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

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

August 22, 2008

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

RE: **EM-VER-076-080714** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 8 Old Route 79, Madison, Connecticut.

Dear Attorney Baldwin:

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.

The proposed modifications are to be implemented as specified here and in your notice dated July 14, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. 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. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps FOC

S. Derek Phelps
Executive Director

SDP/MP/cm

c: The Honorable Al Goldberg, First Selectman, Town of Madison
Marilyn M. Ozols, Planning & Zoning Administrator, Town of Madison
American Tower

sdp
mp
dm

TOWN OF MADISON
8 Campus Drive
Madison, CT 06443

Telephone 203-245-5602 TDD 203-245-5666 Fax 203-245-5609

July 28, 2008

ORIGINAL

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

Re: Docket EM-VER-076-080714

Dear Mr. Phelps:

We have reviewed the Application for the above docket. We have no objection but would suggest that the structural engineer's report (Tab 3) be corrected on page 1. The report lists existing antennas and has the top antenna listed as *Town of Branford*. This should read *Town of Madison*. Thank you for the opportunity to comment.

Sincerely,

D. Stewart MacMillan, Jr. , P.E.
Director of Public Works and Town Engineer

Cc: Kenneth C. Baldwin, Robinson & Cole

ORIGINAL

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL
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Daniel F. Caruso
Chairman

July 14, 2008

The Honorable Al Goldberg
First Selectman
Town of Madison
Madison Town Campus
8 Campus Drive
Madison, CT 06443-2563

RE: **EM-VER-076-080714** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 8 Old Route 79, Madison, Connecticut.

Dear Mr. Goldberg:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by July 28, 2008.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Marilyn M. Ozols, Planning & Zoning Administrator, Town of Madison

ROBINSON & COLE LLP

KENNETH C. BALDWIN

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

EM-VER-076-080714

July 14, 2008

Via Hand Delivery

ORIGINAL

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

Re: **Notice of Exempt Modification – Antenna Swap**
8 Old Route 79 (a/k/a 8 Meetinghouse Lane), Madison, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains wireless telecommunications antennas at the 140-foot level on the existing 148-foot American Tower Corporation tower at the above-referenced address. The Council approved Cellco's shared use of the existing facility on April 12, 2000. Cellco now intends to modify its installation by replacing four of its existing antennas at the 140-foot level on the tower with two (2) LPA-80063/6CF antennas and two (2) LPA-80080/6CF antennas at the same level. Attached behind Tab 1 are the specifications for the proposed replacement antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Alfred Goldberg, First Selectman of the Town of Madison. The Town of Madison is the owner of the property on which the facility is located.

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

1. The proposed modifications will not result in any increase in the overall height of the existing structures. Cellco's antennas will be located at the 140-foot level on the existing 148-foot tower.

2. The proposed modifications will not involve any modifications to ground-mounted equipment and, therefore, will not require the extension of the site boundaries.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for Cellco's modified facility is included behind Tab 2.

Also included is a Structural Analysis Report confirming that the tower can support the proposed modifications. (See Tab 3).

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Alfred Goldberg, Madison First Selectman
Sandy M. Carter

Vertically Polarized, Log Periodic 63° / 14.5 dBd

LPA-80063/6CF ___

When ordering replace "___" with connector type.

Mechanical specifications

Length	1800 mm	70.9 in
Width	380 mm	15.0 in
Depth	332 mm	13.1 in
Depth with z-bracket	372 mm	14.6 in
[4] Weight	12.3 kg	27.0 lbs
Wind Area		
Fore/Aft	0.68 m^2	7.4 ft^2
Side	0.60 m^2	6.5 ft^2
Rated Wind Velocity (Safety factor 2.0)	>235 km/hr	>146 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	993 N	223.3 lbs
Side	872 N	196.1 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

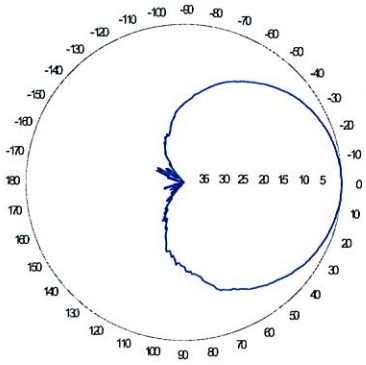
Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in). If the lock-down brace is used, the maximum diameter is Ø88.9 mm (3.5 in)

Mounting Bracket & Downtilt Bracket Kit #21699999

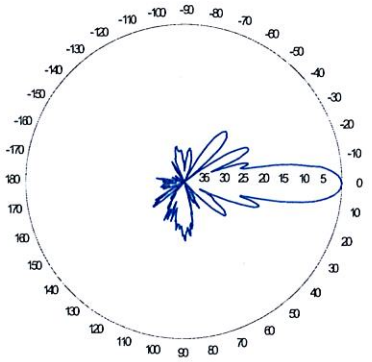
Electrical specifications

	Frequency Range	806-960 MHz
	Impedance	50Ω
[3]	Connector(s)	NE or E-DIN 1 port / center
[1]	VSWR	≤ 1.4:1
	Polarization	Vertical
[1]	Gain	14.5 dBd
[2]	Power Rating	500 W
[1]	Half Power Angle	
	H-Plane	63°
	E-Plane	10°
[1]	Electrical Downtilt	0°
[1]	Null Fill	10%
	Lightning Protection	Direct Ground

Radiation pattern[1]



Horizontal

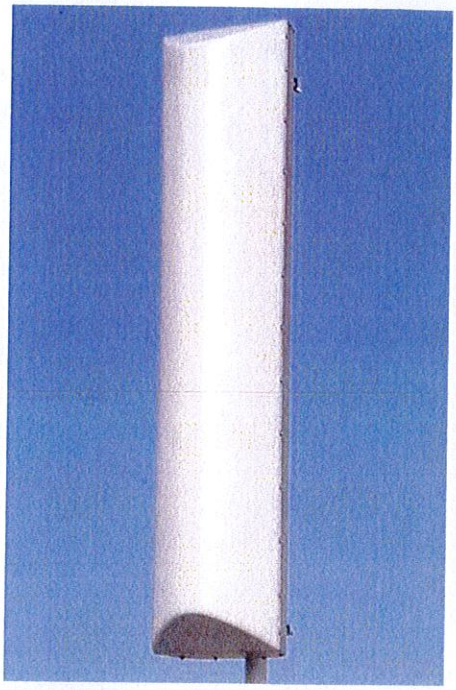


Vertical

Featuring upper side lobe suppression.

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band-width and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connector only.

1) Typical values.
2) Power rating limited by connector only.
3) NE indicates an elongated N connector. E-DIN indicates an elongated DIN connector.
4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

CF Denotes a Center-Fed Connector.

806-960 MHz

Amphenol Antel, Inc. 1300 Capital Drive Rockford, Illinois 61109 USA Tel. (815) 399-0001
Toll-Free (888) 417-9562 Fax. (815) 399-0156 antel@antelinc.com www.antelinc.com

Amphenol Antel, Inc. The Antenna Technology Company

Revision Date: 7/5/07

Vertically Polarized, Log Periodic 80° / 14 dBd

LPA-80080/6CF ___

When ordering replace "___" with connector type.

Mechanical specifications

Length	1800 mm	70.9 in
Width	140 mm	5.5 in
Depth	335 mm	13.2 in
Depth with z-bracket	375 mm	14.8 in
[4] Weight	9.5 kg	21.0 lbs
Wind Area		
Fore/Aft	0.25 m^2	2.7 ft^2
Side	0.60 m^2	6.5 ft^2
Rated Wind Velocity (Safety factor 2.0)	>295 km/hr	>183 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	415 N	93.3 lbs
Side	870 N	195.6 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

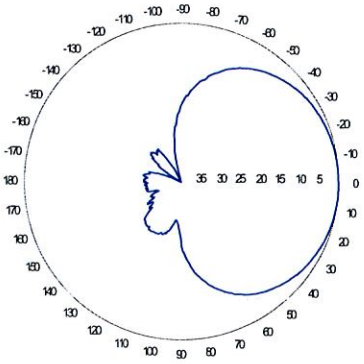
Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in). If the lock-down brace is used, the maximum diameter is Ø88.9 mm (3.5 in)

Mounting Bracket & Downtilt Bracket Kit #21699999

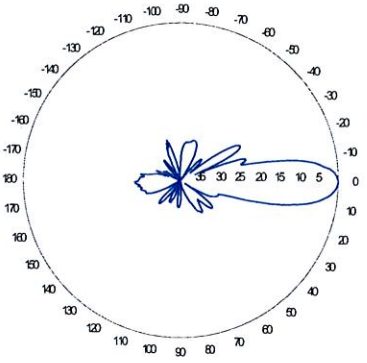
Electrical specifications

	Frequency Range	806-960 MHz
	Impedance	50Ω
[3]	Connector(s)	NE or E-DIN 1 port / center
[1]	VSWR	≤ 1.4:1
	Polarization	Vertical
[1]	Gain	14 dBd
[2]	Power Rating	500 W
[1]	Half Power Angle	
	H-Plane	80°
	E-Plane	10°
[1]	Electrical Downtilt	0°
[1]	Null Fill	10%
	Lightning Protection	Direct Ground

Radiation pattern[1]



Horizontal

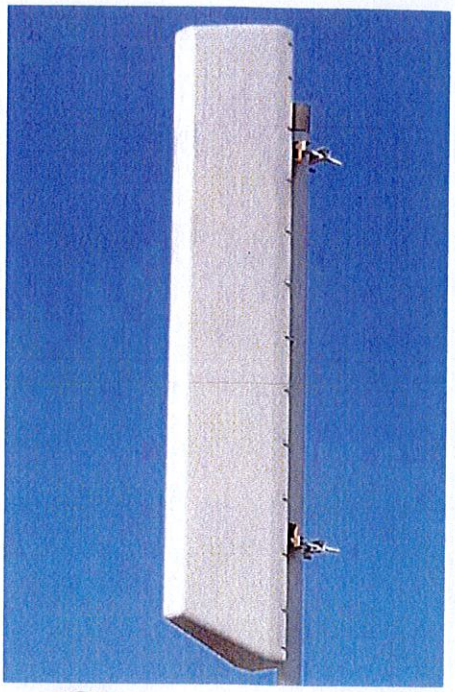


Vertical

Featuring upper side lobe suppression.

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.



