

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

May 9, 2002

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-097-020424** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 201 South Main Street, Newtown, Connecticut.

Dear Attorney Fisher:

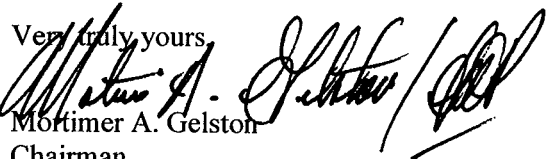
At a public meeting held on May 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received on April 24, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston

Chairman

MAG/RKE/laf

c: Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown
Gary Frenette, Zoning Enforcement Officer, Town of Newtown
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene, & MacRae
Paul T. Tusch, Esq., Cacace, Tusch, & Santagata
Sandy M. Carter, Verizon Wireless

1047 N. 204th Avenue
Elkhorn, NE 68022
402-289-1888
Fax-333-8577

CT-182

SEMAAN ENGINEERING SOLUTIONS

**150 ft PIROD Monopole
Structural Analysis**

RECEIVED

APR 30 2002

CONNECTICUT
SITING COUNCIL

**Prepared for:
VoiceStream Wireless
1500 N.E. Irving, Suite 530
Portland, OR 97232**

**Site: CT-11-217A / Newtown / AT&T
Newtown, CT**

October 30, 2001

APPROVED

10/31/01

Ms. Jennifer Jones
VoiceStream Wireless
1500 N.E. Irving, Suite 530
Portland, OR 97232

Re: Site Number CT-11-217A – Newtown, CT.

Dear Ms. Jones:

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

Description of Structure:

The structure is a 150 ft PIROD Monopole.

Refer to PIROD drawing 151455-B dated October 17, 2000 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. The analysis was performed in conformance with EIA/TIA-222-F for 85 mph with 1/2" radial ice. Wind is applied to the structure, accessories and antennas.

Structure loading:

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

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
150.0	12	RR65-19-00XP w/ Airtch LNA's Mounted On (3) 15' Pirod Universal T-Frame	(24) 1-5/8	Voicestream
140.0	3	DB980H90T2EM Mounted On a Low Profile platform	(3) 1-5/8	Sprint
140.0	6	DB980F90EM Mounted On a Low Profile platform	(6) 1-5/8	Sprint
130.0	12	RR90-17 Mounted On a Low Profile platform	(12) 1-5/8	Verizon
110.0	9	DAPA 58210 Mounted On a Low Profile platform	(9) 1-1/4	AT&T
100.0	1	HP MW Dish, 4' Dia.	(1) 1-5/8	Voicestream

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All VoiceStream transmission lines are assumed running inside of pole shaft. All other transmission lines were assumed to be strapped tightly to the outer face of the pole shaft

Results of Analysis:

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

Structure:

The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 67.2%.

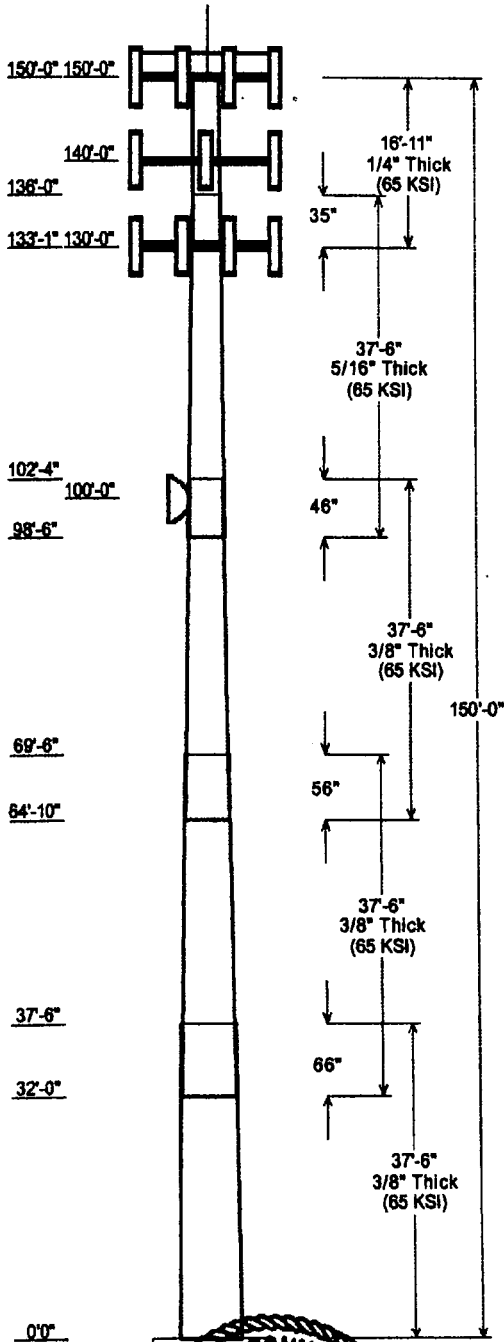
Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,347.00	2846.83	121.3
Shear (kips)	21.90	27.02	123.4

The reactions calculated from the analysis slightly exceed the ones indicated on the original structural design. However, upon reviewing the foundation documents, they were found to be adequate.

Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 85 mph with 1/2" radial ice.



Job Information	
Pole :	CT-11-217A
Description :	
Client :	VoiceStream Wireless-OR
Location :	Newtown, CT
Type :	18 Sides Slip Joints
Height (ft)	150.000
Taper:	0.2461 (in/ft)

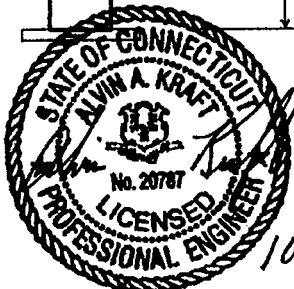
Sections Properties							
Section	Length (ft)	Diameter (in)		Thick (in)	Joint Type	Overlap Length (in)	Steel Grade (ksi)
		Across Top	Flats Bottom				
1	37.500	46.89	56.12	0.375		0.000	65
2	37.500	39.77	49.00	0.375	Slip Joint	66.000	65
3	37.500	32.44	41.67	0.375	Slip Joint	56.000	65
4	37.500	24.78	34.01	0.313	Slip Joint	46.000	65
5	16.917	21.83	26.00	0.250	Slip Joint	35.000	65

Discrete Appurtenance					
Attach Elev (ft)	Force Elev (ft)	Type	Qty	Description	
150.000	157.500	Lightning	1	Lightning Rod, 15'	
150.000	150.000	Platform	3	15' Pirod Universal T-Frame	
150.000	150.000	Panel	12	RR65-19-00XP w/ Airtech LNA's	
140.000	140.000	Platform	1	Low Profile platform	
140.000	140.000	Panel	3	DB980H90T2EM	
140.000	140.000	Panel	6	DB980F90EM	
130.000	130.000	Platform	1	Low Profile platform	
130.000	130.000	Panel	12	RR90-17	
100.000	100.000	Dish	1	HP MW Dish, 4' Dia.	

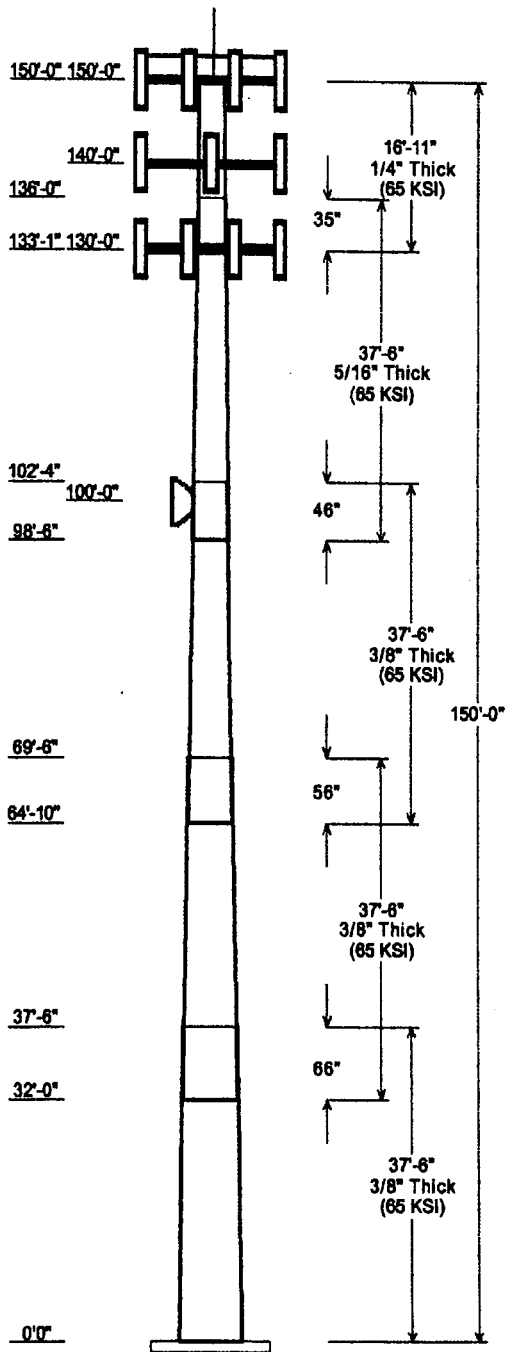
Linear Appurtenance				
Elev (ft)		Description	Exposed To Wind	
From	To			
0.000	117.0	(12) 1 1/4" Coax	No	
0.000	130.0	(12) 1 5/8" Coax	No	
0.000	140.0	(9) 1 5/8" Coax	Yes	

Load Cases / Deflections			
Load Case	Attach Elev (ft)	Translation (in)	Rotation (deg)
No Ice <u>No Ice Wind Speed = 85.00 mph w/ No Ice</u>			
	150.000	69.65	-4.007
	140.000	61.31	-3.948
	130.000	53.17	-3.809
	100.000	31.51	-3.025
Ice <u>Ice Wind Speed = 73.81 mph w/ Ice 0.50 in Thick</u>			
	150.000	61.35	-3.560
	140.000	53.94	-3.502
	130.000	46.72	-3.373
	100.000	27.60	-2.662
Twist/Sway <u>Twist/Sway Wind Speed = 50.00 mph w/ No Ice</u>			
	150.000	24.14	-1.388
	140.000	21.24	-1.368
	130.000	18.42	-1.320
	100.000	10.91	-1.048

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2,620.286	25.065	-33.417
Ice	2,274.242	21.209	-42.000



10-31-01



Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

VoiceStream Wireless-OR

Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 Page: 1



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fv (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top				Taper (in/ft)				
							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	37.500	0.3750	65		0.00	7,766	56.12	0.000	66.35	26056.2	24.63	149.6	46.88	37.50	55.37	15140.5	20.29	125.06	0.246
2	37.500	0.3750	65	Slip Joint	66.00	6,684	49.00	32.00	57.87	17288.5	21.28	130.6	39.77	69.50	46.89	9195.1	16.94	106.88	0.246
3	37.500	0.3750	65	Slip Joint	56.00	5,571	41.67	64.63	49.15	10589.4	17.83	111.1	32.44	102.3	36.17	4956.4	13.49	86.51	0.246
4	37.500	0.3125	65	Slip Joint	46.00	3,681	34.01	88.59	33.42	4795.0	17.43	108.8	24.78	136.0	24.27	1835.9	12.22	79.30	0.246
5	16.917	0.2500	65	Slip Joint	35.00	1,081	26.00	133.0	20.43	1711.6	16.57	104.0	21.83	150.0	17.13	1008.4	13.64	87.35	0.246
						Shaft Weight	24,783												

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
150.0	Lightning Rod, 15"	1	35.00	1.050	1.00	128.00	5.100	1.00	0.000	0.00	7.500
150.0	15' Pirod Universal T-Frame	3	500.00	15.000	0.67	650.00	20.600	0.67	0.000	0.00	0.000
150.0	RR65-19-00XP w/ Airtech	12	23.00	6.000	1.00	52.00	6.850	1.00	0.000	0.00	0.000
148.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
140.0	DB980H90T2EM	3	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
140.0	DB980F90EM	6	9.00	3.280	0.67	28.00	3.850	0.67	0.000	0.00	0.000
139.0	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.00	0.000
130.0	RR90-17	12	12.00	5.230	0.67	35.00	5.800	0.67	0.000	0.00	0.000
100.0	HP MW Dish, 4' Dia.	1	170.00	15.660	1.00	280.00	16.520	1.00	0.000	0.00	0.000
Totals		40	4806.00			7852.00			Number of Loadings : 9		

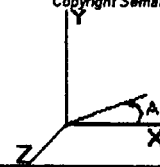
Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	CaAa (sf/ft)	Ice Weight (lb/ft)	CaAa (sf/ft)	Exposed To Wind
0.00	117.00	(12) 1 1/4" Coax	7.92	0.00	22.95	0.00	N
0.00	130.00	(12) 1 5/8" Coax	12.48	0.00	30.84	0.00	N
0.00	140.00	(9) 1 5/8" Coax	9.36	0.40	23.13	0.60	Y
Total Weight			3,859.43		9,932.52		

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 58.12 (in)
 Taper: 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 Page: 3



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

Shaft Forces

Seg Top

Elev (ft)	Description	Kz	αz (psf)	αzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	18.49	31.25	397.55	0.650	0.00	0.009	0.009	0.00	0.00	0.0
5.00		1.00	18.49	31.25	388.84	0.650	5.00	23.129	15.034	469.93	0.00	1,116.5
10.00		1.00	18.49	31.25	380.12	0.650	5.00	22.616	14.701	459.52	0.00	1,091.6
15.00		1.00	18.49	31.25	371.41	0.650	5.00	22.104	14.367	449.10	0.00	1,066.6
20.00		1.00	18.49	31.25	362.69	0.650	5.00	21.591	14.034	438.68	0.00	1,041.7
25.00		1.00	18.49	31.25	353.97	0.650	5.00	21.078	13.701	428.27	0.00	1,016.8
30.00		1.00	18.49	31.25	345.26	0.650	5.00	20.566	13.368	417.85	0.00	991.9
32.00	Bot - Section 2	1.00	18.49	31.25	341.77	0.650	2.00	8.083	5.254	164.22	0.00	389.8
35.00		1.01	18.81	31.78	339.38	0.650	3.00	12.158	7.903	251.21	0.00	1,163.5
37.50	Top - Section 1	1.03	19.18	32.42	338.31	0.650	2.50	9.990	6.494	210.54	0.00	955.9
40.00		1.05	19.54	33.02	342.42	0.650	2.50	9.862	6.410	211.70	0.00	475.5
45.00		1.09	20.21	34.15	339.12	0.650	5.00	19.340	12.571	429.39	0.00	932.3
50.00		1.12	20.82	35.19	335.02	0.650	5.00	18.827	12.238	430.75	0.00	907.4
55.00		1.15	21.40	36.17	330.23	0.650	5.00	18.315	11.905	430.59	0.00	882.5
60.00		1.18	21.94	37.08	324.87	0.650	5.00	17.802	11.571	429.07	0.00	857.6
64.83	Bot - Section 3	1.21	22.43	37.91	319.21	0.650	4.83	16.721	10.869	412.04	0.00	805.3
65.00		1.21	22.44	37.93	319.00	0.650	0.17	0.578	0.376	14.26	0.00	55.2
69.50	Top - Section 2	1.23	22.88	38.67	313.34	0.650	4.50	15.403	10.012	387.18	0.00	1,469.9
70.00		1.24	22.92	38.75	318.61	0.650	0.50	1.686	1.096	42.46	0.00	81.2
75.00		1.26	23.38	39.52	311.97	0.650	5.00	16.576	10.775	425.83	0.00	798.0
80.00		1.28	23.82	40.25	304.96	0.650	5.00	16.064	10.441	420.34	0.00	773.1
85.00		1.31	24.23	40.96	297.64	0.650	5.00	15.551	10.108	414.04	0.00	748.2
90.00		1.33	24.63	41.63	290.02	0.650	5.00	15.038	9.775	408.98	0.00	723.3
95.00		1.35	25.02	42.28	282.13	0.650	5.00	14.526	9.442	399.22	0.00	698.4
98.50	Bot - Section 4	1.36	25.28	42.72	276.46	0.650	3.50	9.863	6.411	273.89	0.00	474.0
100.00	Appertunance(s)	1.37	25.38	42.80	274.00	0.650	1.50	4.228	2.748	117.92	0.00	369.1
102.33	Top - Section 3	1.38	25.55	43.19	270.12	0.650	2.33	6.485	4.216	182.07	0.00	565.9
105.00		1.39	25.74	43.51	270.85	0.650	2.67	7.275	4.729	205.75	0.00	291.8
110.00		1.41	26.09	44.09	262.31	0.650	5.00	13.248	8.611	379.69	0.00	531.3
115.00		1.42	26.42	44.65	253.56	0.650	5.00	12.735	8.278	369.66	0.00	510.5
120.00		1.44	26.74	45.20	244.63	0.650	5.00	12.223	7.945	359.12	0.00	489.7
125.00		1.46	27.06	45.73	235.52	0.650	5.00	11.710	7.611	348.09	0.00	469.0
130.00	Appertunance(s)	1.48	27.36	46.24	226.24	0.650	5.00	11.197	7.278	336.69	0.00	448.2
133.08	Bot - Section 5	1.48	27.54	46.55	220.44	0.650	3.08	6.649	4.322	201.23	0.00	266.1
135.00		1.49	27.66	46.74	216.80	0.650	1.92	4.115	2.675	125.04	0.00	293.4
138.00	Top - Section 4	1.49	27.72	46.84	214.90	0.650	1.00	2.117	1.376	64.47	0.00	150.9
140.00	Appertunance(s)	1.51	27.95	47.23	211.57	0.650	4.00	8.263	5.371	253.71	0.00	265.0
145.00		1.52	28.23	47.71	201.87	0.650	5.00	9.868	6.414	306.03	0.00	316.3
150.00	Appertunance(s)	1.54	28.50	48.17	192.03	0.650	5.00	9.355	6.081	292.95	0.00	299.7
						Totals:	150.00			11,959.38	0.00	24,783.3

