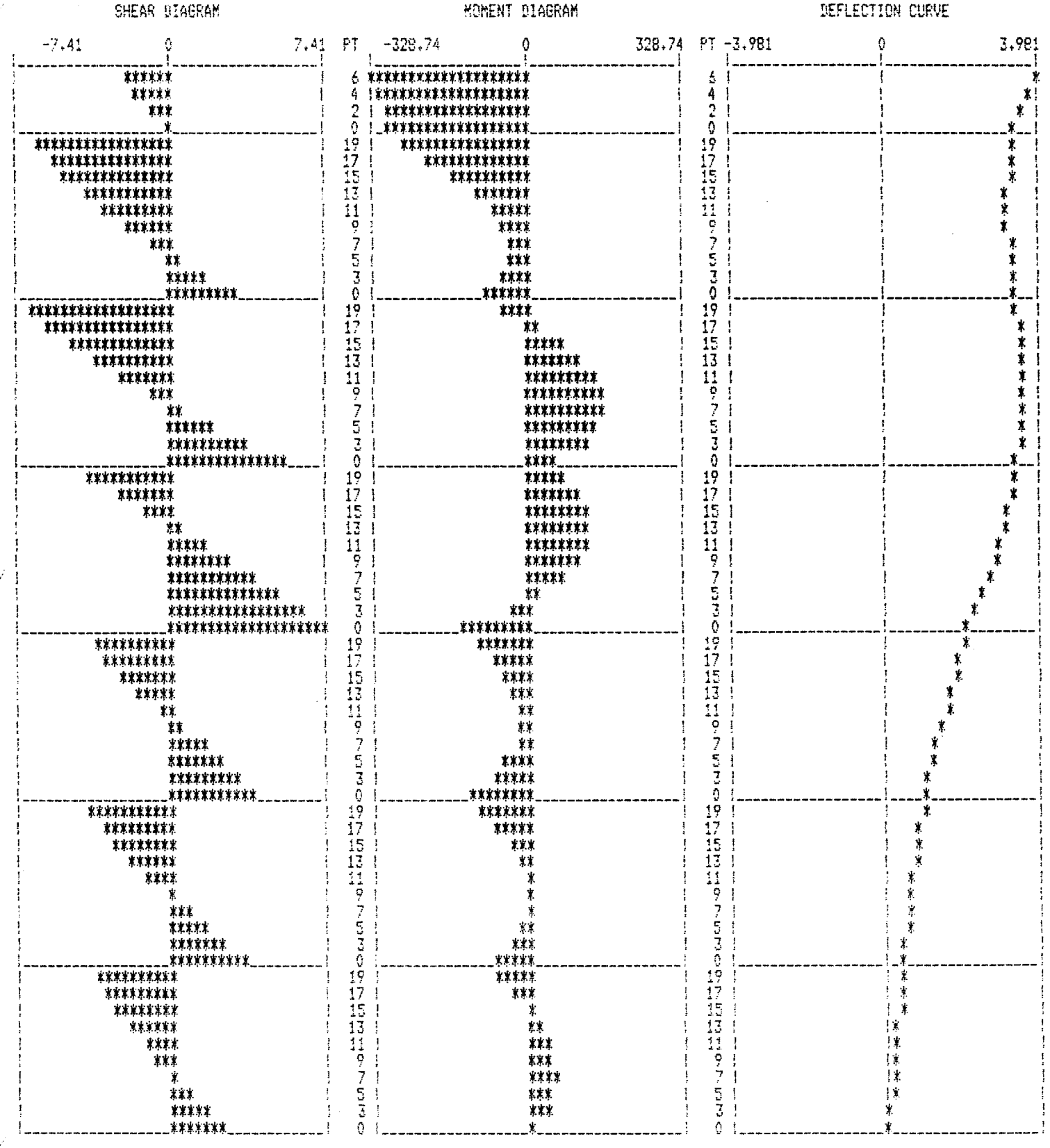
OUTPUT: APPLIED AND ALLOWABLE DIAGONAL AND HORIZONTAL LOADS

DIAGONALS							HORIZONTALS						
SECT	TYPE	DIMENSIONS (IN)	MODE	LOAD (KIPS) MAX	APPL	ALLOW	% OVER	SECT	TYPE	DIMENSIONS (IN)	MODE	LOAD (KIPS) MAX	APPL	ALLOW	% OVER
1	ROD	0.625	TENSN	2.05	C	12.28		1	ROD	1.000	CMPR1	1.49	C	4.82	
2	ROD	0.625	TENSN	0.98	C	12.28		2	ROD	1.000	CMPR1	0.61	C	4.82	
3	ROD	0.625	TENSN	1.73	C	12.28		3	ROD	1.000	CMPR1	1.08	C	4.82	
4	ROD	0.625	TENSN	2.98	C	12.28		4	ROD	1.000	CMPR1	1.86	C	4.82	
5	ROD	0.625	TENSN	3.67	C	12.28		5	ROD	1.000	CMPR1	2.17	C	4.82	
6	ROD	0.625	TENSN	2.97	C	12.28		6	ROD	1.000	CMPR1	1.85	C	4.82	
7	ROD	0.625	TENSN	1.35	B	12.28		7	ROD	1.000	CMPR1	0.85	B	4.82	
8	ROD	0.625	TENSN	1.83	C	12.28		8	ROD	1.000	CMPR1	1.14	C	4.82	
9	ROD	0.625	TENSN	3.54	C	12.28		9	ROD	1.000	CMPR1	2.21	C	4.82	
10	ROD	0.625	TENSN	4.30	C	12.28		10	ROD	1.000	CMPR1	2.47	C	4.82	
11	ROD	0.625	TENSN	3.12	C	12.28		11	ROD	1.000	CMPR1	1.95	C	4.82	
12	ROD	0.625	TENSN	1.37	C	12.28		12	ROD	1.000	CMPR1	0.86	C	4.82	
13	ROD	0.625	TENSN	2.27	B	12.28		13	ROD	1.000	CMPR1	1.42	B	4.82	
14	ROD	0.625	TENSN	3.81	C	12.28		14	ROD	1.000	CMPR1	2.38	C	4.82	
15	ROD	0.625	TENSN	7.25	C	12.28		15	ROD	1.000	CMPR1	4.48	C	4.82	
16	ROD	0.625	TENSN	5.66	C	12.28		16	ROD	1.000	CMPR1	3.53	C	4.82	
17	ROD	[illegible]	TENSN	[illegible]	[illegible]	[illegible]		17	ROD	[illegible]	CMPR1	[illegible]	[illegible]	[illegible]	

VLISSIDES 599' Guyed Tower, 75 Mph Basic Vel., EIA 222E - 3 BUNDLES, 2 RIGIDS WIND A 5-30-93 BALTMR_2A.PLT

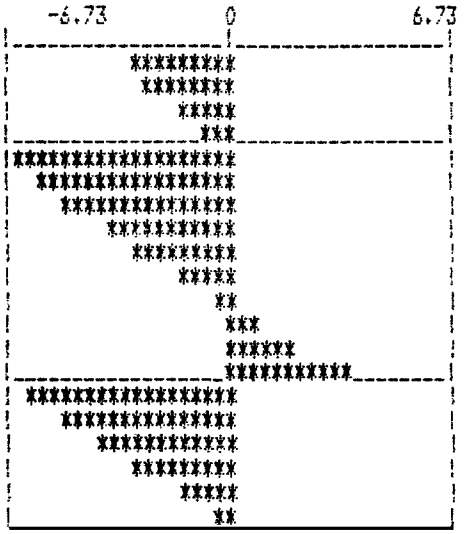
OUTPUT: DATA PLOTS



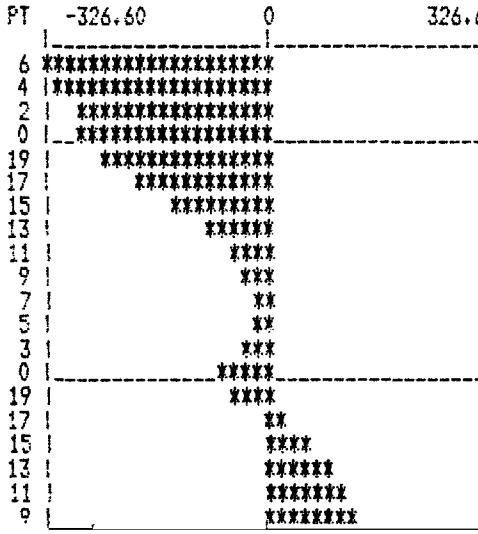
VLISSIDES 599' Guyed Tower, 75 Mph Basic Vel., EIA 222E - 3 BUNDLES, 2 RIGIDS WIND B 5-30-93 BALTMR_2A.PLT