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Amphenol Antel, Inc. The Antenna Technology Company

Revision Date: 7/5/07

	General	Power	Density					
Site Name: Madison 2								
Tower Height: Verizon @ 140Ft.								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*Cingular UMTS	1	500	132	0.0103	880	0.5867	1.76%	
*Cingular GSM	2	296	132	0.0122	880	0.5867	2.08%	
*Cingular GSM	2	427	132	0.0176	1900	1.0000	1.76%	
*Nextel	11	100	150	0.0176	851	0.5673	3.10%	
*Voicestream	9	162	120	0.0364	1900	1.0000	3.64%	
*Town			154	0.0036		0.2000	1.80%	
*Town Fire Dept.			153	0.0032	461	0.3073	1.04%	
*Sprint	11	358.22	96	0.1537	1962.5	1.0000	15.37%	
Verizon	**9**	**331**	**140**	**0.0547**	**880**	**0.5866**	**9.32%**	
Verizon	**3**	**213**	**140**	**0.0117**	**1900**	**1.0000**	**1.17%**	
								41.04%
* Source: Siting Council								

AMERICAN TOWER

Structural Analysis Report

Structure	:	**148 ft Summit Monopole**
ATC Site Name	:	**Madison CT 6, CT**
ATC Site Number	:	**302540**
Proposed Carrier	:	**Verizon**
Carrier Site Name	:	**Madison 2 CT**
Carrier Site Number	:	**NHV2070**
County	:	**New Haven**
Eng. Number	:	**41733424**
Date	:	**June 2, 2008**
Usage	:	**81%**
Portholes Required	:	**No**

Submitted by:
David Johnson, E.I.
Design Engineer

STATE OF CONNECTICUT
RAPHAEL I. MOHAN
No. 25112
LICENSED
PROFESSIONAL ENGINEER

6/4/08

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 148 ft Summit Monopole located at 8 Old Rte. 79, Madison, CT 06443, New Haven County (ATC site #302540). The tower was originally designed and manufactured by Summit (Paul J. Ford Job #29299-729, dated November 12, 1999).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed:	95 mph (Fastest Mile) / 115 mph (3-Second Gust)
Radial Ice:	82 mph (Fastest Mile) w/ ½" ice
Code:	TIA/EIA-222-F / 2003 International Building Code w/ 2005 CT Supplement

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
150.0	1	11' Dipole	Flat Low Profile Platform	(1) 7/8	Town Of Branford
	2	6' Omni		(2) 7/8	
149.0	3	72" x 12" Panel		(3) 1 5/8	Sprint Nextel
	9	48" x 12" Panel		(9) 1 5/8	
140.0	2	Decibel DB844H90E-XY	Flat Low Profile Platform	(2) 1 5/8	Verizon
	6	Decibel 948F85T2E-M		(6) 1 5/8	
132.0	3	14" x 9" TTA	Flat Low Profile Platform	-	AT&T Mobility
	9	72" x 12" Panel		(9) 1 5/8	
	6	ADC DD1900		-	
	3	Powerwave LGP13519		-	
	3	Allgon 7250		(3) 1 5/8	
	-	-	-	(12) 7/8	
120.0	6	EMS RV90-17-02DP	Flat Low Profile Platform	(12) 1 5/8	T-Mobile
106.0	3	52" x 8" Panel	Flush	(6) 1 1/4	AT&T Mobility
96.0	9	Decibel DB980F65E-M	Flat Low Profile Platform	(9) 1 1/4	Sprint Nextel
35.0	1	GPS	Pipe	(1) 1/2	

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
140.0	2	Antel LPA-80063/6CF	Flat Low Profile Platform	(2) 1 5/8	Verizon
	2	Antel LPA-80080/6CF	Flat Low Profile Platform	(2) 1 5/8	

Install proposed coax inside monopole.

Results

The maximum structure usage is: 81%

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	5,050.0	4,101.8	81
Shear (kips)	47.0	38.0	81

The structure base reactions resulting from this analysis are acceptable when compared to the reactions shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure meets the requirements per TIA/EIA-222-F and standards per 2003 IBC with 2005 CT Supplement. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-463-6281.

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:

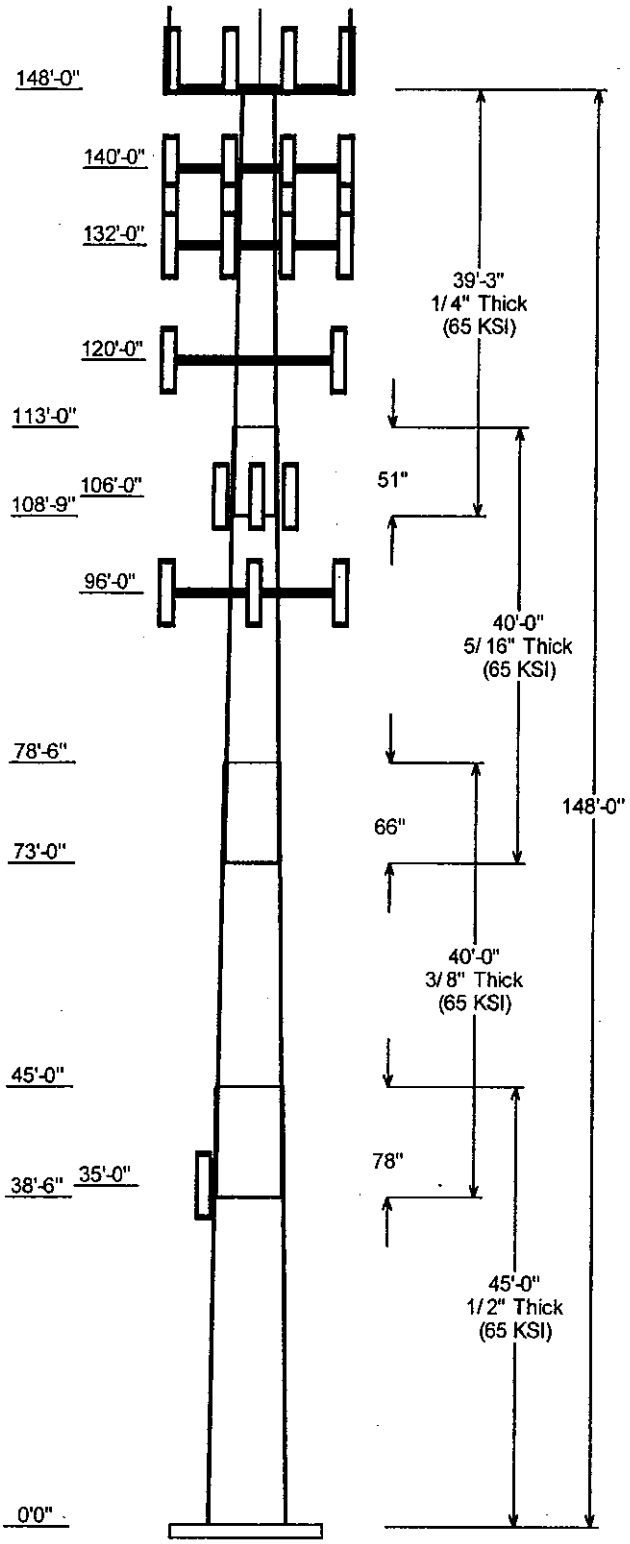
-- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.

-- 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 are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. 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. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

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.



Job Information

Pole :	302540	Code: TIA/EIA-222 Rev F	
Description :	148 ft Summit Monopole		
Client :	Verizon		
Location :	Madison CT 6, CT		
Shape :	18 Sides	Base Elev (ft):	0.00
Height :	148.00 (ft)	Taper:	0.263006(in/ft)

Sections Properties

Shaft Section	Length (ft)	Diameter (in) Accross Flats Top	Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	45.000	49.215	61.050	0.500		0.000	0.263006	65
2	40.000	41.154	51.674	0.375	Slip Joint	78.000	0.263006	65
3	40.000	32.705	43.225	0.313	Slip Joint	66.000	0.263006	65
4	39.250	24.000	34.323	0.250	Slip Joint	51.000	0.263006	65

Discrete Appurtenance

Attach Elev (ft)	Force Elev (ft)	Qty	Description
148.000	148.000	1	Flat Low Profile Platform
148.000	149.000	3	72" x 12" Panel
148.000	149.000	9	48" x 12" Panel
148.000	155.500	1	11' Dipole
148.000	153.000	2	6' Omni
140.000	140.000	6	Decibel 948F85T2E-M
140.000	140.000	1	Flat Low Profile Platform
140.000	140.000	2	Decibel DB844H90E-XY
140.000	140.000	2	Antel LPA-80063/6CF
140.000	140.000	2	Antel LPA-80080/6CF
132.000	132.000	1	Flat Low Profile Platform
132.000	132.000	3	14" x 9" TTA
132.000	133.000	9	72" x 12" Panel
132.000	132.000	6	ADC DD1900
132.000	132.000	3	Powerwave LGP13519
132.000	132.000	3	Allgon 7250
120.000	120.000	1	Flat Low Profile Platform
120.000	120.000	6	EMS RV90-17-02DP
106.000	106.000	3	52" x 8" Panel (Abandoned)
96.000	96.000	9	Decibel DB980F65E-M
96.000	96.000	1	Flat Low Profile Platform
35.000	35.000	1	GPS

Linear Appurtenance

Elev (ft) From	To	Description	Exposed To Wind
0.000	35.000	1/2" Coax	Yes
0.000	96.000	1 1/4" Coax	No
0.000	106.00	1 1/4" Coax	No
0.000	120.00	1 5/8" Coax	No
0.000	132.00	1 5/8" Coax	No
0.000	132.00	7/8" Coax	No
0.000	140.00	1 5/8" Coax	No
0.000	148.00	1 5/8" Coax	No
0.000	148.00	7/8" Coax	No

