

PILGRIM NUCLEAR POWER STATION
RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT
INCLUDING RADIOLOGICAL IMPACT ON HUMANS

JANUARY 1 THROUGH JUNE 30, 1980

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1. INTRODUCTION AND SUMMARY

This report is issued for the period January-June 1980 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 actual effluent releases, radioactive waste and meteorological data; doses from liquid releases, doses from gaseous releases and direct gamma radiation doses. The calculated doses are below the limits specified in 10 CFR 50, Appendix I¹.

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.

As a result of equipment disruption resulting of the installation of new wiring and instruments required by the NRC and due to a lightning strike on the Meteorological Tower in June, data recovery for this period fell below the target of 90%. Data recovery for the remainder of 1980 is expected to improve.

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

Supplemental Information

January - June, 1980

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: $13(1.8E4Q_s + 1.8E5Q_v) \leq 1$
- d. Liquid effluents: 10 Ci/Quarter

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 = 1×10^{-5} μ 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.

1st Quarter, MS = 1.028 & RBV = 0.293; 2nd Quarter, MS = 0.660 & RBV = 0.622

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: 228
2. Total time period for batch releases: 263.50 hrs.
3. Maximum time period for a batch release: - 8.92 hrs.
4. Average time period for batch releases: 1.16 hr.
5. Minimum time period for a batch release: - 0.25 hr.
6. Average stream flow during periods of release of effluent into a flowing stream: $1.81E + 5$ GPM

b. Gaseous (Not Applicable)

6. Abnormal Releases

- a.
- b. None

TABLE 1A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1980)
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

January - June, 1980

Unit	Quarter 1	Quarter 2	Est. Total Error, %
------	--------------	--------------	------------------------

A. Fission and activation gases

1. Total release	Ci	2.69E+2	4.13E+2	3.00E+1
2. Average release rate for period	μ Ci/sec	3.42E+1	5.25E+1	
3. Percent of Technical Specification limit	%	1.39E-2	1.73E-2	

B. Iodines

1. Total iodine-131	Ci	\leq 4.12E-3	3.21E-3	2.50E+1
2. Average release rate for period	μ Ci/sec	\leq 5.24E-4	4.08E-4	
3. Percent of Technical Specification limit	%	2.06E-1	1.61E-1	

C. Particulates

1. Particulates with half-lives > 8 days	Ci	\leq 3.23E-3	4.79E-3	3.00E+1
2. Average release rate for period	μ Ci/sec	\leq 4.11E-4	6.09E-4	
3. Percent of Technical Specification limit	%	8.77E-2	2.63E-2	
4. Gross alpha radioactivity	Ci	\leq 7.00E-7	3.90E-7	

D. Tritium

1. Total release	Ci	3.65E0	6.75E0	3.00E+1
2. Average release rate for period	μ Ci/sec	4.64E-1	8.59E-1	
3. Percent of Technical Specification limit	%			

TABLE 1B
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1980)
GASEOUS EFFLUENTS - ELEVATED RELEASE

January - June, 1980

CONTINUOUS MODE

BATCH MODE

Nuclides Released	Unit	Quarter	Quarter	Quarter	Quarter
-------------------	------	---------	---------	---------	---------

1. Fission gases

krypton-85	Ci	6.35E-4	2.72E-3		
krypton-85m	Ci	5.70E+1	6.95E+1		
krypton-87	Ci	2.95E+1	2.62E+1		
krypton-88	Ci	1.11E+2	1.00E+2		
xenon-133	Ci	5.41E+1	5.55E+1		
xenon-135	Ci	1.54E0	1.20E+1		
xenon-135m	Ci	1.20E-1	4.55E0		
xenon-138	Ci	3.41E0	7.14E+1		
xenon-131m	Ci				
xenon-137	Ci				
xenon-133m	Ci				
Total for period	Ci	2.57E+2	3.39E+2		

2. Iodines

iodine-131	Ci	< 5.26E-4	2.73E-3		
iodine-133	Ci	< 1.38E-5	2.42E-2		
iodine-135	Ci		2.83E-2		
Total for period	Ci	< 5.40E-4	5.52E-2		

3. Particulates

strontium-89	Ci	3.62E-5	8.16E-4		
strontium-90	Ci	5.50E-6	9.71E-6		
cesium-134	Ci	4.54E-7			
cesium-137	Ci	2.16E-5	1.94E-5		
barium-lanthanum-140	Ci	1.98E-4	3.25E-3		
chromium-51	Ci				
manganese-54	Ci	3.82E-6	1.08E-5		
cobalt-58	Ci				
iron-59	Ci				
cobalt-60	Ci	4.23E-5	4.07E-5		
zinc-65	Ci				
zirconium-niobium-95	Ci				
cerium-141	Ci				
cerium-144	Ci		3.42E-5		
ruthenium-103	Ci				
ruthenium-106	Ci		1.61E-4		

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1980)
GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

January - June, 1980

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter	Quarter

1. Fission gases

krypton-85	Ci	< 3.87E-8	< 4.65E-8		
krypton-85m	Ci	9.10E-2	1.10E-1		
krypton-87	Ci	1.52E-1	1.26E0		
krypton-88	Ci	2.83E-1	4.62E0		
xenon-133	Ci	3.04E-1	8.11E0		
xenon-135	Ci	1.11E+1	6.02E+1		
xenon-135m	Ci				
xenon-138	Ci				
Total for period	Ci	1.19E+1	7.43E+1		

2. Iodines

iodine-131	Ci	< 3.59E-3	4.76E-4		
iodine-133	Ci	2.99E-3	3.05E-3		
iodine-135	Ci	4.61E-3			
Total for period	Ci	< 1.12E-2	3.53E-3		

3. Particulates

strontium-89	Ci	7.00E-5	6.02E-5		
strontium-90	Ci	6.21E-7	1.02E-6		
cesium-134	Ci	5.70E-6	8.82E-6		
cesium-137	Ci	6.75E-5	4.93E-5		
barium-lanthanum-140	Ci	< 2.35E-3	1.99E-4		
manganese-54	Ci	2.92E-5	1.10E-5		
cobalt-58	Ci	2.39E-6			
iron-59	Ci				
cobalt-60	Ci	3.73E-4	1.17E-4		
zinc-65	Ci		4.68E-6		
zirconium-niobium-95	Ci				
cerium-141	Ci	1.74E-5			
ruthenium-103	Ci				
ruthenium-106	Ci				

TABLE 2A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1980)
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

January - June, 1980

	Unit	Quarter 1	Quarter 2	Est. Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, noble gases, or alpha)	Ci	8.77E-1	5.65E-1	3.00E+1
2. Average diluted concentration during period	μCi/ml	1.07E-7	2.17E-7	
3. Percent of applicable limit	%	8.77E0	5.65E0	
B. Tritium				
1. Total release	Ci	2.59E+1	9.13E0	3.00E+1
2. Average diluted concentration during period	μCi/ml	3.15E-6	3.51E-6	
3. Percent of applicable limit	%	3.15E+1	3.51E+1	
C. Dissolved and entrained gases				
1. Total release	Ci	4.55E-3	1.51E-3	4.00E+1
2. Average diluted concentration during period	μCi/ml	5.54E-10	5.81E-10	
3. Percent of applicable limit	%			
D. Gross alpha radioactivity				
1. Total release	Ci	≤1.94E-4	≤9.17E-5	4.00E+1
E. Volume of waste released (prior to dilution)				
	liters	2.59E+6	1.78E+6	2.00E+1
F. Volume of dilution water used during period				
	liters	8.22E+9	2.60E+9	2.00E+1

TABLE 2B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1980)

LIQUID EFFLUENTS

January - June, 1980

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter	Quarter	Quarter	Quarter
strontium-89	Ci			1.84E-3	5.62E-4
strontium-90	Ci			5.26E-4	5.31E-4
cesium-134	Ci			6.46E-3	2.81E-2
cesium-137	Ci			3.34E-2	9.17E-2
iodine-131	Ci			1.07E-4	7.92E-5
cobalt-58	Ci			7.51E-3	5.14E-3
cobalt-60	Ci			3.36E-1	1.57E-1
iron-59	Ci			4.31E-3	
zinc-65	Ci			2.20E-3	1.01E-3
manganese-54	Ci			3.41E-2	1.39E-2
chromium-51	Ci			1.61E-2	
zirconium-niobium-95	Ci			8.81E-4	1.78E-5
molybdenum 99- technetium 99m	Ci			2.08E-3	
barium-lanthanum-140	Ci			6.36E-3	
cerium-141	Ci			4.52E-3	
iodine-133	Ci			2.35E-4	4.77E-5
cerium-144	Ci			5.62E-4	1.35E-4
silver-110m	Ci				
iron-55	Ci			2.12E-1	1.87E-1
unidentified	Ci			2.08E-1	7.95E-2
Total for period (above)	Ci			8.77E-1	5.65E-1
xenon-133	Ci			8.85E-4	3.97E-4
xenon-135	Ci			3.66E-3	1.11E-3

TABLE 3
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1980)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
JANUARY-JUNE 1980

A. Solid Waste Shipped Offsite for Burial or Disposal (Not Irradiated Fuel)

1. TYPE OF WASTE	UNIT	6 MONTH PERIOD	ESTIMATED TOTAL ERROR %
a. spent resins, filter sludges, evaporator bottoms, etc.	m3 Ci	160.557 610.281	N/A
b. Dry compressible waste, contaminated equipment, etc.	m3 Ci	1889.828 25.81	N/A
c. Irradiated components, control rods, etc.	m3 Ci	None	N/A
d. other (describe) Misc. low-level waste	m3 Ci	None	N/A

2. ESTIMATED OF MAJOR NUCLIDE COMPOSITION (BY TYPE OF WASTE)

a. Spent resins, filter, sludges, evap bottoms, diatomaceous earth, etc.