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.248 (in/ft)

VoiceStream Wireless-OR

Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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10/30/2001 12:20:49 PM

Page: 4



Load Case: No Ice	85 mph - No Ice	23 Iterations
Gust Response Factor: 1.89	Effective Wind Speed: 85.00 (mph)	
Dead Load Factor: 1.00		
Wind Load Factor: 1.00		

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Total CaAa (sf)	CaAs Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
100.00	HP MW Dia, 4' Dia.	1	25.38	42.90	15.990	1.000	0.000	0.0	0.0	688.51	0.00	0.00	0.00	0.00	178.0
130.00	Low Profile platform	1	27.38	48.24	25.558	1.000	0.000	0.0	0.0	1181.62	0.00	0.00	0.00	0.00	1300.0
130.00	RR90-17	12	27.38	48.24	41.961	0.667	0.000	0.0	0.0	1935.98	0.00	0.00	0.00	0.00	144.0
140.00	Low Profile platform	1	27.95	47.23	25.558	1.000	0.000	0.0	0.0	1206.90	0.00	0.00	0.00	0.00	1300.0
140.00	DB900H9072EM	3	27.95	47.23	6.563	0.667	0.000	0.0	0.0	318.03	0.00	0.00	0.00	0.00	27.0
140.00	DB900F90EM	6	27.95	47.23	13.127	0.667	0.000	0.0	0.0	620.06	0.00	0.00	0.00	0.00	54.0
150.00	Lightning Rod, 15'	1	28.90	48.85	1.050	1.000	0.000	7.5	0.0	81.30	0.00	0.00	0.00	384.72	35.0
150.00	15' Pired Universal T-	3	28.50	48.17	30.015	0.667	0.000	0.0	0.0	1446.05	0.00	0.00	0.00	0.00	1500.0
150.00	RR65-16-00XP w/	12	28.50	48.17	72.000	1.000	0.000	0.0	0.0	3488.78	0.00	0.00	0.00	0.00	276.0
										19,901.2	0.00				4,806.0

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

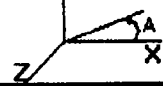
VoiceStream Wireless-OR

Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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10/30/2001 12:20:49 PM

Page: 5



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

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

Dead Load Factor: 1.00

Wind Load Factor: 1.00

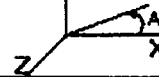
Linear Appurtenance Forces

Seg Elev (ft)	Description	Exposed To Wind	Applied Length (ft)	Weight (lb/ft)	CaAs (sf/ft)	qz (psf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
5.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
5.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
5.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
10.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
10.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
10.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
15.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
15.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
15.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
20.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
20.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
20.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
25.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
25.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
25.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
30.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.496	0.00	0.00	39.60
30.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.496	0.00	0.00	62.40
30.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	18.496	62.52	0.00	46.80
32.00	(12) 1 1/4" Coax	No	2.00	7.92	0.00	18.496	0.00	0.00	15.84
32.00	(12) 1 5/8" Coax	No	2.00	12.48	0.00	18.496	0.00	0.00	24.96
32.00	(9) 1 5/8" Coax	Yes	2.00	9.36	0.40	18.496	25.01	0.00	18.72
35.00	(12) 1 1/4" Coax	No	3.00	7.92	0.00	18.810	0.00	0.00	23.76
35.00	(12) 1 5/8" Coax	No	3.00	12.48	0.00	18.810	0.00	0.00	37.44
35.00	(9) 1 5/8" Coax	Yes	3.00	9.36	0.40	18.810	38.15	0.00	28.08
37.50	(12) 1 1/4" Coax	No	2.50	7.92	0.00	19.184	0.00	0.00	19.80
37.50	(12) 1 5/8" Coax	No	2.50	12.48	0.00	19.184	0.00	0.00	31.20
37.50	(9) 1 5/8" Coax	Yes	2.50	9.36	0.40	19.184	32.42	0.00	23.40
40.00	(12) 1 1/4" Coax	No	2.50	7.92	0.00	19.541	0.00	0.00	19.80
40.00	(12) 1 5/8" Coax	No	2.50	12.48	0.00	19.541	0.00	0.00	31.20
40.00	(9) 1 5/8" Coax	Yes	2.50	9.36	0.40	19.541	33.02	0.00	23.40
45.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	20.210	0.00	0.00	39.60
45.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	20.210	0.00	0.00	62.40
45.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	20.210	66.31	0.00	46.80
50.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	20.827	0.00	0.00	39.60
50.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	20.827	0.00	0.00	62.40
50.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	20.827	70.40	0.00	46.80
55.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	21.402	0.00	0.00	39.60
55.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	21.402	0.00	0.00	62.40
55.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	21.402	72.34	0.00	48.80
60.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	21.941	0.00	0.00	39.60
60.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	21.941	0.00	0.00	62.40
60.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	21.941	74.16	0.00	48.80
64.83	(12) 1 1/4" Coax	No	4.83	7.92	0.00	22.432	0.00	0.00	38.28
64.83	(12) 1 5/8" Coax	No	4.83	12.48	0.00	22.432	0.00	0.00	60.32
64.83	(9) 1 5/8" Coax	Yes	4.83	9.36	0.40	22.432	73.29	0.00	45.24
65.00	(12) 1 1/4" Coax	No	0.17	7.92	0.00	22.449	0.00	0.00	1.32
65.00	(12) 1 5/8" Coax	No	0.17	12.48	0.00	22.449	0.00	0.00	2.08
65.00	(9) 1 5/8" Coax	Yes	0.17	9.36	0.40	22.449	2.53	0.00	1.56
69.50	(12) 1 1/4" Coax	No	4.50	7.92	0.00	22.882	0.00	0.00	35.64
69.50	(12) 1 5/8" Coax	No	4.50	12.48	0.00	22.882	0.00	0.00	56.16
69.50	(9) 1 5/8" Coax	Yes	4.50	9.36	0.40	22.882	69.61	0.00	42.12

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:49 PM
 Page : 6



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

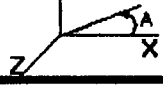
70.00	(12) 1 1/4" Coax	No	0.50	7.92	0.00	22.929	0.00	0.00	3.96
70.00	(12) 1 5/8" Coax	No	0.50	12.48	0.00	22.929	0.00	0.00	6.24
70.00	(9) 1 5/8" Coax	Yes	0.50	9.36	0.40	22.929	7.75	0.00	4.68
75.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	23.388	0.00	0.00	39.60
75.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	23.388	0.00	0.00	62.40
75.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	23.388	79.04	0.00	46.80
80.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	23.821	0.00	0.00	39.60
80.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	23.821	0.00	0.00	62.40
80.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	23.821	80.51	0.00	46.80
85.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	24.237	0.00	0.00	39.60
85.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	24.237	0.00	0.00	62.40
85.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	24.237	81.92	0.00	46.80
90.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	24.636	0.00	0.00	39.60
90.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	24.636	0.00	0.00	62.40
90.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	24.636	83.27	0.00	46.80
95.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	25.020	0.00	0.00	39.60
95.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	25.020	0.00	0.00	62.40
95.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	25.020	84.57	0.00	46.80
98.50	(12) 1 1/4" Coax	No	3.50	7.92	0.00	25.280	0.00	0.00	27.72
98.50	(12) 1 5/8" Coax	No	3.50	12.48	0.00	25.280	0.00	0.00	43.68
98.50	(9) 1 5/8" Coax	Yes	3.50	9.36	0.40	25.280	59.81	0.00	32.76
100.0	(12) 1 1/4" Coax	No	1.50	7.92	0.00	25.369	0.00	0.00	11.88
100.0	(12) 1 5/8" Coax	No	1.50	12.48	0.00	25.369	0.00	0.00	18.72
100.0	(9) 1 5/8" Coax	Yes	1.50	9.36	0.40	25.369	25.74	0.00	14.04
102.3	(12) 1 1/4" Coax	No	2.33	7.92	0.00	25.557	0.00	0.00	18.48
102.3	(12) 1 5/8" Coax	No	2.33	12.48	0.00	25.557	0.00	0.00	29.12
102.3	(9) 1 5/8" Coax	Yes	2.33	9.36	0.40	25.557	40.31	0.00	21.84
105.0	(12) 1 1/4" Coax	No	2.67	7.92	0.00	25.745	0.00	0.00	21.12
105.0	(12) 1 5/8" Coax	No	2.67	12.48	0.00	25.745	0.00	0.00	33.28
105.0	(9) 1 5/8" Coax	Yes	2.67	9.36	0.40	25.745	46.41	0.00	24.96
110.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	26.090	0.00	0.00	39.60
110.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	26.090	0.00	0.00	62.40
110.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	26.090	88.18	0.00	46.80
115.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	26.423	0.00	0.00	39.60
115.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	26.423	0.00	0.00	62.40
115.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	26.423	89.31	0.00	46.80
120.0	(12) 1 1/4" Coax	No	2.00	7.92	0.00	26.747	0.00	0.00	15.84
120.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	26.747	0.00	0.00	62.40
120.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	26.747	90.40	0.00	46.80
125.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	27.060	0.00	0.00	62.40
125.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	27.060	91.46	0.00	46.80
130.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	27.365	0.00	0.00	62.40
130.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	27.365	92.49	0.00	46.80
133.0	(9) 1 5/8" Coax	Yes	3.08	9.36	0.40	27.549	57.42	0.00	28.86
135.0	(9) 1 5/8" Coax	Yes	1.92	9.36	0.40	27.662	35.84	0.00	17.94
138.0	(9) 1 5/8" Coax	Yes	1.00	9.36	0.40	27.720	18.74	0.00	9.36
140.0	(9) 1 5/8" Coax	Yes	4.00	9.36	0.40	27.951	75.58	0.00	37.44
Totals:							2,163.12	0.00	3,859.4

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

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Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:49 PM
 Page: 7



Load Case: No ice 85 mph - No ice 23 Iterations
Gust Response Factor : 1.89 **Effective Wind Speed :** 85.00 (mph)
Dead Load Factor : 1.00
Wind Load Factor : 1.00

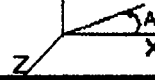
Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	532.45	1,265.28	0.00	0.00	0.00	0.00
10.00	0.00	0.00	522.03	1,240.36	0.00	0.00	0.00	0.00
15.00	0.00	0.00	511.62	1,215.45	0.00	0.00	0.00	0.00
20.00	0.00	0.00	501.20	1,190.53	0.00	0.00	0.00	0.00
25.00	0.00	0.00	490.78	1,165.61	0.00	0.00	0.00	0.00
30.00	0.00	0.00	480.37	1,140.70	0.00	0.00	0.00	0.00
32.00	0.00	0.00	188.23	448.30	0.00	0.00	0.00	0.00
35.00	0.00	0.00	289.35	1,252.79	0.00	0.00	0.00	0.00
37.50	0.00	0.00	242.86	1,030.29	0.00	0.00	0.00	0.00
40.00	0.00	0.00	244.73	548.91	0.00	0.00	0.00	0.00
45.00	0.00	0.00	497.67	1,081.14	0.00	0.00	0.00	0.00
50.00	0.00	0.00	501.15	1,056.22	0.00	0.00	0.00	0.00
55.00	0.00	0.00	502.93	1,031.30	0.00	0.00	0.00	0.00
60.00	0.00	0.00	503.23	1,006.39	0.00	0.00	0.00	0.00
64.83	0.00	0.00	485.34	948.16	0.00	0.00	0.00	0.00
65.00	0.00	0.00	18.79	80.17	0.00	0.00	0.00	0.00
69.50	0.00	0.00	456.79	1,803.79	0.00	0.00	0.00	0.00
70.00	0.00	0.00	50.21	86.05	0.00	0.00	0.00	0.00
75.00	0.00	0.00	504.98	946.82	0.00	0.00	0.00	0.00
80.00	0.00	0.00	506.86	921.91	0.00	0.00	0.00	0.00
85.00	0.00	0.00	495.96	896.99	0.00	0.00	0.00	0.00
90.00	0.00	0.00	489.25	872.07	0.00	0.00	0.00	0.00
95.00	0.00	0.00	483.79	847.16	0.00	0.00	0.00	0.00
98.50	0.00	0.00	333.70	578.18	0.00	0.00	0.00	0.00
100.00	0.00	0.00	624.17	583.72	0.00	0.00	0.00	0.00
102.33	0.00	0.00	222.39	635.39	0.00	0.00	0.00	0.00
105.00	0.00	0.00	252.16	371.20	0.00	0.00	0.00	0.00
110.00	0.00	0.00	467.87	880.67	0.00	0.00	0.00	0.00
115.00	0.00	0.00	458.97	659.31	0.00	0.00	0.00	0.00
120.00	0.00	0.00	449.52	614.79	0.00	0.00	0.00	0.00
125.00	0.00	0.00	439.55	578.18	0.00	0.00	0.00	0.00
130.00	0.00	0.00	3,548.67	2,001.42	0.00	0.00	0.00	0.00
133.08	0.00	0.00	258.65	294.91	0.00	0.00	0.00	0.00
135.00	0.00	0.00	168.88	311.38	0.00	0.00	0.00	0.00
138.00	0.00	0.00	83.21	180.28	0.00	0.00	0.00	0.00
140.00	0.00	0.00	2,466.29	1,683.47	0.00	0.00	0.00	0.00
145.00	0.00	0.00	306.03	316.34	0.00	0.00	0.00	0.00
150.00	0.00	0.00	5,289.07	2,110.72	0.00	0.00	0.00	384.72
Totals:			25,823.69	33,448.74	0.00	0.00	0.00	384.72