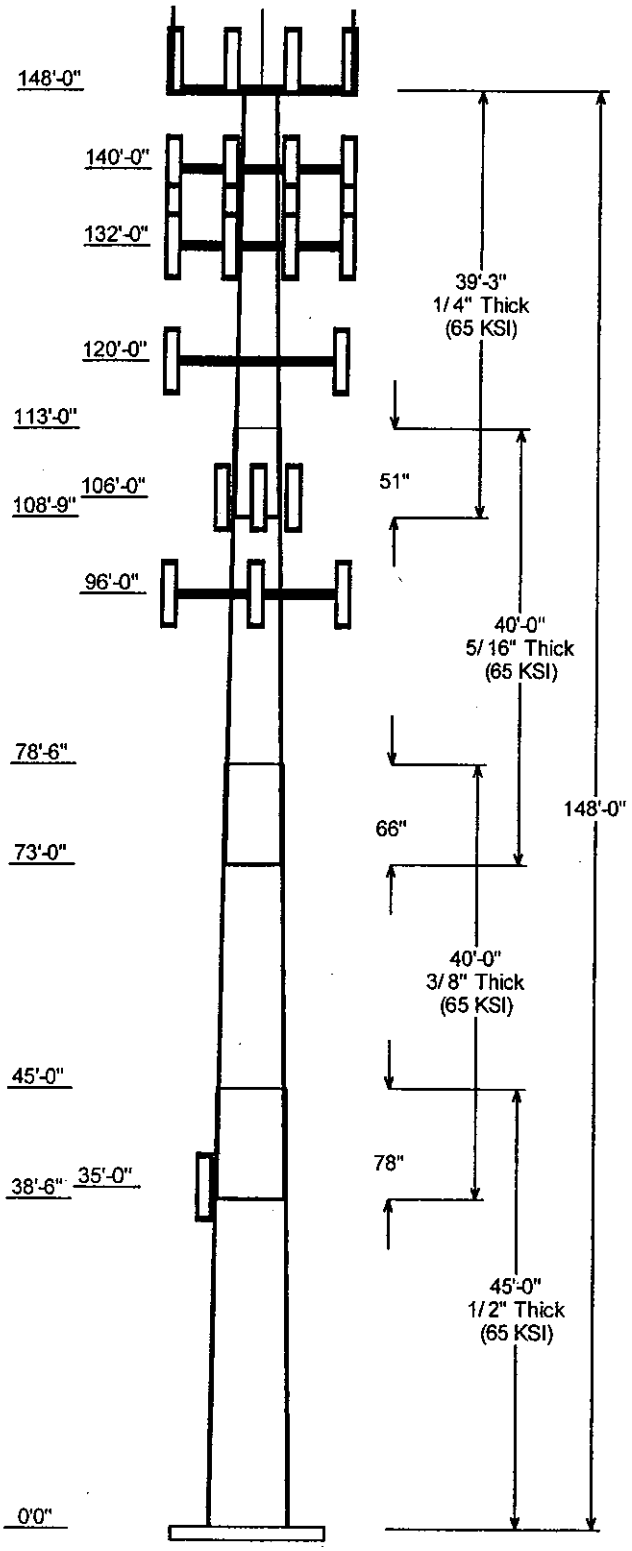
Load Cases

No Ice	95.00 mph Wind with No Ice
Ice	73.61 mph Wind with Ice

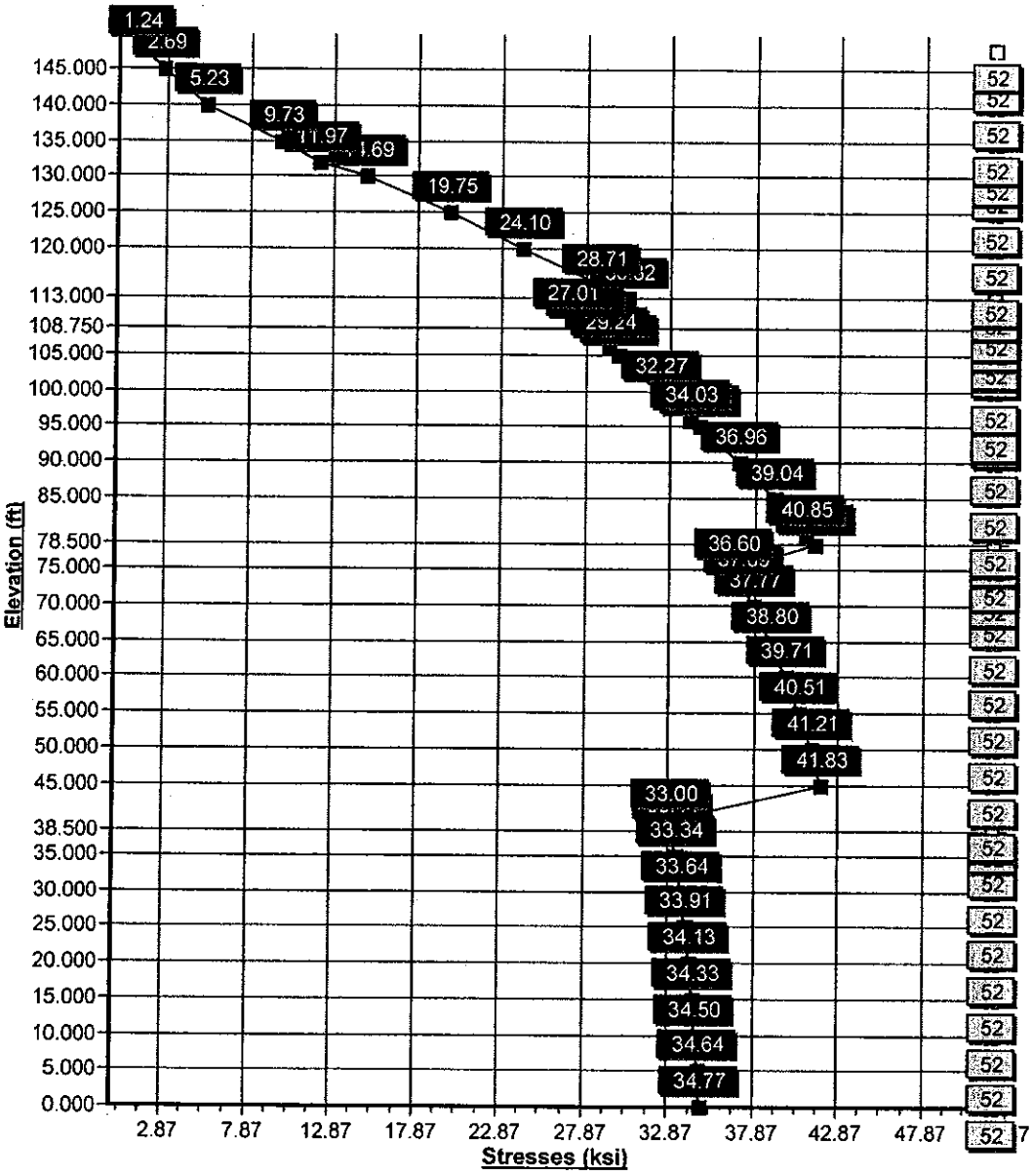
Reactions

Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)

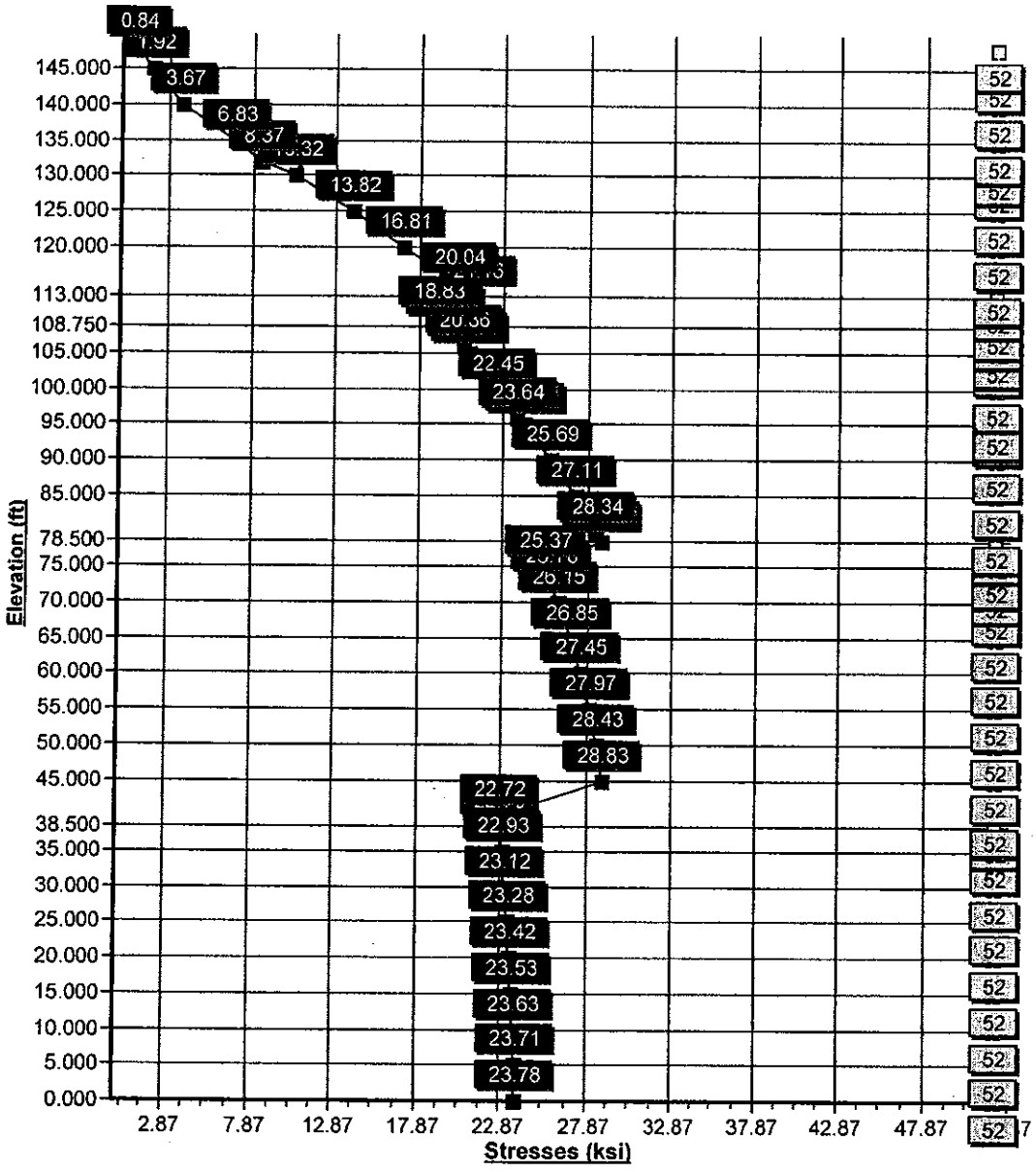
No Ice	4101.75	38.01	44.34
Ice	2780.03	25.32	51.19



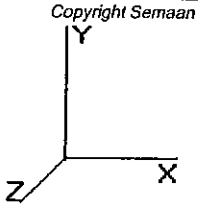
Load Case : No Ice
Max Stress 80.5% at 45.0ft



Load Case : Ice
Max Stress 55.5% at 45.0ft



Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		6/2/2008 3:51:50 PM
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	61.050 (in)		
Top Dia :	24.000 (in)		
Taper :	0.263006 (in/ft)	Base Elev : 0.000 (ft)	



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom Dia (in)	Bottom Elev (ft)	Bottom Area (sqin)	Bottom Ix (in^4)	Bottom W/t Ratio	Bottom D/t Ratio	Top Dia (in)	Top Elev (ft)	Top Area (sqin)	Top Ix (in^4)	Top W/t Ratio	Top D/t Ratio	Taper (in/ft)
1	45.000	0.5000	65		0.00	13,276	61.05	0.000	96.09	44509.7	20.12	122.10	49.215	45.00	77.31	23178.9	15.95	98.43	0.26301
2	40.000	0.3750	65	Slip Joint	78.00	7,458	51.67	38.50	61.06	20300.5	22.89	137.80	41.154	78.50	48.54	10197.2	17.94	109.74	0.26301
3	40.000	0.3125	65	Slip Joint	66.00	5,083	43.22	73.00	42.56	9902.8	22.98	138.32	32.705	113.0	32.13	4259.3	17.04	104.66	0.26301
4	39.250	0.2500	65	Slip Joint	51.00	3,064	34.32	108.7	27.04	3965.7	22.80	137.29	24.000	148.0	18.84	1343.0	15.52	96.00	0.26301
				Shaft Weight		28,881													