ISOTOPE	% COMP	E (CURIES)
Ba/La-140	.499	2.984
CO-60	33.720	205.787
FE-59	.211	1.288
ZN-65	.157	.958
MN-54	3.620	22.092
CO-58	1.169	7.134
ZR/NB-95	.005	.031
CS-137	17.832	108.825
CS-134	4.69	28.622
I-131	.084	.513
CR-51	.886	5.407
CE-141	.082	.500
FE-55	34.01	207.557
RU-103	.029	.177
I-135	.004	.024
SR-90	.048	.293
SR-89	2.961	18.070
Unidentified	.003	.018
TOTALS	100.000	610.281

B. DRY COMPRESSIBLE WASTE, CONTAMINATED EQUIPMENT		% COMP	E (CURIES)
	CO-60	44.472	11.478
	FE-59	2.428	.627
	ZN-65	6.153	1.588
	MN-54	5.837	1.507
	CO-58	38.693	9.987
	ZR/NB-95	.042	.011
	CS-137	.208	.054
	CR-51	.184	.047
	FE-55	1.423	.367
	RU-103	.211	.054
	Unidentified	.349	.090
	TOTALS	100	25.810

C. IRRADIATED COMPONENTS, CONTROL RODS, etc.		% COMP	E (CURIES)
NONE			

3A. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
81	Tractor Trailer	Barnwell, S.C.
5	Tractor Trailer	Beatty, Nev.

B. Irradiated Fuel Shipments (Disposition)

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

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 198J

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

CLASS FREQUENCY (PERCENT) = 12.48

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	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
3.6- 7.5	15	7	3	0	2	1	0	1	0	2	1	1	11	16	19	15	94
(1)	7.4	3.5	1.5	0.0	1.0	0.5	0.0	0.5	0.0	1.0	0.5	0.5	5.4	7.9	9.4	7.4	46.5
(2)	0.9	0.4	0.2	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.7	1.0	1.2	0.9	5.8
7.6-12.5	12	4	0	0	0	0	0	0	0	14	0	0	8	36	17	0	94
(1)	5.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	1.5	0.0	4.0	17.8	8.4	0.0	46.5
(2)	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.2	0.0	0.5	2.2	1.1	0.0	5.8
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	0	8	6	0	0	14
(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	4.0	3.0	0.0	0.0	6.9
(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	0.5	0.4	0.0	0.0	0.9
18.6-24.0	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
(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	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	27	11	3	0	2	1	0	1	0	16	4	1	27	58	36	15	202
(1)	13.4	5.4	1.5	0.0	1.0	0.5	0.0	0.5	0.0	7.9	2.0	0.5	13.4	28.7	17.8	7.4	100.0
(2)	1.7	0.7	0.2	0.0	0.1	0.1	0.0	0.1	0.0	1.0	0.2	0.1	1.7	3.6	2.2	0.9	12.5

Table 4A-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= 202

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 1.11

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..	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
3.6- 7.5	1	0	1	1	0	0	0	0	0	0	0	1	3	2	0	1	10
(1)	5.6	0.0	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	16.7	11.1	0.0	5.6	55.6
(2)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.1	0.6
7.6-12.5	0	0	0	0	0	0	0	0	1	3	0	1	0	1	0	1	7
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	16.7	0.0	5.6	0.0	5.6	0.0	5.6	38.9
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.1	0.0	0.1	0.4
12.6-18.5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	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	5.6
(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	0.0	0.0	0.1
18.6-24.0	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
(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	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	1	1	1	1	0	0	0	0	1	3	0	2	3	3	0	2	18
(1)	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	5.6	16.7	0.0	11.1	16.7	16.7	0.0	11.1	100.0
(2)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.2	0.2	0.0	0.1	1.1

(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= 18

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

- 10 -

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 3.40

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	0	0	0	0	0	0	1	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	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	0.1	0.0	0.0	0.0	0.0	
3.6- 7.5	0	1	2	1	0	0	0	0	0	0	2	3	1	1	4	1	
(1)	0.0	1.0	3.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	5.5	1.0	1.0	7.3	1.0	
(2)	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.1	
7.6-12.5	1	3	0	0	0	3	0	0	0	5	5	1	5	7	4	1	
(1)	1.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	9.1	1.0	9.1	12.7	7.3	1.0	
(2)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.3	0.4	0.2	0.1	
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	0	2	4	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	3.6	7.3	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	0.1	0.2	0.0	0.0	
18.6-24.0	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	
(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	
OVER-24.0	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	
(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	
ALL SPEEDS	1	4	2	1	0	0	0	0	0	5	7	5	8	12	8	2	
(1)	1.0	7.3	3.6	1.0	0.0	0.0	0.0	0.0	0.0	9.1	12.7	9.1	14.5	21.8	14.5	3.6	
(2)	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.3	0.5	0.7	0.5	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= ;

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

- 11 -

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 26.21

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	1	1	2	1	0	0	0	0	2	2	2	2	2	14
(1)	0.0	0.0	0.2	0.0	0.2	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	3.3
(2)	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.9
3.6- 7.5	5	4	4	7	2	3	1	6	5	7	5	14	17	28	9	6	123	
(1)	1.2	0.9	0.9	1.7	0.5	0.7	0.2	1.4	1.2	1.7	1.2	3.3	4.0	6.6	2.1	1.4	29.0	
(2)	0.3	0.2	0.2	0.4	0.1	0.2	0.1	0.4	0.3	0.4	0.3	0.9	1.1	1.7	0.6	0.4	7.6	
7.6-12.5	3	13	5	19	6	4	3	3	6	10	11	4	40	48	19	17	211	
(1)	0.7	3.1	1.2	4.5	1.4	0.9	0.7	0.7	1.4	2.4	2.6	0.9	9.4	11.3	4.5	4.0	49.0	
(2)	0.2	0.8	0.3	1.2	0.4	0.2	0.2	0.2	0.4	0.6	0.7	0.2	2.5	3.0	1.2	1.1	13.0	
12.6-18.5	4	22	5	8	0	0	0	0	1	1	1	0	9	15	2	1	69	
(1)	0.9	5.2	1.2	1.9	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	2.1	3.5	0.5	0.2	16.3	
(2)	0.2	1.4	0.3	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.6	0.9	0.1	0.1	4.3	
18.6-24.0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7	
(1)	0.0	0.0	1.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	
(2)	0.0	0.0	0.3	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	0.4	
OVER-24.0	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	
(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	12	39	20	36	9	8	6	10	12	18	17	18	68	93	32	26	424	
(1)	2.8	9.2	4.7	8.5	2.1	1.9	1.4	2.4	2.8	4.2	4.0	4.2	16.0	21.9	7.5	6.1	100.0	
(2)	0.7	2.4	1.2	2.2	0.6	0.5	0.4	0.6	0.7	1.1	1.1	1.1	4.2	5.7	2.0	1.6	26.2	

(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= 424

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

- 12 -

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 46.23

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	2	4	3	4	0	0	1	3	10	4	1	9	13	8	7	3	72
(1)	0.3	0.5	0.4	0.5	0.0	0.0	0.1	0.4	1.3	0.5	0.1	1.2	1.7	1.1	0.9	0.4	9.6
(2)	0.1	0.2	0.2	0.2	0.0	0.0	0.1	0.2	0.6	0.2	0.1	0.6	0.8	0.5	0.4	0.2	4.4
3.6- 7.5	6	0	5	0	0	0	18	12	12	6	35	42	120	55	29	17	373
(1)	0.8	0.0	0.7	0.0	0.0	1.1	2.4	1.6	1.6	0.8	4.7	5.6	17.1	7.4	3.9	2.3	49.9
(2)	0.4	0.0	0.3	0.0	0.0	0.5	1.1	0.7	0.7	0.4	2.2	2.6	7.9	3.4	1.8	1.1	23.1
7.6-12.5	5	26	6	4	1	3	11	0	7	6	32	8	56	32	10	3	210
(1)	0.7	3.5	0.8	0.5	0.1	0.4	1.5	1.1	0.9	0.8	4.3	1.1	7.5	4.3	1.3	0.4	29.1
(2)	0.3	1.6	0.4	0.2	0.1	0.2	0.7	0.5	0.4	0.4	2.0	0.5	3.5	2.0	0.6	0.2	13.5
12.6-18.5	0	21	11	0	2	5	0	0	10	0	2	0	3	2	0	0	64
(1)	0.0	2.0	1.5	0.0	0.3	0.7	0.0	0.0	1.3	1.1	0.3	0.0	0.4	0.3	0.0	0.0	8.6
(2)	0.0	1.3	0.7	0.0	0.1	0.3	0.0	0.0	0.6	0.5	0.1	0.0	0.2	0.1	0.0	0.0	4.0
18.6-24.0	0	1	6	4	3	3	0	0	0	4	0	0	0	0	0	0	21
(1)	0.0	0.1	0.8	0.5	0.4	0.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.0
(2)	0.0	0.0	0.4	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.3
OVER-24.0	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
(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	13	52	31	12	6	19	30	23	39	20	70	59	200	97	46	23	740
(1)	1.7	7.0	4.1	1.6	0.8	2.5	4.0	3.1	5.2	3.7	9.4	7.9	26.7	13.0	6.1	3.1	100.0
(2)	0.8	3.2	1.9	0.7	0.4	1.2	1.9	1.4	2.4	1.7	4.3	3.6	12.4	6.0	2.0	1.4	46.2