OUTPUT: DATA PLOTS

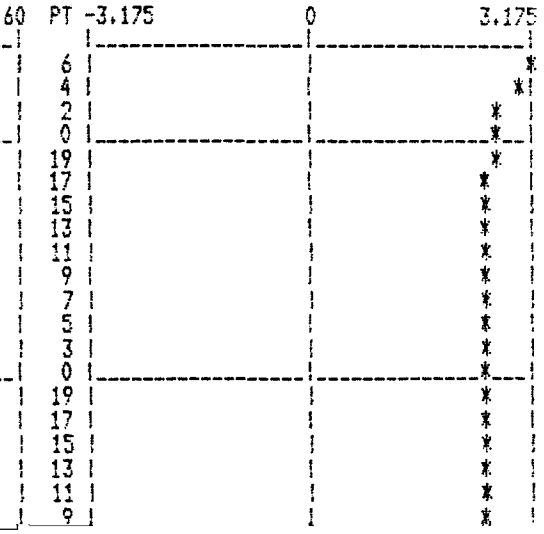
SHEAR DIAGRAM



MOMENT DIAGRAM

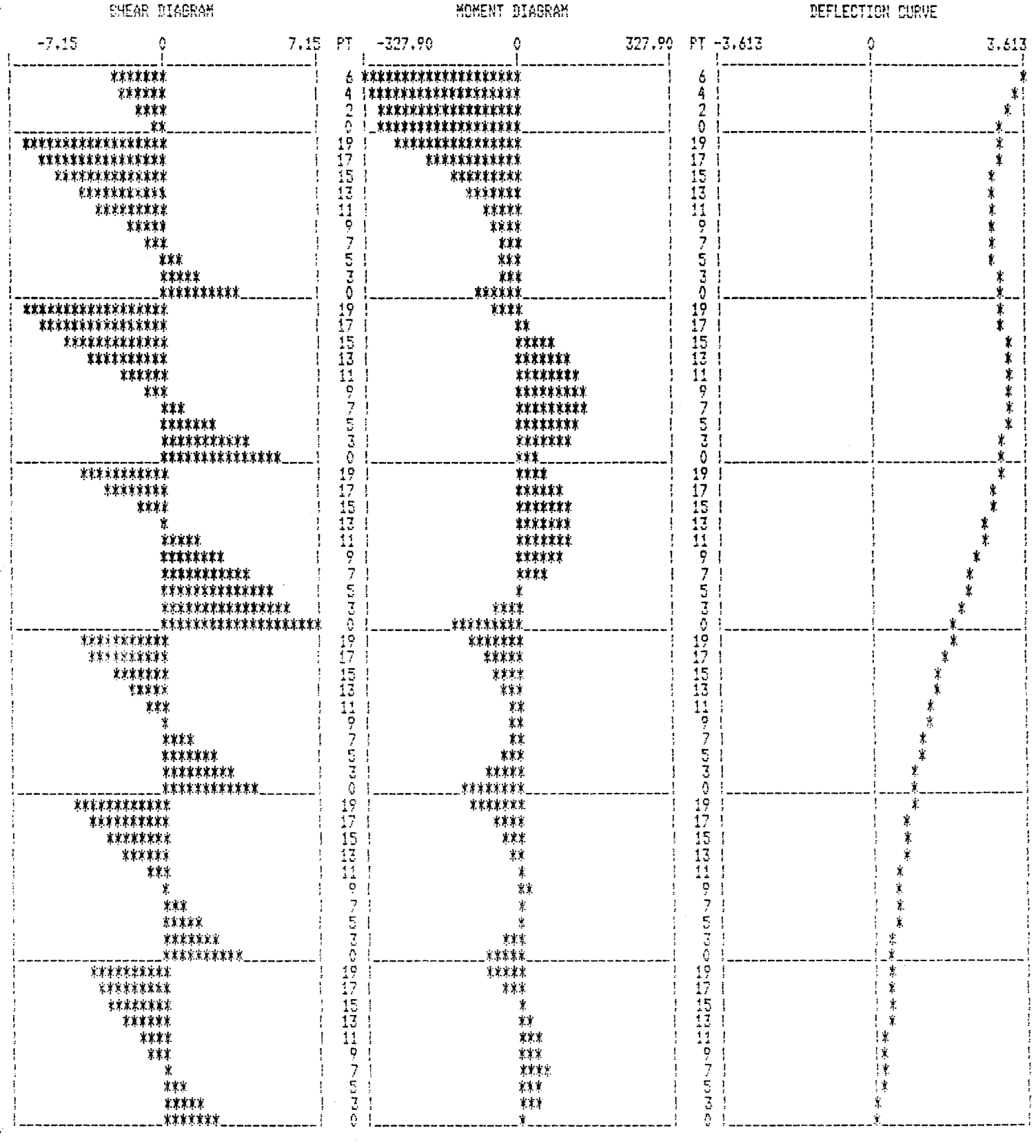


DEFLECTION CURVE



VLISSIDES 599' Guyed Tower; 75 Mph Basic Vel.; EIA 222E - 3 BUNDLES, 2 RIGIDS WIND C 5-30-93 BALTMR_2A.PLT

OUTPUT: DATA PLOTS



ANALYSIS

CASE 3(a)

CONTROL PARAMETERS

GUY LEVELS
HINGED BASE
WIND LOADING DIRECTION 'A'
TWO-WAY BENDING CONSIDERED

ANALYSIS PARAMETERS

0.000 INCH RADIAL ICE ON GUYS (SP WT 56.0 LB/CUFT)
AMBIENT TEMPERATURE = 30.00 DEG F
NORMAL TEMPERATURE = 70.00 DEG F

INPUT ECHO: GUY DATA AND RELATED INFORMATION

LVL	GUY #	DISTANCE (FT) HORIZ	DISTANCE (FT) VERT	TENS (KIPS)	UNIT WT (LB/FT)	DIAM (IN)	AE (KIPS)	LEV ARM (FT)	WIND ANGLES (DEG) WIND TO GUY	WIND ANGLES (DEG) WIND TO LEV ARM	INSULATORS ON GUY WEIGHT (LBS)	INSULATORS ON GUY AREA (SQFT)	INSULATORS ON GUY LENGTH (FT)	ANCHOR PIN HT ABV GND (FT)
1	1	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
1	2	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
1	3	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
2	1	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
2	2	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
2	3	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
3	1	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
3	2	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
3	3	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
4	1	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
4	2	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
4	3	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
5	1	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
5	2	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
5	3	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
6	1	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
6	2	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
6	3	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
7	1	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	60.00	60.00	0.00	0.00	0.000	
7	2	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	180.00	180.00	0.00	0.00	0.000	
7	3	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	300.00	300.00	0.00	0.00	0.000	

OUTPUT: WIND LOADS

LEVEL	TOWER WIND LOAD (KIPS)	LEVEL	INSULATOR CLUSTERS WIND LOAD (KIPS)
1	4.86	1	0.00
2	7.07	2	0.00
3	8.02	3	0.00
4	8.68	4	0.00
5	8.80	5	0.00
6	8.25	6	0.00
7	2.07	7	0.00