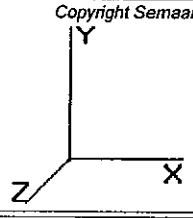
Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
148.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
148.00	72" x 12" Panel	3	45.00	8.400	0.75	92.28	9.230	0.75	0.000	1.000
148.00	48" x 12" Panel	9	30.00	5.600	0.75	63.00	6.190	0.75	0.000	1.000
148.00	11' Dipole	1	40.00	3.580	1.00	25.00	4.000	1.00	0.000	7.500
148.00	6' Omni	2	25.00	1.760	1.00	38.24	2.130	1.00	0.000	5.000
140.00	Decibel 948F85T2E-M	6	8.50	3.270	0.79	28.00	3.810	0.79	0.000	0.000
140.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
140.00	Decibel DB844H90E-XY	2	14.00	3.730	0.91	40.30	4.290	0.92	0.000	0.000
140.00	Antel LPA-80063/6CF	2	27.00	10.340	0.94	101.00	11.120	0.94	0.000	0.000
140.00	Antel LPA-80080/6CF	2	21.00	9.100	0.74	50.00	9.930	0.75	0.000	0.000
132.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
132.00	14" x 9" TTA	3	10.00	1.230	0.50	18.00	1.460	0.50	0.000	0.000
132.00	72" x 12" Panel	9	45.00	8.400	0.75	92.28	9.230	0.75	0.000	1.000
132.00	ADC DD1900	6	12.10	1.280	0.50	40.30	1.800	0.50	0.000	0.000
132.00	Powerwave LGP13519	3	5.00	0.340	0.50	14.00	0.440	0.50	0.000	0.000
132.00	Allgon 7250	3	15.00	4.000	0.73	35.00	4.710	0.77	0.000	0.000
120.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
120.00	EMS RV90-17-02DP	6	18.00	4.360	0.73	40.00	4.990	0.76	0.000	0.000
106.00	52" x 8" Panel (Abandoned)	3	30.00	4.040	0.75	60.00	4.500	0.75	0.000	0.000
96.00	Decibel DB980F65E-M	9	9.50	3.750	0.81	29.85	4.448	0.83	0.000	0.000
96.00	Flat Low Profile Platform	1	1500.00	26.100	1.00	1700.00	31.600	1.00	0.000	0.000
35.00	GPS	1	7.00	1.000	1.00	15.00	1.300	1.00	0.000	0.000
	Totals	75	9028.10			11972.91			Number of Loadings :	22

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	No Ice CaAa (sf/ft)	Ice Weight (lb/ft)	Ice CaAa (sf/ft)	Exposed To Wind
0.00	148.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	148.00	(3) 7/8" Coax	0.99	0.00	0.00	0.00	N
0.00	140.00	(12) 1 5/8" Coax	6.56	0.00	0.00	0.00	N
0.00	132.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	132.00	(12) 7/8" Coax	3.96	0.00	0.00	0.00	N
0.00	120.00	(12) 1 5/8" Coax	9.84	0.00	0.00	0.00	N
0.00	106.00	(6) 1 1/4" Coax	3.78	0.00	0.00	0.00	N
0.00	96.00	(9) 1 1/4" Coax	5.67	0.00	0.00	0.00	N
0.00	35.00	(1) 1/2" Coax	0.15	0.06	0.00	0.22	Y
		Total Weight	6,473.89 (lb)		0.00 (lb)		

Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		6/2/2008 3:51:51 PM
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	61.050 (in)		
Top Dia :	24.000 (in)		
Taper :	0.263006 (in/ft)	Base Elev : 0.000 (ft)	



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)	Fb (ksi)	Weight (lb)
0.00		0.5000	61.050	96.089	44,509.7	20.12	122.10	65	52	0.0
5.00		0.5000	59.735	94.002	41,672.2	19.66	119.47	65	52	1,617.1
10.00		0.5000	58.420	91.915	38,958.0	19.19	116.84	65	52	1,581.6
15.00		0.5000	57.105	89.829	36,364.2	18.73	114.21	65	52	1,546.1
20.00		0.5000	55.790	87.742	33,888.2	18.26	111.58	65	52	1,510.6
25.00		0.5000	54.475	85.655	31,527.3	17.80	108.95	65	52	1,475.1
30.00		0.5000	53.160	83.568	29,278.6	17.34	106.32	65	52	1,439.6
35.00		0.5000	51.845	81.481	27,139.4	16.87	103.69	65	52	1,404.1
38.50	Bot - Section 2	0.5000	50.924	80.020	25,705.8	16.55	101.85	65	52	961.7
40.00		0.5000	50.530	79.394	25,107.1	16.41	101.06	65	52	717.3
45.00	Top - Section 1	0.3750	49.965	59.022	18,337.8	22.08	133.24	65	52	2,350.6
50.00		0.3750	48.650	57.457	16,917.3	21.46	129.73	65	52	990.9
55.00		0.3750	47.335	55.892	15,572.1	20.85	126.23	65	52	964.2
60.00		0.3750	46.020	54.326	14,300.2	20.23	122.72	65	52	937.6
65.00		0.3750	44.705	52.761	13,099.5	19.61	119.21	65	52	911.0
70.00		0.3750	43.389	51.196	11,967.9	18.99	115.71	65	52	884.4
73.00	Bot - Section 3	0.3750	42.600	50.257	11,321.4	18.62	113.60	65	52	517.8
75.00		0.3750	42.074	49.631	10,903.5	18.37	112.20	65	52	627.8
78.50	Top - Section 2	0.3125	41.779	41.128	8,934.8	22.16	133.69	65	52	1,079.8
80.00		0.3125	41.384	40.737	8,682.2	21.94	132.43	65	52	208.9
85.00		0.3125	40.069	39.432	7,874.7	21.20	128.22	65	52	682.0
90.00		0.3125	38.754	38.128	7,118.8	20.46	124.01	65	52	659.8
95.00		0.3125	37.439	36.824	6,412.9	19.71	119.81	65	52	637.6
96.00		0.3125	37.176	36.563	6,277.6	19.57	118.96	65	52	124.9
100.00		0.3125	36.124	35.520	5,755.4	18.97	115.60	65	52	490.6
105.00		0.3125	34.809	34.215	5,144.3	18.23	111.39	65	52	593.2
106.00		0.3125	34.546	33.954	5,027.6	18.08	110.55	65	52	116.0
108.75	Bot - Section 4	0.3125	33.823	33.237	4,715.6	17.67	108.23	65	52	314.4
110.00		0.3125	33.494	32.911	4,578.2	17.49	107.18	65	52	255.1
113.00	Top - Section 3	0.2500	33.205	26.149	3,588.0	22.01	132.82	65	52	602.1
115.00		0.2500	32.679	25.732	3,419.0	21.64	130.72	65	52	176.5
120.00		0.2500	31.364	24.688	3,019.7	20.71	125.46	65	52	428.9
125.00		0.2500	30.049	23.645	2,652.7	19.78	120.20	65	52	411.2
130.00		0.2500	28.734	22.601	2,316.8	18.86	114.94	65	52	393.4
132.00		0.2500	28.208	22.184	2,190.8	18.48	112.83	65	52	152.4
135.00		0.2500	27.419	21.558	2,010.5	17.93	109.68	65	52	223.3
140.00		0.2500	26.104	20.514	1,732.5	17.00	104.42	65	52	357.9
145.00		0.2500	24.789	19.471	1,481.3	16.07	99.16	65	52	340.2
148.00		0.2500	24.000	18.845	1,343.0	15.52	96.00	65	52	195.6
										28,881.1

Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		6/2/2008 3:51:51 PM
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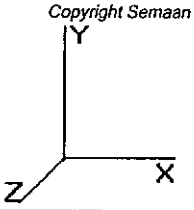
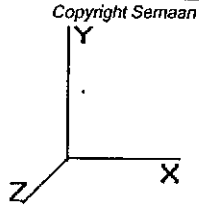


Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		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		0.00	1.00	23.104	39.046	483.31	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	23.104	39.046	472.90	0.650	0.000	5.00	25.163	16.36	638.6	0.0	1,617.1
10.00		0.00	1.00	23.104	39.046	462.49	0.650	0.000	5.00	24.616	16.00	624.7	0.0	1,581.6
15.00		0.00	1.00	23.104	39.046	452.08	0.650	0.000	5.00	24.068	15.64	610.8	0.0	1,546.1
20.00		0.00	1.00	23.104	39.046	441.66	0.650	0.000	5.00	23.520	15.29	596.9	0.0	1,510.6
25.00		0.00	1.00	23.104	39.046	431.25	0.650	0.000	5.00	22.972	14.93	583.0	0.0	1,475.1
30.00		0.00	1.00	23.104	39.046	420.84	0.650	0.000	5.00	22.424	14.58	569.1	0.0	1,439.6
35.00	Appertunance(s)	0.00	1.01	23.496	39.708	413.90	0.650	0.000	5.00	21.876	14.22	564.6	0.0	1,404.1
38.50	Bot - Section 2	0.00	1.04	24.144	40.804	412.12	0.650	0.000	3.50	14.987	9.74	397.5	0.0	961.7
40.00		0.00	1.05	24.409	41.252	411.17	0.650	0.000	1.50	6.435	4.18	172.5	0.0	717.3
45.00	Top - Section 1	0.00	1.09	25.245	42.664	407.26	0.650	0.000	5.00	21.093	13.71	584.9	0.0	2,350.6
50.00		0.00	1.12	26.016	43.968	408.69	0.650	0.000	5.00	20.545	13.35	587.1	0.0	990.9
55.00		0.00	1.15	26.735	45.181	403.10	0.650	0.000	5.00	19.997	13.00	587.3	0.0	964.2
60.00		0.00	1.18	27.407	46.319	396.80	0.650	0.000	5.00	19.449	12.64	585.5	0.0	937.6
65.00		0.00	1.21	28.042	47.390	389.89	0.650	0.000	5.00	18.901	12.29	582.2	0.0	911.0
70.00		0.00	1.24	28.642	48.404	382.45	0.650	0.000	5.00	18.353	11.93	577.4	0.0	884.4
73.00	Bot - Section 3	0.00	1.25	28.987	48.988	377.75	0.650	0.000	3.00	10.749	6.99	342.3	0.0	517.8
75.00		0.00	1.26	29.212	49.368	374.53	0.650	0.000	2.00	7.160	4.65	229.8	0.0	627.8
78.50	Top - Section 2	0.00	1.28	29.595	50.015	368.73	0.650	0.000	3.50	12.320	8.01	400.5	0.0	1,079.8
80.00		0.00	1.28	29.755	50.287	371.80	0.650	0.000	1.50	5.198	3.38	169.9	0.0	208.9
85.00		0.00	1.31	30.275	51.165	363.12	0.650	0.000	5.00	16.970	11.03	564.4	0.0	682.0
90.00		0.00	1.33	30.774	52.008	354.08	0.650	0.000	5.00	16.422	10.67	555.1	0.0	659.8
95.00		0.00	1.35	31.253	52.817	344.72	0.650	0.000	5.00	15.874	10.32	545.0	0.0	637.6
96.00	Appertunance(s)	0.00	1.35	31.347	52.976	342.81	0.650	0.000	1.00	3.109	2.02	107.1	0.0	124.9
100.0		0.00	1.37	31.714	53.597	335.06	0.650	0.000	4.00	12.217	7.94	425.6	0.0	490.6
105.0		0.00	1.39	32.159	54.349	325.12	0.650	0.000	5.00	14.778	9.61	522.1	0.0	593.2
106.0	Appertunance(s)	0.00	1.39	32.247	54.497	323.10	0.650	0.000	1.00	2.890	1.88	102.4	0.0	116.0
108.7	Bot - Section 4	0.00	1.40	32.484	54.897	317.49	0.650	0.000	2.75	7.834	5.09	279.5	0.0	314.4
110.0		0.00	1.41	32.590	55.077	314.92	0.650	0.000	1.25	3.558	2.31	127.4	0.0	255.1
113.0	Top - Section 3	0.00	1.42	32.841	55.502	308.69	0.650	0.000	3.00	8.400	5.46	303.0	0.0	602.1
115.0		0.00	1.42	33.006	55.781	309.22	0.650	0.000	2.00	5.490	3.57	199.1	0.0	176.5
120.0	Appertunance(s)	0.00	1.44	33.410	56.463	298.58	0.650	0.000	5.00	13.342	8.67	489.7	0.0	428.9
125.0		0.00	1.46	33.802	57.125	287.74	0.650	0.000	5.00	12.794	8.32	475.1	0.0	411.2
130.0		0.00	1.48	34.183	57.769	276.69	0.650	0.000	5.00	12.247	7.96	459.9	0.0	393.4
132.0	Appertunance(s)	0.00	1.48	34.332	58.022	272.22	0.650	0.000	2.00	4.745	3.08	179.0	0.0	152.4
135.0		0.00	1.49	34.554	58.396	265.45	0.650	0.000	3.00	6.953	4.52	263.9	0.0	223.3
140.0	Appertunance(s)	0.00	1.51	34.914	59.005	254.04	0.650	0.000	5.00	11.151	7.25	427.7	0.0	357.9
145.0		0.00	1.52	35.266	59.600	242.45	0.650	0.000	5.00	10.603	6.89	410.7	0.0	340.2
148.0	Appertunance(s)	0.00	1.53	35.473	59.950	235.42	0.650	0.000	3.00	6.099	3.96	237.6	0.0	195.6
							Totals:		148.00			16,079.0	0.0	28,881.1

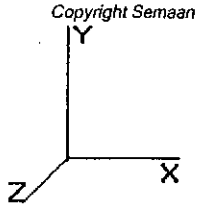


Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
35.00	GPS	1	23.496	39.708	1.00	1.00	0.000	0.000	39.71	0.00	0.00	7.00
96.00	Decibel DB980F65E-M	9	31.347	52.976	0.81	27.34	0.000	0.000	1,448.22	0.00	0.00	85.50
96.00	Flat Low Profile Pla	1	31.347	52.976	1.00	26.10	0.000	0.000	1,382.66	0.00	0.00	1,500.00
106.0	52" x 8" Panel (Aban	3	32.247	54.497	0.75	9.09	0.000	0.000	495.38	0.00	0.00	90.00
120.0	Flat Low Profile Pla	1	33.410	56.463	1.00	26.10	0.000	0.000	1,473.69	0.00	0.00	1,500.00
120.0	EMS RV90-17-02DP	6	33.410	56.463	0.73	19.10	0.000	0.000	1,078.26	0.00	0.00	108.00
132.0	Flat Low Profile Pla	1	34.332	58.022	1.00	26.10	0.000	0.000	1,514.37	0.00	0.00	1,500.00
132.0	14" x 9" TTA	3	34.332	58.022	0.50	1.85	0.000	0.000	107.05	0.00	0.00	30.00
132.0	72" x 12" Panel	9	34.407	58.147	0.75	56.70	0.000	1.000	3,296.90	0.00	3,296.90	405.00
132.0	ADC DD1900	6	34.332	58.022	0.50	3.84	0.000	0.000	222.80	0.00	0.00	72.60
132.0	Powerwave LGP13519	3	34.332	58.022	0.50	0.51	0.000	0.000	29.59	0.00	0.00	15.00
132.0	Allgon 7250	3	34.332	58.022	0.73	8.76	0.000	0.000	508.27	0.00	0.00	45.00
140.0	Decibel 948F85T2E-M	6	34.914	59.005	0.79	15.50	0.000	0.000	914.57	0.00	0.00	51.00
140.0	Flat Low Profile Pla	1	34.914	59.005	1.00	26.10	0.000	0.000	1,540.04	0.00	0.00	1,500.00
140.0	Decibel DB844H90E-	2	34.914	59.005	0.91	6.79	0.000	0.000	400.56	0.00	0.00	28.00
140.0	Antel LPA-80063/6CF	2	34.914	59.005	0.94	19.44	0.000	0.000	1,147.02	0.00	0.00	54.00
140.0	Antel LPA-80080/6CF	2	34.914	59.005	0.74	13.47	0.000	0.000	794.69	0.00	0.00	42.00
148.0	Flat Low Profile Pla	1	35.473	59.950	1.00	26.10	0.000	0.000	1,564.69	0.00	0.00	1,500.00
148.0	72" x 12" Panel	3	35.542	60.065	0.75	18.90	0.000	1.000	1,135.23	0.00	1,135.23	135.00
148.0	48" x 12" Panel	9	35.542	60.065	0.75	37.80	0.000	1.000	2,270.47	0.00	2,270.47	270.00
148.0	11' Dipole	1	35.978	60.803	1.00	3.58	0.000	7.500	217.67	0.00	1,632.55	40.00
148.0	6' Omni	2	35.812	60.522	1.00	3.52	0.000	5.000	213.04	0.00	1,065.18	50.00
									21,794.88			9,028.10

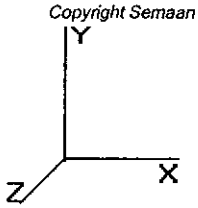


Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	F X (lb)	Dead Load (lb)
5.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
10.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
15.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
20.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
25.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
30.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.104	11.71	0.75
35.00	(1) 1/2" Coax	Yes	5.00	0.15	0.06	23.496	11.91	0.75
						Totals:	82.19	5.25



Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

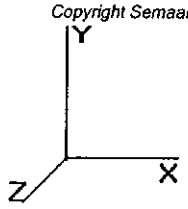
Applied Segment Forces Summary

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	650.36	1,870.25	0.00	0.00
10.00	636.45	1,834.74	0.00	0.00
15.00	622.54	1,799.24	0.00	0.00
20.00	608.64	1,763.73	0.00	0.00
25.00	594.73	1,728.22	0.00	0.00
30.00	580.83	1,692.72	0.00	0.00
35.00	616.24	1,664.21	0.00	0.00
38.50	397.50	1,138.40	0.00	0.00
40.00	172.54	793.00	0.00	0.00
45.00	584.93	2,602.96	0.00	0.00
50.00	587.14	1,243.28	0.00	0.00
55.00	587.26	1,216.65	0.00	0.00
60.00	585.55	1,190.02	0.00	0.00
65.00	582.21	1,163.39	0.00	0.00
70.00	577.43	1,136.76	0.00	0.00
73.00	342.26	669.27	0.00	0.00
75.00	229.77	728.74	0.00	0.00
78.50	400.52	1,256.51	0.00	0.00
80.00	169.89	284.65	0.00	0.00
85.00	564.36	934.39	0.00	0.00
90.00	555.13	912.20	0.00	0.00
95.00	544.96	890.01	0.00	0.00
96.00	2,937.94	1,760.84	0.00	0.00
100.0	425.61	669.80	0.00	0.00
105.0	522.06	817.28	0.00	0.00
106.0	597.74	250.79	0.00	0.00
108.7	279.54	427.21	0.00	0.00
110.0	127.38	306.41	0.00	0.00
113.0	303.04	725.19	0.00	0.00
115.0	199.07	258.60	0.00	0.00
120.0	3,041.63	2,242.07	0.00	0.00
125.0	475.08	567.12	0.00	0.00
130.0	459.86	549.36	0.00	0.00
132.0	5,857.94	2,282.37	0.00	3,296.90
135.0	263.93	275.44	0.00	0.00
140.0	5,224.55	2,119.86	0.00	0.00
145.0	410.75	394.30	0.00	0.00
148.0	5,638.74	2,223.06	0.00	6,103.43
Totals:	37,956.10	44,383.06	0.00	9,400.32

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 61.050 (in)
Top Dia : 24.000 (in)
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