(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= 740

CALM-WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

13

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 9.39

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	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	2	1	1	0	0	2	1	1	3	0	3	5	4	6	3	1	33	
(1)	1.3	0.7	0.7	0.0	0.0	1.3	0.7	0.7	2.0	0.0	2.0	3.3	2.6	3.9	2.0	0.7	21.7	
(2)	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.2	0.3	0.2	0.4	0.2	0.1	2.0	
3.6- 7.5	1	0	0	1	2	1	0	11	7	7	20	18	12	3	4	0	87	
(1)	0.7	0.0	0.0	0.7	1.3	0.7	0.0	7.2	4.6	4.6	13.2	11.8	7.9	2.0	2.6	0.0	57.2	
(2)	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.7	0.4	0.4	1.2	1.1	0.7	0.2	0.2	0.0	5.4	
7.6-12.5	0	0	2	3	0	1	4	2	3	3	5	1	1	0	1	1	27	
(1)	0.0	0.0	1.3	2.0	0.0	0.7	2.6	1.3	2.0	2.0	3.3	0.7	0.7	0.0	0.7	0.7	17.8	
(2)	0.0	0.0	0.1	0.2	0.0	0.1	0.2	0.1	0.2	0.2	0.3	0.1	0.1	0.0	0.1	0.1	1.7	
12.6-18.5	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	5	
(1)	0.0	0.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	3.3	
(2)	0.0	0.1	0.1	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	0.3	
18.6-24.0	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	
(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	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	3	2	5	4	2	4	5	14	13	12	28	24	17	9	8	2	152	
(1)	2.0	1.3	3.3	2.6	1.3	2.6	3.3	9.2	8.6	7.9	18.4	15.8	11.2	5.9	5.3	1.3	100.0	
(2)	0.2	0.1	0.3	0.2	0.1	0.2	0.3	0.9	0.8	0.7	1.7	1.5	1.1	0.6	0.5	0.1	9.4	

Table 4.A-1 (Cont.)

(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= 152

CALM=WIND SPEED LESS THAN 1.00 MPH

228 FT TOWER - 33 FT

33.8 FT WIND DATA

JAN - MAR 1988

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

CLASS FREQUENCY (PERCENT) = 1.17

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SF	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	1	2	0	1	0	4	
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	10.5	0.0	5.3	0.0	21.1	
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.2	
3.6- 7.5	1	0	0	0	0	0	0	0	0	0	6	5	1	0	0	0	13	
(1)	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.6	26.3	5.3	0.0	0.0	0.0	68.4	
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.1	0.0	0.0	0.0	0.8	
7.6-12.5	0	0	0	0	0	0	0	0	0	0	0	2	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	10.5	0.0	0.0	0.0	0.0	10.5	
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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	
(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	
18.6-24.0	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	
(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	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	1	0	0	0	0	0	0	0	0	0	6	8	3	0	1	0	19	
(1)	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.6	42.1	15.8	0.0	5.3	0.0	100.0	
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.2	0.0	0.1	0.0	1.2	

Table 4.A-1 (Cont.)

- 15 -

(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= 19

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

JAN - MAR 1980

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
(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	4	5	5	4	1	3	4	5	13	4	4	16	21	16	13	6	124
(1)	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.3	0.8	0.2	0.2	1.0	1.3	1.0	0.8	0.4	7.7
(2)	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.3	0.8	0.2	0.2	1.0	1.3	1.0	0.8	0.4	7.7
3.6- 7.5	29	12	15	10	6	13	19	30	24	22	69	84	173	105	65	40	716
(1)	1.8	0.7	0.9	0.6	0.4	0.8	1.2	1.9	1.5	1.4	4.3	5.2	10.7	6.5	4.0	2.5	44.3
(2)	1.8	0.7	0.9	0.6	0.4	0.8	1.2	1.9	1.5	1.4	4.3	5.2	10.7	6.5	4.0	2.5	44.3
7.6-12.5	21	46	13	26	7	8	18	13	17	41	56	17	110	124	51	23	591
(1)	1.3	2.8	0.8	1.6	0.4	0.5	1.1	0.8	1.1	2.5	3.5	1.1	6.8	7.7	3.2	1.4	36.5
(2)	1.3	2.8	0.8	1.6	0.4	0.5	1.1	0.8	1.1	2.5	3.5	1.1	6.8	7.7	3.2	1.4	36.5
12.6-18.5	4	45	18	8	2	5	0	0	11	11	3	0	22	27	2	1	159
(1)	0.2	2.8	1.1	0.5	0.1	0.3	0.0	0.0	0.7	0.7	0.2	0.0	1.4	1.7	0.1	0.1	9.8
(2)	0.2	2.8	1.1	0.5	0.1	0.3	0.0	0.0	0.7	0.7	0.2	0.0	1.4	1.7	0.1	0.1	9.8
18.6-24.0	0	1	11	6	3	3	0	0	0	4	0	0	0	0	0	0	20
(1)	0.0	0.1	0.7	0.4	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.7
(2)	0.0	0.1	0.7	0.4	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.7
OVER-24.0	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
(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	50	109	62	54	19	32	41	40	65	82	132	117	326	272	131	70	1618
(1)	3.6	6.7	3.8	3.3	1.2	2.0	2.5	3.0	4.0	5.1	8.2	7.2	20.1	16.8	8.1	4.3	100.0
(2)	3.6	6.7	3.8	3.3	1.2	2.0	2.5	3.0	4.0	5.1	8.2	7.2	20.1	16.8	8.1	4.3	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=1618
 NUMBER OF HOURS IN THIS PERIOD= 2104

74.. PERCENT DATA RECOVERY

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

- 16 -

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 12.40

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	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
3.6- 7.5	1	3	0	0	0	0	0	0	0	0	0	0	0	1	3	7	15
(1)	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.5	3.5	7.4
(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	0.1	0.2	0.4	0.9
7.6-12.5	6	5	0	0	0	2	1	0	0	3	2	1	9	5	11	5	50
(1)	3.0	2.5	0.0	0.0	0.0	1.0	0.5	0.0	0.0	1.5	1.0	0.5	4.5	2.5	5.4	2.5	24.0
(2)	0.4	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.6	0.3	0.7	0.3	3.1
12.6-18.5	13	4	0	0	0	0	0	1	0	10	1	1	6	18	17	6	77
(1)	6.4	2.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	5.0	0.5	0.5	3.0	8.9	8.4	3.0	38.1
(2)	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.1	0.1	0.4	1.1	1.1	0.4	4.8
18.6-24.0	4	1	0	0	0	0	0	0	0	3	0	0	4	10	8	0	30
(1)	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	2.0	5.0	4.0	0.0	14.9
(2)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.6	0.5	0.0	1.9
OVER-24.0	2	1	0	0	0	0	0	0	0	0	0	0	3	18	6	0	30
(1)	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	8.9	3.0	0.0	14.9
(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	0.2	1.1	0.4	0.0	1.9
ALL SPEEDS	26	14	0	0	0	2	1	1	0	16	3	2	22	52	45	18	202
(1)	12.9	6.9	0.0	0.0	0.0	1.0	0.5	0.5	0.0	7.9	1.5	1.0	10.9	25.7	22.3	8.9	100.0
(2)	1.6	0.9	0.0	0.0	0.0	0.1	0.1	0.1	0.0	1.0	0.2	0.1	1.4	3.2	2.8	1.1	12.5

(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= 202

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1988

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

CLASS FREQUENCY (PERCENT) = 1.11

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	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
3.6- 7.5	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	4
(1)	0.0	0.0	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	5.6	22.2
(2)	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	0.1	0.0	0.1	0.2
7.6-12.5	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	4
(1)	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	11.1	0.0	0.0	0.0	22.2
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2
12.6-18.5	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	5.6	0.0	0.0	0.0	11.1	0.0	0.0	22.2
(2)	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	0.1	0.0	0.0	0.2
18.6-24.0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	5.6	0.0	5.6	0.0	0.0	22.2
(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	0.1	0.0	0.0	0.2
OVER-24.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
(1)	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	5.6	11.1
(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	0.0	0.1	0.1
ALL SPEEDS	1	1	1	1	0	0	0	0	1	3	0	2	2	4	0	2	18
(1)	5.6	5.6	5.6	5.6	0.0	0.0	0.0	0.0	5.6	16.7	0.0	11.1	11.1	22.2	0.0	11.1	100.0
(2)	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.2	0.0	0.1	1.1

Table 4.A-1 (Cont.)

(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= 18

CALM=WIND SPEED LESS THAN 1.00 MPH

18

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 3.40

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	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
3.6- 7.5	0	1	3	0	0	0	0	0	0	0	2	0	0	0	1	0	7
(1)	0.0	1.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	1.8	0.0	12.7
(2)	0.0	0.1	0.2	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	0.4
7.6-12.5	0	0	0	0	0	0	0	0	0	0	1	2	2	0	2	1	8
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.6	3.6	0.0	3.6	1.8	14.5
(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	0.0	0.1	0.1	0.5
12.6-18.5	0	0	0	0	0	0	0	0	0	2	4	2	2	1	3	1	15
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.3	3.6	3.6	1.8	5.5	1.8	27.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.9
18.6-24.0	0	0	0	0	0	0	0	0	0	1	1	1	3	1	1	1	9
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	5.5	1.8	1.8	1.8	16.4
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.6
OVER-24.0	1	3	0	0	0	0	0	0	0	0	0	0	0	10	2	0	16
(1)	1.8	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	3.6	0.0	29.1
(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	0.6	0.1	0.0	1.0
ALL SPEEDS	1	4	3	0	0	0	0	0	0	3	8	5	7	12	9	3	55
(1)	1.8	7.3	5.5	0.0	0.0	0.0	0.0	0.0	0.0	5.5	14.5	9.1	12.7	21.8	16.4	5.5	100.0
(2)	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.3	0.4	0.7	0.6	0.2	3.4

Table 4.A-1 (Cont.)