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.248 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:49 PM
 Page: 8



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

Calculated Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	25.065	33.417	0.000	0.000	0.000	2,620.286	0.000	0.000	0.000	0.000
5.00	24.610	32.092	0.000	0.000	0.000	2,494.963	-0.075	0.000	0.075	-0.140
10.00	24.161	30.794	0.000	0.000	0.000	2,371.915	-0.298	0.000	0.298	-0.282
15.00	23.717	29.521	0.000	0.000	0.000	2,251.114	-0.671	0.000	0.671	-0.426
20.00	23.278	28.275	0.000	0.000	0.000	2,132.533	-1.196	0.000	1.196	-0.573
25.00	22.845	27.055	0.000	0.000	0.000	2,016.144	-1.877	0.000	1.877	-0.723
30.00	22.397	25.879	0.000	0.000	0.000	1,901.918	-2.716	0.000	2.716	-0.874
32.00	22.236	25.403	0.000	0.000	0.000	1,857.124	-3.096	0.000	3.096	-0.937
35.00	21.962	24.122	0.000	0.000	0.000	1,796.417	-3.716	0.000	3.716	-1.032
37.50	21.732	23.066	0.000	0.000	0.000	1,735.513	-4.277	0.000	4.277	-1.111
40.00	21.522	22.477	0.000	0.000	0.000	1,681.185	-4.881	0.000	4.881	-1.192
45.00	21.057	21.351	0.000	0.000	0.000	1,573.577	-6.211	0.000	6.211	-1.343
50.00	20.585	20.252	0.000	0.000	0.000	1,488.292	-7.700	0.000	7.700	-1.497
55.00	20.106	19.181	0.000	0.000	0.000	1,365.370	-9.351	0.000	9.351	-1.652
60.00	19.622	18.137	0.000	0.000	0.000	1,264.842	-11.165	0.000	11.165	-1.809
64.83	19.129	17.178	0.000	0.000	0.000	1,179.005	-13.076	0.000	13.076	-1.962
65.00	19.133	17.093	0.000	0.000	0.000	1,166.817	-13.144	0.000	13.144	-1.967
69.50	18.640	15.481	0.000	0.000	0.000	1,080.721	-15.068	0.000	15.068	-2.111
70.00	18.610	15.359	0.000	0.000	0.000	1,071.401	-15.291	0.000	15.291	-2.128
75.00	18.107	14.385	0.000	0.000	0.000	978.355	-17.600	0.000	17.600	-2.279
80.00	17.604	13.438	0.000	0.000	0.000	887.822	-20.069	0.000	20.069	-2.430
85.00	17.102	12.519	0.000	0.000	0.000	799.895	-22.695	0.000	22.695	-2.581
90.00	16.602	11.627	0.000	0.000	0.000	714.296	-25.478	0.000	25.478	-2.730
95.00	16.101	10.770	0.000	0.000	0.000	631.288	-28.416	0.000	28.416	-2.878
98.50	15.751	10.190	0.000	0.000	0.000	574.936	-30.564	0.000	30.564	-2.980
100.00	14.907	9.835	0.000	0.000	0.000	551.310	-31.507	0.000	31.507	-3.025
102.33	14.662	8.994	0.000	0.000	0.000	516.529	-33.002	0.000	33.002	-3.092
105.00	14.407	8.608	0.000	0.000	0.000	477.430	-34.751	0.000	34.751	-3.169
110.00	13.922	7.920	0.000	0.000	0.000	405.395	-38.150	0.000	38.150	-3.320
115.00	13.442	7.257	0.000	0.000	0.000	335.785	-41.704	0.000	41.704	-3.463
120.00	12.970	6.643	0.000	0.000	0.000	268.574	-45.402	0.000	45.402	-3.595
125.00	12.506	6.070	0.000	0.000	0.000	203.722	-49.230	0.000	49.230	-3.712
130.00	8.841	4.295	0.000	0.000	0.000	141.192	-53.170	0.000	53.170	-3.809
133.00	8.566	4.012	0.000	0.000	0.000	113.932	-55.646	0.000	55.646	-3.860
135.00	8.386	3.709	0.000	0.000	0.000	97.513	-57.201	0.000	57.201	-3.889
136.00	8.294	3.551	0.000	0.000	0.000	89.127	-58.017	0.000	58.017	-3.903
140.00	5.720	2.036	0.000	0.000	0.000	55.951	-61.305	0.000	61.305	-3.948
145.00	5.394	1.738	0.000	0.000	0.000	27.352	-65.463	0.000	65.463	-3.991
150.00	5.259	0.000	0.000	0.000	0.000	0.385	-69.651	0.000	69.651	-4.007

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.248 (in/ft)

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Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 9



Load Case: No Ice 85 mph - No Ice 23 iterations

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

Dead Load Factor: 1.00

Wind Load Factor: 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.504	0.761	0.000	0.000	0.000	34.387	34.916	52.0	0.672
5.00	0.495	0.764	0.000	0.000	0.000	34.242	34.782	52.0	0.669
10.00	0.486	0.768	0.000	0.000	0.000	34.079	34.590	52.0	0.666
15.00	0.476	0.771	0.000	0.000	0.000	33.896	34.399	52.0	0.662
20.00	0.467	0.776	0.000	0.000	0.000	33.680	34.184	52.0	0.658
25.00	0.458	0.780	0.000	0.000	0.000	33.457	33.943	52.0	0.653
30.00	0.450	0.784	0.000	0.000	0.000	33.195	33.671	52.0	0.648
32.00	0.446	0.786	0.000	0.000	0.000	33.085	33.559	52.0	0.646
35.00	0.430	0.789	0.000	0.000	0.000	32.908	33.366	52.0	0.642
37.50	0.410	0.778	0.000	0.000	0.000	31.716	32.155	52.0	0.619
40.00	0.405	0.781	0.000	0.000	0.000	31.542	31.976	52.0	0.615
45.00	0.395	0.785	0.000	0.000	0.000	31.151	31.575	52.0	0.607
50.00	0.385	0.789	0.000	0.000	0.000	30.715	31.130	52.0	0.599
55.00	0.375	0.792	0.000	0.000	0.000	30.229	30.634	52.0	0.589
60.00	0.365	0.796	0.000	0.000	0.000	29.686	30.083	52.0	0.579
64.83	0.356	0.799	0.000	0.000	0.000	29.103	29.491	52.0	0.567
65.00	0.355	0.800	0.000	0.000	0.000	29.082	29.470	52.0	0.567
69.50	0.324	0.786	0.000	0.000	0.000	27.420	27.778	52.0	0.534
70.00	0.322	0.787	0.000	0.000	0.000	27.352	27.708	52.0	0.533
75.00	0.312	0.790	0.000	0.000	0.000	26.594	26.940	52.0	0.518
80.00	0.301	0.794	0.000	0.000	0.000	25.748	26.085	52.0	0.502
85.00	0.289	0.797	0.000	0.000	0.000	24.802	25.129	52.0	0.483
90.00	0.278	0.801	0.000	0.000	0.000	23.739	24.057	52.0	0.463
95.00	0.267	0.805	0.000	0.000	0.000	22.541	22.850	52.0	0.440
98.50	0.259	0.808	0.000	0.000	0.000	21.620	21.924	52.0	0.422
100.00	0.248	0.773	0.000	0.000	0.000	21.208	21.496	52.0	0.414
102.33	0.277	0.910	0.000	0.000	0.000	23.631	23.960	52.0	0.461
105.00	0.270	0.912	0.000	0.000	0.000	22.749	23.074	52.0	0.444
110.00	0.259	0.916	0.000	0.000	0.000	20.895	21.214	52.0	0.408
115.00	0.247	0.922	0.000	0.000	0.000	18.782	19.096	52.0	0.367
120.00	0.236	0.928	0.000	0.000	0.000	16.360	16.673	52.0	0.321
125.00	0.225	0.935	0.000	0.000	0.000	13.585	13.885	52.0	0.267
130.00	0.167	0.692	0.000	0.000	0.000	10.320	10.555	52.0	0.203
133.00	0.161	0.691	0.000	0.000	0.000	8.840	9.080	52.0	0.175
135.00	0.151	0.689	0.000	0.000	0.000	7.859	8.099	52.0	0.156
136.00	0.179	0.842	0.000	0.000	0.000	8.731	9.028	52.0	0.174
140.00	0.107	0.604	0.000	0.000	0.000	5.941	6.138	52.0	0.118
145.00	0.096	0.600	0.000	0.000	0.000	3.226	3.483	52.0	0.067
150.00	0.000	0.619	0.000	0.000	0.000	0.051	1.073	52.0	0.021

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.248 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 10



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

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

Dead Load Factor: 1.00

Wind Load Factor: 1.00

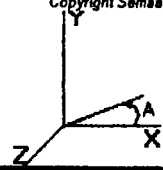
Shaft Forces

Seg Top Elev (ft)	Description	Kz	αz (psf)	αzGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Az (sf)	CFAz (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)	
0.00		1.00	13.87	23.44	344.28	0.650	0.00	0.000	0.000	0.00	0.00	0.0	
5.00		1.00	13.87	23.44	336.73	0.650	5.00	23.546	15.305	358.78	0.00	1,287.4	
10.00		1.00	13.87	23.44	329.18	0.650	5.00	23.033	14.971	350.97	0.00	1,258.7	
15.00		1.00	13.87	23.44	321.64	0.650	5.00	22.520	14.638	343.15	0.00	1,230.0	
20.00		1.00	13.87	23.44	314.09	0.650	5.00	22.008	14.305	335.34	0.00	1,201.3	
25.00		1.00	13.87	23.44	306.54	0.650	5.00	21.495	13.972	327.53	0.00	1,172.6	
30.00		1.00	13.87	23.44	298.99	0.650	5.00	20.982	13.638	319.72	0.00	1,143.8	
32.00	Bot - Section 2	1.00	13.87	23.44	295.97	0.650	2.00	8.249	5.362	125.70	0.00	450.0	
35.00		1.01	14.10	23.84	293.91	0.650	3.00	12.408	8.065	192.27	0.00	1,253.8	
37.50	Top - Section 1	1.03	14.38	24.31	292.87	0.650	2.50	10.199	6.629	181.18	0.00	1,030.2	
40.00		1.05	14.65	24.78	290.84	0.650	2.50	10.071	6.546	182.12	0.00	546.8	
45.00		1.09	15.15	25.61	293.88	0.650	5.00	19.757	12.842	328.94	0.00	1,075.2	
50.00		1.12	15.62	26.39	290.12	0.650	5.00	19.244	12.509	330.19	0.00	1,048.5	
55.00		1.15	16.05	27.12	285.98	0.650	5.00	18.731	12.175	330.27	0.00	1,017.8	
60.00		1.18	16.45	27.80	281.34	0.650	5.00	18.219	11.842	329.31	0.00	989.1	
64.83	Bot - Section 3	1.21	16.82	28.43	276.43	0.650	4.83	17.124	11.131	316.46	0.00	928.9	
65.00		1.21	16.83	28.45	276.28	0.650	0.17	0.592	0.385	10.95	0.00	59.5	
69.50	Top - Section 2	1.23	17.16	29.00	271.36	0.650	4.50	15.778	10.256	297.44	0.00	1,583.8	
70.00		1.24	17.19	29.06	275.92	0.650	0.50	1.728	1.123	32.63	0.00	93.8	
75.00		1.26	17.53	29.63	270.16	0.650	5.00	16.993	11.048	327.38	0.00	920.4	
80.00		1.28	17.86	30.19	264.10	0.650	5.00	16.480	10.712	323.41	0.00	891.7	
85.00		1.31	18.17	30.71	257.78	0.650	5.00	15.968	10.379	318.83	0.00	863.0	
90.00		1.33	18.47	31.22	251.16	0.650	5.00	15.455	10.046	313.67	0.00	834.3	
95.00		1.35	18.76	31.71	244.33	0.650	5.00	14.942	9.713	307.99	0.00	805.6	
98.50	Bot - Section 4	1.36	18.95	32.04	239.42	0.650	3.50	10.155	6.600	211.48	0.00	547.2	
100.00	Appertunance(s)	1.37	19.04	32.17	237.28	0.650	1.50	4.353	2.830	91.05	0.00	400.7	
102.33	Top - Section 3	1.38	19.16	32.39	233.92	0.650	2.33	6.680	4.342	140.64	0.00	614.3	
105.00		1.39	19.30	32.63	234.56	0.650	2.67	7.497	4.873	158.02	0.00	346.0	
110.00		1.41	19.56	33.06	227.16	0.650	5.00	13.665	8.882	293.70	0.00	629.0	
115.00		1.42	19.81	33.49	219.58	0.650	5.00	13.152	8.549	288.30	0.00	604.5	
120.00		1.44	20.05	33.89	211.85	0.650	5.00	12.639	8.216	278.50	0.00	579.9	
125.00		1.46	20.29	34.29	203.96	0.650	5.00	12.127	7.882	270.34	0.00	555.3	
130.00	Appertunance(s)	1.48	20.52	34.68	195.92	0.650	5.00	11.614	7.549	261.83	0.00	530.8	
133.08	Bot - Section 5	1.48	20.66	34.91	190.90	0.650	3.08	6.906	4.489	158.75	0.00	315.5	
135.00		1.49	20.74	35.05	187.75	0.650	1.92	4.275	2.779	97.42	0.00	324.2	
138.00	Top - Section 4	1.49	20.78	35.13	186.10	0.650	1.00	2.200	1.430	50.25	0.00	186.8	
140.00	Appertunance(s)	1.51	20.96	35.42	183.22	0.650	4.00	8.597	5.588	197.95	0.00	326.2	
145.00		1.52	21.17	35.78	174.82	0.650	5.00	10.284	6.685	239.20	0.00	389.1	
150.00	Appertunance(s)	1.54	21.37	36.13	168.29	0.650	5.00	9.772	6.352	229.49	0.00	388.6	
		Totals:						150.00			9,208.14	0.00	28,384.3

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 11



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 23 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 73.61 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qx (psf)	qxGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
100.00	HP MW Dish, 4' Dia.	1	18.04	32.17	16.528	1.000	0.000	0.0	0.0	531.58	0.00	0.00	0.00	0.00	280.0
130.00	Low Profile platform	1	20.52	34.68	27.320	1.000	0.000	0.0	0.0	947.55	0.00	0.00	0.00	0.00	2100.0
130.00	RR90-17	12	20.52	34.68	46.423	0.867	0.000	0.0	0.0	1618.12	0.00	0.00	0.00	0.00	420.0
140.00	Low Profile platform	1	20.96	35.42	27.320	1.000	0.000	0.0	0.0	967.82	0.00	0.00	0.00	0.00	2100.0
140.00	DB900H90T2EM	3	20.96	35.42	7.704	0.867	0.000	0.0	0.0	272.91	0.00	0.00	0.00	0.00	84.0
140.00	DB900P90EM	8	20.96	35.42	15.408	0.867	0.000	0.0	0.0	545.83	0.00	0.00	0.00	0.00	198.0
150.00	Lightning Rod, 15'	1	21.87	36.63	5.100	1.000	0.000	7.5	0.0	188.85	0.00	0.00	0.00	1401.41	128.0
150.00	15' Pired Universal T-	3	21.37	36.13	41.221	0.867	0.000	0.0	0.0	1488.34	0.00	0.00	0.00	0.00	1850.0
150.00	RR95-19-09XP w/	12	21.37	36.13	82.200	1.000	0.000	0.0	0.0	2988.96	0.00	0.00	0.00	0.00	624.0
										9,521.97	0.00			7,852.0	