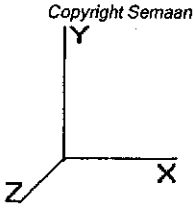
Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-38.006	-44.339	0.000	0.000	0.000	-4,101.752	0.000	0.000	0.000	0.000
5.00	-37.450	-42.385	0.000	0.000	0.000	-3,911.723	-0.069	0.000	0.069	-0.128
10.00	-36.900	-40.468	0.000	0.000	0.000	-3,724.477	-0.274	0.000	0.274	-0.258
15.00	-36.357	-38.588	0.000	0.000	0.000	-3,539.981	-0.616	0.000	0.616	-0.391
20.00	-35.822	-36.744	0.000	0.000	0.000	-3,358.197	-1.098	0.000	1.098	-0.526
25.00	-35.294	-34.937	0.000	0.000	0.000	-3,179.089	-1.723	0.000	1.723	-0.663
30.00	-34.773	-33.167	0.000	0.000	0.000	-3,002.623	-2.493	0.000	2.493	-0.803
35.00	-34.198	-31.440	0.000	0.000	0.000	-2,828.762	-3.410	0.000	3.410	-0.944
38.50	-33.819	-30.265	0.000	0.000	0.000	-2,709.071	-4.141	0.000	4.141	-1.046
40.00	-33.681	-29.419	0.000	0.000	0.000	-2,658.343	-4.477	0.000	4.477	-1.090
45.00	-33.112	-26.744	0.000	0.000	0.000	-2,489.941	-5.698	0.000	5.698	-1.236
50.00	-32.572	-25.419	0.000	0.000	0.000	-2,324.383	-7.072	0.000	7.072	-1.384
55.00	-32.033	-24.112	0.000	0.000	0.000	-2,161.528	-8.624	0.000	8.624	-1.573
60.00	-31.489	-22.835	0.000	0.000	0.000	-2,001.366	-10.374	0.000	10.374	-1.763
65.00	-30.942	-21.587	0.000	0.000	0.000	-1,843.922	-12.323	0.000	12.323	-1.954
70.00	-30.379	-20.391	0.000	0.000	0.000	-1,689.215	-14.473	0.000	14.473	-2.146
73.00	-30.045	-19.684	0.000	0.000	0.000	-1,598.079	-15.860	0.000	15.860	-2.263
75.00	-29.822	-18.909	0.000	0.000	0.000	-1,537.991	-16.825	0.000	16.825	-2.342
78.50	-29.398	-17.621	0.000	0.000	0.000	-1,433.617	-18.593	0.000	18.593	-2.478
80.00	-29.258	-17.272	0.000	0.000	0.000	-1,389.520	-19.381	0.000	19.381	-2.537
85.00	-28.712	-16.258	0.000	0.000	0.000	-1,243.231	-22.155	0.000	22.155	-2.752
90.00	-28.168	-15.272	0.000	0.000	0.000	-1,099.672	-25.152	0.000	25.152	-2.964
95.00	-27.607	-14.354	0.000	0.000	0.000	-958.833	-28.367	0.000	28.367	-3.170
96.00	-24.598	-12.716	0.000	0.000	0.000	-931.227	-29.035	0.000	29.035	-3.212
100.0	-24.172	-11.997	0.000	0.000	0.000	-832.836	-31.795	0.000	31.795	-3.371
105.0	-23.623	-11.167	0.000	0.000	0.000	-711.979	-35.428	0.000	35.428	-3.562
106.0	-23.024	-10.925	0.000	0.000	0.000	-688.357	-36.179	0.000	36.179	-3.601
108.7	-22.732	-10.488	0.000	0.000	0.000	-625.040	-38.283	0.000	38.283	-3.703
110.0	-22.598	-10.160	0.000	0.000	0.000	-596.626	-39.258	0.000	39.258	-3.749
113.0	-22.262	-9.423	0.000	0.000	0.000	-528.832	-41.648	0.000	41.648	-3.854
115.0	-22.066	-9.130	0.000	0.000	0.000	-484.308	-43.276	0.000	43.276	-3.922
120.0	-18.895	-7.052	0.000	0.000	0.000	-373.979	-47.481	0.000	47.481	-4.100
125.0	-18.396	-6.476	0.000	0.000	0.000	-279.503	-51.859	0.000	51.859	-4.254
130.0	-17.904	-5.938	0.000	0.000	0.000	-187.524	-56.382	0.000	56.382	-4.380
132.0	-11.892	-4.102	0.000	0.000	0.000	-148.418	-58.225	0.000	58.225	-4.421
135.0	-11.611	-3.837	0.000	0.000	0.000	-112.743	-61.019	0.000	61.019	-4.472
140.0	-6.238	-2.129	0.000	0.000	0.000	-54.687	-65.734	0.000	65.734	-4.531
145.0	-5.798	-1.767	0.000	0.000	0.000	-23.497	-70.494	0.000	70.494	-4.563
148.0	-5.639	0.000	0.000	0.000	0.000	-6.103	-73.362	0.000	73.362	-4.572

Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	61.050 (in)		
Top Dia :	24.000 (in)		
Taper :	0.263006 (in/ft)	Base Elev : 0.000 (ft)	



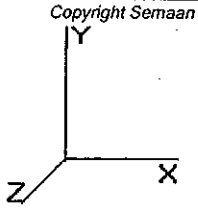
Load Case: No Ice — 95.00 mph Wind with No Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.46	0.80	0.00	0.00	0.00	34.28	34.77	52.0	0.0	0.669
5.00	0.45	0.80	0.00	0.00	0.00	34.16	34.64	52.0	0.0	0.666
10.00	0.44	0.81	0.00	0.00	0.00	34.03	34.50	52.0	0.0	0.664
15.00	0.43	0.82	0.00	0.00	0.00	33.87	34.33	52.0	0.0	0.660
20.00	0.42	0.82	0.00	0.00	0.00	33.68	34.13	52.0	0.0	0.657
25.00	0.41	0.83	0.00	0.00	0.00	33.47	33.91	52.0	0.0	0.652
30.00	0.40	0.84	0.00	0.00	0.00	33.21	33.64	52.0	0.0	0.647
35.00	0.39	0.85	0.00	0.00	0.00	32.92	33.34	52.0	0.0	0.641
38.50	0.38	0.85	0.00	0.00	0.00	32.70	33.11	52.0	0.0	0.637
40.00	0.37	0.85	0.00	0.00	0.00	32.60	33.00	52.0	0.0	0.635
45.00	0.45	1.13	0.00	0.00	0.00	41.33	41.83	52.0	0.0	0.805
50.00	0.44	1.14	0.00	0.00	0.00	40.72	41.21	52.0	0.0	0.793
55.00	0.43	1.16	0.00	0.00	0.00	40.03	40.51	52.0	0.0	0.779
60.00	0.42	1.17	0.00	0.00	0.00	39.24	39.71	52.0	0.0	0.764
65.00	0.41	1.18	0.00	0.00	0.00	38.34	38.80	52.0	0.0	0.747
70.00	0.40	1.20	0.00	0.00	0.00	37.31	37.77	52.0	0.0	0.727
73.00	0.39	1.20	0.00	0.00	0.00	36.64	37.09	52.0	0.0	0.714
75.00	0.38	1.21	0.00	0.00	0.00	36.16	36.60	52.0	0.0	0.704
78.50	0.43	1.44	0.00	0.00	0.00	40.84	41.35	52.0	0.0	0.795
80.00	0.42	1.45	0.00	0.00	0.00	40.35	40.85	52.0	0.0	0.786
85.00	0.41	1.47	0.00	0.00	0.00	38.54	39.04	52.0	0.0	0.751
90.00	0.40	1.49	0.00	0.00	0.00	36.47	36.96	52.0	0.0	0.711
95.00	0.39	1.51	0.00	0.00	0.00	34.10	34.59	52.0	0.0	0.666
96.00	0.35	1.36	0.00	0.00	0.00	33.60	34.03	52.0	0.0	0.655
100.00	0.34	1.37	0.00	0.00	0.00	31.85	32.27	52.0	0.0	0.621
105.00	0.33	1.39	0.00	0.00	0.00	29.35	29.78	52.0	0.0	0.573
106.00	0.32	1.37	0.00	0.00	0.00	28.82	29.24	52.0	0.0	0.562
108.75	0.32	1.38	0.00	0.00	0.00	27.31	27.73	52.0	0.0	0.534
110.00	0.31	1.38	0.00	0.00	0.00	26.59	27.01	52.0	0.0	0.520
113.00	0.36	1.72	0.00	0.00	0.00	29.82	30.32	52.0	0.0	0.583
115.00	0.35	1.73	0.00	0.00	0.00	28.20	28.71	52.0	0.0	0.552
120.00	0.29	1.54	0.00	0.00	0.00	23.67	24.10	52.0	0.0	0.464
125.00	0.27	1.57	0.00	0.00	0.00	19.29	19.75	52.0	0.0	0.380
130.00	0.26	1.60	0.00	0.00	0.00	14.17	14.69	52.0	0.0	0.283
132.00	0.18	1.08	0.00	0.00	0.00	11.64	11.97	52.0	0.0	0.230
135.00	0.18	1.09	0.00	0.00	0.00	9.37	9.73	52.0	0.0	0.187
140.00	0.10	0.61	0.00	0.00	0.00	5.02	5.23	52.0	0.0	0.101
145.00	0.09	0.60	0.00	0.00	0.00	2.40	2.69	52.0	0.0	0.052
148.00	0.00	0.60	0.00	0.00	0.00	0.66	1.24	52.0	0.0	0.024

Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	61.050 (in)		
Top Dia :	24.000 (in)		
Taper :	0.263006 (in/ft)	Base Elev : 0.000 (ft)	

