

# Pilgrim Nuclear Power Station

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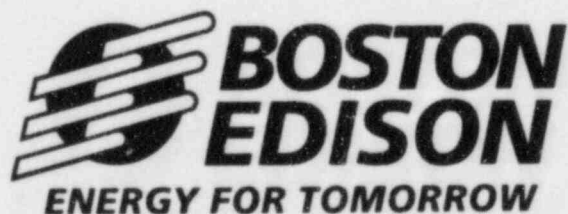
## Radioactive Effluent and Waste Disposal Report including Radiological Impact on Humans

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January 1 through June 30, 1985

Environmental and Radiological  
Health and Safety Group

Date: October 15, 1985



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PILGRIM NUCLEAR POWER STATION  
RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT  
INCLUDING RADIOLOGICAL IMPACT ON HUMANS  
JANUARY 1 THROUGH JUNE 30, 1985

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Date of Submittal: October 15, 1985

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1. INTRODUCTION AND SUMMARY

This report is issued for the period January - June 1985 in accordance with NRC Regulatory Guide 1.21, "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants" (Rev 1). The information supplied includes doses from liquid releases, doses from gaseous releases and direct gamma radiation doses.

2. EFFLUENT, WASTE DISPOSAL AND WIND DATA

Radioactive liquid and gaseous releases, wind speed data together with measurement errors and solid waste disposal information are given in Tables 1A, 1B, 1C, 2A, 2B, 3, 4A-1, 4A-2, and supplemental information section in the standard Regulatory Guide 1.21 format.

# EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

## Supplemental Information

JANUARY - JUNE 1985

Facility Pilgrim Nuclear Power Station Licensee DPR-35

### 1. Regulatory Limits

- a. Fission and activation gases  $\frac{Q_s}{0.25/\bar{E}} + \frac{Q_v}{0.10/\bar{E}} \leq 1$
- b. Iodines 2 Ci/Quarter
- c. Particulates, half-lives > 8 days  $13(Q_s \times 1.8E4 + Q_v \times 1.8E5) \leq 1$
- d. Liquid effluents

### 2. Maximum Permissible Concentration

Provide the MPC's used in determining allowable release rates or concentrations.

- a. Fission and activation gases } 10 CFR 20
- b. Iodines } Appendix B
- c. Particulates, half-lives > 8 days } Table II
- d. Liquid effluents: H-3 =  $1 \times 10^{-5}$   $\mu$ Ci/ml; all rest, 10 CFR 20, Appendix B, Table II

### 3. Average Energy

Provide the average energy ( $\bar{E}$ ) of the radionuclide mixture in releases of fission and activation gases, if applicable.  $\bar{E} = 1$  Mev  
 1st Quarter,  $Q_s = 0.757$  &  $Q_v = 0.420$  2nd Quarter  $Q_s = 0.323$  &  $Q_v = 0.536$

### 4. Measurements and Approximations of Total Radioactivity

Provide the methods used to measure or approximate the total radioactivity in effluents and the methods used to determine radionuclide composition.

- a. Fission and activation gases } GeLi
- b. Iodines } Isotopic
- c. Particulates } Analysis
- d. Liquid effluents }

### 5. Batch Releases

Provide the following information relating to batch releases of radioactive materials in liquid and gaseous effluents:

#### a. Liquid

1. Number of batch releases: 186
2. Total time period for batch releases: 293.33 hours
3. Maximum time period for a batch release: = 8.33 hours
4. Average time period for batch releases: 1.58 hours
5. Minimum time period for a batch release: = .33 hours
6. Average stream flow during periods of release of effluent into a flowing stream: 2.81E5 GPM

#### b. Gaseous (Not Applicable)

### 6. Abnormal Releases

- a. None
- b.

**TABLE 1A**  
**EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT**  
**GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES**  
 JANUARY - JUNE, 1985

Unit	Quarter	Quarter	Est. Total Error, %
------	---------	---------	---------------------

**A. Fission and activation gases**

1. Total release	Ci	1.87E+3	8.22E+2	± 35.0
2. Average release rate for period	μCi/sec	2.39E+2	1.05E+2	
3. Percent of Technical Specification limit	%	1.11E-1	4.34E-2	

**B. Iodines**

1. Total iodine-131	Ci	<3.03E-2	<2.77E-3	± 33.4
2. Average release rate for period	μCi/sec	<3.85E-3	<3.52E-4	
3. Percent of Technical Specification limit	%	<1.52	<0.139	

**C. Particulates**

1. Particulates with half-lives > 8 days	Ci	<1.61E-3	<1.49E-3	± 30.1
2. Average release rate for period	μCi/sec	<2.04E-4	<1.90E-4	
3. Percent of Technical Specification limit	%	<2.50E-2	<2.71E-2	
4. Gross alpha radioactivity	Ci	6.48E-7	3.87E-7	

**D. Tritium**

1. Total release	Ci	9.65E-1	1.70E0	± 43.2
2. Average release rate for period	μCi/sec	1.23E-1	2.16E-1	
3. Percent of Technical Specification limit	%	-	-	



**TABLE 1B**  
**EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT ( 1985 )**  
**GASEOUS EFFLUENTS - ELEVATED RELEASE**

JANUARY - JUNE 1985

CONTINUOUS MODE

BATCH MODE

Nuclides Released	Unit	Quarter	Quarter	Quarter	Quarter
		1	2		

**1. Fission gases**

krypton-85	Ci	4.12E-3	1.20E-2		
krypton-85m	Ci	3.02E+2	1.33E+2		
krypton-87	Ci	1.56E+2	1.46E+1		
krypton-88	Ci	4.75E+2	1.24E+2		
xenon-133	Ci	5.56E+2	5.08E+2		
xenon-135	Ci	1.47E+2	1.97E+1		
xenon-135m	Ci	5.07E0	-		
xenon-138	Ci	2.64E+1	-		
xenon-131m	Ci	-	-		
xenon-137	Ci	-	-		
xenon-133m	Ci	7.61E0	2.12E0		
Total for period	Ci	1.68E3	8.01E2		

**2. Iodines**

iodine-131	Ci	<1.33E-3	<1.74E-3		
iodine-133	Ci	<7.10E-3	9.81E-3		
iodine-135	Ci	<1.56E-2	1.14E-2		
Total for period	Ci	<2.41E-2	<2.33E-2		

**3. Particulates**

strontium-89	Ci	2.44E-4	8.79E-5		
strontium-90	Ci	1.11E-6	7.48E-7		
cesium-134	Ci	-	2.29E-7		
cesium-137	Ci	<6.01E-5	<2.40E-5		
barium-lanthanum-140	Ci	<4.00E-4	3.63E-4		
chromium-51	Ci	-	1.07E-6		
manganese-54	Ci	-	3.40E-6		
cobalt-58	Ci	-	-		
iron-59	Ci	-	-		
cobalt-60	Ci	<1.36E-4	<1.55E-4		
zinc-65	Ci	-	-		
zirconium-niobium-95	Ci	-	-		
cerium-141	Ci	-	-		
cerium-144	Ci	-	-		
ruthenium-103	Ci	-	-		
ruthenium-106	Ci	-	-		

**TABLE 1C**  
**EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT ( 1985 )**  
**GASEOUS EFFLUENTS - GROUND LEVEL RELEASE**

JANUARY - JUNE, 1985

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter	Quarter

**1. Fission gases**

krypton-85	Ci	-	-		
krypton-85m	Ci	< 3.83E0	< 8.7E-1		
krypton-87	Ci	< 7.99E0	< 1.82E0		
krypton-88	Ci	< 1.22E+1	< 2.69E0		
xenon-133	Ci	< 9.27E0	< 3.14E0		
xenon-135	Ci	< 1.64E+2	< 1.21E+1		
xenon-135m	Ci	-	-		
xenon-138	Ci	-	-		
Total for period	Ci	< 1.97E+2	< 2.06E+1		

**2. Iodines**

iodine-131	Ci	< 2.90E-2	< 1.03E-3		
iodine-133	Ci	< 9.62E-2	< 8.58E-3		
iodine-135	Ci	< 3.18E-3	< 6.83E-3		
Total for period	Ci	< 4.43E-3	< 1.64E-2		

**3. Particulates**

strontium-89	Ci	2.93E-4	1.11E-4		
strontium-90	Ci	6.28E-7	5.84E-7		
cesium-134	Ci	2.65E-6	3.28E-6		
cesium-137	Ci	< 1.37E-4	1.35E-4		
barium-lanthanum-140	Ci	< 1.88E-4	3.79E-4		
manganese-54	Ci	-	-		
cobalt-58	Ci	-	-		
iron-59	Ci	-	-		
cobalt-60	Ci	< 1.36E-4	< 2.15E-4		
zinc-65	Ci	-	-		
zirconium-niobium-95	Ci	-	-		
cerium-141	Ci	-	6.37E-6		
ruthenium-103	Ci	-	-		
ruthenium-106	Ci	-	-		

TABLE 2A  
 EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1985)  
 LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES  
 JANUARY - JUNE 1985

Unit	Quarter 1	Quarter 2	Est. Total Error, %
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**A. Fission and activation products**

1. Total release (not including tritium, noble gases, or alpha)	Ci	3.76E-1	6.19E-1	± 30.0
2. Average diluted concentration during period	μCi/ml	3.33E-8	8.39E-8	
3. Percent of applicable limit	%	0.376	0.619	

**B. Tritium**

1. Total release	Ci	1.75E0	2.61E0	± 32.5
2. Average diluted concentration during period	μCi/ml	1.55E-7	3.25E-7	
3. Percent of applicable limit	%	1.55	3.25	

**C. Dissolved and entrained gases**

1. Total release	Ci	5.07E-2	1.09E-2	± 35.0
2. Average diluted concentration during period	μCi/ml	4.49E-9	1.54E-9	
3. Percent of applicable limit	%	-	-	

**D. Gross alpha radioactivity**

1. Total release	Ci	2.03E-4	1.54E-4	± 40.0
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E. Volume of waste released (prior to dilution)	liters	4.69E6	2.95E6	± 20.0
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F. Volume of dilution water used during period	liters	1.13E10	7.38E7	± 20.0
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JANUARY - JUNE 1985

TABLE 2B  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1985)

LIQUID EFFLUENTS

JANUARY - JUNE, 1985

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter 1	Quarter 2
strontium-89	Ci			< 1.72E-4	< 1.17E-4
strontium-90	Ci			< 1.12E-4	< 4.09E-5
cesium-134	Ci			9.94E-3	2.89E-4
cesium-137	Ci			1.68E-1	1.20E-4
iodine-131	Ci			4.73E-4	6.30E-4
cobalt-58	Ci			1.24E-3	4.94E-6
cobalt-60	Ci			1.16E-1	5.81E-1
iron-59	Ci			-	-
zinc-65	Ci			8.23E-5	-
manganese-54	Ci			6.88E-3	2.74E-4
chromium-51	Ci			2.51E-5	2.82E-4
zirconium-niobium-95	Ci			1.56E-6	-
molybdenum 99- technetium 99m	Ci			1.83E-4	-
barium-lanthanum-140	Ci			8.45E-5	-
cerium-141	Ci			-	-
iodine-133	Ci			4.50E-3	2.31E-3
cerium-144	Ci			1.85E-5	-
silver-110m	Ci			-	-
iron-55	Ci			< 1.37E-2	< 4.07E-3
unidentified	Ci			5.48E-2	2.04E-2
Total for period (above)	Ci			3.78E-1	6.19E-1
xenon-133	Ci			1.39E-2	1.05E-3
xenon-135	Ci			3.68E-2	9.89E-3

TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1985)  
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS  
JANUARY - JUNE 1985