OUTPUT: GUY WEIGHTS, LENGTHS AND FORCES

LVL	GUY #	EFF D (IN)	TOTAL WT (KIPS)	UNSTRESSED LENGTH (FT)	FORCES AT TOWER (KIPS) TENSION	WINDWARD	NORMAL	VERT	FORCES AT ANCHORAGE (KIPS) UPLIFT	M	N	TWIST (KIP-FT)
1	1	0.6250	0.227	279.56	8.78	4.01	7.05	3.36	3.17	8.30	0.06	-0.136
1	2	0.6250	0.227	279.56	1.81	-1.65	0.00	0.75	0.56	1.64	0.00	0.000
1	3	0.6250	0.227	279.56	8.78	4.01	-7.05	3.36	3.17	8.30	-0.06	0.136
2	1	0.6250	0.266	326.78	10.62	4.10	7.28	6.55	6.38	8.60	0.11	-0.215
2	2	0.6250	0.266	326.78	0.48	-0.36	0.00	0.31	0.17	0.27	0.00	0.000
2	3	0.6250	0.266	326.78	10.62	4.10	-7.28	6.55	6.38	8.60	-0.11	0.215
3	1	0.7500	0.453	392.15	16.96	5.42	9.67	12.84	12.54	11.46	0.21	-0.349
3	2	0.7500	0.453	392.15	0.46	-0.33	0.00	0.32	0.11	0.05	0.00	0.000
3	3	0.7500	0.453	392.15	16.96	5.42	-9.67	12.84	12.54	11.46	-0.21	0.349
4	1	0.6250	0.456	560.75	12.73	4.28	7.81	9.09	8.83	9.39	0.25	-0.489
4	2	0.6250	0.456	560.75	0.49	-0.38	0.00	0.31	0.15	0.09	0.00	0.000
4	3	0.6250	0.456	560.75	12.73	4.28	-7.81	9.09	8.83	9.39	-0.25	0.489
	1	0.7500	0.728	630.54	16.32	4.74	8.87	12.85	12.40	10.73	0.39	-0.826
	2	0.7500	0.728	630.54	1.41	-0.99	0.00	1.01	0.73	0.43	0.00	0.000
5	3	0.7500	0.728	630.54	16.32	4.74	-8.87	12.85	12.40	10.73	-0.39	0.826
6	1	0.7500	0.816	706.52	15.98	3.97	7.73	13.42	12.92	9.47	0.49	-1.076
6	2	0.7500	0.816	706.52	2.60	-1.66	0.00	1.99	1.72	0.87	0.00	0.000
6	3	0.7500	0.816	706.52	15.98	3.97	-7.73	13.42	12.92	9.47	-0.49	1.076
7	1	1.0000	1.515	730.66	28.94	7.14	13.49	24.59	23.51	16.35	0.69	-1.413
7	2	1.0000	1.515	730.66	2.97	-1.84	0.00	2.33	1.57	0.68	0.00	0.000
7	3	1.0000	1.515	730.66	28.95	7.14	-13.50	24.59	23.51	16.35	-0.69	1.413

OUTPUT: TOWER BEHAVIOR AT GUY LEVELS

	DEFLECTION (FT)		TWIST	REACTIONS (KIPS)			REACTIONS (KIP-FT)			AXIAL FORCE	PHI
	WINDWARD	NORMAL	(DEG)	WINDWARD	NORMAL	VERT	WINDWARD	NORMAL	TWIST	(KIPS)	
1	0.372	0.000	0.000	6.37	0.00	7.46	6.52	0.00	0.00	231.17	1.48019
2	0.862	0.000	0.000	7.85	0.00	13.42	15.59	0.00	0.00	216.33	1.45956
3	1.811	0.000	0.000	10.51	0.00	26.01	31.30	0.00	0.00	195.33	1.39915
4	2.866	0.000	0.000	8.19	0.00	18.50	21.96	0.00	0.00	162.20	1.31262
5	2.816	0.000	0.000	8.49	0.00	26.71	29.61	0.00	0.00	136.55	1.24776
6	3.171	0.000	0.000	6.27	0.00	28.83	28.55	0.00	0.00	102.90	1.23173
7	3.935	0.000	0.000	12.44	0.00	51.51	55.66	0.00	0.00	69.49	1.01408

OUTPUT: BEHAVIOR AT TOWER EXTREMITIES

BASE MOMENTS (KIP-FT)		BASE SHEAR (KIPS)		BASE VERTICAL	CANTILEVER DEFL (FT)		MOMENT ABOVE TOP GL (KIP-FT)	
WINDWARD	NORMAL	WINDWARD	NORMAL	(KIPS)	WINDWARD	NORMAL	WINDWARD	NORMAL
0.00	0.00	0.92	0.00	234.74	3.935	0.000	-384.80	0.00

OUTPUT: SPAN PARAMETERS

SPAN	BENDING MOMENTS (KIP-FT) WINDWARD		NORMAL		TOTAL SHEARS (KIPS) WINDWARD		NORMAL	
	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
1	-60.72	0.00	0.00	0.00	-3.15	2.21	0.00	0.00
2	-93.99	-67.24	0.00	0.00	-3.63	3.17	0.00	0.00
3	-91.04	-109.58	-0.01	0.00	-3.46	3.82	0.00	0.00
4	60.20	-122.34	0.00	-0.01	-3.61	6.64	0.00	0.00
5	-69.88	38.25	0.01	0.00	-6.12	4.44	0.00	0.00
6	-279.75	-99.48	0.00	0.01	-5.64	2.51	0.00	0.00
7	-329.14	-308.30	0.00	0.00	-1.32	0.07	0.00	0.00

OUTPUT: TOTAL FORCES AT GUY ANCHORS

ANCHOR	LOCATION		TOTAL FORCES (KIPS)			
#	REF ANGLE (DEG)	HORIZ DIST (FT)	UPLIFT	M	RESULT	ELEV ANGLE (DEG)
1	60.00	260.00	22.09	28.36	35.95	37.92
2	180.00	260.00	0.84	1.96	2.13	23.20
3	300.00	260.00	22.09	28.36	35.95	37.92
4	60.00	400.00	57.66	45.94	73.72	51.45
5	180.00	400.00	4.17	2.07	4.66	63.60
6	300.00	400.00	57.66	45.94	73.72	51.45

CONTROL PARAMETERS

GUY LEVELS
HINGED BASE
WIND LOADING DIRECTION 'B'
TWO-WAY BENDING CONSIDERED
WIND LOADS ARE INPUT ITEMS

ANALYSIS PARAMETERS

0.000 INCH RADIAL ICE ON GUYS (SP WT 56.0 LB/CUFT)
AMBIENT TEMPERATURE = 30.00 DEG F
NORMAL TEMPERATURE = 70.00 DEG F
HEIGHT TO TOWER BASE = 0.0 FT
TOWER SHAFT MODULUS OF ELASTICITY = 29000.

INPUT ECHO: LOCAL LOADS AT GUY LEVELS AND PULL-OFF DATA

LVL	WIND VEL (MI/HR)	CONCENTRATED LOADS (KIPS) VERTICAL	HORIZONTAL WINDWARD	HORIZONTAL NORMAL	MOMENTS (KIP-FT) WINDWARD	MOMENTS (KIP-FT) NORMAL	MOMENTS (KIP-FT) TWIST	INSULATOR CLUSTERS WEIGHT (KIPS)	INSULATOR CLUSTERS DRAG (KIPS)
1	81.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	88.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	92.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	96.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	99.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	102.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	102.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP		17.00	8.70	0.00	384.80	0.00	0.00		