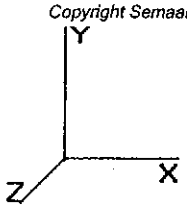


Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Shaft Segment Forces

Seg Top Elev (ft)	Description		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		0.00	1.00	13.871	23.442	374.49	0.650	0.500	0.00	0.000	0.00	0.0	0.0	0.0
5.00		0.00	1.00	13.871	23.442	366.42	0.650	0.500	5.00	25.580	16.63	389.8	185.9	1,803.0
10.00		0.00	1.00	13.871	23.442	358.35	0.650	0.500	5.00	25.032	16.27	381.4	181.8	1,763.4
15.00		0.00	1.00	13.871	23.442	350.29	0.650	0.500	5.00	24.484	15.91	373.1	177.8	1,723.8
20.00		0.00	1.00	13.871	23.442	342.22	0.650	0.500	5.00	23.936	15.56	364.7	173.7	1,684.3
25.00		0.00	1.00	13.871	23.442	334.15	0.650	0.500	5.00	23.388	15.20	356.4	169.6	1,644.7
30.00		0.00	1.00	13.871	23.442	326.09	0.650	0.500	5.00	22.841	14.85	348.0	165.6	1,605.1
35.00	Appertunance(s)	0.00	1.01	14.106	23.840	320.70	0.650	0.500	5.00	22.293	14.49	345.4	161.5	1,565.6
38.50	Bot - Section 2	0.00	1.04	14.496	24.498	319.33	0.650	0.500	3.50	15.279	9.93	243.3	111.1	1,072.8
40.00		0.00	1.05	14.655	24.767	318.59	0.650	0.500	1.50	6.560	4.26	105.6	47.9	765.2
45.00	Top - Section 1	0.00	1.09	15.156	25.614	315.56	0.650	0.500	5.00	21.509	13.98	358.1	155.7	2,506.3
50.00		0.00	1.12	15.620	26.397	316.67	0.650	0.500	5.00	20.961	13.62	359.7	151.7	1,142.5
55.00		0.00	1.15	16.051	27.126	312.33	0.650	0.500	5.00	20.413	13.27	359.9	147.6	1,111.9
60.00		0.00	1.18	16.455	27.809	307.46	0.650	0.500	5.00	19.865	12.91	359.1	143.5	1,081.2
65.00		0.00	1.21	16.836	28.452	302.10	0.650	0.500	5.00	19.318	12.56	357.3	139.5	1,050.5
70.00		0.00	1.24	17.196	29.061	296.34	0.650	0.500	5.00	18.770	12.20	354.5	135.4	1,019.8
73.00	Bot - Section 3	0.00	1.25	17.403	29.411	292.70	0.650	0.500	3.00	10.999	7.15	210.3	79.8	597.6
75.00		0.00	1.26	17.538	29.639	290.20	0.650	0.500	2.00	7.327	4.76	141.2	53.3	681.1
78.50	Top - Section 2	0.00	1.28	17.768	30.028	285.71	0.650	0.500	3.50	12.611	8.20	246.2	91.3	1,171.1
80.00		0.00	1.28	17.865	30.191	288.09	0.650	0.500	1.50	5.323	3.46	104.5	38.8	247.7
85.00		0.00	1.31	18.177	30.719	281.36	0.650	0.500	5.00	17.386	11.30	347.2	125.2	807.2
90.00		0.00	1.33	18.476	31.224	274.36	0.650	0.500	5.00	16.838	10.94	341.7	121.1	780.9
95.00		0.00	1.35	18.764	31.710	267.10	0.650	0.500	5.00	16.290	10.59	335.8	117.1	754.7
96.00	Appertunance(s)	0.00	1.35	18.820	31.805	265.62	0.650	0.500	1.00	3.192	2.08	66.0	23.3	148.1
100.0		0.00	1.37	19.041	32.179	259.62	0.650	0.500	4.00	12.550	8.16	262.5	90.4	581.0
105.0		0.00	1.39	19.308	32.630	251.91	0.650	0.500	5.00	15.194	9.88	322.3	109.0	702.2
106.0	Appertunance(s)	0.00	1.39	19.360	32.719	250.35	0.650	0.500	1.00	2.973	1.93	63.2	21.6	137.6
108.7	Bot - Section 4	0.00	1.40	19.502	32.959	246.01	0.650	0.500	2.75	8.063	5.24	172.7	58.3	372.6
110.0		0.00	1.41	19.566	33.067	244.01	0.650	0.500	1.25	3.662	2.38	78.7	26.6	281.7
113.0	Top - Section 3	0.00	1.42	19.717	33.322	239.18	0.650	0.500	3.00	8.650	5.62	187.4	62.4	664.5
115.0		0.00	1.42	19.816	33.490	239.59	0.650	0.500	2.00	5.657	3.68	123.1	41.0	217.5
120.0	Appertunance(s)	0.00	1.44	20.059	33.899	231.35	0.650	0.500	5.00	13.759	8.94	303.2	98.3	527.2
125.0		0.00	1.46	20.294	34.297	222.95	0.650	0.500	5.00	13.211	8.59	294.5	94.3	505.4
130.0		0.00	1.48	20.523	34.683	214.39	0.650	0.500	5.00	12.663	8.23	285.5	90.2	483.6
132.0	Appertunance(s)	0.00	1.48	20.612	34.835	210.93	0.650	0.500	2.00	4.912	3.19	111.2	35.4	187.8
135.0		0.00	1.49	20.745	35.059	205.68	0.650	0.500	3.00	7.203	4.68	164.2	51.7	275.0
140.0	Appertunance(s)	0.00	1.51	20.962	35.426	196.84	0.650	0.500	5.00	11.567	7.52	266.4	82.1	440.0
145.0		0.00	1.52	21.173	35.783	187.86	0.650	0.500	5.00	11.019	7.16	256.3	78.0	418.2
148.0	Appertunance(s)	0.00	1.53	21.297	35.993	182.42	0.650	0.500	3.00	6.349	4.13	148.5	45.4	240.9
							Totals:		148.00			9,888.7	3,882.8	32,763.9

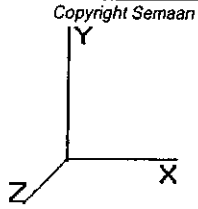


Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
35.00	GPS	1	14.106	23.840	1.00	1.30	0.000	0.000	30.99	0.00	0.00	15.00
96.00	Decibel DB980F65E-M	9	18.820	31.805	0.83	33.23	0.000	0.000	1,056.78	0.00	0.00	268.67
96.00	Flat Low Profile Pla	1	18.820	31.805	1.00	31.60	0.000	0.000	1,005.05	0.00	0.00	1,700.00
106.0	52" x 8" Panel (Aban	3	19.360	32.719	0.75	10.13	0.000	0.000	331.28	0.00	0.00	180.00
120.0	Flat Low Profile Pla	1	20.059	33.899	1.00	31.60	0.000	0.000	1,071.22	0.00	0.00	1,700.00
120.0	EMS RV90-17-02DP	6	20.059	33.899	0.76	22.75	0.000	0.000	771.36	0.00	0.00	240.00
132.0	Flat Low Profile Pla	1	20.612	34.835	1.00	31.60	0.000	0.000	1,100.79	0.00	0.00	1,700.00
132.0	14" x 9" TTA	3	20.612	34.835	0.50	2.19	0.000	0.000	76.29	0.00	0.00	54.00
132.0	72" x 12" Panel	9	20.657	34.910	0.75	62.30	0.000	1.000	2,174.97	0.00	2,174.97	830.52
132.0	ADC DD1900	6	20.612	34.835	0.50	5.40	0.000	0.000	188.11	0.00	0.00	241.80
132.0	Powerwave LGP13519	3	20.612	34.835	0.50	0.66	0.000	0.000	22.99	0.00	0.00	42.00
132.0	Allgon 7250	3	20.612	34.835	0.77	10.88	0.000	0.000	379.01	0.00	0.00	105.00
140.0	Decibel 948F85T2E-M	6	20.962	35.426	0.79	18.06	0.000	0.000	639.77	0.00	0.00	168.00
140.0	Flat Low Profile Pla	1	20.962	35.426	1.00	31.60	0.000	0.000	1,119.45	0.00	0.00	1,700.00
140.0	Decibel DB844H90E-	2	20.962	35.426	0.92	7.89	0.000	0.000	279.63	0.00	0.00	80.60
140.0	Antel LPA-80063/6CF	2	20.962	35.426	0.94	20.91	0.000	0.000	740.58	0.00	0.00	202.00
140.0	Antel LPA-80080/6CF	2	20.962	35.426	0.75	14.90	0.000	0.000	527.66	0.00	0.00	100.00
148.0	Flat Low Profile Pla	1	21.297	35.993	1.00	31.60	0.000	0.000	1,137.37	0.00	0.00	1,700.00
148.0	72" x 12" Panel	3	21.338	36.062	0.75	20.77	0.000	1.000	748.92	0.00	748.92	276.84
148.0	48" x 12" Panel	9	21.338	36.062	0.75	41.78	0.000	1.000	1,506.76	0.00	1,506.76	567.00
148.0	11' Dipole	1	21.600	36.505	1.00	4.00	0.000	7.500	146.02	0.00	1,095.14	25.00
148.0	6' Omni	2	21.501	36.336	1.00	4.26	0.000	5.000	154.79	0.00	773.95	76.48
									15,209.77			11,972.91

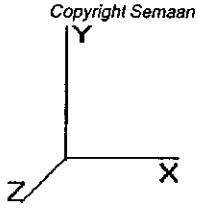


Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Linear Appurtenance Segment Forces

Seg Top Elev (ft)	Description	Exposed To Wind	Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	F X (lb)	Dead Load (lb)
5.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
10.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
15.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
20.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
25.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
30.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	13.871	25.79	0.00
35.00	(1) 1/2" Coax	Yes	5.00	0.00	0.22	14.106	26.22	0.00
						Totals:	180.94	0.00



Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

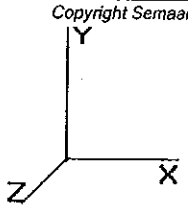
Applied Segment Forces Summary

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	415.56	2,055.37	0.00	0.00
10.00	407.21	2,015.80	0.00	0.00
15.00	398.86	1,976.24	0.00	0.00
20.00	390.52	1,936.68	0.00	0.00
25.00	382.17	1,897.11	0.00	0.00
30.00	373.82	1,857.55	0.00	0.00
35.00	402.66	1,832.98	0.00	0.00
38.50	243.29	1,249.47	0.00	0.00
40.00	105.60	840.94	0.00	0.00
45.00	358.12	2,758.68	0.00	0.00
50.00	359.66	1,394.94	0.00	0.00
55.00	359.93	1,364.25	0.00	0.00
60.00	359.08	1,333.57	0.00	0.00
65.00	357.25	1,302.88	0.00	0.00
70.00	354.55	1,272.19	0.00	0.00
73.00	210.27	749.07	0.00	0.00
75.00	141.16	782.07	0.00	0.00
78.50	246.15	1,347.83	0.00	0.00
80.00	104.45	323.42	0.00	0.00
85.00	347.15	1,059.58	0.00	0.00
90.00	341.75	1,033.33	0.00	0.00
95.00	335.77	1,007.08	0.00	0.00
96.00	2,127.83	2,167.26	0.00	0.00
100.0	262.50	760.21	0.00	0.00
105.0	322.27	926.23	0.00	0.00
106.0	394.51	362.42	0.00	0.00
108.7	172.74	485.46	0.00	0.00
110.0	78.72	333.02	0.00	0.00
113.0	187.35	787.60	0.00	0.00
115.0	123.14	299.55	0.00	0.00
120.0	2,145.75	2,672.39	0.00	0.00
125.0	294.52	661.38	0.00	0.00
130.0	285.48	639.57	0.00	0.00
132.0	4,053.37	3,223.53	0.00	2,174.97
135.0	164.16	327.13	0.00	0.00
140.0	3,573.45	2,777.55	0.00	0.00
145.0	256.30	472.34	0.00	0.00
148.0	3,842.37	2,918.74	0.00	4,124.76
Totals:	25,279.43	51,205.41	0.00	6,299.73

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 61.050 (in)
Top Dia : 24.000 (in)
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