## A. SOLID WASTE SHIPPED OFF SITE FOR BURIAL OR DISPOSAL (not irradiated fuel)

1. TYPE OF WASTE	UNITS	6 MONTH PERIOD	EST. TOTAL ERROR %	
a. Spent resins, filter sludges, evaporator bottoms, etc.	m <sup>3</sup> Ci	149.53 485.58901	N/A	
b. Dry compressible waste, contaminated equipment, etc.	m <sup>3</sup> Ci	833.29 4.15240	N/A	
c. Irradiated components, control rods, etc.	m <sup>3</sup> Ci	13.16 4.05445E4	N/A	
d. Other (Describe) Miscellaneous low-level waste	m <sup>3</sup> Ci	N/A	N/A	
2. ESTIMATE OF MAJOR NUCLIDE COMPOSITION (by type of waste)		E(Curies)	%	
a. Spent Resin, Filter Sludges, Evaporator Bottoms, etc.		Co-60	258.07079	53.146
		Co-58	9.65664	1.989
		Cs-137	109.610330	22.575
		Cs-134	8.11929	1.672
		Fe-59	2.30296	.474
		I-131	.29536	.061
		I-133	.04073	.008
		La-140	2.15272	.443
		Ba-140	1.73350	.357
		Sr-90	1.34719	.277
		Tc-99	.03904	.008
		Zn-65	3.35644	.691
		Mn-54	19.59052	4.034
		Nb-95	.12488	.026
		Cr-51	40.62550	8.366
		Ce-141	.15537	.032
		Ru-103	.04608	.009
		Pu-241	3.32461	.685
		Cm-242	.03099	.006
		C-14	.24188	.050
		I-129	.03203	.007
		H-3	.15187	.031
		Ni-63	23.69076	4.879

TABLE 3 (Continued)

	E(Curies)	%
Na-24	.10899	.022
Mo-99	.14101	.029
Tc-99m	.35948	.074
Ba-139	.00016	.000
Y-91m	.08485	.017
Sr-92	.00446	.001
Sr-91	.00794	.002
Sb-124	.14272	.029
TOTALS	485.58901	100.000

	E(Curies)	%
b. Compactable Waste		
Co-60	2.65278	63.885
Co-58	.00495	.119
Cs-137	.99777	24.029
Cs-134	.05251	1.265
Fe-59	.00018	.004
Sb-124	.00036	.009
Sr-90	.01499	.361
Tc-99	.00062	.015
Zn-65	.00167	.040
Mn-54	.07579	1.825
Cr-51	.00588	.142
Pu-241	.04599	1.108
Cm-246	.00007	.002
C-14	.00373	.089
I-129	.00042	.010
H-3	.25752	6.202
Ni-63	.03717	.895
TOTALS	4.15240	100.00

	E(Curies)	%
c. Irradiated Components Control Rods, etc.		
Co-60	2.03439E4	50.177
Cs-137	5.07501E1	.125
Ni-63	1.92736E3	4.754
Sr-90	8.2634E-2	.000
C-14	3.50964E00	.009
Ni-59	4.53082E1	.112
Nb-94	2.9245E-2	.000
Tc-99	8.7498E-2	.000
I-129	1.41233E-2	.000
Pu-241	1.36677E-1	.000
Cm-242	1.26543E-2	.000
Zn-65	1.32496E2	.327
Fe-55	1.77648E4	43.816
Mn-54	2.04104E2	.503
Co-58	2.97939E1	.073
Cs-134	4.21350E1	.104
TOTALS	4.05445E4	100.00

TABLE 3 (Continued)

d. N/A

3. SOLID WASTE DISPOSITION

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
57	Tractor-Trailer	Barnwell, SC

4. IRRADIATED FUEL SHIPMENTS (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	N/A	N/A

TABLE 4A-1  
DISTRIBUTION OF WIND DIRECTIONS AND SPEEDS  
FOR THE 33 FT. LEVEL OF THE 160 FT. TOWER

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 21.39

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.0	1	1	3	4	3	4	1	0	1	0	4	1	0	0	1	1	1
(1)	0.1	0.1	0.3	0.4	0.3	0.4	0.1	0.0	0.1	0.0	0.4	0.1	0.0	0.0	0.1	0.1	0.1
(2)	0.0	0.1	0.1	0.2	0.2	0.2	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1
3.0- 7.0	1	4	2	4	1	4	17	1	0	1	1	1	1	1	1	1	1
(1)	0.1	0.4	0.2	0.4	0.1	0.4	1.7	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.0	0.4	0.1	0.2	0.1	0.4	0.8	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
7.0-12.0	1	1	2	1	1	1	0	0	1	1	1	1	1	1	1	1	1
(1)	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.0- 15.0	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0-24.0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	14	24	21	18	14	17	16	1	4	1	11	4	1	1	1	1	1
(1)	1.4	2.4	2.1	1.8	1.4	1.7	1.6	0.1	0.4	0.1	1.1	0.4	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.4	0.2	0.2	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS RANGE  
(2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE RANGE

NUMBER OF GOOD OBSERVATIONS ON THIS RANGE = 430

CALM WIND SPEED LESS THAN 1.00MPH



TABLE 4A-1 (continued)

160 FT TOWER - 33 FT E.

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 5.49

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7-8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11-12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33-34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35-36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37-38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41-42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43-44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45-46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47-48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51-52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53-54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55-56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57-58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61-62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63-64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65-66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67-68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71-72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75-76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77-78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81-82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83-84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85-86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87-88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93-94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95-96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	4.1	2.8	3.4	3.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
%	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 116

CALM WIND SPEED LESS THAN 1.0 MPH =

TABLE 4A-1 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS C-- DELTA T +1.6 TO -1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 6.93

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION														TOTAL			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW		NW	NNW	
-CALM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.1	0.0	0.0	2.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
3.6- 7.5	1	0	1	0	1	1	2	0	0	2	2	1	2	2	3	1	1	23
(1)	0.1	0.0	0.1	0.0	0.1	0.1	0.3	0.0	0.0	0.3	0.3	0.1	0.3	0.3	0.4	0.1	0.1	1.8
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	1.1
7.6-12.5	0	0	2	2	0	2	1	0	3	1	4	10	12	12	10	7	6	81
(1)	0.0	0.0	1.1	1.1	0.0	1.1	0.1	0.0	2.0	0.5	2.0	6.7	12.1	6.1	6.1	10.1	7.7	70.1
(2)	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.4	0.4	0.9	0.9	0.7	0.1	0.1	2.0
12.6-18.5	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	4	1	11
(1)	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.4	0.1	1.1
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.6-24.5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4
(1)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	2.1
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
OVER-24.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	6	1	4	0	1	4	3	0	3	3	13	21	18	27	21	14	14	146
(1)	4.1	0.1	2.7	0.0	0.1	2.7	2.1	0.0	2.0	3.4	8.7	14.0	11.1	18.1	15.0	7.4	7.4	100.1
(2)	0.1	0.0	0.2	0.0	0.0	0.2	0.1	0.0	0.1	0.1	0.6	1.0	0.9	1.3	1.2	0.4	0.4	0.4

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 146

OR WIND SPEED LESS THAN 1.0MPH

TABLE 4A-1 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 42.9%

WIND DIRECTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
(1)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
(2)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
CALM-2.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.0-7.0	4	2	1	0	0	0	4	14	14	20	33	23	18	40	23	10	4	0
(1)	0.4	0.2	0.1	0.0	0.0	0.4	1.4	1.4	1.4	2.0	3.3	2.3	1.8	4.0	2.3	1.0	0.4	0.0
(2)	0.4	0.1	0.0	0.0	0.0	0.4	1.4	1.4	1.4	2.0	3.3	2.3	1.8	4.0	2.3	1.0	0.4	0.0
7.0-12.0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
(1)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.3	0.9	0.0	0.0	0.0	0.0	0.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.0-16.0	0	0	4	0	0	0	0	1	24	30	14	12	0	0	0	0	0	0
(1)	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	2.4	3.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.1	2.4	3.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
16.0-24.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	23	21	7	10	14	14	11	21	24	107	134	104	143	121	96	21	4	0
(1)	1.1	1.0	0.3	0.5	0.7	0.7	0.5	1.0	1.2	5.3	6.7	5.2	7.1	6.0	4.8	1.0	0.2	0.0
(2)	1.1	1.0	0.3	0.5	0.7	0.7	0.5	1.0	1.2	5.3	6.7	5.2	7.1	6.0	4.8	1.0	0.2	0.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 104

CALM = TWO SPEEDS LESS THAN 3.0MPH

TABLE 4A-1 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 17.43

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION															TOTAL		
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW		NW	
-CALM	0	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	13
1-1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	2.1
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
CALM- 3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.6- 7.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1-1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.1-12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.1-18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.1-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	7	4	7	2	5	14	8	23	30	70	84	51	43	28	27	11	378	100.0
1-1	1.0	1.1	1.1	0.3	1.0	3.1	2.1	6.1	8.0	17.0	18.7	12.0	10.0	6.7	6.7	2.9	100.0	100.0
1-2	0.3	0.2	0.1	0.1	0.1	0.7	0.4	1.1	1.4	2.7	2.7	1.4	2.0	0.7	1.0	0.4	100.0	100.0

1. PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 2. PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 378

CALM= WIND SPEED LESS THAN 1.0MPH

TABLE 4A-1 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS F-- DELTA T 1.6 TO 4.1 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 4.32

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	1	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
1-11	1.1	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 2.5	0	1	1	1	1	4	3	8	6	2	0	3	1	1	0	0	0	0
1-11	0.0	1.1	1.1	1.1	1.1	4.4	3.3	8.0	6.0	2.2	0.0	3.3	1.1	1.1	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5- 7.5	2	2	0	0	1	4	0	5	3	4	0	2	1	0	0	0	0	0
1-11	2.2	2.2	0.0	0.0	1.1	4.4	0.0	5.5	3.3	4.4	0.0	2.2	1.1	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5-12.5	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1-11	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5-15.0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0
1-11	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15.0-24.0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1-11	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-11	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	1	1	1	1	1	4	3	11	24	11	0	8	1	1	0	0	0	0
1-11	1.1	1.1	1.1	1.1	1.1	4.4	3.3	11.1	24.0	11.1	0.0	8.0	1.1	1.1	0.0	0.0	0.0	0.0
12-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE: 70

CALM WIND SPEED LESS THAN 0.5 MPH

TABLE 4A-1 (continued)

160 FT. TOWER - 33 FT. EL.

33.0 FT. WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 1.49

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	3.1	2.1	6.2	0	0	0	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1	6.2	0.0	0.0	0.0	0.0	0.0	12.7
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
CALM- 3.5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25
(1)	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	1.1
3.6- 7.5	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1	3.1	0.0	0.0	0.0	0.0	0.0	8.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1
7.6-12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.6-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24.6-29.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 32

CALM WIND SPEED LESS THAN 1.0MPH-

TABLE 4A-1 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

1/1/85 - 3/31/87

STABILITY CLASS ALL-- ALL STABILITIES COMBINED

CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION															TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW		NNW
-CALM	1	1	2	1	1	1	1	4	4	3	4	1	1	1	1	0	20
0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.0
0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.0
CALM- 3.0	4	4	7	9	15	10	10	14	24	11	21	21	14	11	11	8	187
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
3.0- 7.0	20	13	13	13	17	17	17	33	50	19	73	67	104	75	41	20	641
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
7.0-12.0	28	21	9	12	11	11	11	22	22	128	87	100	114	104	81	20	730
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
12.0-18.0	38	12	4	0	0	0	0	0	1	43	0	10	0	0	0	40	44
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
18.0-24.0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
0.25-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	64	36	36	50	34	52	46	61	101	74	73	114	114	180	111	117	615
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS RANGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS RANGE IS: \_\_\_\_\_  
 NUMBER OF HOURS IN THIS PERIOD IS: \_\_\_\_\_

99.8 PERCENT DATA RECEIVED

24 HOURS PERIOD LESS THAN 1.0 MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/65 - 3/31/65

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 20.06

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM-3.5	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	12
(1)	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
(2)	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
3.6-7.5	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	7	41
(1)	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	10.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1
7.6-12.5	0	0	0	0	0	0	17	7	0	0	0	0	0	0	0	0	0	24
(1)	0.0	0.0	0.0	0.0	0.0	0.0	4.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
12.6-18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.1-24.0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
OVER-24.0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
(1)	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	0	4	0	0	0	0	22	14	0	0	0	0	4	0	0	0	0	38
(1)	0.0	1.0	0.0	0.0	0.0	0.0	5.5	3.6	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	10.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS CLASS  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE: 381