(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= 55

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 26.21

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	3	3	0	6
(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	0.7	0.7	0.0	1.4
(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	0.0	0.4
CALM- 3.5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	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	0.2	0.2	0.0	0.0	0.5
(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	0.1	0.1	0.0	0.0	0.1
3.6- 7.5	1	1	3	8	1	2	2	1	0	0	0	4	0	2	7	1	28
(1)	0.2	0.2	0.7	1.9	0.2	0.5	0.5	0.2	0.0	0.0	0.0	0.9	0.0	0.5	0.5	0.2	6.6
(2)	0.1	0.1	0.2	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1	1.7
7.6-12.5	3	3	1	17	4	0	4	4	4	7	4	8	5	6	1	2	73
(1)	0.7	0.7	0.2	4.0	0.9	0.0	0.9	0.9	0.9	1.7	0.9	1.9	1.2	1.4	0.2	0.5	17.2
(2)	0.2	0.2	0.1	1.1	0.2	0.0	0.2	0.2	0.2	0.4	0.2	0.5	0.3	0.4	0.1	0.1	4.5
12.6-18.5	1	1	2	4	3	3	1	2	4	8	4	5	16	23	20	8	105
(1)	0.2	0.2	0.5	0.9	0.7	0.7	0.2	0.5	0.9	1.9	0.9	1.2	3.8	5.4	4.7	1.9	24.8
(2)	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.5	0.2	0.3	1.0	1.4	1.2	0.5	6.5
18.6-24.0	1	5	2	4	3	1	0	3	2	0	9	2	11	17	8	11	79
(1)	0.2	1.2	0.5	0.9	0.7	0.2	0.0	0.7	0.5	0.0	2.1	0.5	2.6	4.0	1.9	2.6	18.6
(2)	0.1	0.3	0.1	0.2	0.2	0.1	0.0	0.2	0.1	0.0	0.6	0.1	0.7	1.1	0.5	0.7	4.9
OVER-24.0	8	29	8	3	0	0	0	0	1	2	0	0	8	42	14	16	131
(1)	1.9	6.8	1.9	0.7	0.0	0.0	0.0	0.0	0.2	0.5	0.0	0.0	1.9	9.9	3.3	3.8	30.9
(2)	0.5	1.8	0.5	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.5	2.6	0.9	1.0	8.1
ALL SPEEDS	14	39	15	36	11	6	7	10	11	17	17	19	41	94	48	38	424
(1)	3.3	9.2	3.8	0.5	2.6	1.4	1.7	2.4	2.6	4.0	4.0	4.5	9.7	22.2	11.3	9.0	100.0
(2)	0.9	2.4	1.0	2.2	0.7	0.4	0.4	0.6	0.7	1.1	1.1	1.2	2.5	5.8	3.0	2.3	26.2

(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= 424

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 46.23

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	5	0	5
(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	0.7	0.0	0.7
(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	0.3	0.0	0.3
CALM- 3.5	2	0	1	1	1	0	1	0	0	0	0	1	1	0	0	1	9
(1)	0.3	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	1.2
(2)	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.6
3.6- 7.5	5	0	1	2	3	1	1	4	2	2	1	0	2	6	8	10	48
(1)	0.7	0.0	0.1	0.3	0.4	0.1	0.1	0.5	0.3	0.3	0.1	0.0	0.3	0.8	1.1	1.3	6.4
(2)	0.3	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.4	0.5	0.6	3.0
7.6-12.5	8	2	3	3	1	2	5	7	5	2	3	13	9	27	12	10	112
(1)	1.1	0.3	0.4	0.4	0.1	0.3	0.7	0.9	0.7	0.3	0.4	1.7	1.2	3.6	1.6	1.3	15.0
(2)	0.5	0.1	0.2	0.2	0.1	0.1	0.3	0.4	0.3	0.1	0.2	0.8	0.6	1.7	0.7	0.6	6.9
12.6-18.5	6	1	7	0	2	2	10	14	5	9	20	26	60	86	49	14	311
(1)	0.8	0.1	0.9	0.0	0.3	0.3	1.3	1.9	0.7	1.2	2.7	3.5	8.0	11.5	6.6	1.9	41.6
(2)	0.4	0.1	0.4	0.0	0.1	0.1	0.6	0.9	0.3	0.6	1.2	1.6	3.7	5.3	3.0	0.9	19.2
18.6-24.0	10	10	3	4	0	2	7	5	6	5	30	4	18	32	11	2	149
(1)	1.3	1.3	0.4	0.5	0.0	0.3	0.9	0.7	0.8	0.7	4.0	0.5	2.4	4.3	1.5	0.3	19.9
(2)	0.6	0.6	0.2	0.2	0.0	0.1	0.4	0.3	0.4	0.3	1.9	0.2	1.1	2.0	0.7	0.1	9.2
OVER-24.0	4	35	12	1	3	9	2	2	5	16	7	0	3	13	1	1	114
(1)	0.5	4.7	1.6	0.1	0.4	1.2	0.3	0.3	0.7	2.1	0.9	0.0	0.4	1.7	0.1	0.1	15.2
(2)	0.2	2.2	0.7	0.1	0.2	0.6	0.1	0.1	0.3	1.0	0.4	0.0	0.2	0.8	0.1	0.1	7.0
ALL SPEEDS	35	48	27	11	10	16	26	32	23	34	61	44	93	164	86	38	748
(1)	4.7	6.4	3.6	1.5	1.3	2.1	3.5	4.3	3.1	4.5	8.2	5.9	12.4	21.9	11.5	5.1	100.0
(2)	2.2	3.0	1.7	0.7	0.6	1.0	1.6	2.0	1.4	2.1	3.8	2.7	5.7	10.1	5.3	2.3	46.2

(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= 748

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 9.39

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	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	0	0	0	1	0	1	0	1	1	0	2	0	0	7
(1)	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.7	0.7	0.0	1.3	0.0	0.0	4.6
(2)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.4
3.6- 7.5	1	2	0	1	0	1	0	0	1	1	2	1	1	6	2	4	23
(1)	0.7	1.3	0.0	0.7	0.0	0.7	0.0	0.0	0.7	0.7	1.3	0.7	0.7	3.9	1.3	2.6	15.1
(2)	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.2	1.4
7.6-12.5	1	0	0	2	2	0	0	1	1	5	2	2	5	11	3	5	40
(1)	0.7	0.0	0.0	1.3	1.3	0.0	0.0	0.7	0.7	3.3	1.3	1.3	3.3	7.2	2.0	3.3	26.3
(2)	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.3	0.1	0.1	0.3	0.7	0.2	0.3	2.5
12.6-18.5	1	0	0	1	0	0	0	0	5	3	8	7	9	5	0	1	48
(1)	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	5.3	3.3	2.0	5.3	4.6	5.9	3.3	0.7	31.6
(2)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5	0.3	0.2	0.5	0.4	0.6	0.3	0.1	3.0
18.6-24.0	1	0	1	1	2	1	2	5	2	2	6	2	1	0	0	1	27
(1)	0.7	0.0	0.7	0.7	1.3	0.7	1.3	3.3	1.3	1.3	3.9	1.3	0.7	0.0	0.0	0.7	17.8
(2)	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.4	0.1	0.1	0.0	0.0	0.1	1.7
OVER-24.0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	2	7
(1)	0.0	0.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3	4.6
(2)	0.0	0.1	0.1	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	0.4
ALL SPEEDS	4	4	3	5	4	2	3	14	10	13	19	13	16	24	5	13	152
(1)	2.6	2.6	2.0	3.3	2.6	1.3	2.0	9.2	6.6	8.6	12.5	8.6	10.5	15.8	3.3	8.6	100.0
(2)	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.9	0.6	0.8	1.2	0.8	1.0	1.5	0.3	0.8	9.4

Table 4.A-1 (Cont.)

(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= 152

CALM=WIND SPEED LESS THAN 1.00 MPH

- 22 -

220 FT TOWER - 220 FT

220.0 , WIND DATA

JAN - MAR 1980

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

CLASS FREQUENCY (PERCENT) = 1.17

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	0	0	0	0	0	0	0	0	0	1	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	5.3	0.0	5.3
(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	0.1	0.0	0.1
3.6- 7.5	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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	10.5	0.0	0.0	10.5
(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	0.1	0.0	0.0	0.1
7.6-12.5	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	5
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	15.8	0.0	0.0	0.0	26.3
(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	0.2	0.0	0.0	0.0	0.3
12.6-18.5	0	0	0	0	0	0	0	0	0	0	1	3	5	1	0	0	10
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	15.8	26.3	5.3	0.0	0.0	52.6
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.1	0.0	0.0	0.6
18.6-24.0	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
(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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	5.3	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	5.3
(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	0.1
ALL SPEEDS	1	0	0	0	0	0	0	0	0	0	1	5	8	3	1	0	19
(1)	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	26.3	42.1	15.8	5.3	0.0	100.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.2	0.1	0.0	1.2

(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= 19

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-1 (Cont.)