INPUT ECHO: SPAN LOADS CONCENTRATED AT PANEL POINTS

SPAN	POINT	VERTICAL (KIPS)	HORIZONTAL (KIPS) WINDWARD	HORIZONTAL (KIPS) NORMAL	MOMENTS (KIP-FT) WINDWARD	MOMENTS (KIP-FT) NORMAL	MOMENTS (KIP-FT) TWIST
1	6	0.10	0.08	0.00	0.00	0.00	0.00
2	1	0.10	0.09	0.00	0.00	0.00	0.00
2	5	0.10	0.09	0.00	0.00	0.00	0.00
2	13	0.10	0.09	0.00	0.00	0.00	0.00
2	15	0.10	0.09	0.00	0.00	0.00	0.00
2	17	0.10	0.09	0.00	0.00	0.00	0.00
2	19	0.10	0.25	0.00	0.00	0.00	0.00
3	8	0.20	0.30	0.00	0.00	0.00	0.00
4	1	0.10	0.14	0.00	0.00	0.00	0.00
4	16	0.10	0.15	0.00	0.00	0.00	0.00
4	18	0.10	0.15	0.00	0.00	0.00	0.00
5	3	0.10	0.15	0.00	0.00	0.00	0.00
5	5	0.10	0.16	0.00	0.00	0.00	0.00
5	5	0.10	0.16	0.00	0.00	0.00	0.00
6	2	0.10	0.16	0.00	0.00	0.00	0.00
6	5	0.10	0.16	0.00	0.00	0.00	0.00
6	7	0.10	0.16	0.00	0.00	0.00	0.00
6	10	0.10	0.17	0.00	0.00	0.00	0.00
6	13	0.10	0.17	0.00	0.00	0.00	0.00
6	2	0.15	0.24	0.00	0.00	0.00	0.00
6	6	0.15	0.24	0.00	0.00	0.00	0.00
6	10	0.15	0.24	0.00	0.00	0.00	0.00
6	14	0.15	0.24	0.00	0.00	0.00	0.00
6	18	0.15	0.24	0.00	0.00	0.00	0.00
7	1	0.15	0.20	0.00	0.00	0.00	0.00
7	3	0.15	0.20	0.00	0.00	0.00	0.00
7	3	0.10	0.18	0.00	0.00	0.00	0.00

INPUT ECHO: SPAN DATA

N	LENGTH (FT)	FACE WD (FT)	PANEL TYPE	PANEL HT (FT) TOP	PANEL HT (FT) BOTTOM	PANEL HT (FT) UNIFORM	# UNIF PANELS	SPAN MOM OF INER (INFT)**2	SPAN TORS STIFFNESS (KIP-FT)	SPAN WEIGHT (KIPS)	SPAN WIND LOAD (KIPS)
1	93.500	4.000	N	5.000	3.500	5.000	17	24.21	104.23	7.01	4.856
2	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	7.22	7.073
3	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	6.97	8.016
4	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	6.87	8.483
5	94.500	4.000	N	4.750	4.750	5.000	17	24.21	104.23	6.60	8.798
6	95.167	4.000	N	5.084	5.083	5.000	17	19.55	104.23	5.82	8.249

INPUT ECHO: GUY DATA AND RELATED INFORMATION

LVL	GUY #	DISTANCE (FT) HORIZ	DISTANCE (FT) VERT	TENS (KIPS)	UNIT WT (LB/FT)	DIAM (IN)	AE (KIPS)	LEV ARM (FT)	WIND ANGLES (DEG) WIND TO GUY	WIND ANGLES (DEG) WIND TO LEV ARM	INSULATORS ON GUY WEIGHT (LBS)	INSULATORS ON GUY AREA (SQFT)	INSULATORS ON GUY LENGTH (FT)	ANCHOR PIN HT ABV GND (FT)
1	1	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	0.00	0.00	0.00	0.00	0.000	
1	2	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	120.00	120.00	0.00	0.00	0.000	
1	3	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	240.00	240.00	0.00	0.00	0.000	
2	1	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	0.00	0.00	0.00	0.00	0.000	
2	2	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	120.00	120.00	0.00	0.00	0.000	
2	3	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	240.00	240.00	0.00	0.00	0.000	
3	1	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	0.00	0.00	0.00	0.00	0.000	
3	2	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	120.00	120.00	0.00	0.00	0.000	
3	3	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	240.00	240.00	0.00	0.00	0.000	
4	1	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	0.00	0.00	0.00	0.00	0.000	
4	2	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	120.00	120.00	0.00	0.00	0.000	
4	3	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	240.00	240.00	0.00	0.00	0.000	
5	1	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	0.00	0.00	0.00	0.00	0.000	
5	2	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	120.00	120.00	0.00	0.00	0.000	
5	3	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	240.00	240.00	0.00	0.00	0.000	
6	1	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	0.00	0.00	0.00	0.00	0.000	
6	2	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	120.00	120.00	0.00	0.00	0.000	
6	3	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	240.00	240.00	0.00	0.00	0.000	
7	1	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	0.00	0.00	0.00	0.00	0.000	
7	2	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	120.00	120.00	0.00	0.00	0.000	
7	3	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	240.00	240.00	0.00	0.00	0.000	

OUTPUT: WIND LOADS

PLAN	TOWER WIND LOAD (KIPS)	LEVEL	INSULATOR CLUSTERS WIND LOAD (KIPS)
1	4.86	1	0.00
2	7.07	2	0.00
3	8.02	3	0.00
4	8.68	4	0.00
5	8.80	5	0.00
6	8.25	6	0.00
7	2.07	7	0.00

OUTPUT: GUY WEIGHTS, LENGTHS AND FORCES

LVL	GUY #	EFF D (IN)	TOTAL WT (KIPS)	UNSTRESSED LENGTH (FT)	FORCES AT TOWER (KIPS) TENSION	WINDWARD	NORMAL	VERT	FORCES AT ANCHORAGE (KIPS) UPLIFT	M	N	TWIST (KIP-FT)
1	1	0.6250	0.227	279.56	11.49	10.65	0.00	4.33	4.14	10.66	0.00	0.000
1	2	0.6250	0.227	279.56	3.96	-1.92	3.10	1.54	1.36	3.63	0.11	-0.273
1	3	0.6250	0.227	279.56	3.96	-1.92	-3.10	1.54	1.36	3.63	-0.11	0.273
2	1	0.6250	0.266	326.78	13.48	10.67	0.00	8.23	8.09	10.76	0.00	0.000
2	2	0.6250	0.266	326.78	3.52	-1.52	2.32	2.17	2.00	2.70	0.16	-0.388
2	3	0.6250	0.266	326.78	3.52	-1.52	-2.32	2.17	2.00	2.70	-0.16	0.388
3	1	0.7500	0.453	392.15	20.62	13.57	0.00	15.52	15.31	13.84	0.00	0.000
3	2	0.7500	0.453	392.15	4.23	-1.61	2.27	3.19	2.89	2.60	0.27	-0.636
3	3	0.7500	0.453	392.15	4.23	-1.60	-2.27	3.19	2.89	2.60	-0.27	0.636
4	1	0.6250	0.456	560.75	16.43	11.63	0.00	11.60	11.44	11.92	0.00	0.000
4	2	0.6250	0.456	560.75	3.89	-1.65	2.21	2.74	2.48	2.55	0.34	-0.815
4	3	0.6250	0.456	560.75	3.89	-1.65	-2.21	2.74	2.48	2.55	-0.34	0.815
	1	0.7500	0.728	630.54	20.80	13.00	0.00	16.24	15.96	13.55	0.00	0.000
	2	0.7500	0.728	630.54	6.15	-2.35	3.12	4.76	4.31	3.54	0.49	-1.186
5	3	0.7500	0.728	630.54	6.15	-2.35	-3.12	4.76	4.31	3.54	-0.49	1.186

OUTPUT: TOWER BEHAVIOR AT GUY LEVELS

LVL	DEFLECTION (FT) WINDWARD	DEFLECTION (FT) NORMAL	TWIST (DEG)	REACTIONS (KIPS) WINDWARD	REACTIONS (KIPS) NORMAL	REACTIONS (KIPS) VERT	REACTIONS (KIP-FT) WINDWARD	REACTIONS (KIP-FT) NORMAL	REACTIONS (KIP-FT) TWIST	AXIAL FORCE (KIPS)	PHI
1	0.364	0.000	0.000	6.81	0.00	7.41	6.97	0.00	0.00	219.92	1.44757
2	0.696	0.000	0.000	7.64	0.00	12.58	15.15	0.00	0.00	205.14	1.42679
3	1.260	0.000	0.000	10.36	0.00	21.91	30.83	0.00	0.00	184.97	1.37101
4	2.151	0.000	0.000	8.32	0.00	17.08	22.15	0.00	0.00	155.95	1.29738
5	2.248	0.000	0.000	8.30	0.00	25.75	28.70	0.00	0.00	131.72	1.23714
6	2.502	0.000	0.000	5.50	0.00	27.93	25.29	0.00	0.00	99.03	1.22129
7	3.140	0.000	0.000	13.04	0.00	48.54	57.49	0.00	0.00	66.52	1.01347