CALM WIND SPEED LESS THAN 1.0 MPH



TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 5.00

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3
(1)	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
(2)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3.6- 7.9	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	4.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2
7.6-12.5	0	0	0	0	1	0	2	2	3	1	2	3	4	4	2	0	0	20
(1)	0.0	0.0	0.0	0.0	1.0	0.0	2.1	2.1	3.1	1.0	2.1	3.1	4.1	4.1	2.1	0.0	0.0	20.8
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	1.0
12.6-18.5	1	0	1	0	2	0	0	0	1	4	4	6	4	7	7	7	7	39
(1)	1.0	0.0	1.0	0.0	2.1	0.0	0.0	0.0	1.0	4.1	4.1	6.1	4.1	7.1	7.1	7.1	7.1	40.1
(2)	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.2	0.4	0.4	0.4	0.4	1.0
18.6-24.0	0	0	2	1	3	0	0	0	1	0	0	1	2	7	6	3	3	24
(1)	0.0	0.0	2.1	1.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.1	7.2	5.1	3.1	3.1	24.7
(2)	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.3	0.2	0.2	1.2
OVER-24.0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	7
(1)	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	7.0
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4
ALL SPEEDS	1	0	4	2	6	1	2	3	4	7	7	11	6	19	18	6	6	97
(1)	1.0	0.0	4.1	2.1	6.1	1.0	2.1	3.1	4.1	7.1	7.1	11.1	6.1	19.1	18.1	6.1	6.1	100.0
(2)	0.1	0.0	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.2	1.0	0.4	0.4	0.4	5.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PERIOD  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 97

CALM WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 6.60

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
3.6- 7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
7.1-12.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.1	1.6	2.1	0.0	0.0	0.0	1.9	1.0	1.0	0.0	4.0	0.0	0.0	2.0
12.6- 18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
18.1-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
OVER-24.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	2.0
ALL SPEEDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	1.0	0.0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0
(2)	0.1	0.1	0.1	1.0	2	4	4	1	4	4	7	12	18	20	20	20	7	120

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 128

CALM WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 43.01

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION															TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW		NNW
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	1	0	1	1	3	1	0	0	1	1	0	0	0	0	0	0
(1)	0.0	0.1	0.0	0.1	0.1	0.4	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.1	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3.6- 7.6	3	0	3	2	4	5	2	10	8	6	6	16	4	10	4	4	4
(1)	0.4	0.0	0.4	0.2	1.1	0.6	0.2	1.2	0.8	0.7	0.7	1.9	0.5	1.2	0.5	0.5	1.0
(2)	0.2	0.0	0.2	0.1	0.5	0.3	0.1	0.6	0.4	0.3	0.3	0.9	0.2	0.6	0.2	0.2	0.5
7.6-12.5	2	0	11	1	4	10	5	10	13	17	4	23	41	51	21	19	2
(1)	0.1	0.0	1.3	0.0	0.5	1.2	0.6	1.2	1.6	2.0	0.5	2.7	4.9	6.1	2.5	2.2	0.2
(2)	0.1	0.0	0.6	0.0	0.2	0.7	0.3	0.6	0.7	0.9	0.1	1.3	2.1	2.7	1.2	1.1	0.1
12.6-18.0	3	3	3	4	3	9	3	21	53	52	38	53	46	46	32	19	3
(1)	0.4	0.4	0.4	0.5	0.4	1.1	0.4	2.5	6.1	5.7	4.6	6.3	5.4	5.4	3.9	2.3	0.4
(2)	0.2	0.2	0.2	0.2	0.2	0.5	0.2	1.1	3.0	2.7	2.3	3.1	2.7	2.7	1.9	1.1	0.2
18.0-24.0	0	0	3	1	6	0	0	4	3	14	17	2	1	16	23	10	1
(1)	0.0	0.0	0.4	0.1	0.8	0.0	0.0	0.5	0.4	1.7	2.1	0.3	0.1	2.0	2.8	1.3	0.1
(2)	0.0	0.0	0.2	0.1	0.4	0.0	0.0	0.2	0.1	0.7	0.9	0.1	0.0	1.0	1.4	0.6	0.0
24.0-34.0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	4	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.5	0.5	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0
ALL SPEEDS	14	4	20	8	17	23	12	27	41	40	116	100	160	130	96	20	834
(1)	1.7	0.5	2.4	1.0	2.0	2.8	1.4	3.2	5.0	4.9	14.1	12.0	19.5	15.6	11.9	2.5	100.0
(2)	0.7	0.2	1.0	0.4	0.9	1.2	0.6	1.4	2.1	4.0	0.1	3.0	4.8	6.1	4.1	0.9	43.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 834

CALM WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 19.13

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
CALM- 3.5	1	0	0	1	0	0	0	0	2	1	1	0	0	1	1	0	0	11
(1)	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.6	0.3	0.3	0.0	0.0	0.3	0.3	0.0	0.0	3.0
(2)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.8
3.6- 7.5	1	0	1	1	1	3	6	5	10	7	6	1	4	7	1	0	3	88
(1)	0.3	0.0	0.3	0.3	0.3	0.9	1.8	1.5	3.0	2.0	1.8	0.3	1.1	1.9	0.3	0.0	0.9	18.8
(2)	0.1	0.0	0.1	0.1	0.1	0.2	0.5	0.4	0.9	0.7	0.6	0.1	0.4	0.4	0.1	0.0	0.3	6.0
7.6-12.5	0	1	4	1	0	0	0	12	8	14	22	31	20	27	10	4	15	154
(1)	0.0	0.3	1.1	0.3	0.0	0.0	0.0	3.2	1.9	3.7	6.4	8.4	5.4	7.3	2.7	1.1	4.1	41.5
(2)	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.6	0.5	0.7	1.1	1.6	1.0	1.4	0.5	0.3	1.3	16.4
12.6-18.5	0	0	0	1	2	1	0	4	8	10	23	18	13	5	4	0	11	110
(1)	0.0	0.0	0.0	0.3	0.6	0.3	0.0	1.1	2.0	2.5	5.8	4.5	3.2	1.3	1.1	0.0	2.8	26.1
(2)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.4	1.0	1.7	1.3	0.6	0.3	0.2	0.0	0.4	9.9
18.6-24.5	1	0	0	0	0	0	1	0	0	6	13	0	0	0	0	0	3	24
(1)	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.8	3.7	0.0	0.0	0.0	0.0	0.0	0.8	6.6
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.0	0.0	0.3	2.0
OVER-24.6	1	0	0	0	4	5	1	0	0	4	1	0	0	0	0	0	0	16
(1)	0.3	0.0	0.0	0.0	1.1	1.5	0.3	0.0	0.0	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	4.8
(2)	0.1	0.0	0.0	0.0	0.2	0.5	0.1	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.6
ALL SPEEDS	6	0	5	4	10	8	11	19	26	51	66	45	36	40	16	17	371	
(1)	1.7	0.0	1.5	1.1	2.7	2.4	2.7	5.1	7.0	13.7	17.0	12.4	9.7	10.8	4.0	4.7	100.0	
(2)	0.4	0.0	0.3	0.2	0.5	0.5	0.5	1.0	1.3	2.6	3.4	2.5	1.9	2.1	0.6	0.9	14.1	

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 371

CALM WIND SPEED LESS THAN 1.0MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL.

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 4.54

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	0	0	1	0	2	1	1	5	0	0	0	0	0	0	0	0	12
(1)	0.0	0.0	0.0	1.1	0.0	2.3	1.1	1.1	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5
(2)	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
3.6- 7.5	0	0	1	0	1	0	2	2	5	0	0	0	0	0	0	0	0	21
(1)	0.0	0.0	1.1	0.0	1.1	0.0	2.3	2.3	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7
(2)	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
7.6-12.5	1	1	4	0	1	0	0	7	11	0	0	0	2	7	0	0	0	41
(1)	1.1	1.1	4.5	0.0	1.1	0.0	0.0	6.0	12.5	0.0	0.0	0.0	2.3	6.0	0.0	0.0	0.0	46.6
(2)	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	2.1
12.6-16.7	1	1	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	11
(1)	2.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5
(2)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
16.8-24.0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	2.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
ALL SPEEDS	2	1	5	1	2	2	2	10	21	0	0	1	2	7	0	0	1	65
(1)	3.4	2.0	5.0	1.1	2.3	2.3	2.3	11.4	23.7	0.0	0.0	1.1	2.3	7.1	0.0	0.0	1.1	101.6
(2)	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.5	1.1	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.1	4.7

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 85

CALM = WIND SPEED LESS THAN 1.0 MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 1.65

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	3.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
CALM- 3.5	1	1	0	0	0	1	3	1	2	1	3	0	2	0	0	0	15
(1)	3.1	3.1	0.0	0.0	0.0	3.1	9.4	3.1	6.2	3.1	9.4	0.0	6.2	0.0	0.0	0.0	46.9
(2)	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.8
3.6- 7.5	1	1	0	1	0	0	0	4	3	0	1	0	1	1	0	0	13
(1)	3.1	3.1	0.0	3.1	0.0	0.0	0.0	12.5	9.4	0.0	3.1	0.0	3.1	3.1	0.0	0.0	40.6
(2)	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.7
7.6-12.5	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	3
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	3.1	0.0	0.0	0.0	0.0	9.4
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.6-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	2	2	0	1	0	1	3	5	7	1	5	1	3	1	0	0	32
(1)	6.2	6.2	0.0	3.1	0.0	3.1	9.4	15.6	21.9	3.1	15.6	3.1	9.4	3.1	0.0	0.0	100.0
(2)	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.3	0.4	0.1	0.3	0.1	0.2	0.1	0.0	0.0	1.7

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE

(2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 32

CALM=WIND SPEED LESS THAN 1.0MPH

TABLE 4A-1 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

1/1/85 - 3/31/85

STABILITY CLASS ALL-- ALL STABILITIES COMBINED

CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.2
CALM- 0.5	2	2	2	4	10	8	5	3	10	3	8	0	2	1	1	1	63
(1)	0.1	0.1	0.1	0.2	0.5	0.4	0.3	0.2	0.5	0.2	0.4	0.0	0.1	0.1	0.1	0.1	3.2
(2)	0.1	0.1	0.1	0.2	0.5	0.4	0.3	0.2	0.5	0.2	0.4	0.0	0.1	0.1	0.1	0.1	3.2
0.5- 1.5	8	6	11	6	17	15	16	22	23	14	15	20	10	19	13	16	231
(1)	0.4	0.3	0.6	0.3	0.9	0.8	0.8	1.1	1.2	0.7	0.8	1.0	0.5	1.0	0.7	0.8	11.5
(2)	0.4	0.3	0.6	0.3	0.9	0.8	0.8	1.1	1.2	0.7	0.8	1.0	0.5	1.0	0.7	0.8	11.5
1.5- 3.0	13	4	28	7	12	21	24	38	36	35	71	64	71	107	53	17	601
(1)	0.7	0.2	1.4	0.4	0.6	1.1	1.2	2.0	1.9	1.8	3.7	3.3	3.7	5.3	2.7	0.9	31.0
(2)	0.7	0.2	1.4	0.4	0.6	1.1	1.2	2.0	1.9	1.8	3.7	3.3	3.7	5.3	2.7	0.9	31.0
3.0- 7.5	19	14	8	17	11	4	4	8	35	63	86	44	66	46	70	26	664
(1)	1.0	0.7	0.4	0.7	0.6	0.2	0.2	0.4	1.8	3.3	4.4	2.4	3.4	2.6	3.6	1.4	34.2
(2)	1.0	0.7	0.4	0.7	0.6	0.2	0.2	0.4	1.8	3.3	4.4	2.4	3.4	2.6	3.6	1.4	34.2
7.5- 12.5	10	3	7	2	8	1	8	4	0	22	31	6	20	17	4	37	276
(1)	0.5	0.2	0.4	0.1	0.4	0.1	0.4	0.2	0.0	1.1	1.6	0.4	1.0	0.8	0.4	1.0	14.2
(2)	0.5	0.2	0.4	0.1	0.4	0.1	0.4	0.2	0.0	1.1	1.6	0.4	1.0	0.8	0.4	1.0	14.2
12.5- 18.5	4	4	3	2	4	5	1	0	0	6	3	0	8	17	20	26	100
(1)	0.2	0.2	0.2	0.1	0.2	0.3	0.1	0.0	0.0	0.3	0.2	0.0	0.4	0.8	1.0	1.3	4.0
(2)	0.2	0.2	0.2	0.1	0.2	0.3	0.1	0.0	0.0	0.3	0.2	0.0	0.4	0.8	1.0	1.3	4.0
OVER-24.0	54	34	59	34	62	54	60	75	107	163	215	191	194	302	204	125	1935
(1)	3.0	1.8	3.0	1.8	3.2	2.8	3.1	3.9	5.5	8.4	11.1	9.9	10.0	15.6	10.5	6.4	85.0
(2)	3.0	1.8	3.0	1.8	3.2	2.8	3.1	3.9	5.5	8.4	11.1	9.9	10.0	15.6	10.5	6.4	85.0