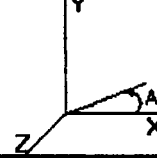
Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

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Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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10/30/2001 12:20:50 PM
 Page: 12



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

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

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Linear Appurtenance Forces

Seg Elev (ft)	Description	Exposed To Wind	Applied Length (ft)	Weight (lb/ft)	CaAa (sf/ft)	qz (psf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
5.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
5.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
5.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
10.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
10.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
10.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
15.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
15.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
15.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
20.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
20.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
20.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
25.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
25.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
25.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
30.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	13.871	0.00	0.00	39.60
30.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	13.871	0.00	0.00	62.40
30.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	13.871	70.33	0.00	115.65
32.00	(12) 1 1/4" Coax	No	2.00	7.92	0.00	13.871	0.00	0.00	15.84
32.00	(12) 1 5/8" Coax	No	2.00	12.48	0.00	13.871	0.00	0.00	24.96
32.00	(9) 1 5/8" Coax	Yes	2.00	23.13	0.60	13.871	28.13	0.00	46.28
35.00	(12) 1 1/4" Coax	No	3.00	7.92	0.00	14.106	0.00	0.00	23.76
35.00	(12) 1 5/8" Coax	No	3.00	12.48	0.00	14.106	0.00	0.00	37.44
35.00	(9) 1 5/8" Coax	Yes	3.00	23.13	0.60	14.106	42.91	0.00	69.39
37.50	(12) 1 1/4" Coax	No	2.50	7.92	0.00	14.387	0.00	0.00	19.80
37.50	(12) 1 5/8" Coax	No	2.50	12.48	0.00	14.387	0.00	0.00	31.20
37.50	(9) 1 5/8" Coax	Yes	2.50	23.13	0.60	14.387	36.47	0.00	57.82
40.00	(12) 1 1/4" Coax	No	2.50	7.92	0.00	14.655	0.00	0.00	19.80
40.00	(12) 1 5/8" Coax	No	2.50	12.48	0.00	14.655	0.00	0.00	31.20
40.00	(9) 1 5/8" Coax	Yes	2.50	23.13	0.60	14.655	37.15	0.00	57.82
45.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	15.156	0.00	0.00	39.60
45.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	15.156	0.00	0.00	62.40
45.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	15.156	76.84	0.00	115.65
50.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	15.620	0.00	0.00	39.60
50.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	15.620	0.00	0.00	62.40
50.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	15.620	79.19	0.00	115.65
55.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	16.051	0.00	0.00	39.60
55.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	16.051	0.00	0.00	62.40
55.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	16.051	81.38	0.00	115.65
60.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	16.455	0.00	0.00	39.60
60.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	16.455	0.00	0.00	62.40
60.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	16.455	83.43	0.00	115.65
64.83	(12) 1 1/4" Coax	No	4.83	7.92	0.00	16.823	0.00	0.00	38.28
64.83	(12) 1 5/8" Coax	No	4.83	12.48	0.00	16.823	0.00	0.00	60.32
64.83	(9) 1 5/8" Coax	Yes	4.83	23.13	0.60	16.823	82.45	0.00	111.79
65.00	(12) 1 1/4" Coax	No	0.17	7.92	0.00	16.836	0.00	0.00	1.32
65.00	(12) 1 5/8" Coax	No	0.17	12.48	0.00	16.836	0.00	0.00	2.08
65.00	(9) 1 5/8" Coax	Yes	0.17	23.13	0.60	16.836	2.85	0.00	3.85
69.50	(12) 1 1/4" Coax	No	4.50	7.92	0.00	17.161	0.00	0.00	35.64
69.50	(12) 1 5/8" Coax	No	4.50	12.48	0.00	17.161	0.00	0.00	56.16
69.50	(9) 1 5/8" Coax	Yes	4.50	23.13	0.60	17.161	78.30	0.00	104.08

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 13



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

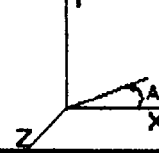
Gust Response Factor: 1.69 Effective Wind Speed: 73.61 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

70.00	(12) 1 1/4" Coax	No	0.50	7.92	0.00	17.196	0.00	0.00	3.96
70.00	(12) 1 5/8" Coax	No	0.50	12.48	0.00	17.196	0.00	0.00	6.24
70.00	(9) 1 5/8" Coax	Yes	0.50	23.13	0.60	17.196	8.72	0.00	11.56
75.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	17.538	0.00	0.00	39.60
75.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	17.538	0.00	0.00	62.40
75.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	17.538	88.92	0.00	115.65
80.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	17.865	0.00	0.00	39.60
80.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	17.865	0.00	0.00	62.40
80.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	17.865	90.57	0.00	115.65
85.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.177	0.00	0.00	39.60
85.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.177	0.00	0.00	62.40
85.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	18.177	92.16	0.00	115.65
90.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.476	0.00	0.00	39.60
90.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.476	0.00	0.00	62.40
90.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	18.476	93.67	0.00	115.65
95.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	18.764	0.00	0.00	39.60
95.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	18.764	0.00	0.00	62.40
95.00	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	18.764	95.13	0.00	115.65
98.50	(12) 1 1/4" Coax	No	3.50	7.92	0.00	18.959	0.00	0.00	27.72
98.50	(12) 1 5/8" Coax	No	3.50	12.48	0.00	18.959	0.00	0.00	43.68
98.50	(9) 1 5/8" Coax	Yes	3.50	23.13	0.60	18.959	67.28	0.00	80.95
100.0	(12) 1 1/4" Coax	No	1.50	7.92	0.00	19.041	0.00	0.00	11.88
100.0	(12) 1 5/8" Coax	No	1.50	12.48	0.00	19.041	0.00	0.00	18.72
100.0	(9) 1 5/8" Coax	Yes	1.50	23.13	0.60	19.041	28.96	0.00	34.69
102.3	(12) 1 1/4" Coax	No	2.33	7.92	0.00	19.166	0.00	0.00	18.48
102.3	(12) 1 5/8" Coax	No	2.33	12.48	0.00	19.166	0.00	0.00	29.12
102.3	(9) 1 5/8" Coax	Yes	2.33	23.13	0.60	19.166	45.35	0.00	53.97
105.0	(12) 1 1/4" Coax	No	2.67	7.92	0.00	19.308	0.00	0.00	21.12
105.0	(12) 1 5/8" Coax	No	2.67	12.48	0.00	19.308	0.00	0.00	33.28
105.0	(9) 1 5/8" Coax	Yes	2.67	23.13	0.60	19.308	52.21	0.00	61.68
110.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	19.566	0.00	0.00	39.60
110.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	19.566	0.00	0.00	62.40
110.0	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	19.566	99.20	0.00	115.65
115.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	19.816	0.00	0.00	39.60
115.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	19.816	0.00	0.00	62.40
115.0	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	19.816	100.47	0.00	115.65
120.0	(12) 1 1/4" Coax	No	2.00	7.92	0.00	20.059	0.00	0.00	15.84
120.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	20.059	0.00	0.00	62.40
120.0	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	20.059	101.70	0.00	115.65
125.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	20.294	0.00	0.00	62.40
125.0	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	20.294	102.89	0.00	115.65
130.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	20.523	0.00	0.00	62.40
130.0	(9) 1 5/8" Coax	Yes	5.00	23.13	0.60	20.523	104.05	0.00	115.65
133.0	(9) 1 5/8" Coax	Yes	3.08	23.13	0.60	20.661	84.66	0.00	71.32
135.0	(9) 1 5/8" Coax	Yes	1.92	23.13	0.60	20.746	40.32	0.00	44.33
136.0	(9) 1 5/8" Coax	Yes	1.00	23.13	0.60	20.789	21.08	0.00	23.13
140.0	(9) 1 5/8" Coax	Yes	4.00	23.13	0.60	20.962	85.02	0.00	92.52
Totals:									2,433.36
									0.00
									5,787.2

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 14



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 23 Iterations
 Gust Response Factor: 1.69 Effective Wind Speed: 73.61 (mph)
 Dead Load Factor: 1.00
 Wind Load Factor: 1.00

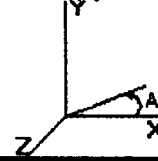
Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	429.10	1,505.06	0.00	0.00	0.00	0.00
10.00	0.00	0.00	421.29	1,476.35	0.00	0.00	0.00	0.00
15.00	0.00	0.00	413.48	1,447.64	0.00	0.00	0.00	0.00
20.00	0.00	0.00	405.67	1,418.92	0.00	0.00	0.00	0.00
25.00	0.00	0.00	397.86	1,390.21	0.00	0.00	0.00	0.00
30.00	0.00	0.00	390.04	1,361.50	0.00	0.00	0.00	0.00
32.00	0.00	0.00	193.83	537.01	0.00	0.00	0.00	0.00
35.00	0.00	0.00	235.18	1,384.38	0.00	0.00	0.00	0.00
37.50	0.00	0.00	197.66	1,139.00	0.00	0.00	0.00	0.00
40.00	0.00	0.00	199.27	657.67	0.00	0.00	0.00	0.00
45.00	0.00	0.00	405.78	1,292.86	0.00	0.00	0.00	0.00
50.00	0.00	0.00	409.38	1,264.14	0.00	0.00	0.00	0.00
55.00	0.00	0.00	411.85	1,235.43	0.00	0.00	0.00	0.00
60.00	0.00	0.00	412.74	1,206.72	0.00	0.00	0.00	0.00
64.83	0.00	0.00	398.91	1,139.26	0.00	0.00	0.00	0.00
65.00	0.00	0.00	13.80	66.80	0.00	0.00	0.00	0.00
69.50	0.00	0.00	375.74	1,779.67	0.00	0.00	0.00	0.00
70.00	0.00	0.00	41.35	115.58	0.00	0.00	0.00	0.00
75.00	0.00	0.00	416.30	1,138.08	0.00	0.00	0.00	0.00
80.00	0.00	0.00	413.99	1,109.36	0.00	0.00	0.00	0.00
85.00	0.00	0.00	416.98	1,080.65	0.00	0.00	0.00	0.00
90.00	0.00	0.00	497.35	1,051.94	0.00	0.00	0.00	0.00
95.00	0.00	0.00	493.12	1,023.22	0.00	0.00	0.00	0.00
98.50	0.00	0.00	276.76	699.57	0.00	0.00	0.00	0.00
100.00	0.00	0.00	651.60	745.98	0.00	0.00	0.00	0.00
102.33	0.00	0.00	185.99	715.85	0.00	0.00	0.00	0.00
105.00	0.00	0.00	211.23	482.08	0.00	0.00	0.00	0.00
110.00	0.00	0.00	382.90	846.68	0.00	0.00	0.00	0.00
115.00	0.00	0.00	386.76	822.12	0.00	0.00	0.00	0.00
120.00	0.00	0.00	380.20	773.80	0.00	0.00	0.00	0.00
125.00	0.00	0.00	373.23	733.40	0.00	0.00	0.00	0.00
130.00	0.00	0.00	2,923.54	3,228.84	0.00	0.00	0.00	0.00
133.88	0.00	0.00	221.34	386.84	0.00	0.00	0.00	0.00
135.00	0.00	0.00	137.73	368.55	0.00	0.00	0.00	0.00
138.00	0.00	0.00	71.33	189.96	0.00	0.00	0.00	0.00
140.00	0.00	0.00	2,069.54	2,770.76	0.00	0.00	0.00	0.00
145.00	0.00	0.00	239.20	389.06	0.00	0.00	0.00	0.00
150.00	0.00	0.00	4,875.63	3,068.65	0.00	0.00	0.00	1,401.41
Totals:			21,163.46	42,023.57	0.00	0.00	0.00	1,401.41

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page : 15



Load Case: Ice 85 mph - With Ice - Ice Thickness = 0.5 in 23 Iterations
 Gust Response Factor : 1.69 Effective Wind Speed : 73.61 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	21.209	42.000	0.000	0.000	0.000	2,274.242	0.000	0.000	0.000	0.000
5.00	20.864	40.451	0.000	0.000	0.000	2,168.201	-0.065	0.000	0.065	-0.121
10.00	20.523	38.932	0.000	0.000	0.000	2,063.881	-0.259	0.000	0.259	-0.245
15.00	20.185	37.442	0.000	0.000	0.000	1,961.267	-0.583	0.000	0.583	-0.371
20.00	19.850	35.981	0.000	0.000	0.000	1,860.345	-1.040	0.000	1.040	-0.499
25.00	19.516	34.550	0.000	0.000	0.000	1,761.098	-1.633	0.000	1.633	-0.629
30.00	19.185	33.163	0.000	0.000	0.000	1,663.512	-2.363	0.000	2.363	-0.762
32.00	19.043	32.605	0.000	0.000	0.000	1,625.183	-2.694	0.000	2.694	-0.817
35.00	18.829	31.199	0.000	0.000	0.000	1,568.054	-3.234	0.000	3.234	-0.900
37.50	18.649	30.041	0.000	0.000	0.000	1,520.984	-3.724	0.000	3.724	-0.969
40.00	18.491	29.354	0.000	0.000	0.000	1,474.362	-4.251	0.000	4.251	-1.040
45.00	18.126	28.027	0.000	0.000	0.000	1,381.910	-5.411	0.000	5.411	-1.173
50.00	17.752	26.730	0.000	0.000	0.000	1,291.283	-6.712	0.000	6.712	-1.308
55.00	17.372	25.463	0.000	0.000	0.000	1,202.523	-8.155	0.000	8.155	-1.444
60.00	16.986	24.227	0.000	0.000	0.000	1,115.663	-9.742	0.000	9.742	-1.582
64.83	16.582	23.080	0.000	0.000	0.000	1,033.567	-11.414	0.000	11.414	-1.718
65.00	16.593	22.994	0.000	0.000	0.000	1,030.803	-11.474	0.000	11.474	-1.722
69.59	16.188	21.207	0.000	0.000	0.000	956.136	-13.159	0.000	13.159	-1.850
70.00	16.171	21.072	0.000	0.000	0.000	948.042	-13.354	0.000	13.354	-1.864
75.00	15.763	19.912	0.000	0.000	0.000	867.191	-15.378	0.000	15.378	-1.998
80.00	15.353	18.762	0.000	0.000	0.000	788.378	-17.543	0.000	17.543	-2.133
85.00	14.942	17.683	0.000	0.000	0.000	711.614	-19.849	0.000	19.849	-2.266
90.00	14.531	16.615	0.000	0.000	0.000	636.905	-22.294	0.000	22.294	-2.399
95.00	14.114	15.563	0.000	0.000	0.000	564.253	-24.877	0.000	24.877	-2.531
98.50	13.821	14.861	0.000	0.000	0.000	514.854	-26.767	0.000	26.767	-2.623
100.00	13.146	14.154	0.000	0.000	0.000	484.123	-27.597	0.000	27.597	-2.662
102.33	12.944	13.433	0.000	0.000	0.000	463.444	-28.913	0.000	28.913	-2.723
105.00	12.734	12.959	0.000	0.000	0.000	428.928	-30.454	0.000	30.454	-2.792
110.00	12.328	12.104	0.000	0.000	0.000	365.257	-33.451	0.000	33.451	-2.928
115.00	11.923	11.278	0.000	0.000	0.000	303.619	-36.587	0.000	36.587	-3.057
120.00	11.522	10.593	0.000	0.000	0.000	244.005	-39.853	0.000	39.853	-3.176
125.00	11.125	9.773	0.000	0.000	0.000	186.395	-43.237	0.000	43.237	-3.283
130.00	8.026	6.710	0.000	0.000	0.000	130.771	-46.724	0.000	46.724	-3.373
133.66	7.787	6.332	0.000	0.000	0.000	106.023	-48.918	0.000	48.918	-3.420
135.00	7.629	5.970	0.000	0.000	0.000	91.099	-50.296	0.000	50.296	-3.447
136.00	7.550	5.780	0.000	0.000	0.000	83.470	-51.019	0.000	51.019	-3.460
140.00	5.318	3.137	0.000	0.000	0.000	53.272	-53.936	0.000	53.936	-3.502
145.00	5.056	2.760	0.000	0.000	0.000	26.664	-57.626	0.000	57.626	-3.543
150.00	4.876	0.000	0.000	0.000	0.000	1.401	-61.347	0.000	61.347	-3.560

