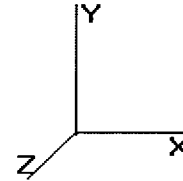
Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	GPS	1	13.866	15.253	1.00	1.00	1.00	0.000	0.500	24.40	0.00	12.20	9.00
78.00	PCTEL GPS-TMG-HR-	1	18.133	19.947	1.00	1.00	0.09	0.000	0.000	2.87	0.00	0.00	0.54
95.00	Bird 429-83H-01-T	1	19.184	21.103	1.00	1.00	1.05	0.000	0.000	35.45	0.00	0.00	18.00
95.00	Decibel DB586	2	19.325	21.257	1.00	1.00	1.48	0.000	2.460	50.34	0.00	123.83	18.00
95.00	Flat Side Arm	3	19.184	21.103	1.00	1.00	18.90	0.000	0.000	638.14	0.00	0.00	405.00
105.0	Antel APXV18-206517S-	3	19.741	21.715	0.80	1.00	12.38	0.000	0.000	430.26	0.00	0.00	71.28
114.5	Decibel DB844H90E-	12	20.235	22.259	0.74	0.80	33.30	0.000	0.000	1,186.00	0.00	0.00	151.20
114.5	Round Low Profile PI	1	20.235	22.259	1.00	1.00	21.70	0.000	0.000	772.82	0.00	0.00	1,350.00
125.0	Antel BXA-171063/12C	1	20.749	22.824	0.80	0.80	3.83	0.000	0.000	139.94	0.00	0.00	13.50
125.0	Antel BXA-171085-12C	2	20.749	22.824	0.73	0.80	6.95	0.000	0.000	253.62	0.00	0.00	27.00
125.0	Antel BXA-70063/6CF	3	20.749	22.824	0.59	0.80	13.73	0.000	0.000	501.34	0.00	0.00	45.90
125.0	Antel LPA-80063/6CF	2	20.749	22.824	0.75	0.80	15.55	0.000	0.000	567.91	0.00	0.00	48.60
125.0	Antel LPA-80080/6CF	4	20.749	22.824	0.59	0.80	21.55	0.000	0.000	786.92	0.00	0.00	75.60
125.0	RFS FD9R6004/2C-3L	6	20.749	22.824	0.40	0.80	0.89	0.000	0.000	32.43	0.00	0.00	16.74
125.0	Round Low Profile PI	1	20.749	22.824	1.00	1.00	21.70	0.000	0.000	792.44	0.00	0.00	1,350.00
132.0	Alcatel-Lucent 1900M	3	21.074	23.182	0.70	0.80	8.03	0.000	0.000	297.68	0.00	0.00	118.80
132.0	Alcatel-Lucent 800 M	3	21.074	23.182	0.74	0.80	6.50	0.000	0.000	240.91	0.00	0.00	166.86
134.0	Andrew DB980H90E-M	6	21.165	23.282	0.63	0.80	14.79	0.000	0.000	550.89	0.00	0.00	45.90
134.0	Flat Low Profile Pla	1	21.165	23.282	1.00	1.00	26.10	0.000	0.000	972.25	0.00	0.00	1,350.00
134.0	RFS APXVSP18-C-	3	21.165	23.282	0.66	0.80	16.26	0.000	0.000	605.54	0.00	0.00	153.90
140.0	Bird 432-83H-01-T	2	21.432	23.575	0.80	0.80	2.61	0.000	0.000	98.37	0.00	0.00	36.00
140.0	Decibel DB809K-XT	3	21.695	23.864	0.80	0.80	8.78	0.000	6.100	335.39	0.00	2,045.87	101.25
140.0	Flat Side Arm	3	21.432	23.575	0.67	1.00	12.66	0.000	0.000	477.65	0.00	0.00	405.00
140.0	Sinclair SC432D-HF6L	1	21.713	23.884	0.80	0.80	4.02	0.000	6.540	153.78	0.00	1,005.71	45.00
140.0	Telewave ANT150D	1	21.648	23.813	0.80	0.80	0.87	0.000	5.000	33.22	0.00	166.12	16.20
150.0	Flat Side Arm	1	21.858	24.044	1.00	1.00	6.30	0.000	0.000	242.37	0.00	0.00	135.00
150.0	Sinclair SD210C2-SF2	1	22.064	24.271	1.00	1.00	1.37	0.000	5.000	53.20	0.00	266.01	14.40
166.0	CCI DTMA-1819-DD-12	6	22.501	24.751	0.40	0.80	1.70	0.000	0.000	67.48	0.00	0.00	77.22
166.0	RFS APX16PV-16PVL-	9	22.501	24.751	0.52	0.80	31.11	0.000	0.000	1,231.91	0.00	0.00	320.76
166.0	T-Arms	3	22.501	24.751	0.50	0.75	19.45	0.000	0.000	770.11	0.00	0.00	675.00
174.0	Flat Low Profile Pla	1	22.805	25.086	1.00	1.00	26.10	0.000	0.000	1,047.58	0.00	0.00	1,350.00
180.0	10' Omni	1	23.351	25.686	1.00	1.00	3.00	0.000	9.000	123.29	0.00	1,109.62	9.00
180.0	Andrew ABT-DMDF-	1	23.172	25.490	0.80	0.80	0.04	0.000	4.000	1.63	0.00	6.53	0.99
180.0	Ericsson RRUS 11	6	23.172	25.490	0.57	0.80	10.19	0.000	4.000	415.58	0.00	1,662.31	270.00
180.0	Flat Low Profile Pla	1	23.027	25.330	1.00	1.00	26.10	0.000	0.000	1,057.78	0.00	0.00	1,350.00
180.0	KMW AM-X-CD-16-65-	3	23.172	25.490	0.62	0.80	15.46	0.000	4.000	630.62	0.00	2,522.48	130.95
180.0	Powerwave 7770.00	6	23.172	25.490	0.60	0.80	21.39	0.000	4.000	872.26	0.00	3,489.03	189.00
180.0	Powerwave LGP21401	6	23.172	25.490	0.40	0.80	3.10	0.000	4.000	126.27	0.00	505.06	76.14
										16,620.65			10,637.73

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 0.9D + 1.6W	90.00 mph with No Ice (Reduced DL)	29 Iterations
Gust Response Factor : 1.10		Wind Importance Factor : 1.00
Dead Load Factor : 0.90		
Wind Load Factor : 1.60		

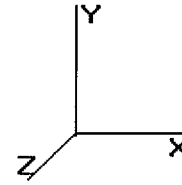
**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.208	0.000	48.05	66.41
5.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.208	0.000	48.05	44.27
5.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.208	0.000	37.62	34.01
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.208	0.000	0.00	22.14
5.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.208	0.000	0.00	1.49
10.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.212	0.000	48.05	66.41
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.212	0.000	48.05	44.27
10.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.212	0.000	37.62	34.01
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.212	0.000	0.00	22.14
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.212	0.000	0.00	1.49
15.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.217	0.000	48.05	66.41
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.217	0.000	48.05	44.27
15.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.217	0.000	37.62	34.01
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.217	0.000	0.00	22.14
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.217	0.000	0.00	1.49
20.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.222	0.000	48.05	66.41
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.222	0.000	48.05	44.27
20.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.222	0.000	37.62	34.01
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.222	0.000	0.00	22.14
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.222	0.000	0.00	1.49
25.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.227	0.000	48.05	66.41
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.789	0.227	0.000	48.05	44.27
25.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.789	0.227	0.000	37.62	34.01
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.227	0.000	0.00	22.14
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.789	0.227	0.000	0.00	1.49
30.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.801	0.232	0.000	48.09	66.41
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	13.801	0.232	0.000	48.09	44.27
30.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	13.801	0.232	0.000	37.65	34.01
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.801	0.232	0.000	0.00	22.14
30.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	13.801	0.232	0.000	0.00	1.49
35.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.423	0.238	0.000	50.26	66.41
35.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.423	0.238	0.000	50.26	44.27
35.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	14.423	0.238	0.000	39.34	34.01
35.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	14.423	0.238	0.000	0.00	22.14
40.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.983	0.244	0.000	52.21	66.41
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	14.983	0.244	0.000	52.21	44.27
40.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	14.983	0.244	0.000	40.87	34.01
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	14.983	0.244	0.000	0.00	22.14
42.96	(18) 1 5/8" Coax	Yes	2.96	1.200	3.96	0.98	1.17	15.292	0.249	0.000	31.51	39.27
42.96	(12) 1 5/8" Coax	Yes	2.96	1.200	3.96	0.98	1.17	15.292	0.249	0.000	31.51	26.18
42.96	(12) 1 1/4" Coax	Yes	2.96	1.200	3.10	0.76	0.92	15.292	0.249	0.000	24.67	20.11
42.96	(6) 1 5/8" Coax	Yes	2.96	0.000	0.00	0.00	0.00	15.292	0.249	0.000	0.00	13.09
45.00	(18) 1 5/8" Coax	Yes	2.04	1.200	3.96	0.67	0.81	15.496	0.252	0.000	22.07	27.14
45.00	(12) 1 5/8" Coax	Yes	2.04	1.200	3.96	0.67	0.81	15.496	0.252	0.000	22.07	18.09
45.00	(12) 1 1/4" Coax	Yes	2.04	1.200	3.10	0.53	0.63	15.496	0.252	0.000	17.28	13.90
45.00	(6) 1 5/8" Coax	Yes	2.04	0.000	0.00	0.00	0.00	15.496	0.252	0.000	0.00	9.05
49.04	(18) 1 5/8" Coax	Yes	4.04	1.200	3.96	1.33	1.60	15.882	0.256	0.000	44.72	53.66
49.04	(12) 1 5/8" Coax	Yes	4.04	1.200	3.96	1.33	1.60	15.882	0.256	0.000	44.72	35.77
49.04	(12) 1 1/4" Coax	Yes	4.04	1.200	3.10	1.04	1.25	15.882	0.256	0.000	35.01	27.48
49.04	(6) 1 5/8" Coax	Yes	4.04	0.000	0.00	0.00	0.00	15.882	0.256	0.000	0.00	17.89
50.00	(18) 1 5/8" Coax	Yes	0.96	1.200	3.96	0.32	0.38	15.970	0.255	0.000	10.69	12.75

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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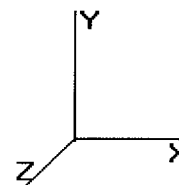
**Load Case:** 0.9D + 1.6W      90.00 mph with No Ice (Reduced DL)      29 Iterations  
**Gust Response Factor:** 1.10      **Wind Importance Factor:** 1.00  
**Dead Load Factor:** 0.90  
**Wind Load Factor:** 1.60