(1)-PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2)-PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=1935  
 NUMBER OF HOURS IN THIS PERIOD= 2160

69.8 PERCENT DATA RECEIVED

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2  
DISTRIBUTION OF WIND DIRECTIONS AND SPEEDS  
FOR THE 160 FT. LEVEL OF THE 160 FT. TOWER

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 26.63

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	7	1	1	7	7	7	6	7	1	0	0	0	0	0	0	7	46	10.1
(1)	1.1	0.1	0.1	1.0	1.0	1.0	0.9	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	10.1	2.6
(2)	0.4	0.4	0.1	0.4	0.4	0.4	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.6	
3.6- 7.5	11	1	1	16	16	16	18	18	3	1	2	3	1	6	5	16	124	40.6
(1)	1.6	0.1	0.1	2.1	2.1	2.1	2.5	2.5	0.4	0.1	0.3	0.4	0.1	0.8	0.7	2.1	40.6	11.7
(2)	0.6	0.1	0.1	0.6	0.6	0.6	0.7	0.7	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.7	11.7	
7.6-12.5	24	1	3	10	10	10	11	11	5	3	1	3	1	13	16	16	121	26.6
(1)	3.3	0.1	0.4	1.3	1.3	1.3	1.5	1.5	0.7	0.4	0.1	0.4	0.1	1.7	2.1	2.1	26.6	7.3
(2)	2.0	0.1	0.3	0.8	0.8	0.8	0.9	0.9	0.3	0.2	0.1	0.2	0.1	0.8	1.0	1.0	7.3	
12.6-18.5	13	1	1	6	6	6	6	6	3	1	0	1	0	2	10	23	84	17.7
(1)	1.7	0.1	0.1	0.8	0.8	0.8	0.8	0.8	0.4	0.1	0.0	0.1	0.0	0.3	1.3	3.0	17.7	5.1
(2)	1.1	0.1	0.1	0.4	0.4	0.4	0.4	0.4	0.2	0.0	0.0	0.1	0.0	0.1	0.8	1.4	5.1	
18.6-24.0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	10	2.7
(1)	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.7	0.6
(2)	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	
OVER-24.0	4	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15	3.2
(1)	0.5	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.9
(2)	0.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	
ALL SPEEDS	43	36	33	27	26	47	44	24	4	6	3	6	12	21	31	51	475	100.0
(1)	5.6	4.6	4.3	3.4	3.3	6.0	5.7	3.1	0.5	0.8	0.4	0.8	1.5	2.7	4.0	6.5	100.0	26.6
(2)	5.6	4.6	4.3	3.4	3.3	6.0	5.7	3.1	0.5	0.8	0.4	0.8	1.5	2.7	4.0	6.5	100.0	26.6

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
(2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 475

CALM=WIND SPEED LESS THAN 1.00MPH



TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 3.50

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3.6- 7.5	3	0	1	0	0	0	1	0	2	0	2	1	0	4	3	3	20
(1)	3.0	0.0	1.7	0.0	0.0	0.0	1.7	0.0	3.4	0.0	3.4	1.7	0.0	6.9	5.1	3.0	34.3
(2)	0.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.2	0.2	1.1
7.6-10.5	11	3	2	2	0	0	0	0	0	3	6	0	2	1	2	2	24
(1)	11.0	3.0	3.4	3.4	0.0	0.0	0.0	0.0	0.0	5.1	6.0	0.0	3.4	1.7	3.4	3.4	41.4
(2)	1.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.1	0.1	1.4
10.6-18.5	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	1	7
(1)	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	3.4	1.7	0.0	0.0	0.0	0.0	1.7	12.1
(2)	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4
18.6-24.0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4
(1)	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.7	0.0	6.7
(2)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2
OVER-24.0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
(2)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
ALL SPEEDS	11	5	7	2	0	1	1	0	2	5	4	1	2	5	10	10	58
(1)	11.0	5.1	12.1	3.4	0.0	1.7	1.7	0.0	3.4	8.6	6.0	1.7	3.4	6.9	10.2	10.2	100.0
(2)	0.7	0.3	0.4	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.2	0.4	0.4	3.5

(1)-PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2)-PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 58

CALM=WIND SPEED LESS THAN 1.0MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 5.67

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	5
(1)	0.0	1.1	0.0	1.1	0.0	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
(2)	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
3.6- 7.5	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
(1)	2.1	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
(2)	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
7.6-12.5	3	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4
(1)	3.0	0.0	3.0	1.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
(2)	0.2	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
12.6-16.5	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16.6-24.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
ALL SPEEDS	5.5	2	6	4	3	1	7	4	5	20	11	6	9	5	6	0	0	64
(1)	5.5	2.1	6.4	4.0	3.0	1.1	7.4	4.3	5.0	21.0	11.7	6.4	9.0	5.0	6.4	0.0	0.0	60.0
(2)	0.0	0.1	0.4	0.2	0.2	0.1	0.4	0.2	0.5	1.2	0.7	0.4	0.5	0.0	0.4	0.0	0.0	6.4

(1)=PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2)=PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 94

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 33.94

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	1	1	3	1	6	2	6	7	1	0	1	1	0	2	1	0	35
(1)	0.2	0.1	0.7	0.2	1.1	0.4	1.1	1.2	0.2	0.0	0.2	0.2	0.0	0.4	0.1	0.0	9.7
(2)	0.1	0.1	0.1	0.1	0.4	0.1	0.4	0.4	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	2.3
3.6- 7.5	6	4	13	4	4	6	23	15	15	13	10	14	20	12	15	10	173
(1)	1.1	0.7	2.4	0.7	0.7	1.1	4.1	2.7	2.7	2.3	1.8	2.5	3.6	2.1	2.7	1.8	30.7
(2)	0.4	0.2	0.1	0.2	0.2	0.4	1.4	0.9	0.9	0.6	0.5	0.5	1.2	0.7	0.9	0.6	10.4
7.6-12.5	0	0	0	0	0	1	0	0	5	11	4	17	26	10	10	7	267
(1)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9	1.9	0.7	3.0	4.6	1.8	1.7	1.1	42.6
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.6	0.2	1.0	1.6	0.6	0.6	0.4	15.6
12.6-16.5	1	0	4	0	0	1	0	0	0	4	27	1	1	1	0	0	33
(1)	0.2	0.0	0.7	0.0	0.0	0.2	0.0	0.0	0.0	0.7	4.8	0.2	0.2	0.2	0.0	0.0	14.3
(2)	0.1	0.0	0.2	0.1	0.0	0.1	0.0	0.0	0.0	2.5	1.6	0.1	0.1	0.1	0.0	0.0	7.9
16.6-24.0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6
(1)	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.1
(2)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4
OVER-24.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
ALL SPEEDS	13	14	17	11	15	11	34	21	21	164	80	30	52	26	31	27	563
(1)	2.3	1.8	2.7	2.0	2.7	2.0	6.0	3.7	3.7	29.1	14.7	5.4	9.1	4.6	5.3	3.9	100.0
(2)	0.6	0.6	0.9	0.7	0.9	0.7	2.0	1.3	1.3	9.9	5.0	2.0	3.1	1.6	1.9	1.3	32.4

(1) - PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) - PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 563

CALM= WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 20.80

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	3	0	2	2	0	2	4	5	5	2	0	2	2	0	1	1	29
(1)	0.3	0.0	0.6	0.6	0.0	0.6	1.2	1.4	1.4	0.6	0.0	0.6	0.6	0.0	0.3	0.3	6.4
(2)	0.1	0.0	0.1	0.1	0.0	0.1	0.7	0.3	0.3	0.1	0.0	0.1	0.1	0.0	0.1	0.1	1.7
3.6- 7.5	4	1	2	1	4	6	8	10	10	10	24	19	20	10	8	4	144
(1)	1.2	0.3	0.6	0.3	1.2	2.3	3.0	2.9	3.0	3.0	7.6	5.7	5.3	2.9	1.7	1.2	41.7
(2)	0.2	0.1	0.1	0.1	0.2	0.5	0.6	0.6	0.6	0.6	1.4	1.1	1.1	0.6	0.4	0.2	8.7
7.6-12.5	6	3	2	2	6	6	1	0	6	45	50	23	6	0	0	0	141
(1)	0.0	0.0	0.6	0.6	0.0	0.0	0.3	0.0	1.7	13.0	14.7	6.7	1.7	0.0	0.0	0.0	40.9
(2)	0.0	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.4	2.7	3.0	1.4	0.1	0.0	0.0	0.0	8.5
12.6-18.5	0	0	0	0	0	0	0	0	0	5	20	13	0	0	1	0	29
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.8	3.6	0.0	0.0	0.3	0.0	6.4
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.2	0.2	0.0	0.0	0.1	0.0	1.7
18.6-24.5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2
(1)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
OVER-24.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	5	4	6	6	4	16	15	15	24	62	94	47	26	10	6	6	345
(1)	1.4	1.2	1.7	1.7	1.2	2.9	3.6	4.3	7.0	16.0	27.1	13.6	6.1	2.9	2.1	1.6	101.6
(2)	0.7	0.2	0.4	0.4	0.2	0.6	0.6	0.9	1.4	3.7	5.7	2.6	1.7	0.6	0.7	0.7	20.5

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 345

CALM = WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT ZL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 4.82

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM-3.5	0	0	1	0	0	0	1	4	1	1	0	0	0	0	0	0	0	11
(1)	0.0	0.0	1.2	0.0	0.0	0.0	1.2	5.0	1.2	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.0
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7
3.6-7.5	2	1	0	1	0	0	0	4	9	2	0	0	0	0	0	0	0	49
(1)	2.5	1.2	0.0	1.2	0.0	0.0	0.0	5.0	11.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.2
(2)	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.5	0.1	0.3	0.9	0.5	0.1	0.0	0.0	0.0	3.0
7.6-12.5	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	10
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
12.6-18.5	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	1.2	0.0	0.0	0.0	0.0	0.0	5.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.2
18.6-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	2	1	1	1	0	0	1	8	10	7	16	21	10	2	0	0	0	80
(1)	2.0	1.2	1.2	1.2	0.0	0.0	1.2	10.0	12.5	8.7	20.0	26.3	12.5	2.5	0.0	0.0	0.0	100.0
(2)	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.5	0.2	0.4	1.0	1.3	0.6	0.1	0.0	0.0	0.0	4.8

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 80

CALM = WIND SPEED LESS THAN 1.0 MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 2.65

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	6	0	0	0	2	0	0	1	1	3	11	4	0	0	0	0	0	22
(1)	0.0	0.0	0.0	0.0	4.5	0.0	0.0	2.3	2.3	6.8	25.0	7.1	0.0	0.0	0.0	0.0	0.0	50.0
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.7	0.2	0.0	0.0	0.0	0.0	0.0	1.3
3.6- 7.5	0	0	1	0	0	0	0	1	7	4	3	3	1	0	0	0	0	20
(1)	0.0	0.0	2.3	0.0	0.0	0.0	0.0	2.3	15.9	9.1	6.8	6.8	2.3	0.0	0.0	0.0	0.0	45.5
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	1.2
7.6-12.5	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
(1)	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	4.5
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.6-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	0	0	2	0	2	0	0	2	6	7	14	6	1	0	0	0	0	44
(1)	0.0	0.0	4.5	0.0	4.5	0.0	0.0	4.5	18.2	15.9	31.6	18.2	2.3	0.0	0.0	0.0	0.0	100.0
(2)	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.7	0.4	0.6	0.2	0.1	0.0	0.0	0.0	0.0	2.7