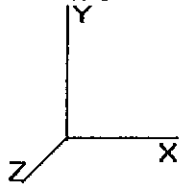
Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-25.319	-51.186	0.000	0.000	0.000	-2,780.028	0.000	0.000	0.000	0.000
5.00	-24.977	-49.092	0.000	0.000	0.000	-2,653.436	-0.047	0.000	0.047	-0.087
10.00	-24.638	-47.039	0.000	0.000	0.000	-2,528.554	-0.186	0.000	0.186	-0.175
15.00	-24.303	-45.026	0.000	0.000	0.000	-2,405.365	-0.418	0.000	0.418	-0.265
20.00	-23.972	-43.053	0.000	0.000	0.000	-2,283.850	-0.745	0.000	0.745	-0.357
25.00	-23.644	-41.120	0.000	0.000	0.000	-2,163.993	-1.170	0.000	1.170	-0.450
30.00	-23.320	-39.227	0.000	0.000	0.000	-2,045.775	-1.693	0.000	1.693	-0.545
35.00	-22.952	-37.365	0.000	0.000	0.000	-1,929.180	-2.316	0.000	2.316	-0.642
38.50	-22.725	-36.099	0.000	0.000	0.000	-1,848.850	-2.813	0.000	2.813	-0.711
40.00	-22.649	-35.233	0.000	0.000	0.000	-1,814.763	-3.041	0.000	3.041	-0.742
45.00	-22.310	-32.441	0.000	0.000	0.000	-1,701.519	-3.872	0.000	3.872	-0.841
50.00	-21.991	-31.007	0.000	0.000	0.000	-1,589.972	-4.808	0.000	4.808	-0.942
55.00	-21.674	-29.600	0.000	0.000	0.000	-1,480.020	-5.864	0.000	5.864	-1.071
60.00	-21.353	-28.226	0.000	0.000	0.000	-1,371.651	-7.057	0.000	7.057	-1.202
65.00	-21.029	-26.883	0.000	0.000	0.000	-1,264.888	-8.386	0.000	8.386	-1.333
70.00	-20.690	-25.582	0.000	0.000	0.000	-1,159.746	-9.853	0.000	9.853	-1.464
73.00	-20.490	-24.814	0.000	0.000	0.000	-1,097.676	-10.800	0.000	10.800	-1.545
75.00	-20.358	-24.010	0.000	0.000	0.000	-1,056.697	-11.459	0.000	11.459	-1.599
78.50	-20.100	-22.647	0.000	0.000	0.000	-985.445	-12.667	0.000	12.667	-1.692
80.00	-20.023	-22.293	0.000	0.000	0.000	-955.296	-13.205	0.000	13.205	-1.733
85.00	-19.697	-21.194	0.000	0.000	0.000	-855.184	-15.101	0.000	15.101	-1.881
90.00	-19.371	-20.125	0.000	0.000	0.000	-756.701	-17.150	0.000	17.150	-2.027
95.00	-19.026	-19.103	0.000	0.000	0.000	-659.849	-19.350	0.000	19.350	-2.168
96.00	-16.838	-16.998	0.000	0.000	0.000	-640.823	-19.807	0.000	19.807	-2.197
100.0	-16.580	-16.213	0.000	0.000	0.000	-573.472	-21.696	0.000	21.696	-2.307
105.0	-16.241	-15.279	0.000	0.000	0.000	-490.572	-24.184	0.000	24.184	-2.439
106.0	-15.844	-14.921	0.000	0.000	0.000	-474.332	-24.698	0.000	24.698	-2.465
108.7	-15.663	-14.429	0.000	0.000	0.000	-430.762	-26.139	0.000	26.139	-2.536
110.0	-15.582	-14.086	0.000	0.000	0.000	-411.184	-26.807	0.000	26.807	-2.568
113.0	-15.373	-13.292	0.000	0.000	0.000	-364.438	-28.444	0.000	28.444	-2.640
115.0	-15.256	-12.975	0.000	0.000	0.000	-333.692	-29.560	0.000	29.560	-2.687
120.0	-13.005	-10.383	0.000	0.000	0.000	-257.414	-32.442	0.000	32.442	-2.809
125.0	-12.694	-9.716	0.000	0.000	0.000	-192.390	-35.443	0.000	35.443	-2.915
130.0	-12.385	-9.080	0.000	0.000	0.000	-128.920	-38.545	0.000	38.545	-3.002
132.0	-8.171	-6.070	0.000	0.000	0.000	-101.976	-39.809	0.000	39.809	-3.030
135.0	-7.993	-5.746	0.000	0.000	0.000	-77.464	-41.724	0.000	41.724	-3.065
140.0	-4.277	-3.163	0.000	0.000	0.000	-37.498	-44.958	0.000	44.958	-3.106
145.0	-3.996	-2.704	0.000	0.000	0.000	-16.113	-48.223	0.000	48.223	-3.128
148.0	-3.842	0.000	0.000	0.000	0.000	-4.125	-50.190	0.000	50.190	-3.134

Pole : 302540
Location : Madison CT 6, CT
Height : 148.0 (ft)
Shape : 18 Sides
Base Dia : 61.050 (in)
Top Dia : 24.000 (in)
Taper : 0.263006 (in/ft)

Code: TIA/EIA-222 Rev F

Base Elev : 0.000 (ft)



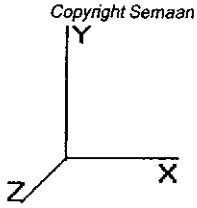
Load Case: Ice — 73.61 mph Wind with Ice — 21 Iterations

Gust Response Factor 1.69
Dead Load Factor : 1.00
Wind Load Factor : 1.00

Calculated Stresses

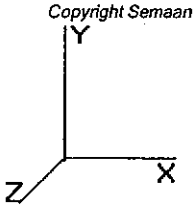
Seg Elev (ft)	Applied Stresses Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)	Allowable Stress (Fb) (ksi)		Stress Ratio
0.00	0.53	0.53	0.00	0.00	0.00	23.23	23.78	52.0	0.0	0.458
5.00	0.52	0.54	0.00	0.00	0.00	23.17	23.71	52.0	0.0	0.456
10.00	0.51	0.54	0.00	0.00	0.00	23.10	23.63	52.0	0.0	0.455
15.00	0.50	0.55	0.00	0.00	0.00	23.01	23.53	52.0	0.0	0.453
20.00	0.49	0.55	0.00	0.00	0.00	22.91	23.42	52.0	0.0	0.451
25.00	0.48	0.56	0.00	0.00	0.00	22.78	23.28	52.0	0.0	0.448
30.00	0.47	0.56	0.00	0.00	0.00	22.63	23.12	52.0	0.0	0.445
35.00	0.46	0.57	0.00	0.00	0.00	22.45	22.93	52.0	0.0	0.441
38.50	0.45	0.57	0.00	0.00	0.00	22.31	22.79	52.0	0.0	0.438
40.00	0.44	0.57	0.00	0.00	0.00	22.25	22.72	52.0	0.0	0.437
45.00	0.55	0.76	0.00	0.00	0.00	28.25	28.83	52.0	0.0	0.555
50.00	0.54	0.77	0.00	0.00	0.00	27.86	28.43	52.0	0.0	0.547
55.00	0.53	0.78	0.00	0.00	0.00	27.41	27.97	52.0	0.0	0.538
60.00	0.52	0.79	0.00	0.00	0.00	26.89	27.45	52.0	0.0	0.528
65.00	0.51	0.80	0.00	0.00	0.00	26.30	26.85	52.0	0.0	0.516
70.00	0.50	0.81	0.00	0.00	0.00	25.62	26.15	52.0	0.0	0.503
73.00	0.49	0.82	0.00	0.00	0.00	25.16	25.70	52.0	0.0	0.494
75.00	0.48	0.83	0.00	0.00	0.00	24.84	25.37	52.0	0.0	0.488
78.50	0.55	0.98	0.00	0.00	0.00	28.07	28.68	52.0	0.0	0.552
80.00	0.55	0.99	0.00	0.00	0.00	27.74	28.34	52.0	0.0	0.545
85.00	0.54	1.01	0.00	0.00	0.00	26.51	27.11	52.0	0.0	0.521
90.00	0.53	1.02	0.00	0.00	0.00	25.10	25.69	52.0	0.0	0.494
95.00	0.52	1.04	0.00	0.00	0.00	23.47	24.06	52.0	0.0	0.463
96.00	0.46	0.93	0.00	0.00	0.00	23.12	23.64	52.0	0.0	0.455
100.00	0.46	0.94	0.00	0.00	0.00	21.93	22.45	52.0	0.0	0.432
105.00	0.45	0.96	0.00	0.00	0.00	20.22	20.74	52.0	0.0	0.399
106.00	0.44	0.94	0.00	0.00	0.00	19.86	20.36	52.0	0.0	0.392
108.75	0.43	0.95	0.00	0.00	0.00	18.82	19.33	52.0	0.0	0.372
110.00	0.43	0.95	0.00	0.00	0.00	18.33	18.83	52.0	0.0	0.362
113.00	0.51	1.18	0.00	0.00	0.00	20.55	21.16	52.0	0.0	0.407
115.00	0.50	1.19	0.00	0.00	0.00	19.43	20.04	52.0	0.0	0.386
120.00	0.42	1.06	0.00	0.00	0.00	16.29	16.81	52.0	0.0	0.323
125.00	0.41	1.08	0.00	0.00	0.00	13.28	13.82	52.0	0.0	0.266
130.00	0.40	1.10	0.00	0.00	0.00	9.74	10.32	52.0	0.0	0.199
132.00	0.27	0.74	0.00	0.00	0.00	8.00	8.37	52.0	0.0	0.161
135.00	0.27	0.75	0.00	0.00	0.00	6.44	6.83	52.0	0.0	0.131
140.00	0.15	0.42	0.00	0.00	0.00	3.44	3.67	52.0	0.0	0.071
145.00	0.14	0.41	0.00	0.00	0.00	1.64	1.92	52.0	0.0	0.037
148.00	0.00	0.41	0.00	0.00	0.00	0.45	0.84	52.0	0.0	0.016

Pole :	302540	Code: TIA/EIA-222 Rev F	
Location :	Madison CT 6, CT		6/2/2008 3:51:53 PM
Height :	148.0 (ft)		
Shape :	18 Sides		
Base Dia :	61.050 (in)		
Top Dia :	24.000 (in)		
Taper :	0.263006 (in/ft)	Base Elev : 0.000 (ft)	



Analysis Summary

	Reactions						Max Stresses			
Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	38.0	0.00	44.34	0.00	0.00	4101.75	41.83	52.0	45.00	0.805
Ice	25.3	0.00	51.19	0.00	0.00	2780.03	28.83	52.0	45.00	0.555



Base Summary

Reactions

Original Design			Analysis			
Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment (kip-ft)	Axial (kip)	Shear (kip)	Moment Design %
5,050.00	35.00	47.00	4,101.75	51.19	38.01	81.22

Base Plate

Yield (ksi)	Thick (in)	Width (in)	Style	Poly Sides	Clip Len (in)	Effective Len (in)	Moment (kip-in)	Allow Stress (ksi)	Applied Stress (ksi)	Stress Ratio
50.0	3.250	68.000	Square	0	0.00	9.688	377.61	49.99	22.14	0.44

Anchor Bolts

								Start	Compression			Tension		
Bolt Circle	Num Bolts	Bolt Type	Bolt Dia (in)	Yield (ksi)	Ultimate (ksi)	Arrange	Cluster Dist (in)	Angle (deg)	Force (kip)	Allow (kip)	Ratio	Force (kip)	Allow (kip)	Ratio
69.00	20	2.25" 18J	2.25	75.00	100.00	Clustered	6.00	45.0	145.23	194.98	0.74	140.11	194.98	0.72