50.00	(12) 1 5/8" Coax	Yes	0.96	1.200	3.96	0.32	0.38	15.970	0.255	0.000	10.69	8.50
50.00	(12) 1 1/4" Coax	Yes	0.96	1.200	3.10	0.25	0.30	15.970	0.255	0.000	8.37	6.53
50.00	(6) 1 5/8" Coax	Yes	0.96	0.000	0.00	0.00	0.00	15.970	0.255	0.000	0.00	4.25
55.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.411	0.259	0.000	57.19	66.41
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.411	0.259	0.000	57.19	44.27
55.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	16.411	0.259	0.000	44.77	34.01
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.411	0.259	0.000	0.00	22.14
60.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.824	0.265	0.000	58.63	66.41
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	16.824	0.265	0.000	58.63	44.27
60.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	16.824	0.265	0.000	45.90	34.01
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	16.824	0.265	0.000	0.00	22.14
65.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.213	0.273	0.000	59.98	66.41
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.213	0.273	0.000	59.98	44.27
65.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	17.213	0.273	0.000	46.96	34.01
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.213	0.273	0.000	0.00	22.14
70.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.581	0.281	0.000	61.27	66.41
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.581	0.281	0.000	61.27	44.27
70.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	17.581	0.281	0.000	47.96	34.01
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.581	0.281	0.000	0.00	22.14
75.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.931	0.289	0.000	62.49	66.41
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	17.931	0.289	0.000	62.49	44.27
75.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	17.931	0.289	0.000	48.92	34.01
75.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	17.931	0.289	0.000	0.00	22.14
78.00	(18) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	18.133	0.296	0.000	37.91	39.85
78.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	0.99	1.19	18.133	0.296	0.000	37.91	26.56
78.00	(12) 1 1/4" Coax	Yes	3.00	1.200	3.10	0.77	0.93	18.133	0.296	0.000	29.68	20.41
78.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	18.133	0.296	0.000	0.00	13.28
80.00	(18) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	18.265	0.300	0.000	25.46	26.56
80.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	0.66	0.79	18.265	0.300	0.000	25.46	17.71
80.00	(12) 1 1/4" Coax	Yes	2.00	1.200	3.10	0.52	0.62	18.265	0.300	0.000	19.93	13.61
80.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	18.265	0.300	0.000	0.00	8.85
85.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.584	0.307	0.000	64.76	66.41
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	18.584	0.307	0.000	64.76	44.27
85.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	18.584	0.307	0.000	50.70	34.01
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	18.584	0.307	0.000	0.00	22.14
87.54	(18) 1 5/8" Coax	Yes	2.54	1.200	3.96	0.84	1.01	18.741	0.314	0.000	33.18	33.74
87.54	(12) 1 5/8" Coax	Yes	2.54	1.200	3.96	0.84	1.01	18.741	0.314	0.000	33.18	22.49
87.54	(12) 1 1/4" Coax	Yes	2.54	1.200	3.10	0.66	0.79	18.741	0.314	0.000	25.97	17.28
87.54	(6) 1 5/8" Coax	Yes	2.54	0.000	0.00	0.00	0.00	18.741	0.314	0.000	0.00	11.25
90.00	(18) 1 5/8" Coax	Yes	2.46	1.200	3.96	0.81	0.97	18.890	0.319	0.000	32.39	32.68
90.00	(12) 1 5/8" Coax	Yes	2.46	1.200	3.96	0.81	0.97	18.890	0.319	0.000	32.39	21.78
90.00	(12) 1 1/4" Coax	Yes	2.46	1.200	3.10	0.64	0.76	18.890	0.319	0.000	25.35	16.74
90.00	(6) 1 5/8" Coax	Yes	2.46	0.000	0.00	0.00	0.00	18.890	0.319	0.000	0.00	10.89
92.46	(18) 1 5/8" Coax	Yes	2.46	1.200	3.96	0.81	0.97	19.036	0.324	0.000	32.59	32.63
92.46	(12) 1 5/8" Coax	Yes	2.46	1.200	3.96	0.81	0.97	19.036	0.324	0.000	32.59	21.75
92.46	(12) 1 1/4" Coax	Yes	2.46	1.200	3.10	0.63	0.76	19.036	0.324	0.000	25.51	16.71
92.46	(6) 1 5/8" Coax	Yes	2.46	0.000	0.00	0.00	0.00	19.036	0.324	0.000	0.00	10.88
95.00	(18) 1 5/8" Coax	Yes	2.54	1.200	3.96	0.84	1.01	19.184	0.323	0.000	34.01	33.78
95.00	(12) 1 5/8" Coax	Yes	2.54	1.200	3.96	0.84	1.01	19.184	0.323	0.000	34.01	22.52
95.00	(12) 1 1/4" Coax	Yes	2.54	1.200	3.10	0.66	0.79	19.184	0.323	0.000	26.62	17.30
95.00	(6) 1 5/8" Coax	Yes	2.54	0.000	0.00	0.00	0.00	19.184	0.323	0.000	0.00	11.26
100.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.467	0.332	0.000	67.84	66.41
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.467	0.332	0.000	67.84	44.27
100.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	19.467	0.332	0.000	53.11	34.01
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.467	0.332	0.000	0.00	22.14
105.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.741	0.343	0.000	68.79	66.41
105.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	19.741	0.343	0.000	68.79	44.27

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W      90.00 mph with No Ice (Reduced DL)      29 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

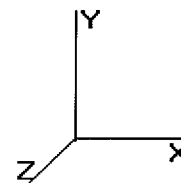
Wind Load Factor : 1.60

105.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	19.741	0.343	0.000	53.85	34.01
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	19.741	0.343	0.000	0.00	22.14
110.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.005	0.355	0.000	69.71	66.41
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.005	0.355	0.000	69.71	44.27
110.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	1.29	1.55	20.005	0.355	0.000	54.57	34.01
114.5	(18) 1 5/8" Coax	Yes	4.50	1.200	3.96	1.49	1.78	20.235	0.368	0.000	63.46	59.77
114.5	(12) 1 5/8" Coax	Yes	4.50	1.200	3.96	1.49	1.78	20.235	0.368	0.000	63.46	39.85
114.5	(12) 1 1/4" Coax	Yes	4.50	1.200	3.10	1.16	1.39	20.235	0.368	0.000	49.68	30.61
115.0	(18) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.17	0.20	20.260	0.269	0.000	7.06	6.64
115.0	(12) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.17	0.20	20.260	0.269	0.000	7.06	4.43
120.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.508	0.275	0.000	71.47	66.41
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.508	0.275	0.000	71.47	44.27
125.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.749	0.286	0.000	72.31	66.41
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	20.749	0.286	0.000	72.31	44.27
130.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	20.983	0.149	1.147	0.00	66.41
132.0	(18) 1 5/8" Coax	Yes	2.00	0.000	3.96	0.66	0.00	21.074	0.154	1.161	0.00	26.56
132.1	(18) 1 5/8" Coax	Yes	0.12	0.000	3.96	0.04	0.00	21.080	0.155	1.165	0.00	1.59
134.0	(18) 1 5/8" Coax	Yes	1.88	0.000	3.96	0.62	0.00	21.165	0.156	1.169	0.00	24.97
135.0	(18) 1 5/8" Coax	Yes	1.00	0.000	3.96	0.33	0.00	21.210	0.158	1.175	0.00	13.28
135.8	(18) 1 5/8" Coax	Yes	0.87	0.000	3.96	0.29	0.00	21.249	0.160	1.179	0.00	11.55
140.0	(18) 1 5/8" Coax	Yes	4.13	0.000	3.96	1.36	0.00	21.432	0.161	1.183	0.00	54.86
145.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	21.648	0.168	1.204	0.00	66.41
150.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	21.858	0.176	1.229	0.00	66.41
155.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	22.064	0.185	1.256	0.00	66.41
160.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	1.65	0.00	22.265	0.196	1.287	0.00	66.41
165.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	1.65	1.98	22.462	0.207	0.000	78.28	66.41
166.0	(18) 1 5/8" Coax	Yes	1.00	1.200	3.96	0.33	0.40	22.501	0.214	0.000	15.68	13.28
<b>Totals:</b>											<b>4,095.34</b>	<b>4,564.47</b>

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W      90.00 mph with No Ice (Reduced DL)      29 Iterations  
**Gust Response Factor :** 1.10      **Wind Importance Factor :** 1.00  
**Dead Load Factor :** 0.90  
**Wind Load Factor :** 1.60

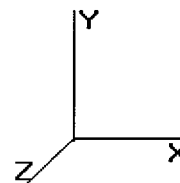
### Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	776.95	1,423.21	0.00	0.00
10.00	763.43	1,399.88	0.00	0.00
15.00	749.91	1,376.55	0.00	0.00
20.00	736.39	1,353.22	0.00	0.00
25.00	722.87	1,329.89	0.00	0.00
30.00	734.35	1,315.56	0.00	12.20
35.00	727.77	1,281.74	0.00	0.00
40.00	741.38	1,258.41	0.00	0.00
42.96	440.36	733.14	0.00	0.00
45.00	309.56	825.75	0.00	0.00
49.04	619.58	1,611.23	0.00	0.00
50.00	146.56	209.54	0.00	0.00
55.00	774.73	1,079.33	0.00	0.00
60.00	777.74	1,059.33	0.00	0.00
65.00	778.85	1,039.33	0.00	0.00
70.00	778.28	1,019.33	0.00	0.00
75.00	776.20	999.34	0.00	0.00
78.00	465.30	590.54	0.00	0.00
80.00	306.94	389.07	0.00	0.00
85.00	768.01	958.67	0.00	0.00
87.54	386.39	479.33	0.00	0.00
90.00	377.86	715.90	0.00	0.00
92.46	375.73	706.01	0.00	0.00
95.00	1,111.19	860.83	0.00	123.83
100.0	758.13	809.10	0.00	0.00
105.0	1,179.68	863.71	0.00	0.00
110.0	739.83	753.63	0.00	0.00
114.5	2,615.38	2,165.22	0.00	0.00
115.0	66.52	69.55	0.00	0.00
120.0	662.29	686.29	0.00	0.00
125.0	3,724.31	2,246.96	0.00	0.00
130.0	265.54	608.69	0.00	0.00
132.0	642.14	524.47	0.00	0.00
132.1	6.15	14.22	0.00	0.00
134.0	2,226.14	1,857.78	0.00	0.00
135.0	51.30	155.14	0.00	0.00
135.8	44.34	134.07	0.00	0.00
140.0	1,306.05	933.70	0.00	3,217.69
145.0	243.39	365.65	0.00	0.00
150.0	529.72	505.06	0.00	266.01
155.0	224.64	341.97	0.00	0.00
160.0	214.86	331.97	0.00	0.00
165.0	456.42	321.97	0.00	0.00
166.0	2,158.30	1,136.17	0.00	0.00
170.0	154.68	195.65	0.00	0.00
174.0	1,195.54	1,539.25	0.00	0.00
175.0	35.84	46.31	0.00	0.00
180.0	3,400.72	2,251.64	0.00	9,295.02

Pole : 302506  
Location : Winchester CT 3, CT  
Height : 180.0 (ft)  
Base Dia : 52.75 (in)  
Top Dia : 15.00 (in)  
Shape : 18 Sides  
Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
Struct Class : II  
Exposure Category : B  
Topographic Category : 1  
Base Elev : 0.000 (ft)

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**Load Case:** 0.9D + 1.6W

90.00 mph with No Ice (Reduced DL)

29 Iterations

Gust Response Factor : 1.10

Wind Importance Factor : 1.00

Dead Load Factor : 0.90

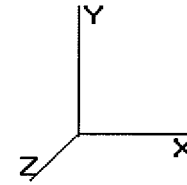
Wind Load Factor : 1.60

Totals:            38,048.24    42,873.27            0.00    12,914.75

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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 Page: 19



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**Load Case:** 0.9D + 1.6W      90.00 mph with No Ice (Reduced DL)      29 Iterations