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

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Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 16



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

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

Dead Load Factor: 1.00

Wind Load Factor: 1.00

Calculated Stresses

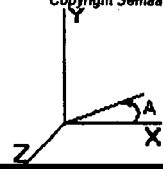
Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)		
0.00	0.633	0.644	0.000	0.000	0.000	29.846	30.499	52.0	0.587
5.00	0.623	0.648	0.000	0.000	0.000	29.757	30.402	52.0	0.585
10.00	0.614	0.652	0.000	0.000	0.000	29.654	30.288	52.0	0.583
15.00	0.604	0.657	0.000	0.000	0.000	29.532	30.158	52.0	0.580
20.00	0.595	0.661	0.000	0.000	0.000	29.390	30.007	52.0	0.577
25.00	0.585	0.666	0.000	0.000	0.000	29.225	29.833	52.0	0.574
30.00	0.576	0.671	0.000	0.000	0.000	29.034	29.632	52.0	0.570
32.00	0.572	0.674	0.000	0.000	0.000	28.953	29.548	52.0	0.568
35.00	0.556	0.676	0.000	0.000	0.000	28.821	29.400	52.0	0.566
37.50	0.534	0.668	0.000	0.000	0.000	27.796	28.353	52.0	0.546
40.00	0.529	0.671	0.000	0.000	0.000	27.662	28.214	52.0	0.543
45.00	0.518	0.676	0.000	0.000	0.000	27.357	27.900	52.0	0.537
50.00	0.508	0.680	0.000	0.000	0.000	27.012	27.545	52.0	0.530
55.00	0.498	0.685	0.000	0.000	0.000	26.623	27.147	52.0	0.522
60.00	0.488	0.689	0.000	0.000	0.000	26.185	26.699	52.0	0.514
64.83	0.478	0.693	0.000	0.000	0.000	25.709	26.215	52.0	0.504
65.00	0.477	0.694	0.000	0.000	0.000	25.692	26.197	52.0	0.504
69.50	0.444	0.683	0.000	0.000	0.000	24.259	24.732	52.0	0.476
70.00	0.442	0.684	0.000	0.000	0.000	24.203	24.674	52.0	0.475
75.00	0.431	0.688	0.000	0.000	0.000	23.572	24.033	52.0	0.462
80.00	0.420	0.692	0.000	0.000	0.000	22.864	23.315	52.0	0.449
85.00	0.409	0.696	0.000	0.000	0.000	22.087	22.508	52.0	0.433
90.00	0.398	0.701	0.000	0.000	0.000	21.167	21.599	52.0	0.416
95.00	0.387	0.706	0.000	0.000	0.000	20.147	20.570	52.0	0.396
98.50	0.379	0.709	0.000	0.000	0.000	19.361	19.778	52.0	0.381
100.00	0.364	0.682	0.000	0.000	0.000	19.006	19.406	52.0	0.373
102.33	0.413	0.803	0.000	0.000	0.000	21.203	21.661	52.0	0.417
105.00	0.407	0.806	0.000	0.000	0.000	20.438	20.892	52.0	0.402
110.00	0.395	0.812	0.000	0.000	0.000	18.827	19.273	52.0	0.371
115.00	0.384	0.817	0.000	0.000	0.000	16.983	17.424	52.0	0.335
120.00	0.373	0.824	0.000	0.000	0.000	14.863	15.303	52.0	0.294
125.00	0.363	0.832	0.000	0.000	0.000	12.412	12.855	52.0	0.247
130.00	0.261	0.629	0.000	0.000	0.000	9.558	9.879	52.0	0.190
133.08	0.253	0.628	0.000	0.000	0.000	8.228	8.549	52.0	0.164
135.00	0.244	0.627	0.000	0.000	0.000	7.342	7.663	52.0	0.147
136.00	0.291	0.786	0.000	0.000	0.000	8.177	8.571	52.0	0.165
140.00	0.164	0.582	0.000	0.000	0.000	5.657	5.902	52.0	0.114
145.00	0.152	0.563	0.000	0.000	0.000	3.149	3.442	52.0	0.066
150.00	0.000	0.574	0.000	0.000	0.000	0.185	1.011	52.0	0.019

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR

Base Elev : 0.000 (ft)
 Top Dia : 21.63 (in)

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 10/30/2001 12:20:50 PM
 Page: 17



Load Case: Twist/Sway 50 mph - No Ice 22 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 50.00 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Shaft Forces

Seg Top Elev (ft)	Description	Kz	αz (psf)	αGh (psf)	C (mph-ft)	Cf	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
0.00		1.00	6.400	10.81	233.85	0.650	0.00	0.000	0.000	0.00	0.00	0.0
5.00		1.00	6.400	10.81	228.73	0.650	5.00	23.129	15.034	162.61	0.00	1,116.5
10.00		1.00	6.400	10.81	223.60	0.650	5.00	22.616	14.701	159.00	0.00	1,091.6
15.00		1.00	6.400	10.81	218.47	0.650	5.00	22.104	14.367	155.40	0.00	1,066.8
20.00		1.00	6.400	10.81	213.35	0.650	5.00	21.591	14.034	151.79	0.00	1,041.7
25.00		1.00	6.400	10.81	208.22	0.650	5.00	21.078	13.701	148.19	0.00	1,016.8
30.00		1.00	6.400	10.81	203.09	0.650	5.00	20.566	13.368	144.58	0.00	991.9
32.00	Bot - Section 2	1.00	6.400	10.81	201.04	0.650	2.00	8.083	5.254	56.82	0.00	389.8
35.00		1.01	6.509	10.99	199.64	0.650	3.00	12.158	7.903	86.92	0.00	1,163.5
37.50	Top - Section 1	1.03	6.638	11.21	199.00	0.650	2.50	9.990	6.494	72.85	0.00	955.9
40.00		1.05	6.762	11.42	201.42	0.650	2.50	9.862	6.410	73.25	0.00	475.5
45.00		1.09	6.993	11.81	199.48	0.650	5.00	19.340	12.571	148.57	0.00	932.3
50.00		1.12	7.207	12.17	197.07	0.650	5.00	18.827	12.238	149.05	0.00	907.4
55.00		1.15	7.408	12.51	194.25	0.650	5.00	18.315	11.905	148.99	0.00	882.5
60.00		1.18	7.592	12.83	191.10	0.650	5.00	17.802	11.571	148.47	0.00	857.8
64.83	Bot - Section 3	1.21	7.762	13.11	187.77	0.650	4.83	16.721	10.869	142.58	0.00	805.3
65.00		1.21	7.768	13.12	187.65	0.650	0.17	0.578	0.378	4.94	0.00	55.2
69.50	Top - Section 2	1.23	7.918	13.38	184.32	0.650	4.50	15.403	10.012	133.97	0.00	1,469.9
70.00		1.24	7.934	13.40	187.42	0.650	0.50	1.886	1.096	14.69	0.00	81.2
75.00		1.26	8.092	13.67	183.51	0.650	5.00	16.576	10.775	147.35	0.00	798.0
80.00		1.28	8.242	13.93	179.39	0.650	5.00	16.064	10.441	145.45	0.00	773.1
85.00		1.31	8.387	14.17	175.08	0.650	5.00	15.551	10.108	143.27	0.00	748.2
90.00		1.33	8.525	14.40	170.60	0.650	5.00	15.038	9.775	140.82	0.00	723.3
95.00		1.35	8.657	14.63	165.96	0.650	5.00	14.526	9.442	138.14	0.00	698.4
98.50	Bot - Section 4	1.36	8.747	14.78	162.83	0.650	3.50	9.863	6.411	94.77	0.00	474.0
100.00	Appertunance(s)	1.37	8.785	14.84	161.17	0.650	1.50	4.228	2.748	40.80	0.00	369.1
102.33	Top - Section 3	1.38	8.843	14.94	158.89	0.650	2.33	6.485	4.216	63.00	0.00	565.9
105.00		1.39	8.908	15.05	159.33	0.650	2.67	7.275	4.729	71.20	0.00	291.8
110.00		1.41	9.028	15.25	154.30	0.650	5.00	13.248	8.611	131.38	0.00	531.3
115.00		1.42	9.143	15.45	149.15	0.650	5.00	12.735	8.278	127.91	0.00	510.5
120.00		1.44	9.255	15.64	143.90	0.650	5.00	12.223	7.945	124.26	0.00	489.7
125.00		1.46	9.363	15.82	138.54	0.650	5.00	11.710	7.611	120.45	0.00	469.0
130.00	Appertunance(s)	1.48	9.489	16.00	133.08	0.650	5.00	11.197	7.278	116.47	0.00	448.2
133.88	Bot - Section 5	1.48	9.533	16.11	129.87	0.650	3.08	6.649	4.322	89.63	0.00	266.1
135.00		1.49	9.572	16.17	127.53	0.650	1.92	4.116	2.675	43.27	0.00	293.4
136.00	Top - Section 4	1.49	9.592	16.21	126.41	0.650	1.00	2.117	1.376	22.31	0.00	150.9
140.00	Appertunance(s)	1.51	9.672	16.34	124.45	0.650	4.00	8.263	5.371	87.79	0.00	265.0
145.00		1.52	9.769	16.51	118.74	0.650	5.00	9.868	6.414	105.89	0.00	316.3
150.00	Appertunance(s)	1.54	9.864	16.67	112.06	0.650	5.00	9.355	6.081	101.37	0.00	299.7
				Totals:			150.00			4,138.19	0.00	24,783.3

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

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 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:50 PM
 Page: 18



Load Case: Twist/Sway 50 mph - No Ice 22 Iterations

Gust Response Factor: 1.69 Effective Wind Speed: 50.00 (mph)

Dead Load Factor: 1.00

Wind Load Factor: 1.00

Discrete Appurtenance Forces

Elev (ft)	Description	Qty	qx (psf)	qxGh (psf)	Total CaAa (sf)	CaAa Factor	Horiz Ecc (ft)	Vert Ecc (ft)	X Angle (deg)	Wind Force X (lb)	Wind Force Z (lb)	Mom X (lb-ft)	Mom Y (lb-ft)	Mom Z (lb-ft)	Weight (lb)
100.00	HP MW Dish, 4' Dia.	1	8.785	14.84	15.869	1.000	0.000	0.0	0.0	235.47	0.00	0.00	0.00	0.00	170.0
130.00	Low Profile platform	1	9.489	16.00	25.550	1.000	0.000	0.0	0.0	488.87	0.00	0.00	0.00	0.00	1300.0
130.00	RR90-17	12	9.489	16.00	41.861	0.667	0.000	0.0	0.0	689.88	0.00	0.00	0.00	0.00	144.0
140.00	Low Profile platform	1	9.672	16.34	25.550	1.000	0.000	0.0	0.0	417.61	0.00	0.00	0.00	0.00	1300.0
140.00	DB900H90T2EM	3	9.672	16.34	6.563	0.667	0.000	0.0	0.0	107.28	0.00	0.00	0.00	0.00	27.0
140.00	DB900F90EM	6	9.672	16.34	13.127	0.667	0.000	0.0	0.0	214.55	0.00	0.00	0.00	0.00	54.0
150.00	Lightning Rod, 15'	1	10.00	16.90	1.060	1.000	0.000	7.5	0.0	17.75	0.00	0.00	0.00	133.12	35.0
150.00	15' Pirod Universal T-	3	9.864	16.67	30.015	0.667	0.000	0.0	0.0	509.36	0.00	0.00	0.00	0.00	1500.0
150.00	RR65-18-00XP w/	12	9.864	16.67	72.000	1.000	0.000	0.0	0.0	1200.27	0.00	0.00	0.00	0.00	276.0
										3,772.04	0.00			4,806.0	

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

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Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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10/30/2001 12:20:50 PM
 Page: 19



Load Case: Twist/Sway 50 mph - No Ice

22 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 50.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

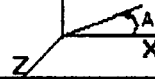
Linear Apurtenance Forces

Seg Elev (ft)	Description	Exposed To Wind	Applied Length (ft)	Weight (lb/ft)	CaAa (eff/ft)	qz (psf)	Wind Force X (lb)	Wind Force Z (lb)	Weight (lb)
5.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
5.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
5.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
10.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
10.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
10.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
15.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
15.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
15.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
20.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
20.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
20.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
25.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
25.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
25.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
30.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.400	0.00	0.00	39.60
30.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.400	0.00	0.00	62.40
30.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.400	21.83	0.00	46.80
32.00	(12) 1 1/4" Coax	No	2.00	7.92	0.00	6.400	0.00	0.00	15.84
32.00	(12) 1 5/8" Coax	No	2.00	12.48	0.00	6.400	0.00	0.00	24.96
32.00	(9) 1 5/8" Coax	Yes	2.00	9.36	0.40	6.400	8.85	0.00	18.72
35.00	(12) 1 1/4" Coax	No	3.00	7.92	0.00	6.500	0.00	0.00	23.76
35.00	(12) 1 5/8" Coax	No	3.00	12.48	0.00	6.500	0.00	0.00	37.44
35.00	(9) 1 5/8" Coax	Yes	3.00	9.36	0.40	6.500	13.20	0.00	28.08
37.50	(12) 1 1/4" Coax	No	2.50	7.92	0.00	6.638	0.00	0.00	19.80
37.50	(12) 1 5/8" Coax	No	2.50	12.48	0.00	6.638	0.00	0.00	31.20
37.50	(9) 1 5/8" Coax	Yes	2.50	9.36	0.40	6.638	11.22	0.00	23.40
40.00	(12) 1 1/4" Coax	No	2.50	7.92	0.00	6.762	0.00	0.00	19.80
40.00	(12) 1 5/8" Coax	No	2.50	12.48	0.00	6.762	0.00	0.00	31.20
40.00	(9) 1 5/8" Coax	Yes	2.50	9.36	0.40	6.762	11.43	0.00	23.40
45.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	6.993	0.00	0.00	39.60
45.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	6.993	0.00	0.00	62.40
45.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	6.993	23.84	0.00	46.80
50.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	7.207	0.00	0.00	39.60
50.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	7.207	0.00	0.00	62.40
50.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	7.207	24.36	0.00	46.80
55.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	7.406	0.00	0.00	39.60
55.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	7.406	0.00	0.00	62.40
55.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	7.406	25.03	0.00	46.80
60.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	7.592	0.00	0.00	39.60
60.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	7.592	0.00	0.00	62.40
60.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	7.592	25.66	0.00	46.80
64.83	(12) 1 1/4" Coax	No	4.83	7.92	0.00	7.762	0.00	0.00	38.28
64.83	(12) 1 5/8" Coax	No	4.83	12.48	0.00	7.762	0.00	0.00	60.32
64.83	(9) 1 5/8" Coax	Yes	4.83	9.36	0.40	7.762	25.36	0.00	45.24
65.00	(12) 1 1/4" Coax	No	0.17	7.92	0.00	7.768	0.00	0.00	1.32
65.00	(12) 1 5/8" Coax	No	0.17	12.48	0.00	7.768	0.00	0.00	2.08
65.00	(9) 1 5/8" Coax	Yes	0.17	9.36	0.40	7.768	0.88	0.00	1.56
69.50	(12) 1 1/4" Coax	No	4.50	7.92	0.00	7.918	0.00	0.00	35.64
69.50	(12) 1 5/8" Coax	No	4.50	12.48	0.00	7.918	0.00	0.00	56.16
69.50	(9) 1 5/8" Coax	Yes	4.50	9.36	0.40	7.918	24.09	0.00	42.12