- 23 -

220 FT TOWER - 220 FT

220.0 FT WIND DATA

JAN - MAR 1980

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	3	8	0	11
(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	0.2	0.5	0.0	0.7
(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	0.5	0.0	0.7
CALM- 3.5	2	1	1	1	1	0	2	0	1	0	1	2	2	3	1	1	19
(1)	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.1	1.2
(2)	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.1	1.2
3.6- 7.5	8	7	8	12	4	4	3	5	3	3	5	5	3	18	16	23	127
(1)	0.5	0.4	0.5	0.7	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	1.1	1.0	1.4	7.8
(2)	0.5	0.4	0.5	0.7	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	1.1	1.0	1.4	7.8
7.6-12.5	19	10	4	22	7	4	10	12	10	17	12	29	35	49	29	23	292
(1)	1.2	0.6	0.2	1.4	0.4	0.2	0.6	0.7	0.6	1.1	0.7	1.8	2.2	3.0	1.8	1.4	18.0
(2)	1.2	0.6	0.2	1.4	0.4	0.2	0.6	0.7	0.6	1.1	0.7	1.8	2.2	3.0	1.8	1.4	18.0
12.6-18.5	21	6	9	5	5	5	11	25	15	33	38	44	98	136	89	30	570
(1)	1.3	0.4	0.6	0.3	0.3	0.3	0.7	1.5	0.9	2.0	2.3	2.7	6.1	8.4	5.5	1.9	35.2
(2)	1.3	0.4	0.6	0.3	0.3	0.3	0.7	1.5	0.9	2.0	2.3	2.7	6.1	8.4	5.5	1.9	35.2
18.6-24.0	16	16	6	9	5	4	9	13	10	13	46	10	37	61	28	15	298
(1)	1.0	1.0	0.4	0.6	0.3	0.2	0.6	0.8	0.6	0.8	2.8	0.6	2.3	3.8	1.7	0.9	18.4
(2)	1.0	1.0	0.4	0.6	0.3	0.2	0.6	0.8	0.6	0.8	2.8	0.6	2.3	3.8	1.7	0.9	18.4
OVER-24.0	16	70	22	4	3	9	2	2	6	20	7	0	14	83	23	20	301
(1)	1.0	4.3	1.4	0.2	0.2	0.6	0.1	0.1	0.4	1.2	0.4	0.0	0.9	5.1	1.4	1.2	18.6
(2)	1.0	4.3	1.4	0.2	0.2	0.6	0.1	0.1	0.4	1.2	0.4	0.0	0.9	5.1	1.4	1.2	18.6
ALL SPEEDS	82	110	50	53	25	26	37	57	45	86	109	90	189	353	194	112	1618
(1)	5.1	6.8	3.1	3.3	1.5	1.6	2.3	3.5	2.8	5.3	6.7	5.6	11.7	21.8	12.0	6.9	100.0
(2)	5.1	6.8	3.1	3.3	1.5	1.6	2.3	3.5	2.8	5.3	6.7	5.6	11.7	21.8	12.0	6.9	100.0

Table 4.A-1 (Cont)

(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=1618
 NUMBER OF HOURS IN THIS PERIOD= 2184

74.1 PERCENT DATA RECOVERY

CALM=WIND SPEED LESS THAN 1.00 MPH

- 24 -

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 14.39

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	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	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3	
(1)	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0	0.0	1.7	
(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	0.1	0.1	0.0	0.0	0.2	
3.6- 7.5	18	21	12	1	13	7	0	0	0	0	0	2	4	12	9	8	107	
(1)	10.3	12.1	6.9	0.6	7.5	4.0	0.0	0.0	0.0	0.0	0.0	1.1	2.3	6.9	5.2	4.6	61.5	
(2)	1.5	1.7	1.0	0.1	1.1	0.6	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.0	0.7	0.7	8.9	
7.6-12.5	3	7	10	2	1	7	2	4	0	8	7	4	2	4	2	1	64	
(1)	1.7	4.0	5.7	1.1	0.6	4.0	1.1	2.3	0.0	4.6	4.0	2.3	1.1	2.3	1.1	0.6	35.8	
(2)	0.2	0.6	0.8	0.2	0.1	0.6	0.2	0.3	0.0	0.7	0.6	0.3	0.2	0.3	0.2	0.1	5.3	
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	
18.6-24.0	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	
(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	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	22	28	22	3	14	14	2	4	0	8	7	6	7	17	11	9	174	
(1)	12.6	16.1	12.6	1.7	8.0	8.0	1.1	2.3	0.0	4.6	4.0	3.4	4.0	9.0	6.3	5.2	100.0	
(2)	1.8	2.3	1.8	0.2	1.2	1.2	0.2	0.3	0.0	0.7	0.6	0.5	0.6	1.4	0.9	0.7	14.4	

(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= 174

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4A-2

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 1.41

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	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
3.6- 7.5	2	0	3	2	1	1	1	1	0	0	0	2	1	1	0	0	0	15
(1)	11.8	0.0	17.6	11.8	5.9	5.9	5.9	5.9	0.0	0.0	0.0	11.8	5.9	5.9	0.0	0.0	0.0	88.2
(2)	0.2	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	1.2
7.6-12.5	0	0	0	0	0	0	0	0	0	0	1	0	0	1	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	5.9	0.0	0.0	5.9	0.0	0.0	0.0	11.8
(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	0.1	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	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	2	0	3	2	1	1	1	1	0	0	1	2	1	2	0	0	0	17
(1)	11.8	0.0	17.6	11.8	5.9	5.9	5.9	5.9	0.0	0.0	5.9	11.8	5.9	11.8	0.0	0.0	0.0	100.0
(2)	0.2	0.0	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.2	0.0	0.0	0.0	1.4

Table 4.A-2 (Cont)

(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= 17

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 3.64

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	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
(1)	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	
(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	0.0	0.1	
3.6- 7.5	3	0	0	2	2	4	2	0	0	0	2	1	0	4	0	2	22	
(1)	6.0	0.0	0.0	4.5	4.5	9.1	4.5	0.0	0.0	0.0	4.5	2.3	0.0	9.1	0.0	4.5	50.0	
(2)	0.2	0.0	0.0	0.2	0.2	0.3	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.3	0.0	0.2	1.8	
7.6-12.5	0	1	1	0	0	3	3	2	0	0	1	0	1	1	0	0	21	
(1)	0.0	2.3	2.3	0.0	0.0	6.0	6.0	4.5	0.0	0.0	18.2	2.3	0.0	2.3	2.3	0.0	47.7	
(2)	0.0	0.1	0.1	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.7	0.1	0.0	0.1	0.1	0.0	1.7	
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	
18.6-24.0	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	
(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	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	3	1	1	3	2	7	5	2	0	0	8	3	1	1	5	0	2	44
(1)	6.8	2.3	2.3	6.8	4.5	15.9	11.4	4.5	0.0	0.0	18.2	6.8	2.3	2.3	11.4	0.0	4.5	100.0
(2)	0.2	0.1	0.1	0.2	0.2	0.6	0.4	0.2	0.0	0.0	0.7	0.2	0.1	0.1	0.4	0.0	0.2	3.6

Table 4.A-2 (Cont)

- 27 -

(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 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 20.10

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	2	1	3	6	2	0	2	4	0	1	0	1	0	0	2	2	26
(1)	0.8	0.4	1.2	2.5	0.8	0.0	0.8	1.6	0.0	0.4	0.0	0.4	0.0	0.0	0.8	0.8	10.7
(2)	0.2	0.1	0.2	0.5	0.2	0.0	0.2	0.3	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.2	2.2
3.6- 7.5	3	0	9	14	24	27	13	8	5	5	8	2	7	6	3	4	138
(1)	1.2	0.0	3.7	5.7	9.8	11.1	5.3	3.3	2.0	2.0	3.3	0.8	2.9	2.5	1.2	1.6	56.6
(2)	0.2	0.0	0.7	1.2	2.0	2.2	1.1	0.7	0.4	0.4	0.7	0.2	0.6	0.5	0.2	0.3	11.4
7.6-12.5	0	3	7	2	0	3	3	2	1	16	15	5	3	3	6	7	76
(1)	0.0	1.2	2.9	0.8	0.0	1.2	1.2	0.8	0.4	6.6	6.1	2.0	1.2	1.2	2.5	2.9	31.1
(2)	0.0	0.2	0.6	0.2	0.0	0.2	0.2	0.2	0.1	1.3	1.2	0.4	0.2	0.2	0.5	0.6	6.3
12.6-18.5	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	4
(1)	0.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.6
(2)	0.1	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	0.1	0.3
18.6-24.0	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
(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	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	6	4	21	22	26	30	18	14	6	22	23	8	19	9	11	14	244
(1)	2.5	1.6	8.6	9.8	10.7	12.3	7.4	5.7	2.5	9.0	9.4	3.3	4.1	3.7	4.5	5.7	100.0
(2)	0.5	0.3	1.7	1.3	2.2	2.5	1.5	1.2	0.5	1.8	1.9	0.7	0.8	0.7	0.9	1.2	20.2

Table 4.A-2 (Cont)

(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= 244

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 45.00

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
(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	4	2	3	6	17	5	2	7	4	6	4	5	7	10	6	10	98
(1)	0.7	0.4	0.6	1.1	3.1	0.9	0.4	1.3	0.7	1.1	0.7	0.9	1.3	1.8	1.1	1.8	18.0
(2)	0.3	0.2	0.2	0.5	1.4	0.4	0.2	0.6	0.3	0.5	0.3	0.4	0.6	0.8	0.5	0.8	8.1
3.6- 7.5	23	6	13	8	14	14	30	14	20	18	23	13	23	17	18	21	275
(1)	4.2	1.1	2.4	1.5	2.6	2.6	5.5	2.6	3.7	3.3	4.2	2.4	4.2	3.1	3.3	3.9	50.6
(2)	1.9	0.5	1.1	0.7	1.2	1.2	2.5	1.2	1.7	1.5	1.9	1.1	1.9	1.4	1.5	1.7	22.7
7.6-12.5	6	1	4	5	13	3	6	20	14	27	22	5	4	2	8	1	141
(1)	1.1	0.2	0.7	0.9	2.4	0.6	1.1	3.7	2.6	5.0	4.0	0.9	0.7	0.4	1.5	0.2	25.9
(2)	0.5	0.1	0.3	0.4	1.1	0.2	0.5	1.7	1.2	2.2	1.8	0.4	0.3	0.2	0.7	0.1	11.7
12.6-18.5	2	10	0	0	9	0	0	0	6	2	1	0	0	0	0	0	30
(1)	0.4	1.8	0.0	0.0	1.7	0.0	0.0	0.0	1.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	5.5
(2)	0.2	0.8	0.0	0.0	0.7	0.0	0.0	0.0	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	2.5
18.6-24.0	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
(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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0.0	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	35	19	20	19	53	22	38	41	44	53	50	23	34	29	32	32	544
(1)	6.4	3.5	3.7	3.5	9.7	4.0	7.0	7.5	8.1	9.7	9.2	4.2	6.2	5.3	5.9	5.9	100.0
(2)	2.9	1.6	1.7	1.6	4.4	1.8	3.1	3.4	3.6	4.4	4.1	1.9	2.8	2.4	2.6	2.6	45.0