Gust Response Factor : 1.10      Wind Importance Factor : 1.00

Dead Load Factor : 0.90

Wind Load Factor : 1.60

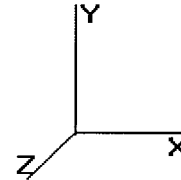
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-42.79	-38.14	0.00	-4,224.92	0.00	4,224.92	5,102.86	2,551.43	10,963.2	5,489.79	0.00	0.00	0.778
5.00	-41.22	-37.53	0.00	-4,034.24	0.00	4,034.24	5,029.12	2,514.56	10,576.3	5,296.03	0.13	-0.23	0.770
10.00	-39.67	-36.92	0.00	-3,846.61	0.00	3,846.61	4,953.95	2,476.98	10,193.1	5,104.17	0.50	-0.47	0.762
15.00	-38.15	-36.32	0.00	-3,662.01	0.00	3,662.01	4,877.36	2,438.68	9,813.98	4,914.28	1.12	-0.71	0.753
20.00	-36.65	-35.72	0.00	-3,480.41	0.00	3,480.41	4,799.34	2,399.67	9,438.93	4,726.48	2.00	-0.96	0.744
25.00	-35.18	-35.13	0.00	-3,301.81	0.00	3,301.81	4,719.90	2,359.95	9,068.23	4,540.86	3.14	-1.21	0.735
30.00	-33.73	-34.52	0.00	-3,126.15	0.00	3,126.15	4,639.03	2,319.51	8,702.08	4,357.51	4.54	-1.46	0.725
35.00	-32.31	-33.90	0.00	-2,953.58	0.00	2,953.58	4,556.73	2,278.36	8,340.67	4,176.53	6.21	-1.72	0.714
40.00	-30.96	-33.23	0.00	-2,784.08	0.00	2,784.08	4,473.00	2,236.50	7,984.18	3,998.03	8.15	-1.98	0.704
42.96	-30.16	-32.84	0.00	-2,685.84	0.00	2,685.84	4,422.82	2,211.41	7,775.79	3,893.68	9.43	-2.14	0.697
45.00	-29.26	-32.58	0.00	-2,618.74	0.00	2,618.74	4,378.03	2,189.01	7,615.75	3,813.53	10.37	-2.25	0.694
49.04	-27.60	-31.96	0.00	-2,487.12	0.00	2,487.12	4,304.17	2,162.15	7,462.69	3,738.50	12.37	-2.47	0.800
50.00	-27.29	-31.89	0.00	-2,456.44	0.00	2,456.44	4,282.82	2,149.48	7,404.18	3,711.78	12.88	-2.53	0.797
55.00	-26.09	-31.20	0.00	-2,297.00	0.00	2,297.00	4,224.22	2,121.76	7,244.39	3,637.71	15.68	-2.83	0.780
60.00	-24.91	-30.50	0.00	-2,140.99	0.00	2,140.99	4,169.43	2,099.67	7,093.51	3,566.60	18.80	-3.13	0.762
65.00	-23.76	-29.79	0.00	-1,988.48	0.00	1,988.48	4,122.46	2,079.28	6,946.28	3,498.28	22.24	-3.43	0.743
70.00	-22.63	-29.08	0.00	-1,839.51	0.00	1,839.51	4,082.82	2,062.15	6,802.69	3,431.11	26.00	-3.74	0.723
75.00	-21.56	-28.33	0.00	-1,694.13	0.00	1,694.13	4,048.03	2,048.03	6,661.53	3,363.53	30.09	-4.05	0.701
78.00	-20.93	-27.88	0.00	-1,609.14	0.00	1,609.14	4,022.82	2,037.61	6,524.39	3,303.11	32.69	-4.24	0.691
80.00	-20.46	-27.62	0.00	-1,553.39	0.00	1,553.39	4,004.17	2,029.04	6,390.28	3,253.11	32.69	-4.24	0.691
85.00	-19.45	-26.86	0.00	-1,415.27	0.00	1,415.27	3,990.28	2,024.62	6,261.53	3,208.80	34.50	-4.37	0.683
87.54	-18.94	-26.49	0.00	-1,347.05	0.00	1,347.05	3,981.41	2,021.15	6,138.12	3,171.11	36.21	-4.50	0.675
90.00	-18.18	-26.10	0.00	-1,281.88	0.00	1,281.88	3,976.97	2,018.48	6,020.12	3,135.62	37.81	-4.62	0.667
92.46	-17.44	-25.71	0.00	-1,217.76	0.00	1,217.76	3,975.23	2,016.62	5,912.86	3,101.88	39.31	-4.74	0.659
95.00	-16.58	-24.60	0.00	-1,152.24	0.00	1,152.24	3,975.23	2,016.62	5,808.12	3,069.36	40.71	-4.85	0.651
100.00	-15.70	-23.87	0.00	-1,029.22	0.00	1,029.22	3,975.23	2,016.62	5,714.39	3,037.71	42.01	-4.96	0.643
105.00	-14.83	-22.69	0.00	-909.90	0.00	909.90	3,975.23	2,016.62	5,630.62	3,007.04	43.21	-5.07	0.635
110.00	-14.04	-21.95	0.00	-796.45	0.00	796.45	3,975.23	2,016.62	5,556.85	2,977.37	44.31	-5.18	0.627
114.50	-12.13	-19.14	0.00	-697.67	0.00	697.67	3,975.23	2,016.62	5,492.08	2,948.71	45.31	-5.29	0.619
115.00	-12.01	-19.10	0.00	-688.10	0.00	688.10	3,975.23	2,016.62	5,437.31	2,920.04	46.21	-5.40	0.611
120.00	-11.31	-18.43	0.00	-592.58	0.00	592.58	3,975.23	2,016.62	5,391.53	2,891.37	47.11	-5.51	0.603
125.00	-9.47	-14.50	0.00	-500.45	0.00	500.45	3,975.23	2,016.62	5,352.76	2,862.71	48.01	-5.62	0.595
130.00	-8.85	-14.19	0.00	-427.95	0.00	427.95	3,975.23	2,016.62	5,314.00	2,834.04	48.91	-5.73	0.587
132.00	-8.40	-13.49	0.00	-399.57	0.00	399.57	3,975.23	2,016.62	5,275.23	2,805.37	49.81	-5.84	0.579
132.12	-8.38	-13.49	0.00	-397.96	0.00	397.96	3,975.23	2,016.62	5,236.46	2,776.71	50.71	-5.95	0.571
134.00	-6.82	-11.05	0.00	-372.59	0.00	372.59	3,975.23	2,016.62	5,197.69	2,748.04	51.61	-6.06	0.563
135.00	-6.66	-10.98	0.00	-361.54	0.00	361.54	3,975.23	2,016.62	5,158.92	2,719.37	52.51	-6.17	0.555
135.87	-6.51	-10.93	0.00	-351.99	0.00	351.99	3,975.23	2,016.62	5,120.15	2,690.71	53.41	-6.28	0.547
140.00	-5.71	-9.54	0.00	-303.61	0.00	303.61	3,975.23	2,016.62	5,081.38	2,662.04	54.31	-6.39	0.539
145.00	-5.32	-9.29	0.00	-255.90	0.00	255.90	3,975.23	2,016.62	5,042.61	2,633.37	55.21	-6.50	0.531
150.00	-4.85	-8.72	0.00	-209.21	0.00	209.21	3,975.23	2,016.62	5,003.84	2,604.71	56.11	-6.61	0.523
155.00	-4.49	-8.47	0.00	-165.63	0.00	165.63	3,975.23	2,016.62	4,965.07	2,576.04	57.01	-6.72	0.515
160.00	-4.16	-8.22	0.00	-123.28	0.00	123.28	3,975.23	2,016.62	4,926.30	2,547.37	57.91	-6.83	0.507
165.00	-3.90	-7.73	0.00	-82.16	0.00	82.16	3,975.23	2,016.62	4,887.53	2,518.71	58.81	-6.94	0.499
166.00	-3.14	-5.42	0.00	-74.43	0.00	74.43	3,975.23	2,016.62	4,848.76	2,490.04	59.71	-7.05	0.491
170.00	-2.96	-5.24	0.00	-52.77	0.00	52.77	3,975.23	2,016.62	4,810.00	2,461.37	60.61	-7.16	0.483
174.00	-1.65	-3.79	0.00	-31.83	0.00	31.83	3,975.23	2,016.62	4,771.23	2,432.71	61.51	-7.27	0.475
175.00	-1.61	-3.75	0.00	-28.04	0.00	28.04	3,975.23	2,016.62	4,732.46	2,404.04	62.41	-7.38	0.467
180.00	0.00	-3.40	0.00	-9.30	0.00	9.30	3,975.23	2,016.62	4,693.69	2,375.37	63.31	-7.49	0.459

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

**Shaft Segment Forces (Factored)**

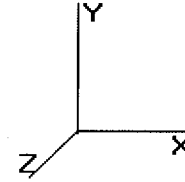
Seg Top Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	2.724	2.996	0.000	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		1.00	0.70	2.724	2.996	0.000	1.200	* 2.070	5.00	23.811	28.57	85.6	696.5	2,164.0
10.00		1.00	0.70	2.724	2.996	0.000	1.200	* 2.219	5.00	23.471	28.16	84.4	733.3	2,169.7
15.00		1.00	0.70	2.724	2.996	0.000	1.200	* 2.310	5.00	23.083	27.70	83.0	749.0	2,154.3
20.00		1.00	0.70	2.724	2.996	0.000	1.200	* 2.378	5.00	22.675	27.21	81.5	755.5	2,129.7
25.00		1.00	0.70	2.724	2.996	0.000	1.200	* 2.432	5.00	22.255	26.71	80.0	756.7	2,099.8
30.00	Appertunance(s)	1.00	0.70	2.726	2.999	0.000	1.200	* 2.476	5.00	21.829	26.19	78.6	754.3	2,066.2
35.00		1.00	0.73	2.849	3.134	0.000	1.200	* 2.515	5.00	21.396	25.68	80.5	749.3	2,030.2
40.00		1.00	0.76	2.960	3.256	0.000	1.200	* 2.549	5.00	20.960	25.15	81.9	742.4	1,992.1
42.96	Bot - Section 2	1.00	0.77	3.021	3.323	0.000	1.200	* 2.567	2.96	12.185	14.62	48.6	436.1	1,160.5
45.00		1.00	0.78	3.061	3.367	0.000	1.200	* 2.579	2.04	8.460	10.15	34.2	304.9	1,230.9
49.04	Top - Section 1	1.00	0.80	3.137	3.451	0.000	1.200	* 2.601	4.04	16.513	19.82	68.4	596.6	2,399.0
50.00		1.00	0.81	3.155	3.470	0.000	1.200	* 2.606	0.96	3.881	4.66	16.2	141.4	338.6
55.00		1.00	0.83	3.242	3.566	0.000	1.200	* 2.631	5.00	19.954	23.94	85.4	725.8	1,736.8
60.00		1.00	0.85	3.323	3.656	0.000	1.200	* 2.654	5.00	19.509	23.41	85.6	714.3	1,698.6
65.00		1.00	0.87	3.400	3.740	0.000	1.200	* 2.675	5.00	19.062	22.87	85.6	702.0	1,659.6
70.00		1.00	0.89	3.473	3.820	0.000	1.200	* 2.695	5.00	18.615	22.34	85.3	689.0	1,620.0
75.00		1.00	0.91	3.542	3.896	0.000	1.200	* 2.714	5.00	18.166	21.80	84.9	675.4	1,579.8
78.00	Appertunance(s)	1.00	0.92	3.582	3.940	0.000	1.200	* 2.725	3.00	10.682	12.82	50.5	400.2	930.0
80.00		1.00	0.92	3.608	3.969	0.000	1.200	* 2.731	2.00	7.031	8.44	33.5	264.5	612.4
85.00		1.00	0.94	3.671	4.038	0.000	1.200	* 2.748	5.00	17.266	20.72	83.7	646.7	1,497.7
87.54	Bot - Section 3	1.00	0.95	3.702	4.072	0.000	1.200	* 2.756	2.54	8.596	10.32	42.0	324.7	746.8
90.00		1.00	0.95	3.731	4.105	0.000	1.200	* 2.764	2.46	8.345	10.01	41.1	316.1	1,060.5
92.46	Top - Section 2	1.00	0.96	3.760	4.136	0.000	1.200	* 2.771	2.46	8.224	9.87	40.8	312.0	1,043.4
95.00	Appertunance(s)	1.00	0.97	3.789	4.168	0.000	1.200	* 2.779	2.54	8.400	10.08	42.0	319.0	661.5
100.0		1.00	0.98	3.845	4.230	0.000	1.200	* 2.793	5.00	16.175	19.41	82.1	611.4	1,267.9
105.0	Appertunance(s)	1.00	1.00	3.899	4.289	0.000	1.200	* 2.807	5.00	15.722	18.87	80.9	595.3	1,229.6
110.0		1.00	1.01	3.952	4.347	0.000	1.200	* 2.820	5.00	15.269	18.32	79.6	579.0	1,191.0
114.5	Appertunance(s)	1.00	1.02	3.997	4.397	0.000	1.200	* 2.831	4.50	13.354	16.02	70.5	507.6	1,039.4
115.0		1.00	1.02	4.002	4.402	0.000	1.200	* 2.832	0.50	1.461	1.75	7.7	56.2	114.2
120.0		1.00	1.04	4.051	4.456	0.000	1.200	* 2.845	5.00	14.361	17.23	76.8	545.3	1,112.9
125.0	Appertunance(s)	1.00	1.05	4.099	4.508	0.000	1.200	* 2.856	5.00	13.907	16.69	75.2	528.1	1,073.5
130.0		1.00	1.06	4.145	4.559	0.000	1.200	* 2.867	5.00	13.452	16.14	73.6	510.7	1,033.8
132.0	Appertunance(s)	1.00	1.07	4.163	4.579	0.000	1.200	* 2.872	2.00	5.252	6.30	28.9	201.5	404.5
132.1	Bot - Section 4	1.00	1.07	4.164	4.580	0.000	1.200	* 2.872	0.12	0.312	0.37	1.7	12.1	24.1
134.0	Appertunance(s)	1.00	1.07	4.181	4.599	0.000	1.200	* 2.876	1.88	4.927	5.91	27.2	189.3	491.4
135.0		1.00	1.07	4.190	4.609	0.000	1.200	* 2.878	1.00	2.594	3.11	14.3	100.0	258.6
135.8	Top - Section 3	1.00	1.07	4.197	4.617	0.000	1.200	* 2.880	0.87	2.241	2.69	12.4	86.4	223.3
140.0	Appertunance(s)	1.00	1.08	4.233	4.657	0.000	1.200	* 2.889	4.13	10.457	12.55	58.4	398.1	639.4
145.0		1.00	1.09	4.276	4.704	0.000	1.200	* 2.899	5.00	12.244	14.69	69.1	463.9	743.8
150.0	Appertunance(s)	1.00	1.11	4.318	4.749	0.000	1.200	* 2.909	5.00	11.788	14.15	67.2	445.6	712.3
155.0		1.00	1.12	4.358	4.794	0.000	1.200	* 2.918	5.00	11.332	13.60	65.2	427.2	680.5
160.0		1.00	1.13	4.398	4.838	0.000	1.200	* 2.928	5.00	10.875	13.05	63.1	408.6	648.6
165.0		1.00	1.14	4.437	4.881	0.000	1.200	* 2.937	5.00	10.418	12.50	61.0	389.8	616.5
166.0	Appertunance(s)	1.00	1.14	4.445	4.889	0.000	1.200	* 2.938	1.00	2.028	2.43	11.9	77.2	120.9
170.0		1.00	1.15	4.475	4.922	0.000	1.200	* 2.945	4.00	7.932	9.52	46.9	296.7	466.3
174.0	Appertunance(s)	1.00	1.15	4.505	4.955	0.000	1.200	* 2.952	4.00	7.639	9.17	45.4	284.5	445.6
175.0		1.00	1.16	4.512	4.963	0.000	1.200	* 2.954	1.00	1.864	2.24	11.1	70.4	109.3
180.0	Appertunance(s)	1.00	1.16	4.549	5.003	0.000	1.200	* 2.962	5.00	9.047	10.86	54.3	332.6	519.2
* = Cf Adjusted By Linear Load Ra Effect								Totals:	180.00			2,767.8	21,623.2	51,948.5



Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

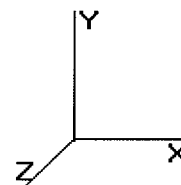
**Discrete Appurtenance Segment Forces (Factored)**

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Ka	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
30.00	GPS	1	2.739	3.013	1.00	1.00	1.15	0.000	0.500	3.46	0.00	1.73	74.96
78.00	PCTEL GPS-TMG-HR-	1	3.582	3.940	1.00	1.00	0.49	0.000	0.000	1.95	0.00	0.00	24.39
95.00	Bird 429-83H-01-T	1	3.789	4.168	1.00	1.00	1.70	0.000	0.000	7.08	0.00	0.00	104.98
95.00	Decibel DB586	2	3.817	4.199	1.00	1.00	5.37	0.000	2.460	22.54	0.00	55.45	223.94
95.00	Flat Side Arm	3	3.789	4.168	1.00	1.00	30.66	0.000	0.000	127.82	0.00	0.00	650.13
105.0	RFS APXV18-206517S-	3	3.899	4.289	0.82	1.00	17.77	0.000	0.000	76.24	0.00	0.00	768.28
114.5	Decibel DB844H90E-	12	3.997	4.397	0.74	0.80	45.92	0.000	0.000	201.90	0.00	0.00	2,698.63
114.5	Round Low Profile PI	1	3.997	4.397	1.00	1.00	52.91	0.000	0.000	232.63	0.00	0.00	2,653.20
125.0	Antel BXA-171063/12C	1	4.099	4.508	0.80	0.80	5.50	0.000	0.000	24.77	0.00	0.00	252.82
125.0	Antel BXA-171085-12C	2	4.099	4.508	0.73	0.80	10.02	0.000	0.000	45.19	0.00	0.00	505.42
125.0	Antel BXA-70063/6CF	3	4.099	4.508	0.59	0.80	17.25	0.000	0.000	77.77	0.00	0.00	1,000.46
125.0	Antel LPA-80063/6CF	2	4.099	4.508	0.75	0.80	17.83	0.000	0.000	80.40	0.00	0.00	1,092.87
125.0	Antel LPA-80080/6CF	4	4.099	4.508	0.60	0.80	26.08	0.000	0.000	117.58	0.00	0.00	1,539.82
125.0	RFS FD9R6004/2C-3L	6	4.099	4.508	0.40	0.80	1.95	0.000	0.000	8.81	0.00	0.00	208.43
125.0	Round Low Profile PI	1	4.099	4.508	1.00	1.00	53.18	0.000	0.000	239.78	0.00	0.00	2,662.48
132.0	Alcatel-Lucent 1900M	3	4.163	4.579	0.70	0.80	9.58	0.000	0.000	43.86	0.00	0.00	855.48
132.0	Alcatel-Lucent 800 M	3	4.163	4.579	0.74	0.80	8.10	0.000	0.000	37.10	0.00	0.00	815.05
134.0	Andrew DB980H90E-M	6	4.181	4.599	0.66	0.80	22.43	0.000	0.000	103.15	0.00	0.00	1,189.30
134.0	Flat Low Profile Pla	1	4.181	4.599	1.00	1.00	57.63	0.000	0.000	265.02	0.00	0.00	2,669.90
134.0	RFS APXVSP18-C-	3	4.181	4.599	0.66	0.80	20.16	0.000	0.000	92.71	0.00	0.00	1,318.96
140.0	Bird 432-83H-01-T	2	4.233	4.657	0.80	0.80	2.78	0.000	0.000	12.94	0.00	0.00	219.76
140.0	Decibel DB809K-XT	3	4.285	4.714	0.80	0.80	22.92	0.000	6.100	108.06	0.00	659.14	1,146.74
140.0	Flat Side Arm	3	4.233	4.657	0.67	1.00	20.86	0.000	0.000	97.13	0.00	0.00	663.98
140.0	Sinclair SC432D-HF6L	1	4.289	4.718	0.80	0.80	8.67	0.000	6.540	40.93	0.00	267.67	451.61
140.0	Telewave ANT150D	1	4.276	4.704	0.80	0.80	20.77	0.000	5.000	97.68	0.00	488.39	2,095.85
150.0	Flat Side Arm	1	4.318	4.749	1.00	1.00	10.40	0.000	0.000	49.42	0.00	0.00	222.17
150.0	Sinclair SD210C2-SF2	1	4.358	4.794	1.00	1.00	6.64	0.000	5.000	31.83	0.00	159.16	133.96
166.0	CCI DTMA-1819-DD-12	6	4.445	4.889	0.40	0.80	3.14	0.000	0.000	15.34	0.00	0.00	440.82
166.0	RFS APX16PV-16PVL-	9	4.445	4.889	0.54	0.80	38.23	0.000	0.000	186.89	0.00	0.00	2,704.07
166.0	T-Arms	3	4.445	4.889	0.50	0.75	40.25	0.000	0.000	196.76	0.00	0.00	1,765.80
174.0	Flat Low Profile Pla	1	4.505	4.955	1.00	1.00	58.46	0.000	0.000	289.69	0.00	0.00	2,698.21
180.0	10' Omni	1	4.612	5.074	1.00	1.00	7.48	0.000	9.000	37.93	0.00	341.40	302.02
180.0	Andrew ABT-DMDF-	1	4.577	5.035	0.80	0.80	0.23	0.000	4.000	1.16	0.00	4.64	18.00
180.0	Ericsson RRUS 11	6	4.577	5.035	0.57	0.80	12.77	0.000	4.000	64.31	0.00	257.22	1,334.97
180.0	Flat Low Profile Pla	1	4.549	5.003	1.00	1.00	58.57	0.000	0.000	293.06	0.00	0.00	2,701.94
180.0	KMW AM-X-CD-16-65-	3	4.577	5.035	0.62	0.80	19.31	0.000	4.000	97.24	0.00	388.96	1,275.04
180.0	Powerwave 7770.00	6	4.577	5.035	0.61	0.80	27.22	0.000	4.000	137.03	0.00	548.13	1,859.97
180.0	Powerwave LGP21401	6	4.577	5.035	0.40	0.80	4.69	0.000	4.000	23.62	0.00	94.46	544.06
										<b>3,590.78</b>			<b>41,888.49</b>

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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**Load Case:** 1.2D + 1.0Di + 1.0Wi      40.00 mph with 1.25 in Radial Ice      30 Iterations

Gust Response Factor : 1.10      Ice Dead Load Factor : 1.00      Wind Importance Factor : 1.00

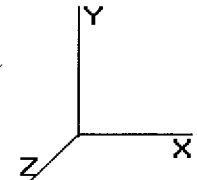
Dead Load Factor : 1.20      Wind Load Factor : 1.00      Ice Importance Factor : 1.00