Pole : CT-11-217A
 Location: Newtown, CT
 Height: 150.0 (ft)
 Shape: 18 Sides
 Base Dia: 56.12 (in)
 Taper: 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev: 0.000 (ft)
 Top Dia: 21.83 (in)

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 10/30/2001 12:20:51 PM
 Page: 20



Load Case: Twist/Sway 50 mph - No Ice 22 iterations
Gust Response Factor: 1.69 **Effective Wind Speed:** 50.00 (mph)
Dead Load Factor: 1.00
Wind Load Factor: 1.00

70.00	(12) 1 1/4" Coax	No	0.50	7.92	0.00	7.934	0.00	0.00	3.96
70.00	(12) 1 5/8" Coax	No	0.50	12.48	0.00	7.934	0.00	0.00	6.24
70.00	(9) 1 5/8" Coax	Yes	0.50	9.36	0.40	7.934	2.68	0.00	4.68
75.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	8.092	0.00	0.00	39.60
75.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	8.092	0.00	0.00	62.40
75.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	8.092	27.35	0.00	46.80
80.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	8.242	0.00	0.00	39.60
80.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	8.242	0.00	0.00	62.40
80.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	8.242	27.86	0.00	46.80
85.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	8.387	0.00	0.00	39.60
85.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	8.387	0.00	0.00	62.40
85.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	8.387	28.35	0.00	46.80
90.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	8.525	0.00	0.00	39.60
90.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	8.525	0.00	0.00	62.40
90.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	8.525	28.81	0.00	46.80
95.00	(12) 1 1/4" Coax	No	5.00	7.92	0.00	8.657	0.00	0.00	39.60
95.00	(12) 1 5/8" Coax	No	5.00	12.48	0.00	8.657	0.00	0.00	62.40
95.00	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	8.657	29.26	0.00	46.80
98.50	(12) 1 1/4" Coax	No	3.50	7.92	0.00	8.747	0.00	0.00	27.72
98.50	(12) 1 5/8" Coax	No	3.50	12.48	0.00	8.747	0.00	0.00	43.68
98.50	(9) 1 5/8" Coax	Yes	3.50	9.36	0.40	8.747	20.70	0.00	32.76
100.0	(12) 1 1/4" Coax	No	1.50	7.92	0.00	8.785	0.00	0.00	11.88
100.0	(12) 1 5/8" Coax	No	1.50	12.48	0.00	8.785	0.00	0.00	18.72
100.0	(9) 1 5/8" Coax	Yes	1.50	9.36	0.40	8.785	8.91	0.00	14.04
102.3	(12) 1 1/4" Coax	No	2.33	7.92	0.00	8.843	0.00	0.00	18.48
102.3	(12) 1 5/8" Coax	No	2.33	12.48	0.00	8.843	0.00	0.00	29.12
102.3	(9) 1 5/8" Coax	Yes	2.33	9.36	0.40	8.843	13.95	0.00	21.84
105.0	(12) 1 1/4" Coax	No	2.67	7.92	0.00	8.908	0.00	0.00	21.12
105.0	(12) 1 5/8" Coax	No	2.67	12.48	0.00	8.908	0.00	0.00	33.28
105.0	(9) 1 5/8" Coax	Yes	2.67	9.36	0.40	8.908	16.06	0.00	24.96
110.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	9.028	0.00	0.00	39.60
110.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	9.028	0.00	0.00	62.40
110.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	9.028	30.51	0.00	46.80
115.0	(12) 1 1/4" Coax	No	5.00	7.92	0.00	9.143	0.00	0.00	39.60
115.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	9.143	0.00	0.00	62.40
115.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	9.143	30.90	0.00	46.80
120.0	(12) 1 1/4" Coax	No	2.00	7.92	0.00	9.255	0.00	0.00	15.84
120.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	9.255	0.00	0.00	62.40
120.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	9.255	31.28	0.00	46.80
125.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	9.363	0.00	0.00	62.40
125.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	9.363	31.65	0.00	46.80
130.0	(12) 1 5/8" Coax	No	5.00	12.48	0.00	9.469	0.00	0.00	62.40
130.0	(9) 1 5/8" Coax	Yes	5.00	9.36	0.40	9.469	32.01	0.00	46.80
133.0	(9) 1 5/8" Coax	Yes	3.08	9.36	0.40	9.533	19.87	0.00	28.86
135.0	(9) 1 5/8" Coax	Yes	1.92	9.36	0.40	9.572	12.40	0.00	17.94
136.0	(9) 1 5/8" Coax	Yes	1.00	9.36	0.40	9.592	6.48	0.00	9.36
140.0	(9) 1 5/8" Coax	Yes	4.00	9.36	0.40	9.672	26.15	0.00	37.44
Totals:							748.48	0.00	3,859.4

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR

Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:51 PM
 Page: 21



Load Case: Twist/Sway 50 mph - No Ice

22 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 50.00 (mph)
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Forces Summary

Seg Elev (ft)	X Coord (ft)	Z Coord (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Lateral FZ (lb)	Moment MX (lb-ft)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	184.24	1,265.28	0.00	0.00	0.00	0.00
10.00	0.00	0.00	180.83	1,240.36	0.00	0.00	0.00	0.00
15.00	0.00	0.00	177.03	1,215.45	0.00	0.00	0.00	0.00
20.00	0.00	0.00	173.43	1,190.53	0.00	0.00	0.00	0.00
25.00	0.00	0.00	169.82	1,165.61	0.00	0.00	0.00	0.00
30.00	0.00	0.00	166.22	1,140.70	0.00	0.00	0.00	0.00
32.00	0.00	0.00	65.48	449.30	0.00	0.00	0.00	0.00
35.00	0.00	0.00	100.12	1,252.79	0.00	0.00	0.00	0.00
37.50	0.00	0.00	84.07	1,030.29	0.00	0.00	0.00	0.00
40.00	0.00	0.00	84.68	549.91	0.00	0.00	0.00	0.00
45.00	0.00	0.00	172.20	1,081.14	0.00	0.00	0.00	0.00
50.00	0.00	0.00	173.41	1,056.22	0.00	0.00	0.00	0.00
55.00	0.00	0.00	174.02	1,031.30	0.00	0.00	0.00	0.00
60.00	0.00	0.00	174.13	1,006.39	0.00	0.00	0.00	0.00
64.83	0.00	0.00	167.94	949.16	0.00	0.00	0.00	0.00
65.00	0.00	0.00	5.81	60.17	0.00	0.00	0.00	0.00
69.50	0.00	0.00	158.08	1,603.79	0.00	0.00	0.00	0.00
70.00	0.00	0.00	17.37	96.05	0.00	0.00	0.00	0.00
75.00	0.00	0.00	174.70	946.82	0.00	0.00	0.00	0.00
80.00	0.00	0.00	173.31	921.91	0.00	0.00	0.00	0.00
85.00	0.00	0.00	171.61	896.99	0.00	0.00	0.00	0.00
90.00	0.00	0.00	169.84	872.07	0.00	0.00	0.00	0.00
95.00	0.00	0.00	167.40	847.16	0.00	0.00	0.00	0.00
98.50	0.00	0.00	115.47	578.18	0.00	0.00	0.00	0.00
100.00	0.00	0.00	285.18	583.72	0.00	0.00	0.00	0.00
102.33	0.00	0.00	76.95	635.39	0.00	0.00	0.00	0.00
105.00	0.00	0.00	87.25	371.20	0.00	0.00	0.00	0.00
110.00	0.00	0.00	161.89	680.07	0.00	0.00	0.00	0.00
115.00	0.00	0.00	158.81	659.31	0.00	0.00	0.00	0.00
120.00	0.00	0.00	155.54	614.79	0.00	0.00	0.00	0.00
125.00	0.00	0.00	152.09	578.18	0.00	0.00	0.00	0.00
130.00	0.00	0.00	1,227.22	2,001.42	0.00	0.00	0.00	0.00
133.08	0.00	0.00	59.50	294.91	0.00	0.00	0.00	0.00
135.00	0.00	0.00	55.67	311.38	0.00	0.00	0.00	0.00
136.00	0.00	0.00	28.79	160.28	0.00	0.00	0.00	0.00
140.00	0.00	0.00	853.39	1,683.47	0.00	0.00	0.00	0.00
145.00	0.00	0.00	105.89	316.34	0.00	0.00	0.00	0.00
150.00	0.00	0.00	1,819.75	2,110.72	0.00	0.00	0.00	133.12
Totals:			8,658.72	33,448.74	0.00	0.00	0.00	133.12

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR
 Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:51 PM
 Page: 22



Load Case: Twist/Sway 50 mph - No Ice 22 Iterations
Gust Response Factor: 1.69 **Effective Wind Speed:** 50.00 (mph)
Dead Load Factor: 1.00
Wind Load Factor: 1.00

Calculated Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	8.673	33.445	0.000	0.000	0.000	907.210	0.000	0.000	0.000	0.000
5.00	8.515	32.173	0.000	0.000	0.000	863.847	-0.026	0.000	0.026	-0.048
10.00	8.360	30.925	0.000	0.000	0.000	821.272	-0.103	0.000	0.103	-0.098
15.00	8.206	29.703	0.000	0.000	0.000	779.475	-0.232	0.000	0.232	-0.148
20.00	8.055	28.506	0.000	0.000	0.000	738.444	-0.414	0.000	0.414	-0.198
25.00	7.905	27.334	0.000	0.000	0.000	698.171	-0.650	0.000	0.650	-0.250
30.00	7.750	26.189	0.000	0.000	0.000	658.645	-0.940	0.000	0.940	-0.303
32.00	7.695	25.736	0.000	0.000	0.000	643.144	-1.072	0.000	1.072	-0.325
35.00	7.600	24.480	0.000	0.000	0.000	620.061	-1.287	0.000	1.287	-0.357
37.50	7.521	23.447	0.000	0.000	0.000	601.061	-1.481	0.000	1.481	-0.385
40.00	7.448	22.892	0.000	0.000	0.000	582.260	-1.690	0.000	1.690	-0.413
45.00	7.288	21.806	0.000	0.000	0.000	545.019	-2.151	0.000	2.151	-0.465
50.00	7.125	20.744	0.000	0.000	0.000	508.580	-2.666	0.000	2.666	-0.518
55.00	6.960	19.708	0.000	0.000	0.000	472.957	-3.238	0.000	3.238	-0.572
60.00	6.792	18.697	0.000	0.000	0.000	438.160	-3.867	0.000	3.867	-0.626
64.83	6.622	17.747	0.000	0.000	0.000	405.330	-4.528	0.000	4.528	-0.679
65.00	6.624	17.684	0.000	0.000	0.000	404.227	-4.552	0.000	4.552	-0.681
69.50	6.454	16.079	0.000	0.000	0.000	374.421	-5.219	0.000	5.219	-0.731
70.00	6.443	15.980	0.000	0.000	0.000	371.194	-5.295	0.000	5.295	-0.737
75.00	6.270	15.030	0.000	0.000	0.000	338.979	-6.096	0.000	6.096	-0.789
80.00	6.096	14.105	0.000	0.000	0.000	307.631	-6.951	0.000	6.951	-0.842
85.00	5.923	13.205	0.000	0.000	0.000	277.151	-7.861	0.000	7.861	-0.894
90.00	5.750	12.331	0.000	0.000	0.000	247.537	-8.825	0.000	8.825	-0.946
95.00	5.577	11.482	0.000	0.000	0.000	218.788	-9.843	0.000	9.843	-0.997
98.50	5.456	10.904	0.000	0.000	0.000	199.266	-10.587	0.000	10.587	-1.032
100.00	5.164	10.324	0.000	0.000	0.000	191.081	-10.914	0.000	10.914	-1.048
102.33	5.080	9.688	0.000	0.000	0.000	179.032	-11.432	0.000	11.432	-1.071
105.00	4.992	9.315	0.000	0.000	0.000	165.486	-12.038	0.000	12.038	-1.098
110.00	4.825	8.634	0.000	0.000	0.000	140.526	-13.216	0.000	13.216	-1.150
115.00	4.659	7.974	0.000	0.000	0.000	116.404	-14.448	0.000	14.448	-1.200
120.00	4.496	7.359	0.000	0.000	0.000	93.110	-15.730	0.000	15.730	-1.245
125.00	4.335	6.782	0.000	0.000	0.000	70.631	-17.056	0.000	17.056	-1.286
130.00	3.065	4.807	0.000	0.000	0.000	48.954	-18.422	0.000	18.422	-1.320
133.08	2.970	4.514	0.000	0.000	0.000	39.503	-19.281	0.000	19.281	-1.337
135.00	2.908	4.203	0.000	0.000	0.000	33.811	-19.820	0.000	19.820	-1.347
136.00	2.876	4.043	0.000	0.000	0.000	30.904	-20.103	0.000	20.103	-1.352
140.00	1.983	2.380	0.000	0.000	0.000	19.401	-21.243	0.000	21.243	-1.368
145.00	1.870	2.066	0.000	0.000	0.000	9.484	-22.684	0.000	22.684	-1.383
150.00	1.820	0.000	0.000	0.000	0.000	0.133	-24.136	0.000	24.136	-1.388

Pole : CT-11-217A
 Location: Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.12 (in)
 Taper : 0.246 (in/ft)

VoiceStream Wireless-OR

Base Elev : 0.000 (ft)
 Top Dia : 21.83 (in)

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 10/30/2001 12:20:51 PM
 Page: 23



Load Case: Twist/Sway 50 mph - No Ice 22 Iterations

Gust Response Factor : 1.69 Effective Wind Speed : 50.00 (mph)