Table 4.A-2 (Cont)

- 29 -

(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= 544

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 13.15

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	1	1	0	0	0	0	1	0	0	0	2	8	15	2	7	0	37
(1)	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.3	5.0	9.4	1.3	4.4	0.0	23.3
(2)	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.7	1.2	0.2	0.6	0.0	3.1
3.6- 7.5	3	0	4	0	1	0	2	5	2	5	10	31	20	11	2	3	99
(1)	1.9	0.0	2.5	0.0	0.6	0.0	1.3	3.1	1.3	3.1	6.3	19.5	12.6	6.9	1.3	1.9	62.3
(2)	0.2	0.0	0.3	0.0	0.1	0.0	0.2	0.4	0.2	0.4	0.8	2.6	1.7	0.9	0.2	0.2	8.2
7.6-12.5	0	0	2	0	1	1	0	0	0	0	11	7	0	1	0	0	23
(1)	0.0	0.0	1.3	0.0	0.6	0.6	0.0	0.0	0.0	0.0	6.9	4.4	0.0	0.6	0.0	0.0	14.5
(2)	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.6	0.0	0.1	0.0	0.0	1.9
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
18.6-24.0	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
(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	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	4	1	6	0	2	1	3	5	2	5	23	46	35	14	9	3	159
(1)	2.5	0.6	3.8	0.0	1.3	0.6	1.9	3.1	1.3	3.1	14.5	28.9	22.0	8.8	5.7	1.9	100.0
(2)	0.3	0.1	0.5	0.0	0.2	0.1	0.2	0.4	0.2	0.4	1.9	3.8	2.9	1.2	0.7	0.2	13.2

(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= 159

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-2 (Cont)

220 FT TOWER - 35 FT

33.0 FT WIND DATA

APR - JUN 1988

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

CLASS FREQUENCY (PERCENT) = 2.23

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	1	0	0	0	1	1	0	0	0	0	0	3
(1)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	3.7	3.7	0.0	0.0	0.0	0.0	0.0	11.1
(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	0.0	0.0	0.0	0.2
3.6-- 7.5	0	0	0	0	0	0	0	0	0	0	3	11	7	0	0	0	0	21
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	40.7	25.9	0.0	0.0	0.0	0.0	77.8
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	0.6	0.0	0.0	0.0	0.0	1.7
7.6--12.5	0	0	0	0	0	0	0	0	0	0	1	2	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	3.7	7.4	0.0	0.0	0.0	0.0	0.0	11.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	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	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	0	0	0	0	1	0	0	0	5	14	7	0	0	0	0	27
(1)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	18.5	51.9	25.9	0.0	0.0	0.0	0.0	100.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	1.2	0.6	0.0	0.0	0.0	0.0	2.2

(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= 27

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 33 FT

33.0 FT WIND DATA

APR - JUN 1980

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
(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	8	4	6	13	19	5	6	11	4	7	7	15	23	13	15	12	168
(1)	0.7	0.3	0.5	1.1	1.6	0.4	0.5	0.9	0.3	0.6	0.6	1.2	1.9	1.1	1.2	1.0	13.9
(2)	0.7	0.3	0.5	1.1	1.6	0.4	0.5	0.9	0.3	0.6	0.6	1.2	1.9	1.1	1.2	1.0	13.9
3.6- 7.5	52	27	41	27	55	53	48	28	27	28	46	62	62	51	32	38	677
(1)	4.3	2.2	3.4	2.2	4.5	4.4	4.0	2.3	2.2	2.3	3.8	5.1	5.1	4.2	2.6	3.1	56.0
(2)	4.3	2.2	3.4	2.2	4.5	4.4	4.0	2.3	2.2	2.3	3.8	5.1	5.1	4.2	2.6	3.1	56.0
7.6-12.5	9	12	24	9	15	17	14	28	15	59	58	23	10	12	16	9	330
(1)	0.7	1.0	2.0	0.7	1.2	1.4	1.2	2.3	1.2	4.9	4.8	1.9	0.8	1.0	1.3	0.7	27.3
(2)	0.7	1.0	2.0	0.7	1.2	1.4	1.2	2.3	1.2	4.9	4.8	1.9	0.8	1.0	1.3	0.7	27.3
12.6-18.5	3	10	2	0	9	0	0	0	6	2	1	0	0	0	0	1	34
(1)	0.2	0.8	0.2	0.0	0.7	0.0	0.0	0.0	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	2.8
(2)	0.2	0.8	0.2	0.0	0.7	0.0	0.0	0.0	0.5	0.2	0.1	0.0	0.0	0.0	0.0	0.1	2.8
18.6-24.0	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
(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	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	72	53	73	49	98	75	68	67	52	96	112	100	95	76	63	60	1209
(1)	6.0	4.4	6.0	4.1	8.1	6.2	5.6	5.5	4.3	7.9	9.3	8.3	7.9	6.3	5.2	5.0	100.0
(2)	6.0	4.4	6.0	4.1	8.1	6.2	5.6	5.5	4.3	7.9	9.3	8.3	7.9	6.3	5.2	5.0	100.0

Table 4.A-2 (Cont)

(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=1209
 NUMBER OF HOURS IN THIS PERIOD= 2184

55.4 PERCENT DATA RECOVERY

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 14.39

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION															TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW		
-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	1	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
(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	0.0	0.1
3.6- 7.5	4	3	2	2	3	2	0	0	0	0	0	0	2	1	2	2	23
(1)	2.3	1.7	1.1	1.1	1.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6	1.1	1.1	13.2
(2)	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.2	1.9
7.6-12.5	12	19	2	0	6	3	4	0	0	0	2	1	6	0	4	1	68
(1)	6.9	10.9	1.1	0.0	3.4	1.7	2.3	0.0	0.0	0.0	1.1	0.6	3.4	4.6	2.3	0.6	39.1
(2)	1.0	1.6	0.2	0.0	0.5	0.2	0.3	0.0	0.0	0.0	0.2	0.1	0.5	0.7	0.3	0.1	5.6
12.6-18.5	10	10	5	0	1	0	9	1	0	6	3	3	1	4	6	6	65
(1)	5.7	5.7	2.9	0.0	0.6	0.0	5.2	0.6	0.0	3.4	1.7	1.7	0.6	2.3	3.4	3.4	37.4
(2)	0.8	0.8	0.4	0.0	0.1	0.0	0.7	0.1	0.0	0.5	0.2	0.2	0.1	0.3	0.5	0.5	5.4
18.6-24.0	2	1	1	0	0	0	1	3	0	5	1	0	1	1	0	1	17
(1)	1.1	0.6	0.6	0.0	0.0	0.0	0.6	1.7	0.0	2.9	0.6	0.0	0.6	0.6	0.0	0.6	9.8
(2)	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.4	0.1	0.0	0.1	0.1	0.0	0.1	1.4
OVER-24.0	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
(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	28	33	10	3	10	5	14	4	0	11	6	4	10	14	12	10	174
(1)	16.1	19.0	5.7	1.7	5.7	2.9	8.0	2.3	0.0	6.3	3.4	2.3	5.7	8.0	5.9	5.7	100.0
(2)	2.3	2.7	0.8	0.2	0.8	0.4	1.2	0.3	0.0	0.9	0.5	0.3	0.8	1.2	1.0	0.8	14.4

Table 4.A-2 (Cont.)

- 33 -

(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= 174

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 1.41

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	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
3.6- 7.5	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	5
(1)	0.0	5.9	5.9	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	29.4
(2)	0.0	0.1	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	0.1	0.4
7.6-12.5	0	1	0	0	0	1	2	1	0	0	0	2	0	2	0	0	9
(1)	0.0	5.9	0.0	0.0	0.0	5.9	11.8	5.9	0.0	0.0	0.0	11.8	0.0	11.8	0.0	0.0	52.9
(2)	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.7
12.6-18.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9
(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	0.1
18.6-24.0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	5.9	0.0	0.0	11.8
(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	0.1	0.0	0.0	0.2
OVER-24.0	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
(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	1	2	1	2	0	1	2	1	0	0	1	2	0	3	0	1	17
(1)	5.9	11.8	5.9	11.8	0.0	5.9	11.8	5.9	0.0	0.0	5.9	11.8	0.0	17.6	0.0	5.9	100.0
(2)	0.1	0.2	0.1	0.2	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.2	0.0	0.2	0.0	0.1	1.4

(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= 17

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-2 (Cont)

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 3.64

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	1	0	0	0	0	0	0	0	0	0	0	1	0	2
(1)	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	4.5
(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	0.1	0.0	0.2
3.6- 7.5	2	1	1	1	2	1	0	0	0	0	0	1	0	2	0	0	11
(1)	4.5	2.3	2.3	2.3	4.5	2.3	0.0	0.0	0.0	0.0	0.0	2.3	0.0	4.5	0.0	0.0	25.0
(2)	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.9
7.6-12.5	1	0	0	0	1	2	3	0	0	0	2	0	0	1	0	0	10
(1)	2.3	0.0	0.0	0.0	2.3	4.5	6.8	0.0	0.0	0.0	4.5	0.0	0.0	2.3	0.0	0.0	22.7
(2)	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.8
12.6-18.5	0	1	0	0	0	1	4	2	0	5	1	0	0	1	0	0	15
(1)	0.0	2.3	0.0	0.0	0.0	2.3	9.1	4.5	0.0	11.4	2.3	0.0	0.0	2.3	0.0	0.0	34.1
(2)	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.2	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0	1.2
18.6-24.0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	0	0	5
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0	2.3	2.3	0.0	0.0	11.4
(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	0.1	0.1	0.0	0.0	0.4
OVER-24.0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	2.3	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	2.3
(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	0.0	0.0	0.1
ALL SPEEDS	3	3	1	2	3	4	7	2	0	8	3	1	1	5	1	0	44
(1)	6.8	6.8	2.3	4.5	6.8	9.1	15.9	4.5	0.0	18.2	6.8	2.3	2.3	11.4	2.3	0.0	100.0
(2)	0.2	0.2	0.1	0.2	0.2	0.3	0.6	0.2	0.0	0.7	0.2	0.1	0.1	0.4	0.1	0.0	3.6