OUTPUT: BEHAVIOR AT TOWER EXTREMITIES

BASE MOMENTS (KIP-FT) WINDWARD	BASE MOMENTS (KIP-FT) NORMAL	BASE SHEAR (KIPS) WINDWARD	BASE SHEAR (KIPS) NORMAL	BASE VERTICAL (KIPS)	CANTILEVER DEFL (FT) WINDWARD	CANTILEVER DEFL (FT) NORMAL	MOMENT ABOVE TOP GL (KIP-FT) WINDWARD	MOMENT ABOVE TOP GL (KIP-FT) NORMAL
0.00	0.00	1.06	0.00	223.50	3.140	0.000	-384.80	0.00

OUTPUT: SPAN PARAMETERS

SPAN	BENDING MOMENTS (KIP-FT) WINDWARD TOP	BENDING MOMENTS (KIP-FT) WINDWARD BOTTOM	BENDING MOMENTS (KIP-FT) NORMAL TOP	BENDING MOMENTS (KIP-FT) NORMAL BOTTOM	TOTAL SHEARS (KIPS) WINDWARD TOP	TOTAL SHEARS (KIPS) WINDWARD BOTTOM	TOTAL SHEARS (KIPS) NORMAL TOP	TOTAL SHEARS (KIPS) NORMAL BOTTOM
1	-53.37	0.00	0.00	0.00	-3.15	2.32	0.00	0.00
2	-69.41	-60.34	-0.04	0.01	-3.80	3.61	0.00	0.00
3	-111.34	-84.55	0.03	-0.04	-3.91	3.51	0.00	0.00
4	28.89	-142.17	0.04	0.03	-3.34	6.20	0.00	0.00
5	-47.90	6.74	-0.04	0.04	-5.56	4.84	0.00	0.00
6	-252.37	-76.60	-0.02	-0.04	-5.90	2.82	0.00	0.00
7	-327.31	-277.67	0.00	-0.01	-2.34	-0.83	0.00	0.00

OUTPUT: TOTAL FORCES AT GUY ANCHORS

ANCHOR #	LOCATION REF ANGLE (DEG)	LOCATION HORIZ DIST (FT)	TOTAL FORCES (KIPS) UPLIFT	TOTAL FORCES (KIPS) M	TOTAL FORCES (KIPS) RESULT	ELEV ANGLE (DEG)
1	0.00	260.00	27.54	35.26	44.74	37.99
2	120.00	260.00	6.25	8.93	10.90	34.99
3	240.00	260.00	6.25	8.93	10.90	34.99
4	0.00	400.00	73.93	57.95	93.94	51.91
5	120.00	400.00	19.66	14.62	24.50	53.36
6	240.00	400.00	19.66	14.62	24.50	53.36

'TROL PARAMETERS

GUY LEVELS
HINGED BASE

ANALYSIS PARAMETERS

0.000 INCH RADIAL ICE ON GUYS (SP WT 56.0 LB/CUFT)
AMBIENT TEMPERATURE = 70.00 DEG F

INPUT ECHO: GUY DATA AND RELATED INFORMATION

LVL	GUY #	DISTANCE (FT) HORIZ	DISTANCE (FT) VERT	TENS (KIPS)	UNIT WT (LB/FT)	DIAM (IN)	AE (KIPS)	LEV ARM (FT)	WIND ANGLES (DEG) WIND TO GUY	WIND ANGLES (DEG) WIND TO LEV ARM	INSULATORS ON GUY WEIGHT (LBS)	INSULATORS ON GUY AREA (SQFT)	INSULATORS ON GUY LENGTH (FT)	ANCHOR PIN HT ABV GND (FT)
1	1	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	30.00	30.00	0.00	0.00	0.000	
1	2	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	150.00	150.00	0.00	0.00	0.000	
1	3	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	270.00	270.00	0.00	0.00	0.000	
2	1	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	30.00	30.00	0.00	0.00	0.000	
2	2	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	150.00	150.00	0.00	0.00	0.000	
2	3	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	270.00	270.00	0.00	0.00	0.000	
3	1	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	30.00	30.00	0.00	0.00	0.000	
3	2	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	150.00	150.00	0.00	0.00	0.000	
3	3	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	270.00	270.00	0.00	0.00	0.000	
4	1	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	30.00	30.00	0.00	0.00	0.000	
4	2	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	150.00	150.00	0.00	0.00	0.000	
4	3	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	270.00	270.00	0.00	0.00	0.000	
5	1	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	30.00	30.00	0.00	0.00	0.000	
5	2	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	150.00	150.00	0.00	0.00	0.000	
5	3	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	270.00	270.00	0.00	0.00	0.000	
6	1	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	30.00	30.00	0.00	0.00	0.000	
6	2	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	150.00	150.00	0.00	0.00	0.000	
6	3	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	270.00	270.00	0.00	0.00	0.000	
7	1	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	30.00	30.00	0.00	0.00	0.000	
7	2	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	150.00	150.00	0.00	0.00	0.000	
7	3	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	270.00	270.00	0.00	0.00	0.000	

OUTPUT: WIND LOADS

N	TOWER WIND LOAD (KIPS)	LEVEL	INSULATOR CLUSTERS WIND LOAD (KIPS)
1	4.86	1	0.00
2	7.07	2	0.00
3	8.02	3	0.00
4	8.68	4	0.00
5	8.80	5	0.00
6	8.25	6	0.00
7	2.07	7	0.00

OUTPUT: GUY WEIGHTS, LENGTHS AND FORCES

LVL	GUY #	EFF D (IN)	TOTAL WT (KIPS)	UNSTRESSED LENGTH (FT)	FORCES AT TOWER (KIPS) TENSION	WINDWARD	NORMAL	VERT	FORCES AT ANCHORAGE (KIPS) UPLIFT	M	N	TWIST (KIP-FT)
1	1	0.6250	0.227	279.56	10.67	8.57	4.92	4.03	3.86	9.97	-0.01	-0.143
1	2	0.6250	0.227	279.56	2.38	-1.91	1.05	0.95	0.78	2.16	0.04	-0.148
1	3	0.6250	0.227	279.56	6.17	-0.14	-5.69	2.38	2.15	5.70	-0.15	0.242
2	1	0.6250	0.266	326.78	12.89	8.83	5.08	7.89	7.75	10.36	0.00	-0.174
2	2	0.6250	0.266	326.78	1.23	-0.87	0.42	0.77	0.63	0.86	0.07	-0.201
2	3	0.6250	0.266	326.78	7.15	-0.19	-5.62	4.42	4.15	5.62	-0.20	0.350
3	1	0.7500	0.453	392.15	20.43	11.62	6.70	15.41	15.18	13.77	0.04	-0.276
3	2	0.7500	0.453	392.15	1.46	-0.91	0.38	1.08	0.86	0.72	0.13	-0.350
3	3	0.7500	0.453	392.15	11.00	-0.28	-7.17	8.33	7.87	7.18	-0.33	0.543
4	1	0.6250	0.456	560.75	15.87	9.70	5.59	11.25	11.08	11.62	0.04	-0.274
4	2	0.6250	0.456	560.75	1.52	-1.03	0.41	1.03	0.86	0.82	0.16	-0.434
4	3	0.6250	0.456	560.75	8.41	-0.38	-5.88	6.00	5.55	5.88	-0.42	0.797
	1	0.7500	0.728	630.54	19.93	10.71	6.24	15.61	15.31	13.09	0.10	-0.470
	2	0.7500	0.728	630.54	2.81	-1.73	0.71	2.10	1.80	1.33	0.25	-0.667
5	3	0.7500	0.728	630.54	11.44	-0.55	-7.07	8.98	8.25	7.07	-0.60	1.190
6	1	0.7500	0.816	706.52	18.60	8.76	5.19	15.56	15.24	11.08	0.16	-0.572
6	2	0.7500	0.816	706.52	3.90	-2.20	0.92	3.09	2.77	1.64	0.31	-0.821
6	3	0.7500	0.816	706.52	12.05	-0.66	-6.62	10.04	9.23	6.62	-0.71	1.461
7	1	1.0000	1.515	730.66	35.55	16.31	9.57	30.10	29.28	20.19	0.24	-0.864
7	2	1.0000	1.515	730.66	4.99	-2.71	1.07	4.05	3.22	1.83	0.44	-1.144
7	3	1.0000	1.515	730.66	19.33	-0.89	-10.23	16.38	14.87	10.23	-0.99	1.956