**Linear Appurtenance Segment Forces (Factored)**

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	qz (psf)	Ra	Cf Adjust Factor	FX (lb)	Dead Load (lb)
5.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.38	4.05	2.724	0.208	0.000	12.13	431.08
5.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.38	4.05	2.724	0.208	0.000	12.13	296.12
5.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.02	3.62	2.724	0.208	0.000	10.85	233.28
5.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.208	0.000	0.00	161.15
5.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.208	0.000	0.00	37.43
10.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.50	4.20	2.724	0.212	0.000	12.58	455.57
10.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.50	4.20	2.724	0.212	0.000	12.58	313.74
10.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.14	3.77	2.724	0.212	0.000	11.29	247.92
10.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.212	0.000	0.00	171.90
10.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.212	0.000	0.00	41.95
15.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.58	4.29	2.724	0.217	0.000	12.86	470.83
15.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.58	4.29	2.724	0.217	0.000	12.86	324.76
15.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.22	3.86	2.724	0.217	0.000	11.57	257.10
15.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.217	0.000	0.00	178.68
15.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.217	0.000	0.00	44.88
20.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.63	4.36	2.724	0.222	0.000	13.06	482.11
20.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.63	4.36	2.724	0.222	0.000	13.06	332.92
20.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.27	3.93	2.724	0.222	0.000	11.77	263.91
20.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.222	0.000	0.00	183.73
20.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.222	0.000	0.00	47.10
25.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.68	4.41	2.724	0.227	0.000	13.22	491.12
25.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.68	4.41	2.724	0.227	0.000	13.22	339.46
25.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.32	3.98	2.724	0.227	0.000	11.93	269.37
25.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.227	0.000	0.00	187.79
25.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.724	0.227	0.000	0.00	48.90
30.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.71	4.46	2.726	0.232	0.000	13.36	498.67
30.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.71	4.46	2.726	0.232	0.000	13.36	344.93
30.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.36	4.03	2.726	0.232	0.000	12.07	273.95
30.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.726	0.232	0.000	0.00	191.19
30.00	(1) 7/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.726	0.232	0.000	0.00	50.43
35.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.75	4.49	2.849	0.238	0.000	14.09	505.17
35.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.75	4.49	2.849	0.238	0.000	14.09	349.66
35.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.39	4.06	2.849	0.238	0.000	12.74	277.90
35.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.849	0.238	0.000	0.00	194.14
40.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.77	4.53	2.960	0.244	0.000	14.74	510.90
40.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.77	4.53	2.960	0.244	0.000	14.74	353.83
40.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.42	4.10	2.960	0.244	0.000	13.34	281.39
40.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	2.960	0.244	0.000	0.00	196.75
42.96	(18) 1 5/8" Coax	Yes	2.96	1.200	3.96	2.24	2.69	3.021	0.249	0.000	8.93	303.94
42.96	(12) 1 5/8" Coax	Yes	2.96	1.200	3.96	2.24	2.69	3.021	0.249	0.000	8.93	210.56
42.96	(12) 1 1/4" Coax	Yes	2.96	1.200	3.10	2.03	2.43	3.021	0.249	0.000	8.09	167.51
42.96	(6) 1 5/8" Coax	Yes	2.96	0.000	0.00	0.00	0.00	3.021	0.249	0.000	0.00	117.18
45.00	(18) 1 5/8" Coax	Yes	2.04	1.200	3.96	1.55	1.86	3.061	0.252	0.000	6.27	210.90
45.00	(12) 1 5/8" Coax	Yes	2.04	1.200	3.96	1.55	1.86	3.061	0.252	0.000	6.27	146.13
45.00	(12) 1 1/4" Coax	Yes	2.04	1.200	3.10	1.41	1.69	3.061	0.252	0.000	5.68	116.28
45.00	(6) 1 5/8" Coax	Yes	2.04	0.000	0.00	0.00	0.00	3.061	0.252	0.000	0.00	81.37
49.04	(18) 1 5/8" Coax	Yes	4.04	1.200	3.96	3.08	3.70	3.137	0.256	0.000	12.77	420.01
49.04	(12) 1 5/8" Coax	Yes	4.04	1.200	3.96	3.08	3.70	3.137	0.256	0.000	12.77	291.14
49.04	(12) 1 1/4" Coax	Yes	4.04	1.200	3.10	2.79	3.35	3.137	0.256	0.000	11.57	231.76
49.04	(6) 1 5/8" Coax	Yes	4.04	0.000	0.00	0.00	0.00	3.137	0.256	0.000	0.00	162.26
50.00	(18) 1 5/8" Coax	Yes	0.96	1.200	3.96	0.73	0.88	3.155	0.255	0.000	3.06	99.98

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)



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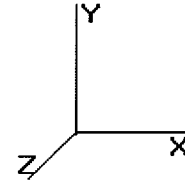
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

50.00	(12) 1 5/8" Coax	Yes	0.96	1.200	3.96	0.73	0.88	3.155	0.255	0.000	3.06	69.31
50.00	(12) 1 1/4" Coax	Yes	0.96	1.200	3.10	0.67	0.80	3.155	0.255	0.000	2.77	55.18
50.00	(6) 1 5/8" Coax	Yes	0.96	0.000	0.00	0.00	0.00	3.155	0.255	0.000	0.00	38.64
55.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.84	4.61	3.242	0.259	0.000	16.44	524.94
55.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.84	4.61	3.242	0.259	0.000	16.44	364.06
55.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.48	4.18	3.242	0.259	0.000	14.91	289.97
55.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.242	0.259	0.000	0.00	203.17
60.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.86	4.63	3.323	0.265	0.000	16.94	528.87
60.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.86	4.63	3.323	0.265	0.000	16.94	366.92
60.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.50	4.20	3.323	0.265	0.000	15.37	292.37
60.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.323	0.265	0.000	0.00	204.98
65.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.88	4.66	3.400	0.273	0.000	17.41	532.52
65.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.88	4.66	3.400	0.273	0.000	17.41	369.59
65.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.52	4.23	3.400	0.273	0.000	15.80	294.61
65.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.400	0.273	0.000	0.00	206.66
70.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.90	4.68	3.473	0.281	0.000	17.86	535.93
70.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.90	4.68	3.473	0.281	0.000	17.86	372.08
70.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.54	4.25	3.473	0.281	0.000	16.22	296.70
70.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.473	0.281	0.000	0.00	208.23
75.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.91	4.69	3.542	0.289	0.000	18.29	539.13
75.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.91	4.69	3.542	0.289	0.000	18.29	374.42
75.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.55	4.26	3.542	0.289	0.000	16.61	298.67
75.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.542	0.289	0.000	0.00	209.71
78.00	(18) 1 5/8" Coax	Yes	3.00	1.200	3.96	2.35	2.82	3.582	0.296	0.000	11.12	324.58
78.00	(12) 1 5/8" Coax	Yes	3.00	1.200	3.96	2.35	2.82	3.582	0.296	0.000	11.12	225.46
78.00	(12) 1 1/4" Coax	Yes	3.00	1.200	3.10	2.14	2.56	3.582	0.296	0.000	10.11	179.88
78.00	(6) 1 5/8" Coax	Yes	3.00	0.000	0.00	0.00	0.00	3.582	0.296	0.000	0.00	126.33
80.00	(18) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.57	1.88	3.608	0.300	0.000	7.48	216.86
80.00	(12) 1 5/8" Coax	Yes	2.00	1.200	3.96	1.57	1.88	3.608	0.300	0.000	7.48	150.65
80.00	(12) 1 1/4" Coax	Yes	2.00	1.200	3.10	1.43	1.71	3.608	0.300	0.000	6.80	120.21
80.00	(6) 1 5/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	3.608	0.300	0.000	0.00	84.44
85.00	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.94	4.73	3.671	0.307	0.000	19.09	545.01
85.00	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.94	4.73	3.671	0.307	0.000	19.09	378.72
85.00	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.58	4.30	3.671	0.307	0.000	17.36	302.28
85.00	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.671	0.307	0.000	0.00	212.43
87.54	(18) 1 5/8" Coax	Yes	2.54	1.200	3.96	2.00	2.41	3.702	0.314	0.000	9.80	277.56
87.54	(12) 1 5/8" Coax	Yes	2.54	1.200	3.96	2.00	2.41	3.702	0.314	0.000	9.80	192.90
87.54	(12) 1 1/4" Coax	Yes	2.54	1.200	3.10	1.82	2.19	3.702	0.314	0.000	8.91	153.99
87.54	(6) 1 5/8" Coax	Yes	2.54	0.000	0.00	0.00	0.00	3.702	0.314	0.000	0.00	108.24
90.00	(18) 1 5/8" Coax	Yes	2.46	1.200	3.96	1.95	2.33	3.731	0.319	0.000	9.58	269.49
90.00	(12) 1 5/8" Coax	Yes	2.46	1.200	3.96	1.95	2.33	3.731	0.319	0.000	9.58	187.31
90.00	(12) 1 1/4" Coax	Yes	2.46	1.200	3.10	1.77	2.12	3.731	0.319	0.000	8.71	149.55
90.00	(6) 1 5/8" Coax	Yes	2.46	0.000	0.00	0.00	0.00	3.731	0.319	0.000	0.00	105.14
92.46	(18) 1 5/8" Coax	Yes	2.46	1.200	3.96	1.95	2.33	3.760	0.324	0.000	9.66	269.74
92.46	(12) 1 5/8" Coax	Yes	2.46	1.200	3.96	1.95	2.33	3.760	0.324	0.000	9.66	187.51
92.46	(12) 1 1/4" Coax	Yes	2.46	1.200	3.10	1.77	2.12	3.760	0.324	0.000	8.78	149.72
92.46	(6) 1 5/8" Coax	Yes	2.46	0.000	0.00	0.00	0.00	3.760	0.324	0.000	0.00	105.28
95.00	(18) 1 5/8" Coax	Yes	2.54	1.200	3.96	2.02	2.42	3.789	0.323	0.000	10.09	279.94
95.00	(12) 1 5/8" Coax	Yes	2.54	1.200	3.96	2.02	2.42	3.789	0.323	0.000	10.09	194.62
95.00	(12) 1 1/4" Coax	Yes	2.54	1.200	3.10	1.84	2.20	3.789	0.323	0.000	9.18	155.42
95.00	(6) 1 5/8" Coax	Yes	2.54	0.000	0.00	0.00	0.00	3.789	0.323	0.000	0.00	109.31
100.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.98	4.77	3.845	0.332	0.000	20.19	552.78
100.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.98	4.77	3.845	0.332	0.000	20.19	384.40
100.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.62	4.34	3.845	0.332	0.000	18.37	307.06
100.0	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.845	0.332	0.000	0.00	216.03
105.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.99	4.79	3.899	0.343	0.000	20.53	555.14
105.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	3.99	4.79	3.899	0.343	0.000	20.53	386.13

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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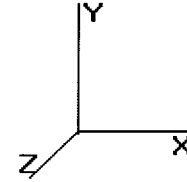
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

105.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.63	4.36	3.899	0.343	0.000	18.69	308.52
105.0	(6) 1 5/8" Coax	Yes	5.00	0.000	0.00	0.00	0.00	3.899	0.343	0.000	0.00	217.13
110.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.00	4.80	3.952	0.355	0.000	20.86	557.40
110.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.00	4.80	3.952	0.355	0.000	20.86	387.79
110.0	(12) 1 1/4" Coax	Yes	5.00	1.200	3.10	3.64	4.37	3.952	0.355	0.000	18.99	309.91
114.5	(18) 1 5/8" Coax	Yes	4.50	1.200	3.96	3.61	4.33	3.997	0.368	0.000	19.04	503.43
114.5	(12) 1 5/8" Coax	Yes	4.50	1.200	3.96	3.61	4.33	3.997	0.368	0.000	19.04	350.31
114.5	(12) 1 1/4" Coax	Yes	4.50	1.200	3.10	3.29	3.94	3.997	0.368	0.000	17.34	280.01
115.0	(18) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.40	0.48	4.002	0.269	0.000	2.12	55.96
115.0	(12) 1 5/8" Coax	Yes	0.50	1.200	3.96	0.40	0.48	4.002	0.269	0.000	2.12	38.94
120.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.02	4.82	4.051	0.275	0.000	21.50	561.67
120.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.02	4.82	4.051	0.275	0.000	21.50	390.92
125.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.03	4.84	4.099	0.286	0.000	21.80	563.69
125.0	(12) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.03	4.84	4.099	0.286	0.000	21.80	392.40
130.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	4.04	0.00	4.145	0.149	1.147	0.00	565.64
132.0	(18) 1 5/8" Coax	Yes	2.00	0.000	3.96	1.62	0.00	4.163	0.154	1.161	0.00	226.56
132.1	(18) 1 5/8" Coax	Yes	0.12	0.000	3.96	0.10	0.00	4.164	0.155	1.165	0.00	13.57
134.0	(18) 1 5/8" Coax	Yes	1.88	0.000	3.96	1.52	0.00	4.181	0.156	1.169	0.00	213.27
135.0	(18) 1 5/8" Coax	Yes	1.00	0.000	3.96	0.81	0.00	4.190	0.158	1.175	0.00	113.50
135.8	(18) 1 5/8" Coax	Yes	0.87	0.000	3.96	0.70	0.00	4.197	0.160	1.179	0.00	98.78
140.0	(18) 1 5/8" Coax	Yes	4.13	0.000	3.96	3.35	0.00	4.233	0.161	1.183	0.00	470.30
145.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	4.07	0.00	4.276	0.168	1.204	0.00	571.11
150.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	4.07	0.00	4.318	0.176	1.229	0.00	572.82
155.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	4.08	0.00	4.358	0.185	1.256	0.00	574.49
160.0	(18) 1 5/8" Coax	Yes	5.00	0.000	3.96	4.09	0.00	4.398	0.196	1.287	0.00	576.10
165.0	(18) 1 5/8" Coax	Yes	5.00	1.200	3.96	4.10	4.92	4.437	0.207	0.000	24.00	577.68
166.0	(18) 1 5/8" Coax	Yes	1.00	1.200	3.96	0.82	0.98	4.445	0.214	0.000	4.81	115.60
<b>Totals:</b>											<b>1,228.36</b>	<b>37,848.97</b>