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 44

CALM = WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS ALL-- ALL STABILITIES COMBINED

CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	4	6	10	10	15	13	18	20	6	7	12	7	9	10	2	2	15	154
(1)	0.0	0.0	0.6	0.6	0.9	0.8	1.1	1.2	0.7	0.4	0.7	0.4	0.5	0.7	0.1	0.1	0.7	4.0
(2)	0.0	0.0	0.6	0.6	0.9	0.8	1.1	1.2	0.8	0.4	0.7	0.4	0.5	0.7	0.1	0.1	0.7	4.0
3.6- 7.5	43	14	17	17	20	57	74	51	5	20	49	26	51	33	31	30	34	634
(1)	2.7	0.9	1.0	0.7	1.3	3.7	4.8	3.1	0.3	1.3	3.0	1.6	3.3	2.1	2.0	1.9	2.1	16.2
(2)	2.6	0.9	1.0	0.7	1.3	3.7	4.8	3.1	0.3	1.3	3.0	1.6	3.3	2.1	2.0	1.9	2.1	16.2
7.6-12.5	50	4	16	20	4	10	100	4	19	17	109	50	51	25	30	21	60	608
(1)	3.0	0.2	1.0	1.2	0.2	0.7	6.5	0.2	1.1	10.5	3.6	3.4	3.1	1.5	1.9	1.3	3.6	36.6
(2)	3.0	0.2	1.0	1.2	0.2	0.7	6.5	0.2	1.1	10.5	3.6	3.4	3.1	1.5	1.9	1.3	3.6	36.6
12.6-18.5	20	7	18	6	1	3	0	0	0	56	54	6	1	4	11	27	215	215
(1)	1.3	0.4	1.1	0.4	0.1	0.1	0.0	0.0	0.0	3.4	3.3	0.4	0.1	0.2	0.7	1.6	13.0	13.0
(2)	1.3	0.4	1.1	0.4	0.1	0.1	0.0	0.0	0.0	3.4	3.3	0.4	0.1	0.2	0.7	1.6	13.0	13.0
18.6-24.0	0	0	4	4	6	0	0	0	0	0	1	0	0	0	0	0	25	25
(1)	0.0	0.0	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.7	1.7
(2)	0.0	0.0	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.7	1.7
OVER-24.0	4	18	5	0	0	9	0	0	0	0	0	0	0	0	0	0	20	20
(1)	0.2	0.7	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
(2)	0.2	0.7	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
ALL SPEEDS	127	50	70	51	50	70	100	75	79	274	223	110	114	69	60	68	1659	1659
(1)	7.9	3.0	4.2	3.1	3.0	4.2	6.0	4.7	4.9	16.8	13.6	7.0	6.9	4.2	4.4	5.3	100.0	100.0
(2)	7.9	3.0	4.2	3.1	3.0	4.2	6.0	4.7	4.9	16.8	13.6	7.0	6.9	4.2	4.4	5.3	100.0	100.0

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 1659  
 NUMBER OF HOURS IN THIS PERIOD = 2184

76.0 PERCENT DATA RECOVERY

CALM = WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

150 FT TOWER - 150 FT EL.

160.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS 4-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 30.76

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION															TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SEE	E	ESW	SW	WSW	W	WNW	NW		NNE
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 0.5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6- 7.5	10	11	10	11	17	19	16	8	0	0	0	0	0	0	0	0	0
(1)	1.0	1.1	1.0	1.1	1.7	1.9	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.3	0.3	0.3	0.3	0.5	0.6	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.6-12.5	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
(1)	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
(2)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
12.6-18.5	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
(1)	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
(2)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
18.6-24.5	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
(1)	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
(2)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
OVER-24.5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
(1)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ALL SPEEDS	89	88	74	74	74	74	74	74	74	74	74	74	74	74	74	74	74
(1)	8.9	8.8	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
(2)	2.6	2.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 866

CALM-WIND SPEED LESS THAN 1.0MPH



TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS E-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 4.18

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.6- 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1.1- 12.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.1- 18.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.1- 24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	10	1	7	7	0	0	2	0	0	0	0	0	0	0	0	0	0	77
(1)	15.0	1.3	7.0	7.0	0.0	0.0	2.6	0.0	11.7	20.0	2.0	7.0	0.0	0.0	0.0	0.0	0.0	100.0
(2)	0.5	0.1	0.3	0.3	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2

(1) - PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) - PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE - 77

CALM - WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 5.75

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
(1)	0.9	0.0	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
(2)	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
3.6- 7.5	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
(1)	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
(2)	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
7.6-11.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11.6-15.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
15.6-19.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
19.6-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	4	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	10
(1)	3.6	0.0	1.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
(2)	0.4	0.0	0.1	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 10

CALM = WIND SPEED LESS THAN 1.00 MPH

TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

4/1/85 - 6/30/87

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 32.55

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3.9- 7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7.0-11.9	0	0	0	0	0	0	12	27	30	16	35	17	17	17	7	7	7	222
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11.9-16.8	0	0	0	0	0	0	4	62	84	30	26	17	17	17	17	17	17	423
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
16.8-24.9	0	0	0	0	0	0	0	0	10	46	6	0	0	0	0	0	0	77
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OVER-24.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	6	7	10	10	11	14	17	22	105	166	57	65	71	71	71	71	71	640
(1)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
(2)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

1. PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 2. PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 299

CALM=WIND SPEED LESS THAN 1.0MPH-

TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL.

160.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 19.78

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	3
(1)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
(2)	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
3.0- 7.0	4	0	0	1	1	0	7	0	4	0	0	0	0	0	0	0	0	16
(1)	1.1	0.0	0.0	0.3	0.3	0.0	2.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
(2)	0.2	0.0	0.0	0.1	0.1	0.0	0.4	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
7.0-12.0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	12
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
12.0-18.0	0	0	0	1	1	0	4	0	10	4	0	0	0	0	0	0	0	19
(1)	0.0	0.0	0.0	0.3	0.3	0.0	1.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
(2)	0.1	0.0	0.0	0.1	0.1	0.0	0.3	0.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
18.0-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	7	0	0	2	2	0	20	0	36	4	0	0	0	0	0	0	0	69
(1)	1.6	0.0	0.0	0.5	0.5	0.0	3.2	0.0	5.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9
(2)	0.4	0.1	0.0	0.2	0.2	0.0	1.1	1.0	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9

(1) = PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) = PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE = 264

CALM = WIND SPEED LESS THAN 1.0MPH

TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

4/1/85 - 6/30/80

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100 METERS

CLASS FREQUENCY (PERCENT) = 4.35

WIND DISTRIBUTION SUMMARY

SPEED (MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
CALM-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3.6- 7.5	1	0	0	0	0	0	0	0	1	0	4	0	1	0	0	0	0	7
11	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	4.4	0.0	1.1	0.0	0.0	0.0	0.0	7.7
12	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.7
7.6-12.5	0	0	0	0	0	0	0	7	0	0	0	0	11	0	0	0	0	18
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	19.7
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
12.6-18.5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
18.6-24.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OVER-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALL SPEEDS	1	0	0	0	1	0	0	0	10	0	4	0	1	0	0	0	0	16
11	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	10.0	0.0	4.4	0.0	1.0	0.0	0.0	0.0	0.0	16.4
12	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2

1 PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 2 PERCENT OF ALL GOOD OBSERVATIONS FOR THE PERIOD

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE 20

04.4 WIND SPEED LESS THAN 1.00MPH



TABLE 4A-2 (continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA

4/1/85 - 6/30/85

STABILITY CLASS ALL-- ALL STABILITIES COMBINED

CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 2.9	0	0	7	0	9	2	1	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.4	0.0	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.4	0.0	0.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.0- 7.9	27	11	11	27	30	31	31	19	9	10	17	16	16	11	11	11	11	244
(1)	1.4	0.6	0.6	1.4	1.6	1.6	1.7	1.0	0.5	0.5	0.9	0.8	0.8	0.6	0.6	0.6	0.6	12.2
(2)	1.4	0.6	0.6	1.4	1.6	1.6	1.7	1.0	0.5	0.5	0.9	0.8	0.8	0.6	0.6	0.6	0.6	12.2
8.0-12.9	24	19	10	6	17	26	46	70	64	31	78	44	44	31	25	25	25	660
(1)	1.2	1.0	0.5	0.3	0.8	1.3	2.3	3.5	3.2	1.6	4.1	2.2	2.2	1.6	1.3	1.3	1.3	33.0
(2)	1.2	1.0	0.5	0.3	0.8	1.3	2.3	3.5	3.2	1.6	4.1	2.2	2.2	1.6	1.3	1.3	1.3	33.0
13.0-17.9	21	0	7	11	14	14	4	10	19	7	26	17	17	4	17	17	17	360
(1)	1.1	0.0	0.4	0.6	0.7	0.7	0.2	0.5	1.0	0.4	1.3	0.9	0.9	0.2	0.9	0.9	0.9	18.0
(2)	1.1	0.0	0.4	0.6	0.7	0.7	0.2	0.5	1.0	0.4	1.3	0.9	0.9	0.2	0.9	0.9	0.9	18.0
18.0-24.0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	10
(1)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
(2)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
ALL SPEEDS	51	19	24	44	76	90	90	23	11	17	17	17	17	4	44	44	44	1000
(1)	2.6	1.0	1.2	2.2	3.8	4.4	4.4	1.2	0.6	0.8	0.8	0.8	0.8	0.2	2.2	2.2	2.2	50.0
(2)	2.6	1.0	1.2	2.2	3.8	4.4	4.4	1.2	0.6	0.8	0.8	0.8	0.8	0.2	2.2	2.2	2.2	50.0

(1) PERCENT OF ALL GOOD OBSERVATIONS FOR THIS PAGE  
 (2) PERCENT OF ALL GOOD OBSERVATIONS FOR THE ENTIRE

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=104  
 NUMBER OF HOURS IN YEAR=2104

84.2 PERCENT DATA RECORD

CALM=10 SPEED LESS THAN 1.0MPH

### 3. OFF-SITE DOSES RESULTING FROM RADIOACTIVE LIQUID EFFLUENTS

#### 3.1 General Dose Assessment

The methods and parameters used to calculate the off-site doses are presented in the Appendix I analysis for Unit #1<sup>1</sup>. Population data are based upon the 1980 census data<sup>3</sup>; effluent releases are given elsewhere in this report.

Numerical constants used in the analyses have been updated to conform to Revision 1 of Regulatory Guide 1.109 dated October 1977.

#### 3.2 Maximum Individual Doses

The maximum individual doses and pathways considered are shown in Tables 3.2-1 through 3.2-3.

#### 3.3 Population Doses

The population doses are shown in Table 3.3-1.

1 See References #1 pg. 68

3 See Reference #3 pg. 68



Table 3.2-1

January - June 1985 Liquid Release Maximum Individual  
Doses From All Pathways for Adults (mREM)

Pathway	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
Salt Water fish	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.0	<0.01
Salt Water Shell fish	<0.01	<0.01	<0.01	<0.01	<0.01	0.09	0.0	0.01
Discharge Canal Shoreline	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ocean Shoreline Deposits	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Swimming	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boating	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total	0.02	0.02	0.01	0.01	0.01	0.12	0.01	0.02

Table 3.2-2

January - June 1985 Liquid Release Maximum Individual  
Doses From All Pathways for Teenagers (mREM)

Pathway	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
Salt Water Fish	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.0	<0.01
Salt Water Shell Fish	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.0	0.01
Discharge Canal Shoreline	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03
Ocean Shoreline Deposits	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Swimming	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boating	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total	0.04	0.05	0.03	0.04	0.04	0.10	0.04	0.05

Table 3.2-3  
 January - June 1985 Liquid Release Maximum Individual  
 Doses From All Pathways for Children (mREM)

Pathway	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
Salt Water Fish	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0	< 0.01
Salt Water Shell Fish	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.02	0.0	0.01
Discharge Canal Shoreline	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ocean Shoreline Deposits	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Swimming	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Boating	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total	0.02	0.02	< 0.01	0.01	0.01	0.03	< 0.01	0.02

Table 3.3-1  
 Population Doses Resulting From The  
 January - June 1985 Liquid Effluents

<u>Pathway</u>	<u>Thyroid</u>	<u>Total Body (MAN-REM)</u>
Salt Water Fish	<0.01	0.10
Salt Water Shell Fish	<0.01	0.13
Salt Water Plants	<0.01	<0.01
Ocean Shoreline Deposits	0.46	0.46
Swimming	<0.01	<0.01
Total	0.46	0.70

NOTE: These are the major pathways for liquid effluents.