OUTPUT: TOWER BEHAVIOR AT GUY LEVELS

	DEFLECTION (FT)		TWIST	REACTIONS (KIPS)			REACTIONS (KIP-FT)			AXIAL FORCE	PHI
	WINDWARD	NORMAL	(DEG)	WINDWARD	NORMAL	VERT	WINDWARD	NORMAL	TWIST	(KIPS)	
1	0.349	0.020	-0.438	6.51	0.28	7.36	6.67	-0.28	-0.05	228.18	1.47140
2	0.780	-0.063	-0.465	7.78	-0.12	13.08	15.43	0.22	-0.02	213.44	1.45097
3	1.598	-0.288	-0.506	10.42	-0.10	24.81	31.02	0.21	-0.08	192.78	1.39212
4	2.588	-0.382	-0.592	8.29	0.13	18.28	22.12	-0.35	0.09	160.85	1.30929
5	2.584	-0.280	-0.630	8.43	-0.11	26.69	29.24	0.30	0.05	135.42	1.24525
6	2.874	-0.316	-0.638	5.91	-0.51	28.69	27.00	1.80	0.07	101.78	1.22870
7	3.577	-0.385	-0.629	12.70	0.42	50.53	56.41	-1.73	-0.05	68.51	1.01388

OUTPUT: BEHAVIOR AT TOWER EXTREMITIES

BASE MOMENTS (KIP-FT)		BASE SHEAR (KIPS)		BASE VERTICAL	CANTILEVER DEFL (FT)		MOMENT ABOVE TOP GL (KIP-FT)	
WINDWARD	NORMAL	WINDWARD	NORMAL	(KIPS)	WINDWARD	NORMAL	WINDWARD	NORMAL
0.00	0.00	1.00	0.01	231.75	3.577	-0.385	-384.80	0.00

OUTPUT: SPAN PARAMETERS

SPAN	BENDING MOMENTS (KIP-FT)				TOTAL SHEARS (KIPS)			
	WINDWARD		NORMAL		WINDWARD		NORMAL	
	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
1	-59.69	0.00	5.45	0.00	-3.15	2.22	-0.01	0.10
2	-86.00	-66.35	15.05	5.18	-3.67	3.31	-0.11	0.27
3	-96.76	-101.43	-11.81	15.28	-3.61	3.74	-0.25	-0.19
4	48.36	-127.78	-19.86	-11.60	-3.54	6.46	0.14	-0.28
5	-60.63	26.24	12.48	-20.21	-5.90	4.61	0.34	0.25
6	-267.69	-89.87	17.21	12.78	-5.75	2.65	-0.11	0.19
7	-328.39	-294.69	1.73	19.01	-1.77	-0.33	-0.59	-0.55

OUTPUT: TOTAL FORCES AT GUY ANCHORS

ANCHOR	LOCATION		TOTAL FORCES (KIPS)			
#	REF ANGLE (DEG)	HORIZ DIST (FT)	UPLIFT	M	RESULT	ELEV ANGLE (DEG)
1	30.00	260.00	26.79	34.10	43.36	38.15
2	150.00	260.00	2.27	3.74	4.37	31.26
3	270.00	260.00	14.17	18.50	23.30	37.45
4	30.00	400.00	70.91	55.98	90.34	51.71
5	150.00	400.00	8.65	5.62	10.32	56.99
6	270.00	400.00	37.90	29.80	48.21	51.82

OUTPUT: APPLIED AND ALLOWABLE LEG LOADS

OUTPUT: GUY TENSIONS AND SAFETY FACTORS

OUTPUT: APPLIED AND ALLOWABLE DIAGONAL AND HORIZONTAL LOADS

DIAGONALS

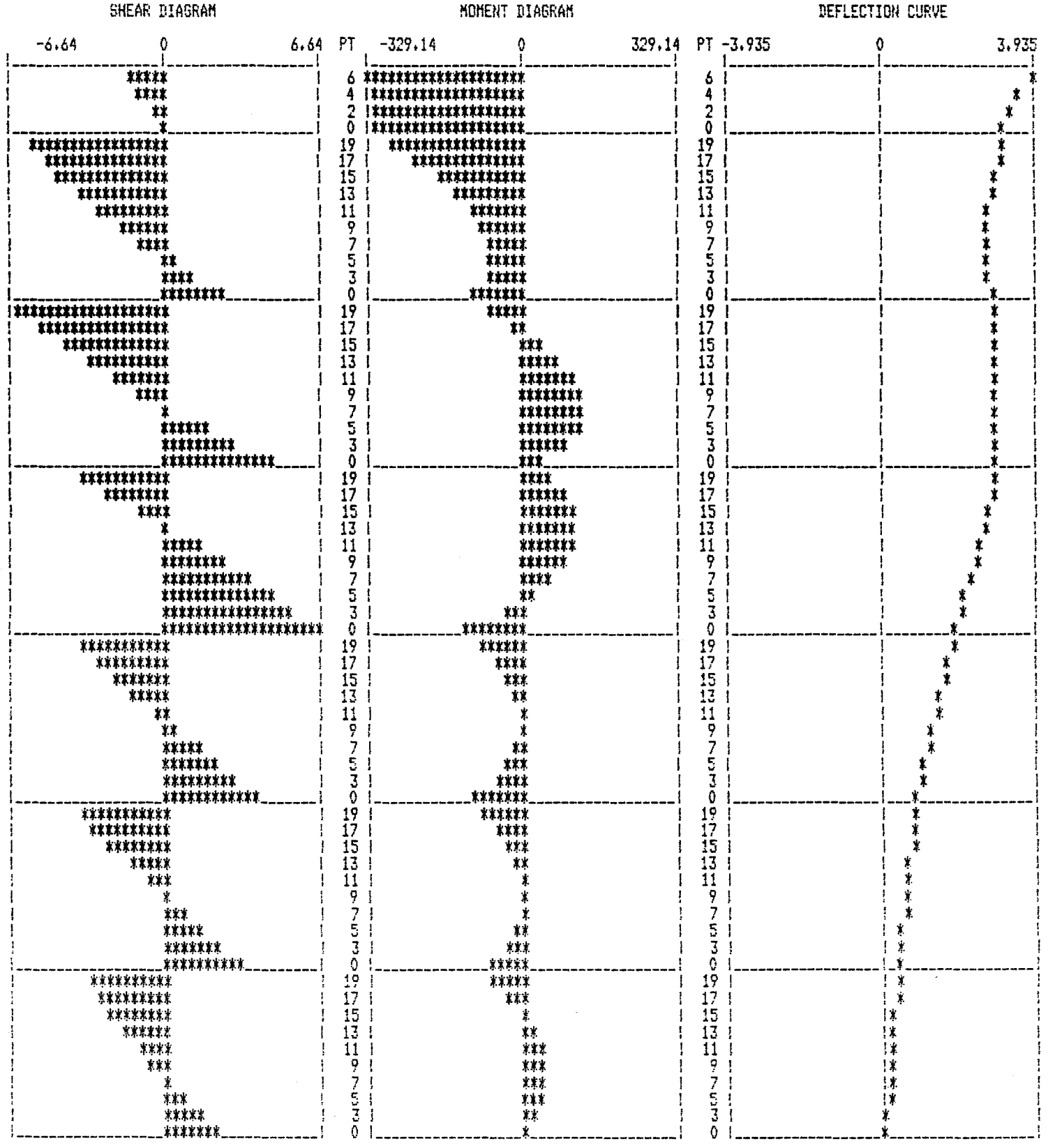
SECT	TYPE	DIMENSIONS (IN)	MODE	LOAD (KIPS) MAX APPL	LOAD (KIPS) ALLOW	% OVER
1	ROD	0.625	TENSN	1.87 C	12.28	
2	ROD	0.625	TENSN	0.90 C	12.28	
3	ROD	0.625	TENSN	1.57 C	12.28	
4	ROD	0.625	TENSN	2.72 C	12.28	
5	ROD	0.625	TENSN	3.36 C	12.28	
6	ROD	0.625	TENSN	2.78 C	12.28	
7	ROD	0.625	TENSN	1.24 B	12.28	
8	ROD	0.625	TENSN	1.65 C	12.28	
9	ROD	0.625	TENSN	3.26 C	12.28	
10	ROD	0.625	TENSN	3.98 C	12.28	
11	ROD	0.625	TENSN	2.92 C	12.28	
12	ROD	0.625	TENSN	1.30 C	12.28	
13	ROD	0.625	TENSN	2.07 B	12.28	
14	ROD	0.625	TENSN	3.55 C	12.28	
15	ROD	0.625	TENSN	6.54 C	12.28	
16	ROD	0.625	TENSN	5.06 C	12.28	
17	ROD	0.625	TENSN	2.97 C	12.28	
18	ROD	0.625	TENSN	1.20 C	12.28	
19	ROD	0.625	TENSN	3.89 C	12.28	
20	ROD	0.625	TENSN	4.24 C	12.28	
21	ROD	0.625	TENSN	1.96 B	12.28	
22	ROD	0.625	TENSN	2.70 C	12.28	
23	ROD	0.625	TENSN	4.92 C	12.28	
24	ROD	0.625	TENSN	6.14 C	12.28	
25	ROD	0.625	TENSN	2.01 C	12.28	
26	ROD	0.625	TENSN	1.84 C	12.28	
27	ROD	0.625	TENSN	3.74 C	12.28	
28	ROD	0.625	TENSN	5.39 C	12.28	
[illegible]	ROD	0.625	TENSN	6.20 C	12.28	
	ROD	0.625	TENSN	2.12 B	12.28	