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev : 0.000 (ft)

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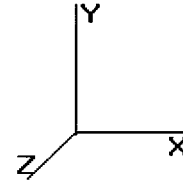
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

**Applied Segment Forces Summary**

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	120.73	3,528.74	0.00	0.00
10.00	120.84	3,606.43	0.00	0.00
15.00	120.27	3,636.26	0.00	0.00
20.00	119.41	3,645.17	0.00	0.00
25.00	118.38	3,642.06	0.00	0.00
30.00	120.81	3,706.03	0.00	1.73
35.00	121.37	3,562.69	0.00	0.00
40.00	124.72	3,540.67	0.00	0.00
42.96	74.54	2,081.27	0.00	0.00
45.00	52.41	1,869.66	0.00	0.00
49.04	105.50	3,670.33	0.00	0.00
50.00	25.04	641.19	0.00	0.00
55.00	133.17	3,324.60	0.00	0.00
60.00	134.82	3,297.41	0.00	0.00
65.00	136.18	3,268.68	0.00	0.00
70.00	137.27	3,238.60	0.00	0.00
75.00	138.12	3,207.35	0.00	0.00
78.00	84.80	1,934.05	0.00	0.00
80.00	55.24	1,266.46	0.00	0.00
85.00	139.20	3,140.93	0.00	0.00
87.54	70.51	1,583.46	0.00	0.00
90.00	68.98	1,872.70	0.00	0.00
92.46	68.91	1,856.30	0.00	0.00
95.00	228.82	2,483.98	0.00	55.45
100.0	140.86	2,928.03	0.00	0.00
105.0	216.91	3,664.67	0.00	0.00
110.0	140.37	2,645.97	0.00	0.00
114.5	560.41	7,704.86	0.00	0.00
115.0	11.95	229.09	0.00	0.00
120.0	119.79	2,265.40	0.00	0.00
125.0	713.15	9,491.78	0.00	0.00
130.0	73.59	1,799.36	0.00	0.00
132.0	109.82	2,381.54	0.00	0.00
132.1	1.72	42.47	0.00	0.00
134.0	488.07	5,958.04	0.00	0.00
135.0	14.35	402.60	0.00	0.00
135.8	12.42	348.54	0.00	0.00
140.0	415.16	5,813.53	0.00	1,415.20
145.0	69.11	1,433.98	0.00	0.00
150.0	148.43	1,760.23	0.00	159.16
155.0	65.19	1,369.09	0.00	0.00
160.0	63.13	1,338.78	0.00	0.00
165.0	85.01	1,308.25	0.00	0.00
166.0	415.70	5,170.05	0.00	0.00
170.0	46.85	557.58	0.00	0.00
174.0	335.12	3,235.07	0.00	0.00
175.0	11.10	132.11	0.00	0.00
180.0	708.67	8,669.36	0.00	1,634.82

Pole : 302506  
Location : Winchester CT 3, CT  
Height : 180.0 (ft)  
Base Dia : 52.75 (in)  
Top Dia : 15.00 (in)  
Shape : 18 Sides  
Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
Struct Class : II  
Exposure Category : B  
Topographic Category : 1  
Base Elev : 0.000 (ft)



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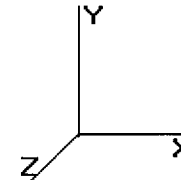
<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

Totals:            7,586.93    138,255.4    0.00    3,266.36

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
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 Base Elev : 0.000 (ft)

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<b>Load Case:</b> 1.2D + 1.0Di + 1.0Wi	40.00 mph with 1.25 in Radial Ice	30 Iterations
Gust Response Factor : 1.10	Ice Dead Load Factor : 1.00	Wind Importance Factor : 1.00
Dead Load Factor : 1.20		Ice Importance Factor : 1.00
Wind Load Factor : 1.00		

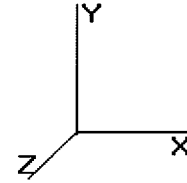
**Calculated Forces**

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation (deg)	Ratio
0.00	-138.25	-7.66	0.00	-1,063.83	0.00	1,063.83	5,102.86	2,551.43	10,963.2	5,489.79	0.00	0.00	0.221
5.00	-134.71	-7.68	0.00	-1,025.54	0.00	1,025.54	5,029.12	2,514.56	10,576.3	5,296.03	0.03	-0.06	0.220
10.00	-131.10	-7.69	0.00	-987.15	0.00	987.15	4,953.95	2,476.98	10,193.1	5,104.17	0.13	-0.12	0.220
15.00	-127.46	-7.70	0.00	-948.69	0.00	948.69	4,877.36	2,438.68	9,813.98	4,914.28	0.28	-0.18	0.219
20.00	-123.80	-7.71	0.00	-910.18	0.00	910.18	4,799.34	2,399.67	9,438.93	4,726.48	0.51	-0.25	0.218
25.00	-120.15	-7.71	0.00	-871.64	0.00	871.64	4,719.90	2,359.95	9,068.23	4,540.86	0.80	-0.31	0.217
30.00	-116.44	-7.71	0.00	-833.07	0.00	833.07	4,639.03	2,319.51	8,702.08	4,357.51	1.17	-0.38	0.216
35.00	-112.87	-7.70	0.00	-794.53	0.00	794.53	4,556.73	2,278.36	8,340.67	4,176.53	1.60	-0.45	0.215
40.00	-109.32	-7.65	0.00	-756.04	0.00	756.04	4,473.00	2,236.50	7,984.18	3,998.03	2.11	-0.52	0.214
42.96	-107.23	-7.63	0.00	-733.41	0.00	733.41	4,422.82	2,211.41	7,775.79	3,893.68	2.44	-0.56	0.213
45.00	-105.36	-7.64	0.00	-717.83	0.00	717.83	4,378.03	2,189.01	7,615.75	3,813.53	2.69	-0.59	0.212
49.04	-101.69	-7.56	0.00	-686.97	0.00	686.97	3,604.17	1,802.08	6,267.69	3,138.50	3.22	-0.65	0.247
50.00	-101.04	-7.62	0.00	-679.71	0.00	679.71	3,591.50	1,795.75	6,214.33	3,111.78	3.35	-0.67	0.247
55.00	-97.70	-7.59	0.00	-641.63	0.00	641.63	3,524.70	1,762.35	5,938.60	2,973.71	4.09	-0.75	0.244
60.00	-94.40	-7.55	0.00	-603.71	0.00	603.71	3,456.48	1,728.24	5,666.60	2,837.51	4.93	-0.84	0.240
65.00	-91.12	-7.50	0.00	-565.98	0.00	565.98	3,386.83	1,693.41	5,398.53	2,703.28	5.85	-0.92	0.236
70.00	-87.87	-7.44	0.00	-528.49	0.00	528.49	3,315.75	1,657.87	5,134.58	2,571.11	6.86	-1.01	0.232
75.00	-84.66	-7.35	0.00	-491.27	0.00	491.27	3,242.30	1,621.15	4,873.54	2,440.39	7.97	-1.10	0.227
78.00	-82.72	-7.30	0.00	-469.21	0.00	469.21	3,184.09	1,592.04	4,699.23	2,353.11	8.68	-1.16	0.225
80.00	-81.45	-7.31	0.00	-454.62	0.00	454.62	3,145.28	1,572.64	4,584.79	2,295.80	9.17	-1.19	0.224
85.00	-78.30	-7.20	0.00	-418.08	0.00	418.08	3,048.26	1,524.13	4,304.87	2,155.63	10.47	-1.29	0.220
87.54	-76.72	-7.15	0.00	-399.81	0.00	399.81	2,998.97	1,499.48	4,166.05	2,086.12	11.17	-1.33	0.217
90.00	-74.84	-7.10	0.00	-382.21	0.00	382.21	2,951.23	1,475.62	4,033.76	2,019.88	11.86	-1.38	0.215
92.46	-72.98	-7.05	0.00	-364.77	0.00	364.77	2,412.07	1,206.04	3,317.78	1,661.36	12.59	-1.43	0.250
95.00	-70.49	-6.85	0.00	-346.80	0.00	346.80	2,382.81	1,191.41	3,222.46	1,613.62	13.36	-1.47	0.245
100.00	-67.56	-6.75	0.00	-312.55	0.00	312.55	2,324.22	1,162.11	3,037.61	1,521.06	14.96	-1.58	0.235
105.00	-63.89	-6.55	0.00	-278.78	0.00	278.78	2,264.20	1,132.10	2,856.29	1,430.27	16.67	-1.68	0.223
110.00	-61.24	-6.43	0.00	-246.05	0.00	246.05	2,186.61	1,093.30	2,659.07	1,331.51	18.49	-1.79	0.213
114.50	-53.55	-5.67	0.00	-217.12	0.00	217.12	2,113.84	1,056.92	2,484.15	1,243.92	20.21	-1.88	0.200
115.00	-53.32	-5.70	0.00	-214.28	0.00	214.28	2,105.76	1,052.88	2,465.08	1,234.37	20.41	-1.89	0.199
120.00	-51.05	-5.59	0.00	-185.78	0.00	185.78	2,024.90	1,012.45	2,278.43	1,140.91	22.44	-1.98	0.188
125.00	-41.58	-4.61	0.00	-157.83	0.00	157.83	1,944.05	972.03	2,099.13	1,051.12	24.57	-2.08	0.172
130.00	-39.78	-4.51	0.00	-134.79	0.00	134.79	1,863.20	931.60	1,927.17	965.02	26.79	-2.17	0.161
132.00	-37.40	-4.32	0.00	-125.77	0.00	125.77	1,830.86	915.43	1,860.45	931.61	27.71	-2.20	0.155
132.12	-37.36	-4.33	0.00	-125.25	0.00	125.25	1,828.92	914.46	1,856.49	929.63	27.76	-2.21	0.155
134.00	-31.42	-3.63	0.00	-117.11	0.00	117.11	1,798.52	899.26	1,794.90	898.78	28.64	-2.24	0.148
135.00	-31.02	-3.61	0.00	-113.48	0.00	113.48	1,782.35	891.17	1,762.57	882.59	29.11	-2.26	0.146
135.87	-30.67	-3.60	0.00	-110.35	0.00	110.35	993.95	496.97	1,000.68	501.09	29.52	-2.27	0.251
140.00	-24.87	-3.00	0.00	-94.05	0.00	94.05	969.84	484.92	940.01	470.70	31.52	-2.34	0.225
145.00	-23.43	-2.92	0.00	-79.07	0.00	79.07	939.35	469.68	867.78	434.53	34.04	-2.47	0.207
150.00	-21.68	-2.73	0.00	-64.33	0.00	64.33	907.44	453.72	797.07	399.13	36.69	-2.59	0.185
155.00	-20.31	-2.64	0.00	-50.66	0.00	50.66	874.09	437.05	728.06	364.57	39.46	-2.70	0.162
160.00	-18.97	-2.55	0.00	-37.44	0.00	37.44	839.33	419.66	660.97	330.98	42.34	-2.80	0.136
165.00	-17.67	-2.41	0.00	-24.71	0.00	24.71	800.44	400.22	593.98	297.43	45.32	-2.88	0.105
166.00	-12.52	-1.74	0.00	-22.30	0.00	22.30	790.74	395.37	579.60	290.23	45.93	-2.90	0.093
170.00	-11.97	-1.68	0.00	-15.33	0.00	15.33	751.93	375.97	523.82	262.30	48.37	-2.95	0.074
174.00	-8.75	-1.18	0.00	-8.62	0.00	8.62	713.12	356.56	470.86	235.78	50.86	-2.98	0.049
175.00	-8.62	-1.16	0.00	-7.44	0.00	7.44	703.42	351.71	458.07	229.37	51.48	-2.99	0.045
180.00	0.00	-0.71	0.00	-1.63	0.00	1.63	654.91	327.45	396.72	198.65	54.63	-3.01	0.008