#### 4. OFF-SITE DOSES RESULTING FROM RADIOACTIVE GASEOUS EFFLUENTS

##### 4.1 General Dose Assessment

The methods and parameters used to calculate the off-site doses are presented in the Appendix I analysis for Unit #1'. The gaseous releases for both reactor building vent and the main stack, for the period January - June 1985, are elsewhere in this report. Meteorological information for calculating dispersion of these releases are shown in Tables 4.1-1 through 4.1-12. For each quarter year, values of X/Q, X/Q depleted and D/Q are tabulated for twenty-three radial distances at sixteen compass directions using the AEOLUS program which was provided to Boston Edison by Yankee Atomic Electric Company.

AEOLUS is a computer code for evaluating atmospheric dispersion of routine radioactive effluents from commercial nuclear power stations, and for computing statistical distributions of radiation doses which would result from postulated accidental releases of assumed intensity. The code is based, in part, on Regulatory Guide 1.111 developed by the U.S. Nuclear Regulatory Commission as guidance toward implementation of Appendix I to 10 CFR Part 50 and the "as low as reasonably achievable" objectives. Table 4.1-1 through 4.1-12 are based on data taken at the 160 ft. elevation for the main stack and the 33-foot elevation for the reactor building vent.

##### 4.2 Maximum Individual Doses

The maximum individual dose locations and pathways assumed are presented in Table 4.2-1. The resultant maximum individual adult, teenage, child and infant doses are reported in Tables 4.2-2 through 4.2-5. In the summary Table 4.2-6, doses for skin and total body; individual organ doses are due to iodine and air particulates only.

##### 4.3 Population Doses

The assumed population distribution is shown in Table 4.3-1 and is based upon 1980 Census Data for the permanent population.<sup>3</sup> The population doses by pathway are presented in Table 4.3-2.

In accordance with Regulatory Guide 1.21, only pathways yielding significant contribution to the total dose have been included; those pathways not included account for a total of less than 5% of the overall population doses.

1 See References #1 pg. 68

3 See Reference #3 pg. 68

TABLE 4.1-1  
UNDEPLETED RELATIVE CONCENTRATIONS PER UNIT  
EMISSION FOR REACTOR BUILDING VENT FOR  
JANUARY - MARCH 1985

REACTOR UNIT	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/MIN							
		WS (1)	WS (2)	WS (3)	WS (4)	WS (5)	WS (6)	WS (7)	WS (8)
01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
02	21.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
03	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04	67.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06	112.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07	135.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08	157.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09	180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	202.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	225.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	247.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	292.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	315.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	337.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	382.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	405.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	427.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	450.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	472.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	495.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	517.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	540.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	562.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	585.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	607.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	630.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	652.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	675.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	697.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	720.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	742.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	765.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	787.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	810.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	832.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	855.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	877.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	900.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	922.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	945.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	967.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	990.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	1012.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	1035.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	1057.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	1080.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	1102.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	1125.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52	1147.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	1170.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
54	1192.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	1215.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
56	1237.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57	1260.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	1282.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	1305.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	1327.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	1350.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62	1372.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
63	1395.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
64	1417.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65	1440.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
66	1462.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67	1485.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
68	1507.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
69	1530.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	1552.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	1575.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72	1597.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
73	1620.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
74	1642.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75	1665.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
76	1687.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77	1710.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
78	1732.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	1755.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	1777.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	1800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	1822.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
83	1845.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
84	1867.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85	1890.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
86	1912.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87	1935.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88	1957.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89	1980.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	2002.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	2025.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92	2047.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93	2070.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94	2092.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95	2115.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96	2137.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97	2160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98	2182.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	2205.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	2227.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 4.1-2  
DEPLETED RELATIVE CONCENTRATIONS PER UNIT  
EMISSION FOR REACTOR BUILDING VENT FOR  
JANUARY - MARCH 1985

REACTOR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGED SEC/M447				Wt - (5)	N/A - (6)	N - (7)	N/A - (8)
		S - (1)	SK - (2)	SK - (3)	SK - (4)				
		0.0	21.9	45.0	67.5	90.0	112.5	135.0	157.5
001	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	21.9	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	45.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	67.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	90.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	112.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	135.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
001	157.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	21.9	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	45.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	67.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	90.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	112.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	135.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
002	157.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	21.9	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	45.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	67.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	90.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	112.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	135.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
003	157.5	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

TABLE 4.1-3  
RELATIVE DEPOSITION CONCENTRATIONS PER UNIT  
EMISSION FOR REACTOR BUILDING VENT FOR  
JANUARY - MARCH 1985

RECPT NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2							
		S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W - (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5
001	201.20	3.150E-08	1.840E-08	1.060E-08	1.500E-08	1.100E-08	1.400E-08	1.200E-08	1.300E-08
002	40.70	4.670E-09	2.320E-09	1.370E-09	1.930E-09	1.400E-09	1.700E-09	1.500E-09	1.600E-09
003	80.70	1.190E-09	5.950E-10	3.420E-10	4.830E-10	3.500E-10	4.200E-10	3.700E-10	3.900E-10
004	120.70	2.970E-10	1.480E-10	8.650E-11	1.190E-10	8.700E-11	1.050E-10	9.300E-11	9.700E-11
005	160.70	7.420E-11	3.700E-11	2.160E-11	2.970E-11	2.100E-11	2.500E-11	2.200E-11	2.300E-11
006	200.70	1.850E-11	9.250E-12	5.400E-12	7.420E-12	5.400E-12	6.400E-12	5.600E-12	5.800E-12
007	240.70	4.620E-12	2.300E-12	1.350E-12	1.870E-12	1.350E-12	1.600E-12	1.400E-12	1.500E-12
008	280.70	1.150E-12	5.750E-13	3.370E-13	4.670E-13	3.350E-13	4.000E-13	3.500E-13	3.700E-13
009	320.70	2.870E-13	1.420E-13	8.150E-14	1.110E-13	8.100E-14	9.600E-14	8.400E-14	8.800E-14
010	360.70	7.170E-14	3.550E-14	2.040E-14	2.780E-14	2.000E-14	2.400E-14	2.100E-14	2.200E-14
011	400.70	1.790E-14	8.870E-15	5.100E-15	6.950E-15	5.050E-15	6.000E-15	5.200E-15	5.500E-15
012	440.70	4.470E-15	2.210E-15	1.270E-15	1.730E-15	1.250E-15	1.500E-15	1.300E-15	1.400E-15
013	480.70	1.110E-15	5.520E-16	3.170E-16	4.320E-16	3.100E-16	3.700E-16	3.200E-16	3.400E-16
014	520.70	2.770E-16	1.380E-16	7.920E-17	1.080E-16	7.850E-17	9.300E-17	8.100E-17	8.500E-17
015	560.70	6.920E-17	3.450E-17	1.980E-17	2.700E-17	1.950E-17	2.300E-17	2.000E-17	2.100E-17
016	600.70	1.730E-17	8.620E-18	4.950E-18	6.700E-18	4.850E-18	5.800E-18	5.000E-18	5.300E-18
017	640.70	4.320E-18	2.150E-18	1.240E-18	1.680E-18	1.200E-18	1.400E-18	1.200E-18	1.300E-18
018	680.70	1.080E-18	5.370E-19	3.060E-19	4.170E-19	3.000E-19	3.600E-19	3.100E-19	3.300E-19
019	720.70	2.700E-19	1.340E-19	7.650E-20	1.040E-19	7.550E-20	9.000E-20	7.800E-20	8.200E-20
020	760.70	6.750E-20	3.350E-20	1.910E-20	2.600E-20	1.850E-20	2.200E-20	1.900E-20	2.000E-20
021	800.70	1.690E-20	8.370E-21	4.770E-21	6.470E-21	4.650E-21	5.600E-21	4.800E-21	5.100E-21
022	840.70	4.220E-21	2.090E-21	1.190E-21	1.610E-21	1.150E-21	1.350E-21	1.150E-21	1.250E-21
023	880.70	1.050E-21	5.220E-22	2.970E-22	4.020E-22	2.850E-22	3.400E-22	2.900E-22	3.100E-22
024	920.70	2.620E-22	1.310E-22	7.420E-23	1.000E-22	7.300E-23	8.700E-23	7.500E-23	7.900E-23
025	960.70	6.550E-23	3.270E-23	1.860E-23	2.530E-23	1.800E-23	2.150E-23	1.850E-23	1.950E-23
026	1000.70	1.630E-23	8.170E-24	4.650E-24	6.320E-24	4.550E-24	5.400E-24	4.700E-24	5.000E-24
027	1040.70	4.070E-24	2.040E-24	1.160E-24	1.570E-24	1.100E-24	1.300E-24	1.100E-24	1.200E-24
028	1080.70	1.010E-24	5.100E-25	2.900E-25	3.920E-25	2.800E-25	3.350E-25	2.900E-25	3.100E-25
029	1120.70	2.520E-25	1.270E-25	7.250E-26	9.800E-26	7.100E-26	8.500E-26	7.300E-26	7.700E-26
030	1160.70	6.300E-26	3.170E-26	1.800E-26	2.430E-26	1.750E-26	2.100E-26	1.800E-26	1.900E-26
031	1200.70	1.570E-26	7.920E-27	4.420E-27	5.970E-27	4.300E-27	5.150E-27	4.400E-27	4.700E-27
032	1240.70	3.920E-27	1.980E-27	1.110E-27	1.490E-27	1.050E-27	1.250E-27	1.050E-27	1.150E-27
033	1280.70	9.750E-28	4.950E-28	2.800E-28	3.720E-28	2.700E-28	3.250E-28	2.750E-28	2.950E-28
034	1320.70	2.430E-28	1.230E-28	6.950E-29	9.300E-29	6.750E-29	8.100E-29	6.850E-29	7.250E-29
035	1360.70	6.070E-29	3.070E-29	1.740E-29	2.320E-29	1.650E-29	1.950E-29	1.650E-29	1.750E-29
036	1400.70	1.510E-29	7.670E-30	4.350E-30	5.800E-30	4.150E-30	4.950E-30	4.200E-30	4.500E-30
037	1440.70	3.770E-30	1.910E-30	1.090E-30	1.450E-30	1.000E-30	1.200E-30	1.000E-30	1.100E-30
038	1480.70	9.420E-31	4.770E-31	2.720E-31	3.620E-31	2.600E-31	3.150E-31	2.650E-31	2.850E-31
039	1520.70	2.350E-31	1.180E-31	6.550E-32	8.750E-32	6.300E-32	7.650E-32	6.400E-32	6.800E-32
040	1560.70	5.870E-32	2.950E-32	1.640E-32	2.180E-32	1.550E-32	1.850E-32	1.550E-32	1.650E-32
041	1600.70	1.460E-32	7.370E-33	4.100E-33	5.450E-33	3.850E-33	4.650E-33	3.900E-33	4.200E-33
042	1640.70	3.650E-33	1.830E-33	1.040E-33	1.390E-33	9.850E-34	1.190E-33	9.850E-34	1.080E-33
043	1680.70	9.120E-34	4.570E-34	2.600E-34	3.470E-34	2.450E-34	2.950E-34	2.450E-34	2.650E-34
044	1720.70	2.280E-34	1.140E-34	6.350E-35	8.420E-35	6.050E-35	7.350E-35	6.050E-35	6.450E-35
045	1760.70	5.700E-35	2.850E-35	1.610E-35	2.130E-35	1.500E-35	1.800E-35	1.500E-35	1.600E-35
046	1800.70	1.420E-35	7.120E-36	3.950E-36	5.250E-36	3.700E-36	4.500E-36	3.700E-36	3.900E-36
047	1840.70	3.550E-36	1.770E-36	9.850E-37	1.310E-36	9.450E-37	1.140E-36	9.450E-37	1.040E-36
048	1880.70	8.870E-37	4.420E-37	2.480E-37	3.280E-37	2.300E-37	2.800E-37	2.300E-37	2.500E-37
049	1920.70	2.210E-37	1.100E-37	6.150E-38	8.150E-38	5.750E-38	7.000E-38	5.750E-38	6.150E-38
050	1960.70	5.520E-38	2.750E-38	1.540E-38	2.030E-38	1.400E-38	1.700E-38	1.400E-38	1.500E-38
051	2000.70	1.380E-38	6.870E-39	3.850E-39	5.070E-39	3.550E-39	4.300E-39	3.550E-39	3.750E-39
052	2040.70	3.450E-39	1.710E-39	9.650E-40	1.280E-39	9.150E-40	1.100E-39	9.150E-40	9.850E-40
053	2080.70	8.620E-40	4.270E-40	2.410E-40	3.170E-40	2.200E-40	2.700E-40	2.200E-40	2.400E-40
054	2120.70	2.150E-40	1.070E-40	5.950E-41	7.850E-41	5.600E-41	6.800E-41	5.600E-41	5.950E-41
055	2160.70	5.370E-41	2.680E-41	1.480E-41	1.970E-41	1.350E-41	1.650E-41	1.350E-41	1.450E-41
056	2200.70	1.340E-41	6.700E-42	3.700E-42	4.870E-42	3.400E-42	4.150E-42	3.400E-42	3.600E-42
057	2240.70	3.350E-42	1.670E-42	9.350E-43	1.240E-42	8.950E-43	1.080E-42	8.950E-43	9.650E-43
058	2280.70	8.370E-43	4.170E-43	2.320E-43	3.050E-43	2.150E-43	2.650E-43	2.150E-43	2.350E-43
059	2320.70	2.090E-43	1.040E-43	2.350E-44	3.100E-44	2.200E-44	2.700E-44	2.200E-44	2.350E-44
060	2360.70	5.220E-44	2.600E-44	6.100E-45	8.050E-45	5.700E-45	6.950E-45	5.700E-45	6.050E-45
061	2400.70	1.300E-44	6.500E-45	1.520E-45	1.990E-45	1.350E-45	1.650E-45	1.350E-45	1.450E-45
062	2440.70	3.250E-45	1.620E-45	4.050E-46	5.350E-46	3.750E-46	4.550E-46	3.750E-46	4.050E-46
063	2480.70	8.120E-46	4.050E-46	1.010E-46	1.330E-46	9.350E-47	1.130E-46	9.350E-47	1.010E-46
064	2520.70	2.020E-46	1.010E-46	2.520E-47	3.300E-47	2.300E-47	2.800E-47	2.300E-47	2.450E-47
065	2560.70	5.050E-47	2.520E-47	6.300E-48	8.250E-48	5.750E-48	7.000E-48	5.750E-48	6.050E-48
066	2600.70	1.260E-47	6.300E-48	1.570E-48	2.060E-48	1.400E-48	1.700E-48	1.400E-48	1.500E-48
067	2640.70	3.150E-48	1.570E-48	3.920E-49	5.150E-49	3.550E-49	4.300E-49	3.550E-49	3.750E-49
068	2680.70	7.870E-49	3.920E-49	9.750E-50	1.280E-49	9.150E-50	1.100E-49	9.150E-50	9.850E-50
069	2720.70	1.970E-49	9.850E-50	2.410E-50	3.150E-50	2.200E-50	2.700E-50	2.200E-50	2.350E-50
070	2760.70	4.920E-50	2.410E-50	6.050E-51	7.950E-51	5.600E-51	6.800E-51	5.600E-51	5.950E-51
071	2800.70	1.230E-50	6.050E-51	1.500E-51	1.970E-51	1.350E-51	1.650E-51	1.350E-51	1.450E-51
072	2840.70	3.070E-51	1.500E-51	3.700E-52	4.850E-52	3.350E-52	4.100E-52	3.350E-52	3.550E-52
073	2880.70	7.670E-52	3.700E-52	9.150E-53	1.200E-52	8.550E-53	1.040E-52	8.550E-53	9.150E-53
074	2920.70	1.910E-52	9.150E-53	2.250E-53	2.950E-53	2.000E-53	2.500E-53	2.000E-53	2.150E-53
075	2960.70	4.770E-53	2.250E-53	5.550E-54	7.300E-54	5.100E-54	6.200E-54	5.100E-54	5.400E-54
076	3000.70	1.190E-53	5.550E-54	1.380E-54	1.800E-54	1.300E-54	1.550E-54	1.300E-54	1.400E-54
077	3040.70	2.970E-54	1.380E-54	3.200E-55	4.150E-55	2.850E-55	3.500E-55	2.850E-55	3.050E-55
078	3080.70	7.420E-55	3.200E-55	7.700E-56	1.010E-55	7.200E-56	8.700E-56	7.200E-56	7.700E-56
079	3120.70	1.850E-55	7.700E-56	1.850E-56	2.400E-56	1.700E-56	2.100E-56	1.700E-56	1.800E-56
080	3160.70	4.620E-56	1.850E-56	4.400E-57	5.750E-57	3.950E-57	4.850E-57	3.950E-57	4.200E-57
081	3200.70	1.150E-56	4.400E-57	1.040E-57	1.360E-57	9.450E-58			