HORIZONTALS

SECT	TYPE	DIMENSIONS (IN)	MODE	LOAD (KIPS) MAX APPL	LOAD (KIPS) ALLOW	% OVER
1	ROD	1.000	CMPR1	1.36 C	4.82	
2	ROD	1.000	CMPR1	0.56 C	4.82	
3	ROD	1.000	CMPR1	0.98 C	4.82	
4	ROD	1.000	CMPR1	1.70 C	4.82	
5	ROD	1.000	CMPR1	2.00 C	4.82	
6	ROD	1.000	CMPR1	1.74 C	4.82	
7	ROD	1.000	CMPR1	0.77 B	4.82	
8	ROD	1.000	CMPR1	1.03 C	4.82	
9	ROD	1.000	CMPR1	2.03 C	4.82	
10	ROD	1.000	CMPR1	2.28 C	4.82	
11	ROD	1.000	CMPR1	1.82 C	4.82	
12	ROD	1.000	CMPR1	0.81 C	4.82	
13	ROD	1.000	CMPR1	1.29 B	4.82	
14	ROD	1.000	CMPR1	2.22 C	4.82	
15	ROD	1.000	CMPR1	4.04 C	4.82	
16	ROD	1.000	CMPR1	3.16 C	4.82	
17	ROD	1.000	CMPR1	1.86 C	4.82	
18	ROD	1.000	CMPR1	0.75 C	4.82	
19	ROD	1.000	CMPR1	1.95 C	4.82	
20	ROD	1.000	CMPR1	2.73 C	4.82	
21	ROD	1.000	CMPR1	1.22 B	4.82	
22	ROD	1.000	CMPR1	1.69 C	4.82	
23	ROD	1.000	CMPR1	3.08 C	4.82	
24	ROD	1.000	CMPR1	3.69 C	4.82	
25	ROD	1.000	CMPR1	1.26 C	4.82	
26	ROD	1.000	CMPR1	1.15 C	4.82	
27	ROD	1.000	CMPR1	2.34 C	4.82	
28	ROD	1.000	CMPR1	3.37 C	4.82	
29	ROD	1.000	CMPR1	3.53 C	4.82	
30	ROD	1.000	CMPR1	1.27 B	4.82	

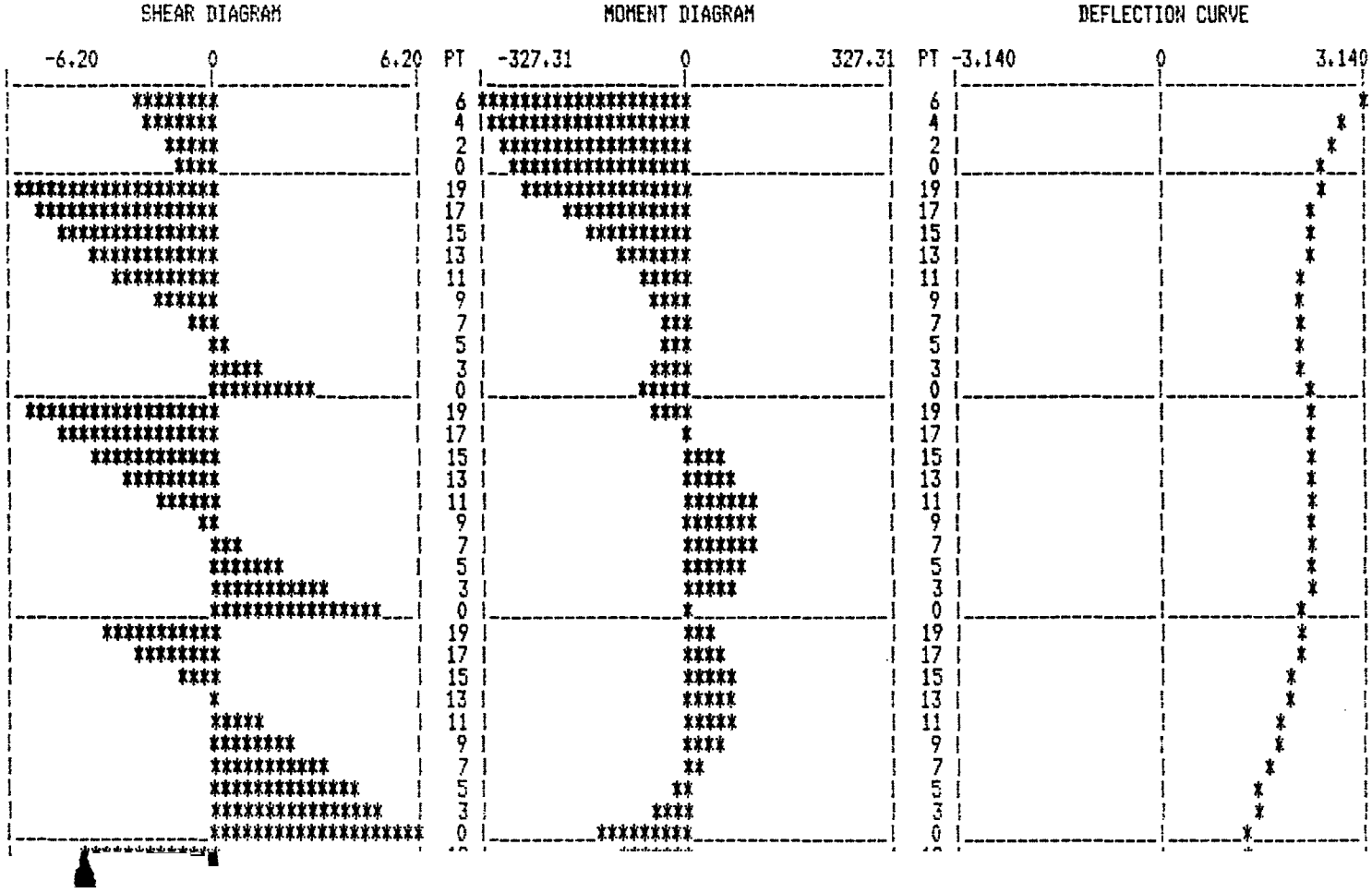
VLISSIDES 599' Guyed Tower, 75 Mph Basic Vel., EIA 222E - 3 BUNDLES, 1 RIGID WIND A 5-30-93 BALTMR_3A.PLT