Pole : 302506  
 Location : Winchester CT 3, CT  
 Height : 180.0 (ft)  
 Base Dia : 52.75 (in)  
 Top Dia : 15.00 (in)  
 Shape : 18 Sides  
 Taper : 0.219444 (in/ft)

Code: ANSI/TIA-222 Rev G  
 Struct Class : II  
 Exposure Category : B  
 Topographic Category : 1  
 Base Elev: 0.000 (ft)

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## Analysis Summary

Load Case	Reactions						Max Usage	
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Elev (ft)	Interaction Ratio
1.2D + 1.6W	38.52	0.00	57.08	0.00	0.00	4359.04	49.04	0.84
0.9D + 1.6W	38.14	0.00	42.79	0.00	0.00	4224.92	49.04	0.80
1.2D + 1.0Di + 1.0Wi	7.66	0.00	138.25	0.00	0.00	1063.83	135.87	0.25



Base/Flange Plate	Plate Type	<b>Baseplate</b>
	Pole Diameter	52.75 in
	Pole Thickness	in
	Plate Diameter	68 in
	Plate Thickness	2 in
	Plate Fy	60 ksi
	Weld Length	0.3125 in
	$\phi_s$ Resistance	1065.55 k-in
Applied	685.78 k-in	
Stiffeners	#	<b>16</b> Show
	Thickness	0.75 in
	Length	6 in
	Height	6 in
	Chamfer	0 in
	Offset Angle	0°
	Fy	50 ksi

Bolts	#	<b>16</b>
	Bolt Circle (R)adial / (S)quare	62 in R
	Diameter	2.25 in
	Hole Diameter	2.375 in
	Type	#18J
	Fy	75 ksi
	Fu	100 ksi
	$\phi_s$ Resistance	259.82 k
Applied	219.45 k	

Reinforcement	#	<b>0</b>
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Extra Bolts	#	<b>0</b>
-------------	---	----------

Code Rev. **G**

Date **8/23/2012**

Engineer **BD**

Site # **305206**

Carrier **Sprint Nextel**

Moment **4359.0 k-ft**

Axial **138.3 k**

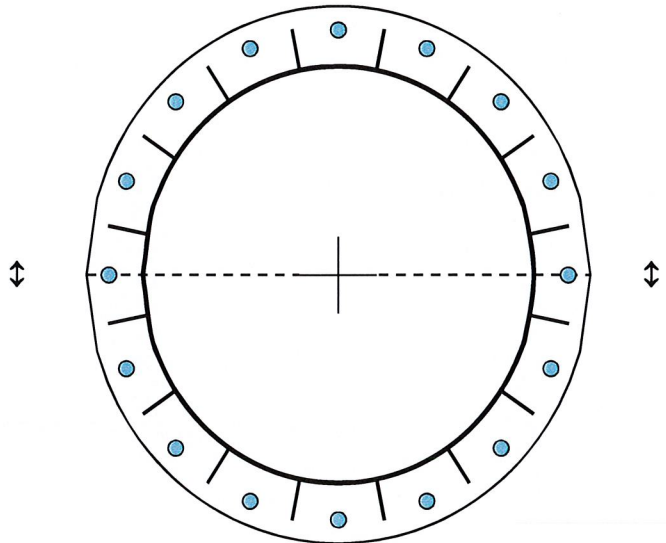


Plate Stress Ratio:  
**0.64** (Pass)

Bolt Stress Ratio:  
**0.84** (Pass)

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT  
EVALUATION OF HUMAN EXPOSURE POTENTIAL  
TO NON-IONIZING EMISSIONS

Sprint Existing Facility

Site ID: CT33XC081

Horton - SNET  
15 Oakdale Avenue  
Winchester, CT 06098

**September 02, 2012**

September 02, 2012

Sprint  
Attn: RF Engineering Manager  
1 International Boulevard, Suite 800  
Mahwah, NJ 07495

Re: Emissions Values for Site **CT33XC081 – Horton - SNET**

EBI Consulting was directed to analyze the proposed upgrades to the existing Sprint facility located at 15 Oakdale Avenue, Winchester, CT, for the purpose of determining whether the emissions from the proposed Sprint equipment upgrades on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The number of  $\mu\text{W}/\text{cm}^2$  calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limit for the cellular band is approximately 567  $\mu\text{W}/\text{cm}^2$ , and the general population exposure limit for the PCS band is 1000  $\mu\text{W}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

## **CALCULATIONS**

Calculations were done for the proposed upgrades to the existing Sprint Wireless antenna facility located at 15 Oakdale Avenue, Winchester, CT, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario. Actual values seen from this site will be dramatically less than those shown in this report. For this report the sample point is the top of a 6 foot person standing at the base of the tower.

For all calculations, all emissions were calculated using the following assumptions:

- 1) 4 CDMA Carriers (1900 MHz) were considered for each sector of the proposed installation.
- 2) 1 CDMA Carrier (850 MHz ) was considered for each sector of the proposed installation
- 3) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 4) For the following calculations the sample point was the top of a six foot person standing at the base of the tower. The actual gain in this direction was used per the manufactures supplied specifications.
- 5) The antenna used in this modeling is the RFS APXVSP18-C-A20. This is based on feedback from the carrier with regards to anticipated antenna selection. This antenna has a 15.9 dBd gain value at its main lobe at 1900 MHz and 13.4 dBd at its main lobe for 850 MHz. All calculations were performed assuming the main lobe of the antenna was focused at the base of the tower to present a worst case scenario.

- 6) The antenna mounting height centerline of the proposed antennas is **131.3 feet** above ground level (AGL)
- 7) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculation were done with respect to uncontrolled / general public threshold limits

Site ID		CT33XC081 - Horton SNET															
Site Address		15 Oakdale Avenue, Winchester, CT 06098															
Site Type		Monopole															
Sector 1																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
1a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	131.3	125.3	1/2 "	0.5	0	2773.8948	63.51756	6.35176%
1a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	131.3	125.3	1/2 "	0.5	0	389.96892	8.929638	1.57489%
Sector total Power Density Value:																7.927%	
Sector 2																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
2a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	131.3	125.3	1/2 "	0.5	0	2773.8948	63.51756	6.35176%
2a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	131.3	125.3	1/2 "	0.5	0	389.96892	8.929638	1.57489%
Sector total Power Density Value:																7.927%	
Sector 3																	
Antenna Number	Antenna Make	Antenna Model	Radio Type	Frequency Band	Technology	Power Out Per Channel (Watts)	Number of Channels	Composite Power	Antenna Gain in direction of sample point (dBd)	Antenna Height (ft)	analysis height	Cable Size	Cable Loss (dB)	Additional Loss	ERP	Power Density Value	Power Density Percentage
3a	RFS	APXVSP18-C-A20	RRH	1900 MHz	CDMA / LTE	20	4	80	15.9	131.3	125.3	1/2 "	0.5	0	2773.8948	63.51756	6.35176%
3a	RFS	APXVSP18-C-A20	RRH	850 MHz	CDMA / LTE	20	1	20	13.4	131.3	125.3	1/2 "	0.5	0	389.96892	8.929638	1.57489%
Sector total Power Density Value:																7.927%	

Site Composite MPE %	
Carrier	MPE %
Sprint	23.780%
AT&T	3.830%
Pocket	6.170%
T-Mobile	1.510%
CTPD	5.250%
Verizon Wireless	19.360%
Nextel	4.310%
<b>Total Site MPE %</b>	<b>64.210%</b>

## Summary

All calculations performed for this analysis yielded results that were well within the allowable limits for general public exposure to RF Emissions.

The anticipated Maximum Composite contributions from the Sprint facility are **23.780% (7.927% from each sector)** of the allowable FCC established general public limit considering all three sectors simultaneously sampled at the ground level.

The anticipated composite MPE value for this site assuming all carriers present is **64.210%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government



**Scott Heffernan**  
RF Engineering Director

**EBI Consulting**  
21 B Street  
Burlington, MA 01803















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SECTOR 1  
20° AZIMUTH

PROPOSED SPRINT 800/1900  
MHZ ANTENNA PIPE  
MOUNTED TO EXISTING MAST (7 C03A)

PROPOSED SPRINT 1900  
MHZ RRH PIPE MOUNTED  
BEHIND ANTENNA (10 C03A)

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO REMAIN

PROPOSED SPRINT 800 MHZ  
RRH & NOTCH FILTER PIPE  
MOUNTED BEHIND ANTENNA (9 C03A)

PROPOSED SPRINT 800/1900  
MHZ ANTENNA PIPE TO  
REPLACE EXISTING (7 C03A)

PROPOSED SPRINT 1900  
MHZ RRH PIPE MOUNTED  
BEHIND ANTENNA (10 C03A)

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO BE RELOCATED AS  
SHOWN

SECTOR 2  
120° AZIMUTH

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO REMAIN

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO REMAIN

PROPOSED SPRINT 800 MHZ  
RRH & NOTCH FILTER PIPE  
MOUNTED BEHIND ANTENNA (9 C03A)