TABLE 4.1-4  
UNDELETED RELATIVE CONCENTRATIONS PER UNIT  
EMISSION FOR MAIN STACK FOR  
JANUARY - MARCH 1985

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**0							
		6 - (1)	95k - (2)	9k - (3)	45k - (4)	90 - (5)	112.5 - (6)	135.0 - (7)	157.5 - (8)
001	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
002	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
003	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
004	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
005	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
006	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
007	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
008	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
009	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
010	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
011	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
012	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
013	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
014	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
015	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
016	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
017	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
018	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
019	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
020	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
021	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
022	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
023	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
024	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
025	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
026	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
027	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
028	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
029	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
030	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
031	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
032	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
033	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
034	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
035	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
036	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
037	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
038	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
039	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
040	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
041	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
042	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
043	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
044	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
045	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
046	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
047	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
048	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
049	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5
050	201.25	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5



TABLE 4.1-6  
RELATIVE DEPOSITION CONCENTRATIONS PER UNIT  
EMISSION FOR MAIN STACK FOR  
JANUARY - MARCH 1985

REC'D NO.	DISCHARGE POINT	WIND	WIND DIR	WIND SPCD	RELATIVE DEPOSITION CONCENTRATION PER UNIT EMISSION
0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.1	0.1	0.1	0.1	0.1
0.2	0.2	0.2	0.2	0.2	0.2
0.3	0.3	0.3	0.3	0.3	0.3
0.4	0.4	0.4	0.4	0.4	0.4
0.5	0.5	0.5	0.5	0.5	0.5
0.6	0.6	0.6	0.6	0.6	0.6
0.7	0.7	0.7	0.7	0.7	0.7
0.8	0.8	0.8	0.8	0.8	0.8
0.9	0.9	0.9	0.9	0.9	0.9
1.0	1.0	1.0	1.0	1.0	1.0
1.1	1.1	1.1	1.1	1.1	1.1
1.2	1.2	1.2	1.2	1.2	1.2
1.3	1.3	1.3	1.3	1.3	1.3
1.4	1.4	1.4	1.4	1.4	1.4
1.5	1.5	1.5	1.5	1.5	1.5
1.6	1.6	1.6	1.6	1.6	1.6
1.7	1.7	1.7	1.7	1.7	1.7
1.8	1.8	1.8	1.8	1.8	1.8
1.9	1.9	1.9	1.9	1.9	1.9
2.0	2.0	2.0	2.0	2.0	2.0
2.1	2.1	2.1	2.1	2.1	2.1
2.2	2.2	2.2	2.2	2.2	2.2
2.3	2.3	2.3	2.3	2.3	2.3
2.4	2.4	2.4	2.4	2.4	2.4
2.5	2.5	2.5	2.5	2.5	2.5
2.6	2.6	2.6	2.6	2.6	2.6
2.7	2.7	2.7	2.7	2.7	2.7
2.8	2.8	2.8	2.8	2.8	2.8
2.9	2.9	2.9	2.9	2.9	2.9
3.0	3.0	3.0	3.0	3.0	3.0
3.1	3.1	3.1	3.1	3.1	3.1
3.2	3.2	3.2	3.2	3.2	3.2
3.3	3.3	3.3	3.3	3.3	3.3
3.4	3.4	3.4	3.4	3.4	3.4
3.5	3.5	3.5	3.5	3.5	3.5
3.6	3.6	3.6	3.6	3.6	3.6
3.7	3.7	3.7	3.7	3.7	3.7
3.8	3.8	3.8	3.8	3.8	3.8
3.9	3.9	3.9	3.9	3.9	3.9
4.0	4.0	4.0	4.0	4.0	4.0
4.1	4.1	4.1	4.1	4.1	4.1
4.2	4.2	4.2	4.2	4.2	4.2
4.3	4.3	4.3	4.3	4.3	4.3
4.4	4.4	4.4	4.4	4.4	4.4
4.5	4.5	4.5	4.5	4.5	4.5
4.6	4.6	4.6	4.6	4.6	4.6
4.7	4.7	4.7	4.7	4.7	4.7
4.8	4.8	4.8	4.8	4.8	4.8
4.9	4.9	4.9	4.9	4.9	4.9
5.0	5.0	5.0	5.0	5.0	5.0
5.1	5.1	5.1	5.1	5.1	5.1
5.2	5.2	5.2	5.2	5.2	5.2
5.3	5.3	5.3	5.3	5.3	5.3
5.4	5.4	5.4	5.4	5.4	5.4
5.5	5.5	5.5	5.5	5.5	5.5
5.6	5.6	5.6	5.6	5.6	5.6
5.7	5.7	5.7	5.7	5.7	5.7
5.8	5.8	5.8	5.8	5.8	5.8
5.9	5.9	5.9	5.9	5.9	5.9
6.0	6.0	6.0	6.0	6.0	6.0
6.1	6.1	6.1	6.1	6.1	6.1
6.2	6.2	6.2	6.2	6.2	6.2
6.3	6.3	6.3	6.3	6.3	6.3
6.4	6.4	6.4	6.4	6.4	6.4
6.5	6.5	6.5	6.5	6.5	6.5
6.6	6.6	6.6	6.6	6.6	6.6
6.7	6.7	6.7	6.7	6.7	6.7
6.8	6.8	6.8	6.8	6.8	6.8
6.9	6.9	6.9	6.9	6.9	6.9
7.0	7.0	7.0	7.0	7.0	7.0
7.1	7.1	7.1	7.1	7.1	7.1
7.2	7.2	7.2	7.2	7.2	7.2
7.3	7.3	7.3	7.3	7.3	7.3
7.4	7.4	7.4	7.4	7.4	7.4
7.5	7.5	7.5	7.5	7.5	7.5
7.6	7.6	7.6	7.6	7.6	7.6
7.7	7.7	7.7	7.7	7.7	7.7
7.8	7.8	7.8	7.8	7.8	7.8
7.9	7.9	7.9	7.9	7.9	7.9
8.0	8.0	8.0	8.0	8.0	8.0
8.1	8.1	8.1	8.1	8.1	8.1
8.2	8.2	8.2	8.2	8.2	8.2
8.3	8.3	8.3	8.3	8.3	8.3
8.4	8.4	8.4	8.4	8.4	8.4
8.5	8.5	8.5	8.5	8.5	8.5
8.6	8.6	8.6	8.6	8.6	8.6
8.7	8.7	8.7	8.7	8.7	8.7
8.8	8.8	8.8	8.8	8.8	8.8
8.9	8.9	8.9	8.9	8.9	8.9
9.0	9.0	9.0	9.0	9.0	9.0
9.1	9.1	9.1	9.1	9.1	9.1
9.2	9.2	9.2	9.2	9.2	9.2
9.3	9.3	9.3	9.3	9.3	9.3
9.4	9.4	9.4	9.4	9.4	9.4
9.5	9.5	9.5	9.5	9.5	9.5
9.6	9.6	9.6	9.6	9.6	9.6
9.7	9.7	9.7	9.7	9.7	9.7
9.8	9.8	9.8	9.8	9.8	9.8
9.9	9.9	9.9	9.9	9.9	9.9
10.0	10.0	10.0	10.0	10.0	10.0