OUTPUT: DATA PLOTS



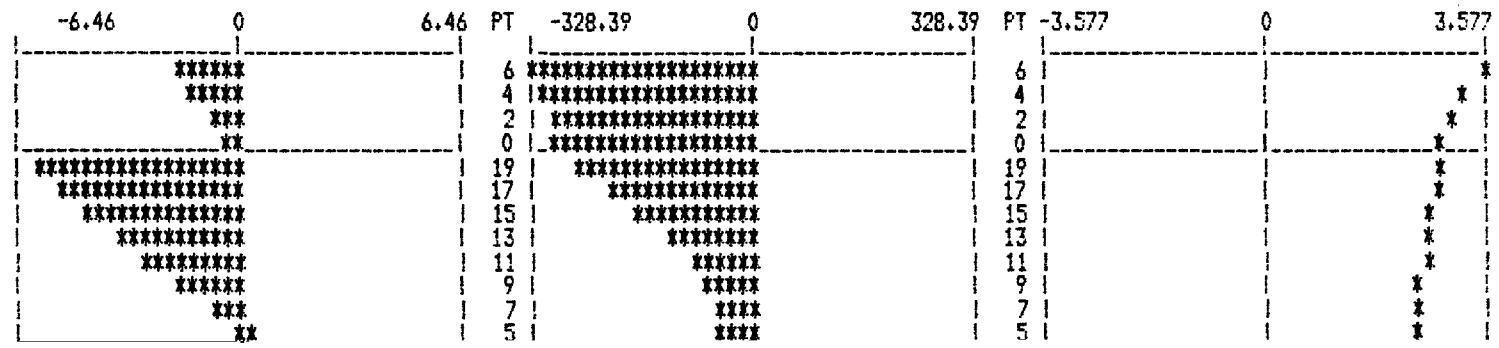
VLISSIDES 599' Guyed Tower, 75 Mph Basic Vel., EIA 222E - 3 BUNDLES, 1 RIGID WIND B 5-30-93 BALTMR_3A.PLT

OUTPUT: DATA PLOTS



VLISSIDES 599' Guyed Tower, 75 Mph Basic Vel., EIA 222E - 3 BUNDLES, 1 RIGID WIND C 5-30-93 BALTMR_3A.PLT

OUTPUT: DATA PLOTS



ANALYSIS

CASE 4(a)

CONTROL PARAMETERS

GUY LEVELS
HINGED BASE
WIND LOADING DIRECTION 'A'
TWO-WAY BENDING CONSIDERED
WIND LOADS ARE INPUT ITEMS

ANALYSIS PARAMETERS

0.000 INCH RADIAL ICE ON GUYS (SP WT 56.0 LB/CUFT)
AMBIENT TEMPERATURE = 30.00 DEG F
NORMAL TEMPERATURE = 70.00 DEG F
HEIGHT TO TOWER BASE = 0.0 FT
TOWER SHAFT MODULUS OF ELASTICITY = 29000.

INPUT ECHO: LOCAL LOADS AT GUY LEVELS AND PULL-OFF DATA

LVL	WIND VEL (MI/HR)	CONCENTRATED LOADS (KIPS) VERTICAL	HORIZONTAL WINDWARD	HORIZONTAL NORMAL	MOMENTS (KIP-FT) WINDWARD	MOMENTS (KIP-FT) NORMAL	MOMENTS (KIP-FT) TWIST	INSULATOR CLUSTERS WEIGHT (KIPS)	INSULATOR CLUSTERS DRAG (KIPS)
1	81.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	88.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	92.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	96.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	99.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	102.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	102.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP		17.00	8.70	0.00	384.80	0.00	0.00		

INPUT ECHO: SPAN LOADS CONCENTRATED AT PANEL POINTS

SPAN	POINT	VERTICAL (KIPS)	HORIZONTAL (KIPS) WINDWARD	HORIZONTAL (KIPS) NORMAL	MOMENTS (KIP-FT) WINDWARD	MOMENTS (KIP-FT) NORMAL	MOMENTS (KIP-FT) TWIST
1	6	0.10	0.08	0.00	0.00	0.00	0.00
2	1	0.10	0.09	0.00	0.00	0.00	0.00
2	5	0.10	0.09	0.00	0.00	0.00	0.00
	13	0.10	0.09	0.00	0.00	0.00	0.00
	15	0.10	0.09	0.00	0.00	0.00	0.00
2	17	0.10	0.09	0.00	0.00	0.00	0.00
2	19	0.10	0.25	0.00	0.00	0.00	0.00
3	8	0.20	0.30	0.00	0.00	0.00	0.00
4	1	0.10	0.14	0.00	0.00	0.00	0.00
4	16	0.10	0.15	0.00	0.00	0.00	0.00
4	18	0.10	0.15	0.00	0.00	0.00	0.00
5	3	0.10	0.15	0.00	0.00	0.00	0.00
5	5	0.10	0.16	0.00	0.00	0.00	0.00
5	5	0.10	0.16	0.00	0.00	0.00	0.00
6	2	0.10	0.16	0.00	0.00	0.00	0.00
6	5	0.10	0.16	0.00	0.00	0.00	0.00
6	7	0.10	0.16	0.00	0.00	0.00	0.00
6	10	0.10	0.17	0.00	0.00	0.00	0.00
6	13	0.10	0.17	0.00	0.00	0.00	0.00
6	2	0.15	0.24	0.00	0.00	0.00	0.00
6	6	0.15	0.24	0.00	0.00	0.00	0.00
6	10	0.15	0.24	0.00	0.00	0.00	0.00
6	14	0.15	0.24	0.00	0.00	0.00	0.00
6	18	0.15	0.24	0.00	0.00	0.00	0.00
7	1	0.15	0.20	0.00	0.00	0.00	0.00
7	3	0.15	0.20	0.00	0.00	0.00	0.00
7	3	0.10	0.18	0.00	0.00	0.00	0.00

INPUT ECHO: SPAN DATA

N	LENGTH (FT)	FACE WD (FT)	PANEL TYPE	PANEL HT (FT) TOP	PANEL HT (FT) BOTTOM	PANEL HT (FT) UNIFORM	# UNIF PANELS	SPAN MOM OF INER (INFT)**2	SPAN TORS STIFFNESS (KIP-FT)	SPAN WEIGHT (KIPS)	SPAN WIND LOAD (KIPS)
1	93.500	4.000	N	5.000	3.500	5.000	17	24.21	104.23	7.01	4.409
2	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	7.22	6.390
3	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	6.97	7.417
4	95.167	4.000	N	5.084	5.083	5.000	17	24.21	104.23	6.87	8.156
5	94.500	4.000	N	4.750	4.750	5.000	17	24.21	104.23	6.60	8.364
6	95.167	4.000	N	5.084	5.083	5.000	17	19.55	104.23	5.82	8.095

INPUT ECHO: GUY DATA AND RELATED INFORMATION

LVL	GUY #	DISTANCE (FT) HORIZ	DISTANCE (FT) VERT	TENS (KIPS)	UNIT WT (LB/FT)	DIAM (IN)	AE (KIPS)	LEV ARM (FT)	WIND ANGLES (DEG) WIND TO GUY	WIND ANGLES (DEG) WIND TO LEV ARM	INSULATORS ON GUY WEIGHT (LBS)	INSULATORS ON GUY AREA (SQFT)	INSULATORS ON GUY LENGTH (FT)	ANCHOR PIN HT ABV GND (FT)
1	1	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
1	2	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
1	3	260.00	103.50	5.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
2	1	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
2	2	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
2	3	260.00	198.50	5.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
3	1	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
3	2	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
3	3	260.00	294.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
4	1	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	60.00	60.00	0.00	0.00	0.000	
4	2	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	180.00	180.00	0.00	0.00	0.000	
4	3	400.00	393.50	4.00	0.8130	0.6250	4700.	2.500	300.00	300.00	0.00	0.00	0.000	
5	1	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
5	2	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
5	3	400.00	488.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
6	1	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	60.00	60.00	0.00	0.00	0.000	
6	2	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	180.00	180.00	0.00	0.00	0.000	
6	3	400.00	583.00	6.00	1.1550	0.7500	6720.	2.500	300.00	300.00	0.00	0.00	0.000	
7	1	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	60.00	60.00	0.00	0.00	0.000	
7	2	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	180.00	180.00	0.00	0.00	0.000	
7	3	400.00	612.00	10.00	2.0730	1.0000	11940.	2.500	300.00	300.00	0.00	0.00	0.000	