Table 4.A-2 (Cont)

(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 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 20.18

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	W	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	3	5	2	1	0	0	0	0	0	0	0	0	0	0	0	11
(1)	0.0	0.0	1.2	2.0	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
(2)	0.0	0.0	0.2	0.4	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	0.9
3.6- 7.5	2	4	6	4	12	10	12	1	0	0	1	1	1	0	1	2	57	
(1)	0.8	1.6	2.5	1.6	4.9	4.1	4.9	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.8	23.4	
(2)	0.2	0.3	0.5	0.3	1.0	0.8	1.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	4.7	
7.6-12.5	3	4	5	2	4	11	13	10	3	3	5	1	3	2	3	3	75	
(1)	1.2	1.6	2.0	0.8	1.6	4.5	5.3	4.1	1.2	1.2	2.0	0.4	1.2	0.8	1.2	1.2	30.7	
(2)	0.2	0.3	0.4	0.2	0.3	0.9	1.1	0.8	0.2	0.2	0.4	0.1	0.2	0.2	0.2	0.2	6.2	
12.6-18.5	1	1	5	0	0	6	3	3	1	16	9	8	4	5	1	1	64	
(1)	0.4	0.4	2.0	0.0	0.0	2.5	1.2	1.2	0.4	6.6	3.7	3.3	1.6	2.0	0.4	0.4	26.2	
(2)	0.1	0.1	0.4	0.0	0.0	0.5	0.2	0.2	0.1	1.3	0.7	0.7	0.3	0.4	0.1	0.1	5.3	
18.6-24.0	1	1	3	0	0	0	2	1	0	5	4	0	0	2	2	3	24	
(1)	0.4	0.4	1.2	0.0	0.0	0.0	0.8	0.4	0.0	2.0	1.6	0.0	0.0	0.8	0.8	1.2	9.8	
(2)	0.1	0.1	0.2	0.0	0.0	0.0	0.2	0.1	0.0	0.4	0.3	0.0	0.0	0.2	0.2	0.2	2.0	
OVER-24.0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	3	6	13	
(1)	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	2.5	5.3	
(2)	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	0.1	0.2	0.5	1.1	
ALL SPEEDS	9	11	22	11	10	20	30	15	4	24	19	10	8	10	10	15	244	
(1)	3.7	4.5	9.0	4.5	7.4	11.5	12.3	6.1	1.6	9.8	7.8	4.1	3.3	4.1	4.1	6.1	100.0	
(2)	0.7	0.9	1.8	0.9	1.5	2.3	2.5	1.2	0.3	2.0	1.6	0.8	0.7	0.8	0.8	1.2	20.2	

Table 4.A-2 (Cont)

- 36 -

(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= 244

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 45.00

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
(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	3	6	2	1	3	0	0	0	0	0	3	1	0	0	
(1)	0.0	0.0	0.6	1.1	0.4	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	0.0	
(2)	0.0	0.0	0.2	0.5	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	
3.6- 7.5	6	1	5	9	11	6	8	6	1	0	7	2	1	1	3	3	
(1)	1.1	0.2	0.9	1.7	2.0	1.1	1.5	1.1	0.2	0.0	1.3	0.4	0.2	0.2	0.6	0.6	
(2)	0.5	0.1	0.4	0.7	0.9	0.5	0.7	0.5	0.1	0.0	0.6	0.2	0.1	0.1	0.2	0.2	
7.6-12.5	16	4	9	8	3	9	6	12	7	7	1	4	1	7	11	12	
(1)	2.9	0.7	1.7	1.5	0.6	1.7	1.1	2.2	1.3	1.3	0.2	0.7	0.2	1.3	2.0	2.2	
(2)	1.3	0.3	0.7	0.7	0.2	0.7	0.5	1.0	0.6	0.6	0.1	0.3	0.1	0.6	0.9	1.0	
12.6-18.5	22	5	5	3	10	3	17	19	18	16	19	6	5	19	17	10	
(1)	4.0	0.9	0.9	0.6	1.8	0.6	3.1	3.5	3.3	2.9	3.5	1.1	0.9	3.5	3.1	1.8	
(2)	1.8	0.4	0.4	0.2	0.8	0.2	1.4	1.6	1.5	1.3	1.6	0.5	0.4	1.6	1.4	0.8	
18.6-24.0	6	0	1	0	7	1	7	13	7	14	27	0	7	5	4	4	
(1)	1.1	0.0	0.2	0.0	1.3	0.2	1.3	2.4	1.3	2.6	5.0	0.0	1.3	0.9	0.7	0.7	
(2)	0.5	0.0	0.1	0.0	0.6	0.1	0.6	1.1	0.6	1.2	2.2	0.0	0.6	0.4	0.3	0.3	
OVER-24.0	13	1	0	0	2	0	0	9	5	0	5	0	0	0	3	3	
(1)	2.4	0.2	0.0	0.0	0.4	0.0	0.0	1.7	0.9	0.0	0.9	0.0	0.0	0.0	0.6	0.6	
(2)	1.1	0.1	0.0	0.0	0.2	0.0	0.0	0.7	0.4	0.0	0.4	0.0	0.0	0.0	0.2	0.2	
ALL SPEEDS	63	11	23	26	35	20	41	59	38	37	59	12	17	33	38	32	
(1)	11.6	2.0	4.2	4.8	6.4	3.7	7.5	10.0	7.0	6.8	10.0	2.2	3.1	6.1	7.0	5.9	
(2)	5.2	0.9	1.9	2.2	2.9	1.7	3.4	4.9	3.1	3.1	4.9	1.0	1.4	2.7	3.1	2.6	

Table 4.A-2 (Cont)

(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= 544

CALM=WIND SPEED LESS THAN 1.00 MPH

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 13.15

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	1	1	0	1	2	0	0	0	1	0	0	0	0	0	0
(1)	0.0	0.0	0.6	0.6	0.0	0.6	1.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3.6- 7.5	3	2	1	1	1	0	0	1	0	0	0	1	0	3	6	4	23
(1)	1.9	1.3	0.6	0.6	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	1.9	3.8	2.5	14.5
(2)	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.5	0.3	1.9
7.6-12.5	2	2	3	0	1	0	0	0	1	0	1	2	9	13	8	5	47
(1)	1.3	1.3	1.9	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.6	1.3	5.7	8.2	5.0	3.1	29.6
(2)	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.7	1.1	0.7	0.4	3.9
12.6-18.5	1	0	2	0	0	1	3	4	3	2	0	7	12	5	7	5	56
(1)	0.6	0.0	1.3	0.0	0.0	0.6	1.9	2.5	1.9	1.3	2.5	4.4	7.5	3.1	4.4	3.1	35.2
(2)	0.1	0.0	0.2	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.3	0.6	1.0	0.4	0.6	0.4	4.6
18.6-24.0	0	0	0	0	0	0	0	0	1	4	10	1	5	1	2	2	26
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.5	6.3	0.6	3.1	0.6	1.3	1.3	16.4
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.8	0.1	0.4	0.1	0.2	0.2	2.2
OVER-24.0	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	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
(2)	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
ALL SPEEDS	6	4	7	2	3	2	5	5	5	6	16	11	26	22	23	16	159
(1)	3.8	2.5	4.4	1.3	1.9	1.3	3.1	3.1	3.1	3.8	10.1	6.9	16.4	13.8	14.5	10.1	100.0
(2)	0.5	0.3	0.6	0.2	0.2	0.2	0.4	0.4	0.4	0.5	1.3	0.9	2.2	1.8	1.9	1.3	13.2

(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= 159

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-2 (Cont)

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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

CLASS FREQUENCY (PERCENT) = 2.23

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	1	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	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
(2)	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
3.6- 7.5	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	4
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7	0.0	0.0	3.7	0.0	0.0	0.0	14.8
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.3
7.6-12.5	0	0	0	0	0	0	0	0	0	0	0	3	1	2	1	1	0	8
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	3.7	7.4	3.7	3.7	0.0	29.6
(2)	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	0.2	0.1	0.1	0.0	0.7
12.6-18.5	0	0	0	0	0	0	0	0	0	0	1	0	6	2	2	0	0	11
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	22.2	7.4	7.4	0.0	0.0	40.7
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.2	0.2	0.0	0.0	0.9
18.6-24.0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	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	3.7	3.7	3.7	0.0	0.0	0.0	11.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.2
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	0	0	0	0	0	0	2	1	2	4	8	6	3	1	0	27
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	3.7	7.4	14.8	29.6	22.2	11.1	3.7	0.0	100.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.3	0.7	0.5	0.2	0.1	0.0	2.2

(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= 27

CALM=WIND SPEED LESS THAN 1.00 MPH

Table 4.A-2 (Cont)