TABLE 4.1-9  
RELATIVE DEPOSITION CONCENTRATIONS PER UNIT  
EMISSION FOR REACTOR BUILDING VENT FOR  
APRIL - JUNE 1985

RECFTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/NK*0							
		S = (1)	SSK = (2)	SR = (3)	MSK = (4)	NR = (5)	MNR = (6)	NW = (7)	NW = (8)
		0.0	21.7	45.0	87.5	90.0	112.5	132.0	157.0
001	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
002	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
003	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
004	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
005	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
006	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
007	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
008	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
009	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
010	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
011	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
012	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
013	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
014	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
015	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
016	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
017	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
018	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
019	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
020	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
021	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
022	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
023	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
024	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
025	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
026	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
027	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
028	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
029	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
030	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
031	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
032	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
033	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
034	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
035	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
036	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
037	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
038	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
039	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
040	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
041	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
042	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
043	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
044	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
045	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
046	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
047	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
048	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
049	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
050	0.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



TABLE 4.1-11  
DEPLETED RELATIVE CONCENTRATIONS PER UNIT  
EMISSION FOR MAIN STACK FOR  
APRIL - JUNE 1985

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M*43							
		S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W - (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNE - (8) 157.5
01	201.30	1.4900	1.4400	1.4580	1.4800	1.4780	1.4680	1.4680	1.4680
02	402.30	1.5800	1.4800	1.4800	1.4800	1.4800	1.4800	1.4800	1.4800
03	603.30	1.4500	1.4500	1.4500	1.4500	1.4500	1.4500	1.4500	1.4500
04	804.30	1.4200	1.4200	1.4200	1.4200	1.4200	1.4200	1.4200	1.4200
05	1005.30	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000	1.4000
06	1206.30	1.3800	1.3800	1.3800	1.3800	1.3800	1.3800	1.3800	1.3800
07	1407.30	1.3600	1.3600	1.3600	1.3600	1.3600	1.3600	1.3600	1.3600
08	1608.30	1.3400	1.3400	1.3400	1.3400	1.3400	1.3400	1.3400	1.3400
09	1809.30	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200	1.3200
10	2010.30	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000	1.3000
11	2211.30	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800	1.2800
12	2412.30	1.2600	1.2600	1.2600	1.2600	1.2600	1.2600	1.2600	1.2600
13	2613.30	1.2400	1.2400	1.2400	1.2400	1.2400	1.2400	1.2400	1.2400
14	2814.30	1.2200	1.2200	1.2200	1.2200	1.2200	1.2200	1.2200	1.2200
15	3015.30	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000	1.2000
16	3216.30	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800	1.1800
17	3417.30	1.1600	1.1600	1.1600	1.1600	1.1600	1.1600	1.1600	1.1600
18	3618.30	1.1400	1.1400	1.1400	1.1400	1.1400	1.1400	1.1400	1.1400
19	3819.30	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
20	4020.30	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000
21	4221.30	1.0800	1.0800	1.0800	1.0800	1.0800	1.0800	1.0800	1.0800
22	4422.30	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
23	4623.30	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
24	4824.30	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
25	5025.30	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
26	5226.30	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
27	5427.30	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
28	5628.30	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
29	5829.30	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
30	6030.30	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
31	6231.30	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
32	6432.30	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
33	6633.30	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
34	6834.30	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200	0.8200
35	7035.30	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
36	7236.30	0.7800	0.7800	0.7800	0.7800	0.7800	0.7800	0.7800	0.7800
37	7437.30	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600	0.7600
38	7638.30	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400	0.7400
39	7839.30	0.7200	0.7200	0.7200	0.7200	0.7200	0.7200	0.7200	0.7200
40	8040.30	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
41	8241.30	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
42	8442.30	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600	0.6600
43	8643.30	0.6400	0.6400	0.6400	0.6400	0.6400	0.6400	0.6400	0.6400
44	8844.30	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200	0.6200
45	9045.30	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
46	9246.30	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800	0.5800
47	9447.30	0.5600	0.5600	0.5600	0.5600	0.5600	0.5600	0.5600	0.5600
48	9648.30	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400	0.5400
49	9849.30	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200	0.5200
50	10050.30	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000



TABLE 4.1-12  
 RELATIVE DEPOSITION CONCENTRATIONS PER UNIT  
 EMISSION FOR MAIN STACK FOR  
 APRIL - JUNE 1985

Stack	April	May	June	Unit
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000
3	0.0000	0.0000	0.0000	0.0000
4	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000
56	0.0000	0.0000	0.0000	0.0000
57	0.0000	0.0000	0.0000	0.0000
58	0.0000	0.0000	0.0000	0.0000
59	0.0000	0.0000	0.0000	0.0000
60	0.0000	0.0000	0.0000	0.0000
61	0.0000	0.0000	0.0000	0.0000
62	0.0000	0.0000	0.0000	0.0000
63	0.0000	0.0000	0.0000	0.0000
64	0.0000	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	0.0000
66	0.0000	0.0000	0.0000	0.0000
67	0.0000	0.0000	0.0000	0.0000
68	0.0000	0.0000	0.0000	0.0000
69	0.0000	0.0000	0.0000	0.0000
70	0.0000	0.0000	0.0000	0.0000
71	0.0000	0.0000	0.0000	0.0000
72	0.0000	0.0000	0.0000	0.0000
73	0.0000	0.0000	0.0000	0.0000
74	0.0000	0.0000	0.0000	0.0000
75	0.0000	0.0000	0.0000	0.0000
76	0.0000	0.0000	0.0000	0.0000
77	0.0000	0.0000	0.0000	0.0000
78	0.0000	0.0000	0.0000	0.0000
79	0.0000	0.0000	0.0000	0.0000
80	0.0000	0.0000	0.0000	0.0000
81	0.0000	0.0000	0.0000	0.0000
82	0.0000	0.0000	0.0000	0.0000
83	0.0000	0.0000	0.0000	0.0000
84	0.0000	0.0000	0.0000	0.0000
85	0.0000	0.0000	0.0000	0.0000
86	0.0000	0.0000	0.0000	0.0000
87	0.0000	0.0000	0.0000	0.0000
88	0.0000	0.0000	0.0000	0.0000
89	0.0000	0.0000	0.0000	0.0000
90	0.0000	0.0000	0.0000	0.0000
91	0.0000	0.0000	0.0000	0.0000
92	0.0000	0.0000	0.0000	0.0000
93	0.0000	0.0000	0.0000	0.0000
94	0.0000	0.0000	0.0000	0.0000
95	0.0000	0.0000	0.0000	0.0000
96	0.0000	0.0000	0.0000	0.0000
97	0.0000	0.0000	0.0000	0.0000
98	0.0000	0.0000	0.0000	0.0000
99	0.0000	0.0000	0.0000	0.0000
100	0.0000	0.0000	0.0000	0.0000

Table 4.2-1

Maximum Individual Locations and Pathways<sup>1</sup>  
 January - June 1985

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Pathway	<u>0.7 Miles</u> W	<u>0.6 Miles</u> ESE	<u>2.2 Miles</u> W
Noble Gas Immersion	Yes	Yes	Yes
Inhalation	Yes	Yes	Yes
Fruit & Vegetable Garden	Yes	Yes	Yes
Meat	No	No	No
Cows Milk	No	No	Yes
Goats Milk	No	No	No

- 
1. Yes indicates that the pathway is analyzed.  
No indicates that it is not considered.

Table 4.2-2

January - June 1985 Gaseous Release Maximum Individual  
Doses From All Pathways for Adults (mREM)

<u>Location</u>	<u>Bone</u>	<u>Liver</u>	<u>Thyroid</u>	<u>Kidney</u>	<u>Lung</u>	<u>GI-LLI</u>	<u>Skin</u>	<u>Total Body</u>
0.7 Miles W	0.03	0.03	0.05	0.03	0.03	0.03	0.05	0.02
*0.6 Miles ESE	0.04	0.04	0.10	0.04	0.04	0.04	0.07	0.04
2.2 Miles W	0.01	0.01	0.03	0.01	0.01	0.01	0.02	0.01

\* Maximum dose location

Table 4.2-3

January - June 1985 Gaseous Release Maximum Individual Doses From All Pathways for Teenagers (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
0.7 Miles W	0.03	0.03	0.05	0.03	0.03	0.03	0.05	0.03
*0.6 Miles ESE	0.04	0.04	0.10	0.04	0.04	0.04	0.07	0.04
2.2 Miles W	0.01	0.01	0.04	0.01	0.01	0.01	0.02	0.01

\*Maximum dose location

Table 4.2-4

January - June 1985 Gaseous Release Maximum Individual Doses From All Pathways for Children (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
0.7 Miles W	0.03	0.03	0.06	0.03	0.03	0.03	0.05	0.03
*0.6 Miles ESE	0.04	0.04	0.13	0.04	0.04	0.04	0.07	0.04
2.2 Miles W	0.01	0.01	0.06	0.01	0.01	0.01	0.02	0.01

\*Maximum dose location

Table 4.2-5

January - June 1985 Gaseous Release Maximum Individual Doses From All Pathways for Infants (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
0.7 Miles W	0.03	0.03	0.04	0.03	0.03	0.03	0.05	0.03
*0.6 Miles ESE	0.04	0.04	0.07	0.04	0.04	0.04	0.07	0.04
2.2 Miles W	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01

\*Maximum dose location

Table 4.2-6

January - June 1985 Gaseous Release Maximum Individual  
Doses 0.6 Miles ESE (mREM)

<u>Age Group</u>	<u>Bone</u>	<u>Liver</u>	<u>Thyroid</u>	<u>Kidney</u>	<u>Lung</u>	<u>GI-LLI</u>	<u>Skin</u>	<u>Total Body</u>
Adult	0.04	0.04	0.10	0.04	0.04	0.04	0.07	0.04
Teenager	0.04	0.04	0.10	0.04	0.04	0.04	0.07	0.04
Child	0.04	0.04	0.13	0.04	0.04	0.04	0.07	0.04
Infant	0.04	0.04	0.07	0.04	0.04	0.04	0.07	0.04

Table 4.3-2

Population Doses Via Major Pathways Resulting  
From Gaseous Effluents During January - June 1985

<u>Pathway</u>	<u>Thyroid (MAN-REM)</u>	<u>Total Body (MAN-REM)</u>
Noble Gas Immersion (gamma)	1.48	1.48
Ground Plane Deposition	0.12	0.12
Inhalation	0.26	0.02



5. OFF-SITE DIRECT RADIATION

Doses due to direct radiation as measured by thermoluminescent dosimeter for the period January - June 1985 were as follows:

	<u>Dose Rate</u> <u>(uR/hr)</u>
Near Plant (0.-0.16 Miles from the Plant)	8.0
Exclusion Area (0.25-0.68 Miles from the Plant)	4.4
Distant Neighborhood (0.7-6.5 Miles from the Plant)	5.3
Background (8-21 Miles from the Plant)	6.2

The measured values for the first two quarters indicate a small but measurable dose contribution due to direct radiation at Near Plant Locations (within 0.16 miles) but no statistically significant contribution beyond about 0.25 miles.

## REFERENCES

1. "Pilgrim Station Unit 1 Appendix Evaluation" Submitted in Accordance with 10 CFR 50 Appendix I, April 1977.
2. Pilgrim Station Environmental Report, Amendment 4, April 1975, pg. 2-329/330.
3. "An Update of Population Distribution Around the Pilgrim Site," prepared for Boston Edison by HMM Associates, July 31, 1981, ppg. 2-3 and 2-7.