Dead Load Factor : 1.00

Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses						Combined (ksi)	Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)			
0.00	0.504	0.263	0.000	0.000	0.000	11.906	12.418	52.0	0.239
5.00	0.496	0.264	0.000	0.000	0.000	11.856	12.360	52.0	0.238
10.00	0.488	0.266	0.000	0.000	0.000	11.800	12.296	52.0	0.237
15.00	0.479	0.267	0.000	0.000	0.000	11.737	12.225	52.0	0.235
20.00	0.471	0.268	0.000	0.000	0.000	11.666	12.146	52.0	0.234
25.00	0.463	0.270	0.000	0.000	0.000	11.586	12.058	52.0	0.232
30.00	0.455	0.271	0.000	0.000	0.000	11.495	11.960	52.0	0.230
32.00	0.452	0.272	0.000	0.000	0.000	11.458	11.919	52.0	0.229
35.00	0.436	0.273	0.000	0.000	0.000	11.397	11.842	52.0	0.228
37.50	0.417	0.269	0.000	0.000	0.000	10.984	11.411	52.0	0.220
40.00	0.412	0.270	0.000	0.000	0.000	10.924	11.346	52.0	0.218
45.00	0.403	0.272	0.000	0.000	0.000	10.789	11.203	52.0	0.216
50.00	0.394	0.273	0.000	0.000	0.000	10.639	11.043	52.0	0.212
55.00	0.385	0.274	0.000	0.000	0.000	10.471	10.867	52.0	0.209
60.00	0.376	0.276	0.000	0.000	0.000	10.284	10.671	52.0	0.205
64.83	0.368	0.277	0.000	0.000	0.000	10.082	10.461	52.0	0.201
65.00	0.367	0.277	0.000	0.000	0.000	10.075	10.453	52.0	0.201
69.50	0.336	0.272	0.000	0.000	0.000	9.500	9.848	52.0	0.189
70.00	0.335	0.273	0.000	0.000	0.000	9.476	9.823	52.0	0.189
75.00	0.326	0.274	0.000	0.000	0.000	9.214	9.552	52.0	0.184
80.00	0.315	0.275	0.000	0.000	0.000	8.922	9.250	52.0	0.178
85.00	0.305	0.276	0.000	0.000	0.000	8.594	8.913	52.0	0.171
90.00	0.295	0.277	0.000	0.000	0.000	8.227	8.535	52.0	0.164
95.00	0.285	0.279	0.000	0.000	0.000	7.812	8.111	52.0	0.156
98.50	0.278	0.280	0.000	0.000	0.000	7.493	7.786	52.0	0.150
100.00	0.266	0.268	0.000	0.000	0.000	7.350	7.630	52.0	0.147
102.33	0.298	0.315	0.000	0.000	0.000	8.191	8.506	52.0	0.164
105.00	0.293	0.316	0.000	0.000	0.000	7.885	8.196	52.0	0.158
110.00	0.282	0.318	0.000	0.000	0.000	7.243	7.545	52.0	0.145
115.00	0.271	0.319	0.000	0.000	0.000	6.511	6.805	52.0	0.131
120.00	0.261	0.322	0.000	0.000	0.000	5.672	5.959	52.0	0.115
125.00	0.252	0.324	0.000	0.000	0.000	4.703	4.986	52.0	0.096
130.00	0.187	0.240	0.000	0.000	0.000	3.578	3.788	52.0	0.073
133.00	0.181	0.240	0.000	0.000	0.000	3.065	3.272	52.0	0.063
135.00	0.171	0.239	0.000	0.000	0.000	2.725	2.926	52.0	0.056
136.00	0.204	0.292	0.000	0.000	0.000	3.027	3.270	52.0	0.063
140.00	0.125	0.209	0.000	0.000	0.000	2.060	2.215	52.0	0.043
145.00	0.114	0.206	0.000	0.000	0.000	1.119	1.285	52.0	0.025
150.00	0.000	0.214	0.000	0.000	0.000	0.018	0.371	52.0	0.007

Pole : CT-11-217A
Location: Newtown, CT
Height : 150.0 (ft)
Shape : 18 Sides
Base Dia : 56.12 (in)
Taper : 0.246 (in/ft)

VoiceStream Wireless-OR

Base Elev : 0.000 (ft)
Top Dia : 21.83 (in)

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10/30/2001 12:20:51 PM

Page: 24



Analysis Summary

Load Case	Reactions						Max Stresses			
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	25.065	0.000	33.417	0.000	0.000	2,620.286	34.916	52.0	0.000	0.672
Ice	21.209	0.000	42.000	0.000	0.000	2,274.242	30.499	52.0	0.000	0.587
Twist/Sway	8.673	0.000	33.445	0.000	0.000	907.210	12.418	52.0	0.000	0.239

**EM-AT&T-097-020424
201 South Main Street
Newtown 04/29/02**





STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

April 25, 2002

Via Facsimile

Mr. Christopher B. Fisher, Esq.
Cuddy & Feder & Worby
90 Maple Avenue
White Plains, NY 10601-5196


RE: **EM-AT&T-097-020424** AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 201 South Main Street, Newtown, CT.

Dear Atty. Fisher:

For the structural analysis provided for the above referenced filing, there is no name or PE seal of the engineer who performed this analysis. Please provide this information.

Thank you for your assistance in this matter.

Sincerely,


David Martin
Siting Analyst I



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

April 24, 2002

Honorable Herbert C. Rosenthal
First Selectman
Town of Newtown
Town Hall
45 Main Street
Newtown, CT 06470

RE: **EM-AT&T-097-020424** – AT&T Wireless notice of intent to modify an existing telecommunications facility located at 201 South Main Street, Newtown, Connecticut.

Dear Mr. Rosenthal:

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.

The Council will consider this item at the next meeting scheduled for May 7, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/esc

Enclosure: Notice of Intent

c: Gary Frenette, Zoning Enforcement Officer, Town of Newtown

**NOTICE OF INTENT TO MODIFY AN
EXISTING TELECOMMUNICATIONS FACILITY
201 SOUTH MAIN STREET, NEWTOWN, CONNECTICUT**

RECEIVED

APR 24 2002

**CONNECTICUT
SITING COUNCIL**

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 201 South Main Street, Newtown, Connecticut (the "South Main Street Facility"), owned by VoiceStream Communications ("VoiceStream"). AT&T Wireless and VoiceStream have agreed with to share the use of the South Main Street Facility, as detailed below.

The South Main Street Facility

The South Main Street Facility consists of an approximately one hundred fifty (150) foot monopole (the "Tower") and associated equipment currently being used and/or leased/approved for wireless communications by Sprint, VoiceStream and Verizon. A chain link fence surrounds the Tower compound. The site is located at a commercial lumber yard bordered by commercial and residential land uses and is well shielded by existing vegetation.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Natcomm, LLC, including a site plan and tower elevation of the South Main Street Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets within the existing fenced compound needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 110 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad. As evidenced in the structural report prepared by Semaan Engineering Solutions, annexed hereto as Exhibit A, AT&T has confirmed that the tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

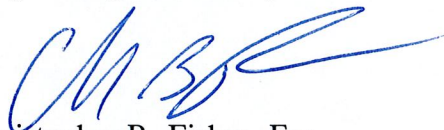
The proposed addition of AT&T Wireless' antennas and equipment to the South Main Street Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Satish Bhandare, Radio Frequency Engineer, annexed hereto as Exhibit B, the total

radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

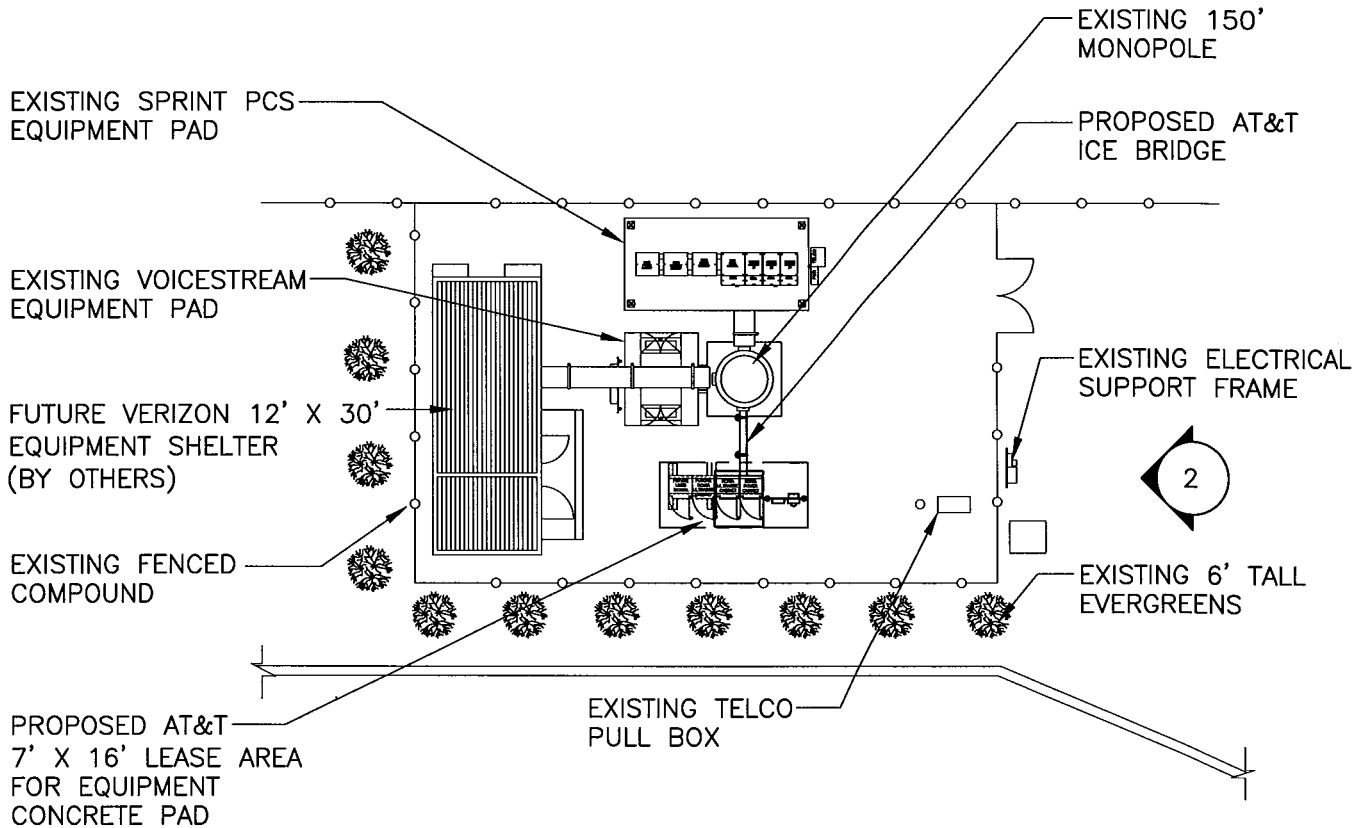
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the South Main Street Facility meets the Council's exemption criteria.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read 'C.B. Fisher', with a long horizontal flourish extending to the right.

Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: First Selectman, Town of Newtown
Harold Hewett, Bechtel



1
SITE PLAN
 SCALE: 1" = 20'

NOTE:
 LATITUDE: 41° 22' 41.33"
 LONGITUDE: 73° 16' 26.75"
 COORDINATES WERE TAKEN WITH HAND HELD GPS

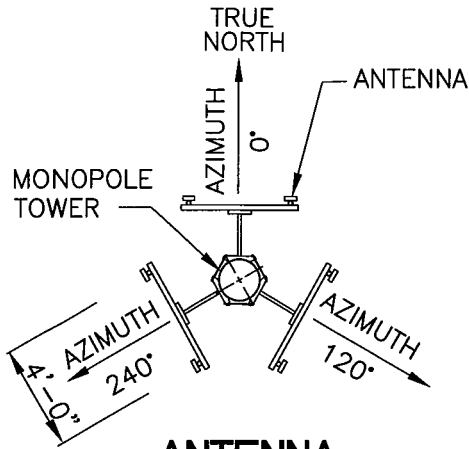
"ISSUED FOR SITING COUNCIL"


Natcomm, LLC
 63-2 North Branford Road
 Branford, Connecticut 06405
 Tel. (203) 488-0580
 Fax (203) 488-8587
 Consulting Engineers - Project Management
 Civil - Structural - Mechanical - Electrical


AT&T
 AT&T WIRELESS PCS LLC
 12 OMEGA DRIVE
 STAMFORD, CONNECTICUT 06907

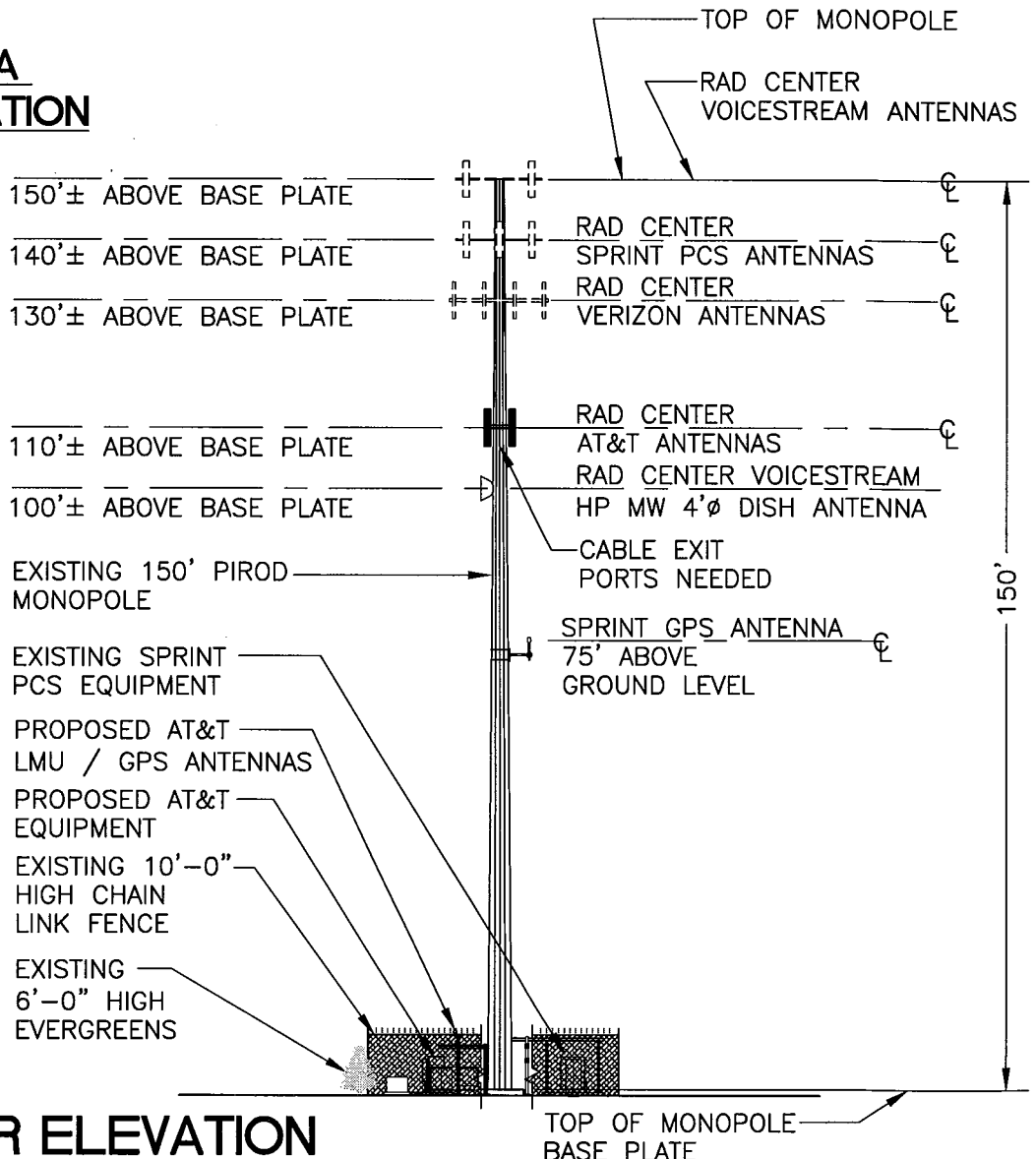
DRAWING TITLE: SITING COUNCIL
PROJECT INFORMATION:
 NEWTOWN
 CT-182
 201 SOUTH MAIN STREET
 NEWTOWN, CT 06470
PROPERTY OWNER:
 GEORGIA PACIFIC
 201 SOUTH MAIN STREET
 NEWTOWN, CT 06470

<i>DRAWING NO.</i>	
3CO-CT182-SC01-0	
REVISION NO. 0	DRAWN BY: CMS
DATE ISSUED: 03/19/02	CHECKED BY: JBA
SCALE: AS NOTED	APPROVED BY: JJP
SHEET NO. 1 OF 2	
A/E PROJECT NO: 428A	



ANTENNA CONFIGURATION

FOR TOWER ANALYSIS SEE REPORT PREPARED BY
 SEMAAN ENGINEERING SOLUTIONS
 1047 N. 204th AVENUE
 ELKHORN, NE 68022
 # (402) 289-1888
 SITE NO. CT-11-217A -- NEWTOWN, CT
 DATED: 10/30/2001
 REF. PIROD DRAWING 151455-B
 DATED 10/17/2000
 CERTIFIED BY ALVIN A. KRAFT PE
 (CT LIC. No. 20787)



TOWER ELEVATION

SCALE: 1"=30'

"ISSUED FOR SITING COUNCIL"

2

03/19/2002 02:46:04 PM, Acrobat Distiller 426ASC02.dwg 3-14-02 12:47:00 pm EST



Natcomm, LLC
 63-2 North Branford Road
 Branford, Connecticut 06405
 Tel. (203) 488-0580
 Fax (203) 488-8587
 Consulting Engineers - Project Management
 Civil - Structural - Mechanical - Electrical



DRAWING TITLE: SITING COUNCIL
PROJECT INFORMATION: NEWTOWN CT-182 201 SOUTH MAIN STREET NEWTOWN, CT 06470
PROPERTY OWNER: GEORGIA PACIFIC 201 SOUTH MAIN STREET NEWTOWN, CT 06470

DRAWING NO. 3CO-CT182-SC02-0	
REVISION NO. 0	DRAWN BY: CMS
DATE ISSUED: 03/19/02	CHECKED BY: JBA
SCALE: AS NOTED	APPROVED BY: JJP
SHEET NO. 2 OF 2	
A/E PROJECT NO: 428A	

1047 N. 204th Avenue
Elkhorn, NE 68022
402-289-1888
Fax-333-8577

CT-182

SEMAAN ENGINEERING SOLUTIONS

**150 ft PIROD Monopole
Structural Analysis**

**Prepared for:
VoiceStream Wireless
1500 N.E. Irving, Suite 530
Portland, OR 97232**

**Site: CT-11-217A / Newtown / AT&T
Newtown, CT**

October 30, 2001

APPROVED

10/31/01

Ms. Jennifer Jones
VoiceStream Wireless
1500 N.E. Irving, Suite 530
Portland, OR 97232

Re: Site Number CT-11-217A – Newtown, CT.