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO REMAIN

EXISTING MONOPOLE

PROPOSED HANDRAIL KIT  
BY SABRE, PART NO.  
CT10-116-813, OR  
APPROVED EQUAL

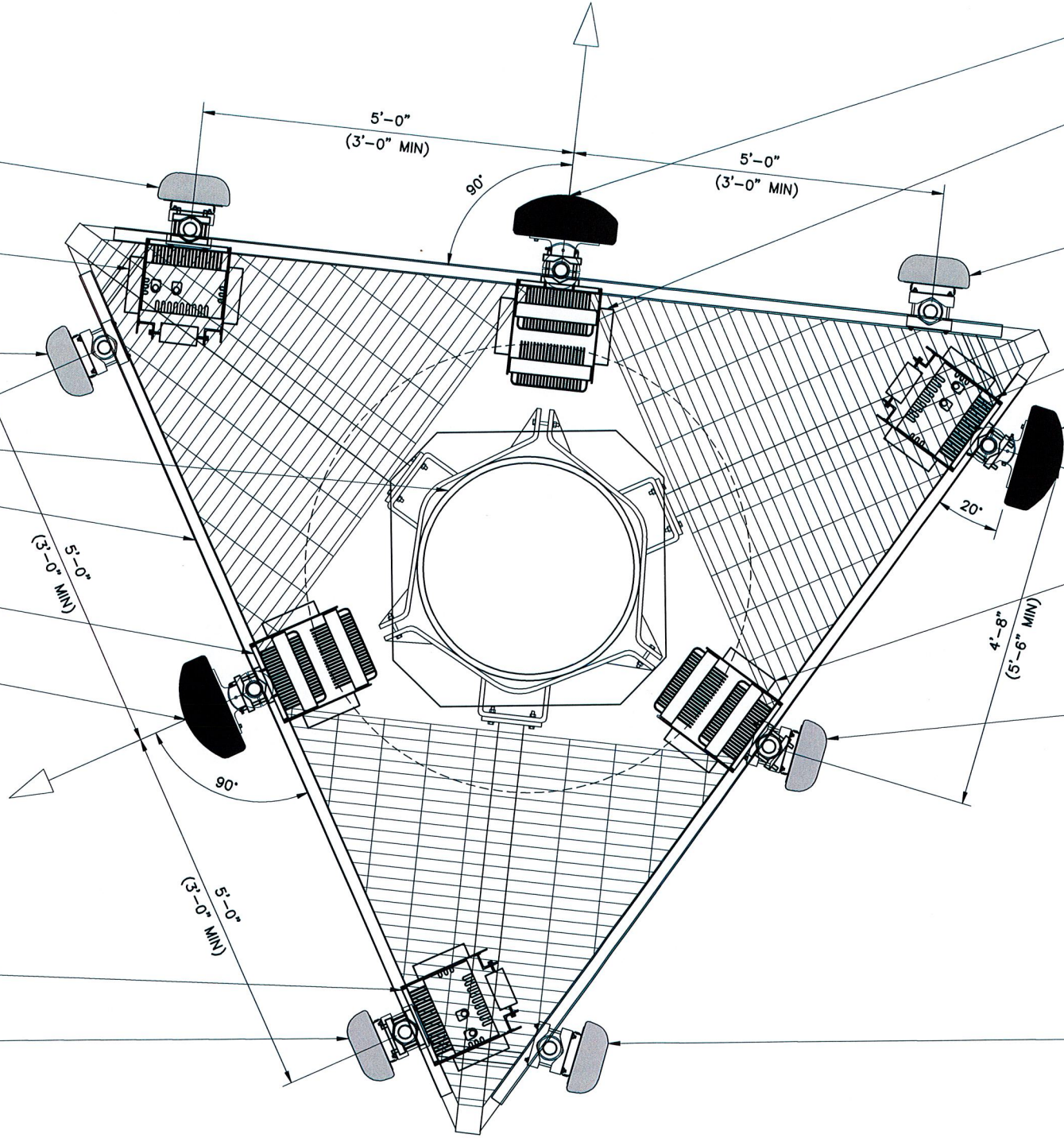
PROPOSED SPRINT 1900  
MHZ RRH PIPE MOUNTED  
BEHIND ANTENNA (10 C03A)

PROPOSED SPRINT 800/1900  
MHZ ANTENNA PIPE  
MOUNTED TO EXISTING MAST (7 C03A)

SECTOR 3  
260° AZIMUTH

PROPOSED SPRINT 800 MHZ  
RRH & NOTCH FILTER PIPE  
MOUNTED BEHIND ANTENNA (9 C03A)

EXISTING SPRINT SINGLE  
POLE CDMA ANTENNA  
TO REMAIN



1 INTERIM ANTENNA PLAN @ ±131'-4" AGL (ALL SECTORS)

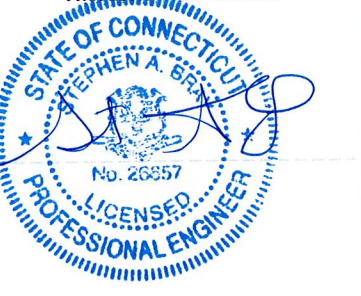
11x17 SCALE: 1/2" = 1'-0" 24x36 SCALE: 1" = 1'-0"




REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY
0	10-02-12	ISSUED FOR CONSTRUCTION	JRF	KCD



**Stephen A. Bray**  
PROFESSIONAL ENGINEER



CT LICENSE: 26657 10/2/12

PROJECT NUMBER: **332.1495**

SITE INFORMATION:  
15 OAKDALE AVENUE  
WINCHESTER, CT 06098  
LITCHFIELD COUNTY

**CT33XC081**

PROJECT TYPE:  
NETWORK VISION

DRAWN BY: MCD CHECKED BY: DATE: 05-01-12

SHEET TITLE:  
INTERIM ANTENNA PLAN  
(ALL SECTORS)

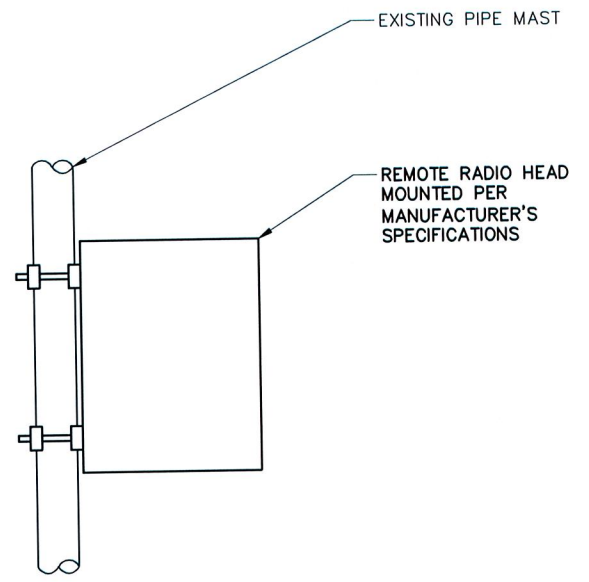
SHEET NUMBER: REV.:

**C04A 0**

K:\332\_Sprint\332.1000\_Alcatel-Lucent\332.1495\_CT33XC081\_15 Oakdale Avenue\332.1495\_CAD\332.1495\_Construction\332.1495\_C04A.dwg, 10/2/2012 8:55:25 AM, jford



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**1 RRH MOUNT DETAIL**

SCALE: NTS



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△	10-02-12	ISSUED FOR CONSTRUCTION	JRF	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



**Stephen A. Bray**  
PROFESSIONAL ENGINEER



CT LICENSE: 26657 10/2/12

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SITE INFORMATION:  
15 OAKDALE AVENUE  
WINCHESTER, CT 06098  
LITCHFIELD COUNTY  
**CT33XC081**

PROJECT TYPE:  
NETWORK VISION

DRAWN BY: MCD	CHECKED BY:	DATE: 05-01-12
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SHEET TITLE:  
RRH MOUNT DETAILS  
(ALL SECTORS)

SHEET NUMBER: <b>C04C</b>	REV.: <b>0</b>
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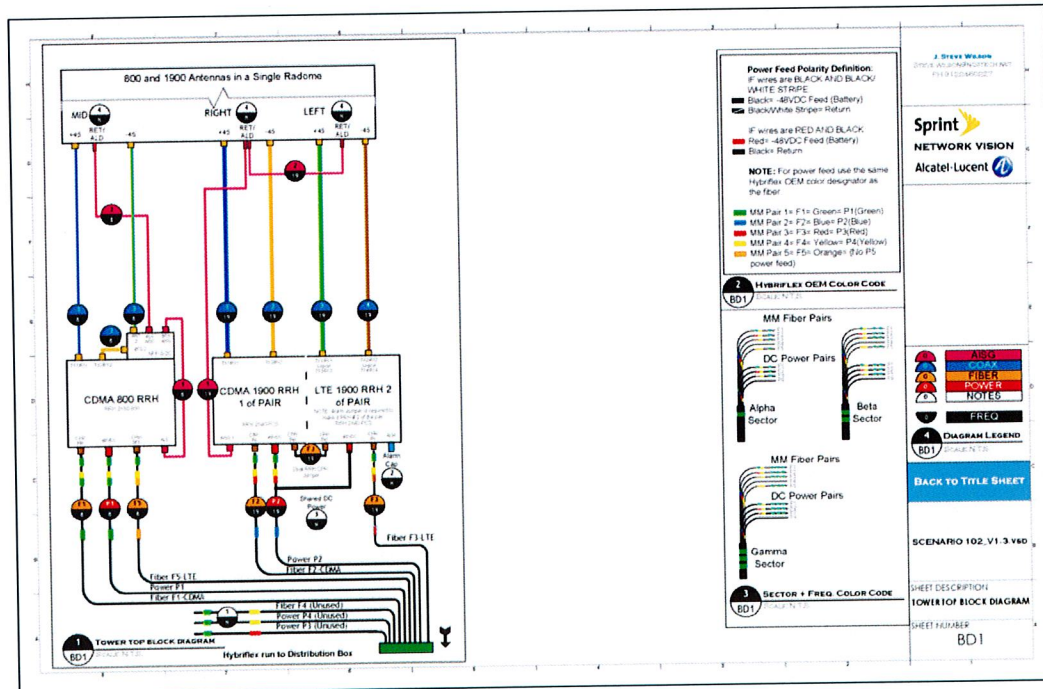
### FINAL ANTENNA AND CABLE SCHEDULE

SECTOR	ANTENNA	AZIMUTH (DEGREES)	MECHANICAL DT (DEGREES)	ELECTRICAL DT (DEGREES)	RAD CENTER AGL (FT)	ANTENNA		RRH		TOP COAX JUMPER		COMBINER JUMPER		NOTCH FILTER JUMPER		HYBRIFLEX LENGTH (FT)
						MAKE	MODEL	QTY	QTY	LENGTH (FT)	QTY	LENGTH (FT)	QTY	LENGTH (FT)		
1	-															155
	800/1900	20	0	800 -1 1900 -2	131.3	RFS	APXVSP18-C-A20	800 1 1900 1	8	10	0	0	1	3		
2	-															155
	800/1900	120	0	800 -1 1900 -2	131.3	RFS	APXVSP18-C-A20	800 1 1900 1	8	10	0	0	1	3		
3	-															155
	800/1900	260	0	800 0 1900 -3	131.3	RFS	APXVSP18-C-A20	800 1 1900 1	8	10	0	0	1	3		

**NOTES:**

1. DUE TO FIELD MEASUREMENTS AND THE INSTALLATION OF NEW ANTENNAS THAT VARY IN SIZE FROM THE EXISTING ANTENNAS, THE ANTENNA RAD CENTER HAS CHANGED FROM WHAT IS ON RECORD. THE DATABASE MAY NEED TO BE UPDATED TO MATCH THESE PLANS.
2. SOME CABLING MAY CHANGE AT THE TIME OF CONSTRUCTION. CONTRACTOR TO CONFIRM ALL CABLE LENGTHS, TYPE, QUANTITIES, AND CONFIGURATION PRIOR TO CONSTRUCTION.
3. ALL UNUSED POWER AND FIBER MUST BE PROPERLY TERMINATED AND WEATHERPROOFED.

CONTRACTOR TO VERIFY & USE THE LATEST TOWER TOP SCENARIO AS PROVIDED BY ALCATEL-LUCENT CONSTRUCTION MANAGER



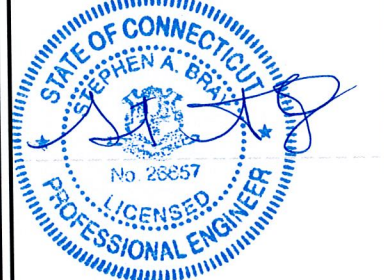
ALL SECTORS



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△	10-02-12	ISSUED FOR CONSTRUCTION	JRF	KCD
REV.	DATE	REVISION DESCRIPTION	DRAWN BY	CHKD. BY



**Stephen A. Bray**  
PROFESSIONAL ENGINEER



CT LICENSE: 26657 10/2/12

PROJECT NUMBER: **332.1495**

SITE INFORMATION:  
15 OAKDALE AVENUE  
WINCHESTER, CT 06098  
LITCHFIELD COUNTY  
**CT33XC081**

PROJECT TYPE:  
**NETWORK VISION**

DRAWN BY: MCD CHECKED BY: DATE: 05-01-12

SHEET TITLE:  
**RF SCHEDULE**

SHEET NUMBER: **C06** REV.: **0**

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