Dear Ms. Jones:

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

Description of Structure:

The structure is a 150 ft PIROD Monopole.

Refer to PIROD drawing 151455-B dated October 17, 2000 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. The analysis was performed in conformance with **EIA/TIA-222-F for 85 mph with 1/2" radial ice.** Wind is applied to the structure, accessories and antennas.

Structure loading:

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

Elev. (ft)	Qty.	Antennas and Mounts	Coax	Owner
150.0	12	RR65-19-00XP w/ Airtech LNA's Mounted On (3) 15' Pirod Universal T-Frame	(24) 1-5/8	Voicestream
140.0	3	DB980H90T2EM Mounted On a Low Profile platform	(3) 1-5/8	Sprint
140.0	6	DB980F90EM Mounted On a Low Profile platform	(6) 1-5/8	Sprint
130.0	12	RR90-17 Mounted On a Low Profile platform	(12) 1-5/8	Verizon
110.0	9	DAPA 58210 Mounted On a Low Profile platform	(9) 1-1/4	AT&T
100.0	1	HP MW Dish, 4' Dia.	(1) 1-5/8	Voicestream

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All VoiceStream transmission lines are assumed running inside of pole shaft. All other transmission lines were assumed to be strapped tightly to the outer face of the pole shaft

Results of Analysis:

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

Structure:

The existing monopole is structurally capable of supporting the existing and proposed antennas. The maximum structure usage is: 67.2%.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	2,347.00	2846.83	121.3
Shear (kips)	21.90	27.02	123.4

The reactions calculated from the analysis slightly exceed the ones indicated on the original structural design. However, upon reviewing the foundation documents, they were found to be adequate.

Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the EIA/TIA-222-F standards for a basic wind speed of 85 mph with 1/2" radial ice.



**RF Exposure Analysis for Proposed
AT&T Wireless Antenna Facility**

SITE ID: 913-010-182

March 27, 2002

**Prepared by AT&T Wireless Services, Inc.
Satish Bhandare, RF Engineer**

Table of Contents

1. INTRODUCTION	3
2. SITE DATA.....	3
3. RF EXPOSURE PREDICTION.....	3
4. FCC GUIDELINES FOR EVALUATING THE ENVIRONMENTAL EFFECTS OF RF RADIATION 4	
5. COMPARISON WITH STANDARDS.....	4
6. CONCLUSION	4
7. FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE	5
8. EXHIBIT A	6
9. FOR FURTHER INFORMATION.....	7
10. REFERENCES	7

1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 201 South Main Street; Newton, CT 06470. This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: Newtown SC	
Number of simultaneously operating channels	16
Type of antenna	Allgon 7250.02
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	110 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility¹:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} \text{ (mw/cm}^2\text{)} \quad \text{Eq. 1-Far-field}$$

Where, N = Number of channels, R = distance in cm from the RC (Radiation Center) of antenna, and $EIRP(\theta)$ = The isotropic power expressed in milliwatts in the direction of prediction point.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} \text{ (mw/cm}^2\text{)} \quad \text{Eq. 2-Near-field}$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, R = distance to center of radiation, h = aperture height in meters, α = 3 dB band-width of horizontal pattern.

¹ RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites.² Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is 1.42 μ W/cm² which occurs at 800 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.02 μ W/cm² at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

<i>Frequency</i>	<i>Public/Uncontrolled</i>	<i>Occupational/controlled</i>	<i>Maximum power density at Accessible location</i>
Cellular	580 μ W/cm ²	2,900 μ W/cm ²	1.42 μ W/cm ²
PCS	1000 μ W/cm ²	5,000 μ W/cm ²	

The maximum power density at the proposed facility represents only 0.22% of the public MPE limit.

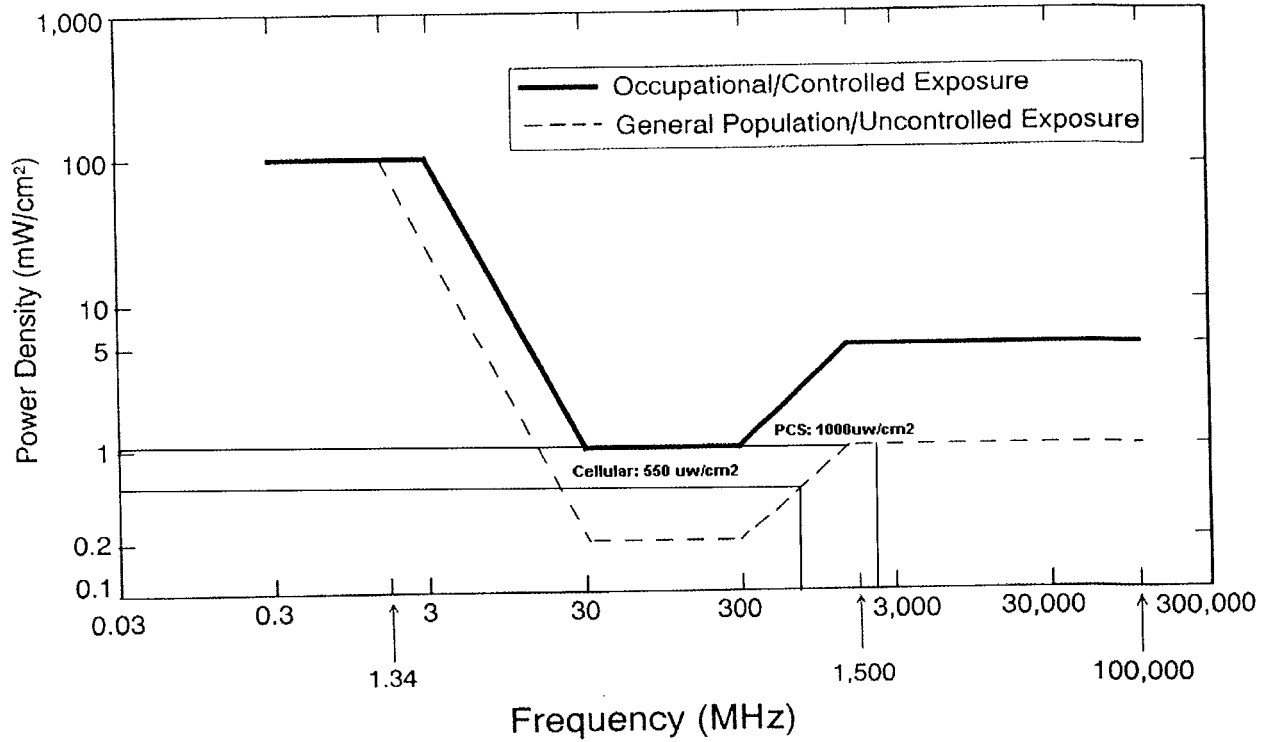
6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 1.42 μ W/cm², a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

² 47 U.S. C. Section 332 (c) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions.”

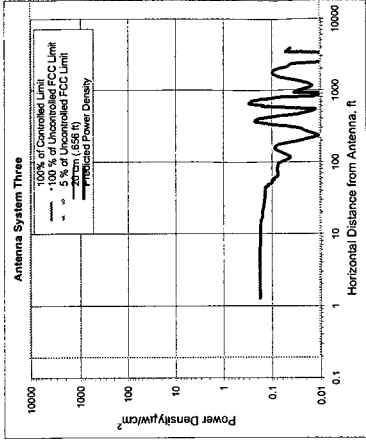
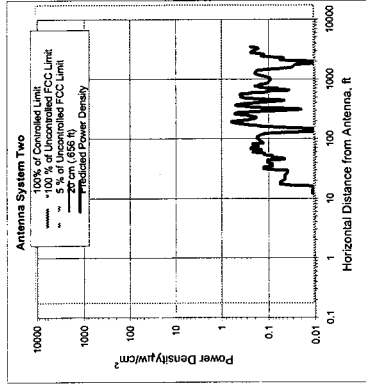
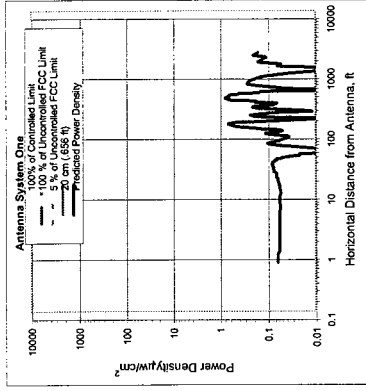
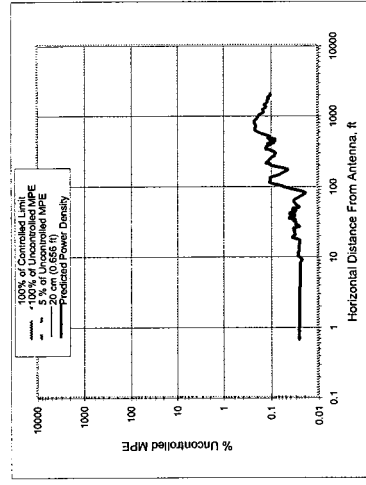
7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



8. Exhibit A

Heading



Number of Antenna Systems: 5
Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antennas Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

Maximum Power Density =	1.42	µW/cm ²	@Horiz. Dist.
	0.22	% of limit	feet
463.55 times lower than the MPE limit for uncontrolled environment			800.00
Composite Power (ERP) =	26,000.00	Watts	

Site ID: 913-01D-182
Site Name: Newtown SC
Site Location: 201 South Main Street
Newtown, CT 06470

Performed By: Jish Bhandare
Sector: 3
Date: 4/23/02

Antenna System One

Frequency	units	Value
1345	MHz	1345
# of Channels	#	16
Max ERP/Ch	Watts	250
Max Pwr/Ch Into Ant. (Center of	Watts	5.579652845
Point of ground or roof surface)	feet	110
Calculation Point (above ground or roof surface)	feet	0
Antenna Model No.		ASpht 7250.02
Max Ant Gain	dBd	16.5
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	5.11
Ant. HBW	degrees	65
Distance to Antenna	feet	107.445
WOS?	Y/N?	n

Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 0/120/240

Antenna System Two

Frequency	units	Value
1345	MHz	1345
# of Channels	#	16
Max ERP/Ch	Watts	250
Max Pwr/Ch Into Ant. (Center of	Watts	5.079655355
Point of ground or roof surface)	feet	90
Calculation Point (above ground or roof surface)	feet	0
Antenna Model No.		RRS01702
Max Ant Gain	dBd	14.4
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	4.69
Ant. HBW	degrees	60
Distance to Antenna	feet	147.97
WOS?	Y/N?	n

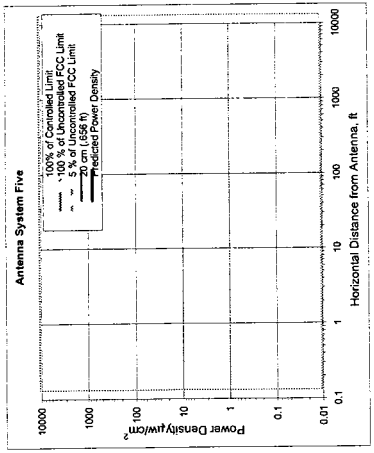
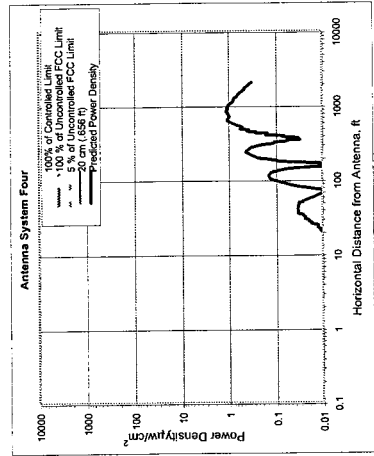
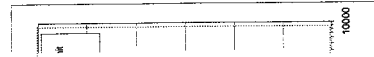
Ant System TWO Owner: Voicestream
Sector: 3
Azimuth: 0/120/240

Antenna System Three

Frequency	units	Value
1970	MHz	1970
# of Channels	#	16
Max ERP/Ch	Watts	250
Max Pwr/Ch Into Ant. (Center of	Watts	7.725736551
Point of ground or roof surface)	feet	140
Calculation Point (above ground or roof surface)	feet	0
Antenna Model No.		D5980950
Max Ant Gain	dBd	15.1
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	5
Ant. HBW	degrees	90
Distance to Antenna	feet	137.5
WOS?	Y/N?	n

Ant System Three Owner: Sprint PCS
Sector: 3
Azimuth: 0/120/240

Heading



Antenna System Four

Parameter	units	Value
Frequency	MHz	850
# of Channels	#	15
Max ERP/Ch	Watts	250
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	18,537,5603
Calculation Point (above ground or roof surface)	feet	150
Antenna Model No.		0
Max Ant Gain	dBd	ALP9711
Down tilt	degrees	-1.3
Miscellaneous Att.	dB	0
Height of aperture	feet	4
Ant. HBW	degrees	85
Distance to Ant. base	feet	128
WQS?	Y/N?	N

Ant System Four Owner: Verizon
Sector: 3
Azimuth: 0/120/240

Antenna System Five

Parameter	units	Value
Frequency	MHz	810
# of Channels	#	2
Max ERP/Ch	Watts	5000
Max Pwr/Ch Into Ant. (Center of Radiator)	Watts	0.5
Calculation Point (above ground or roof surface)	feet	100
Antenna Model No.		0
Max Ant Gain	dBd	Channels Master
Down tilt	degrees	0
Miscellaneous Att.	dB	0
Height of aperture	feet	2
Ant. HBW	degrees	1.9
Distance to Ant. base	feet	99
WQS?	Y/N?	N

Ant System Five Owner: VoiceStream
Sector: 1
Azimuth: 0

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

[1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).

[2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).

[3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).

[4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.

[5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.