220 FT TOWER - 220 FT

220.0 FT WIND DATA

APR - JUN 1980

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
(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	7	14	4	3	5	0	1	0	1	0	3	1	1	0	40
(1)	0.0	0.0	0.6	1.2	0.3	0.2	0.4	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.0	3.3
(2)	0.0	0.0	0.6	1.2	0.3	0.2	0.4	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.0	3.3
3.6- 7.5	17	12	16	19	29	19	20	8	2	1	9	5	4	8	12	12	15
(1)	1.4	1.0	1.3	1.6	2.4	1.6	1.7	0.7	0.2	0.1	0.7	0.4	0.3	0.7	1.0	1.0	16.0
(2)	1.4	1.0	1.3	1.6	2.4	1.6	1.7	0.7	0.2	0.1	0.7	0.4	0.3	0.7	1.0	1.0	16.0
7.6-12.5	34	30	19	10	15	26	28	23	11	10	11	13	20	35	27	22	334
(1)	2.8	2.5	1.6	0.8	1.2	2.2	2.3	1.9	0.9	0.8	0.9	1.1	1.7	2.9	2.2	1.8	27.6
(2)	2.8	2.5	1.6	0.8	1.2	2.2	2.3	1.9	0.9	0.8	0.9	1.1	1.7	2.9	2.2	1.8	27.6
12.6-18.5	35	17	17	3	11	11	36	29	22	45	37	24	28	36	33	22	406
(1)	2.9	1.4	1.4	0.2	0.9	0.9	3.0	2.4	1.8	3.7	3.1	2.0	2.3	3.0	2.7	1.8	33.6
(2)	2.9	1.4	1.4	0.2	0.9	0.9	3.0	2.4	1.8	3.7	3.1	2.0	2.3	3.0	2.7	1.8	33.6
18.6-24.0	9	2	5	0	7	1	10	17	8	31	43	2	15	12	8	10	180
(1)	0.7	0.2	0.4	0.0	0.6	0.1	0.8	1.4	0.7	2.6	3.6	0.2	1.2	1.0	0.7	0.8	14.9
(2)	0.7	0.2	0.4	0.0	0.6	0.1	0.8	1.4	0.7	2.6	3.6	0.2	1.2	1.0	0.7	0.8	14.9
OVER-24.0	15	3	0	0	3	0	0	9	5	0	5	0	0	1	6	9	56
(1)	1.2	0.2	0.0	0.0	0.2	0.0	0.0	0.7	0.4	0.0	0.4	0.0	0.0	0.1	0.5	0.7	4.6
(2)	1.2	0.2	0.0	0.0	0.2	0.0	0.0	0.7	0.4	0.0	0.4	0.0	0.0	0.1	0.5	0.7	4.6
ALL SPEEDS	110	64	64	46	69	60	99	86	49	87	106	44	70	93	87	75	1209
(1)	9.1	5.3	5.3	3.8	5.7	5.0	8.2	7.1	4.1	7.2	8.8	3.6	5.8	7.7	7.2	6.2	100.0
(2)	9.1	5.3	5.3	3.8	5.7	5.0	8.2	7.1	4.1	7.2	8.8	3.6	5.8	7.7	7.2	6.2	100.0

Table 4.A-2 (Cont)

- 40 -

(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=1209
 NUMBER OF HOURS IN THIS PERIOD= 2184

55.4 PERCENT DATA RECOVERY

CALM=WIND SPEED LESS THAN 1.00 MPH

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 #1¹. Population data are those of the Appendix I submittal; 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.

Table 3.2-1
 January-June 1980 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	0.73	0.65	<0.01	<0.07	0.26	0.84	0.0	0.27
Salt Water Shell Fish	1.1	0.90	<0.01	0.08	0.39	1.5	0.0	0.35
Total	1.8	1.6	<0.01	0.15	0.65	2.4	0.6	0.61

Table 3.2-2
 January-June 1980 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	0.76	0.69	<0.01	0.07	0.32	0.61	0.0	0.23
Salt Water Shell Fish	1.1	0.95	<0.01	0.08	0.48	1.1	0.0	0.35
Total	1.9	1.6	<0.01	0.15	0.79	1.7	0.0	0.58

Table 3.2-3
 January-June 1980 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	0.99	0.65	<0.01	0.06	0.28	0.23	0.0	0.23
Salt Water Shell Fish	1.5	0.93	<0.01	0.06	0.43	0.42	0.0	0.43
Total	2.5	1.6	<0.01	0.12	0.71	0.65	0.0	0.66

Table 3.3-1
 Population Doses Resulting from the
 January-June 1980 Liquid Effluents

Pathway	Thyroid (MAN-REM)	Total Body (MAN-REM)
Salt Water Fish	<0.01	0.27
Salt Water Shell Fish	<0.01	0.41
Salt Water Plants	<0.01	<0.01
Ocean Shoreline Deposits	0.52	0.52
Swimming	0.05	0.05
Total	0.57	1.3

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 #1¹. The gaseous releases for both reactor building vent and the main stack, for the period Jan-June 1980 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 the 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. Tables 4.1-1 through 4.1-12, are based on data taken at the 33 foot and 220 foot elevations.

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 from noble gas immersion are included 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. 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 dose.

UNDEPLETED DISPERSION FACTOR - REACTOR BUILDING VENT - JAN - MAR 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q							
		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
1	201.20	7.520E-07	2.610E-06	1.710E-06	1.200E-06	5.460E-07	6.570E-07	8.190E-07	1.880E-07
2	402.30	1.580E-06	3.190E-06	3.040E-06	1.830E-06	6.690E-07	3.130E-07	2.500E-07	2.760E-07
3	804.70	1.040E-06	1.240E-06	1.060E-06	6.780E-07	2.560E-07	5.990E-07	1.130E-07	9.670E-08
4	1207.00	5.190E-07	6.390E-07	5.840E-07	3.850E-07	1.370E-07	3.500E-07	1.030E-07	6.550E-08
5	1609.40	3.250E-07	4.050E-07	3.660E-07	2.540E-07	0.770E-08	2.330E-07	9.710E-08	5.670E-08
6	2414.00	1.690E-07	2.090E-07	1.900E-07	1.330E-07	4.640E-08	1.280E-07	8.070E-08	5.070E-08
7	3218.70	1.090E-07	1.330E-07	1.210E-07	8.510E-08	2.840E-08	8.380E-08	6.510E-08	4.600E-08
8	4023.40	7.740E-08	9.440E-08	8.610E-08	6.020E-08	2.040E-08	6.060E-08	5.290E-08	4.110E-08
9	4828.10	5.910E-08	7.200E-08	6.570E-08	4.530E-08	1.560E-08	4.670E-08	4.380E-08	3.640E-08
10	5632.70	4.720E-08	5.730E-08	5.240E-08	3.580E-08	1.240E-08	3.750E-08	3.700E-08	3.240E-08
11	6437.40	3.900E-08	4.710E-08	4.310E-08	2.920E-08	1.020E-08	3.110E-08	3.180E-08	2.910E-08
12	7242.10	3.290E-08	3.960E-08	3.620E-08	2.450E-08	8.640E-09	2.630E-08	2.770E-08	2.620E-08
13	8046.80	2.840E-08	3.390E-08	3.110E-08	2.090E-08	7.670E-09	2.270E-08	3.120E-08	2.830E-08
14	12070.10	1.640E-08	1.920E-08	1.760E-08	1.170E-08	4.350E-09	1.300E-08	1.810E-08	2.060E-08
15	16093.49	1.120E-08	1.290E-08	1.190E-08	7.740E-09	2.940E-09	8.910E-09	1.280E-08	1.940E-08
16	24140.29	6.570E-09	7.440E-09	6.930E-09	4.290E-09	1.700E-09	5.250E-09	7.390E-09	1.130E-08
17	32187.00	4.540E-09	5.000E-09	4.750E-09	2.870E-09	1.170E-09	3.680E-09	5.050E-09	7.710E-09
18	40233.79	3.430E-09	3.800E-09	3.570E-09	2.120E-09	8.780E-10	2.780E-09	3.770E-09	5.780E-09
19	48280.48	2.750E-09	3.020E-09	2.850E-09	1.660E-09	7.010E-10	2.230E-09	3.000E-09	4.600E-09
20	56327.29	2.280E-09	2.490E-09	2.350E-09	1.360E-09	5.800E-10	1.840E-09	2.460E-09	3.790E-09
21	64373.99	1.940E-09	2.100E-09	1.990E-09	1.140E-09	4.910E-10	1.560E-09	2.080E-09	3.190E-09
22	72420.75	1.680E-09	1.820E-09	1.730E-09	9.740E-10	4.250E-10	1.350E-09	1.790E-09	2.750E-09
23	80467.44	1.480E-09	1.590E-09	1.520E-09	8.490E-10	3.740E-10	1.190E-09	1.560E-09	2.400E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	1.070E-06	1.690E-06	2.760E-06	2.080E-06	4.990E-06	3.700E-06	1.730E-06	9.000E-07
2	402.30	3.270E-07	6.250E-07	8.940E-07	6.960E-07	1.710E-06	1.580E-06	8.510E-07	5.150E-07
3	804.70	1.240E-07	2.030E-07	2.960E-07	2.340E-07	6.440E-07	6.270E-07	3.360E-07	2.290E-07
4	1207.00	8.870E-08	1.200E-07	1.860E-07	1.530E-07	4.680E-07	4.790E-07	2.650E-07	1.800E-07
5	1609.40	8.060E-08	9.180E-08	1.510E-07	1.350E-07	4.220E-07	4.170E-07	2.330E-07	1.550E-07
6	2414.00	7.380E-08	6.700E-08	1.210E-07	1.220E-07	3.610E-07	3.200E-07	1.900E-07	1.100E-07
7	3218.70	6.620E-08	5.430E-08	1.030E-07	1.100E-07	3.020E-07	2.500E-07	1.460E-07	8.250E-08
8	4023.40	5.030E-08	4.540E-08	8.780E-08	9.740E-08	2.530E-07	2.000E-07	1.150E-07	6.420E-08
9	4828.10	5.120E-08	3.860E-08	7.610E-08	8.590E-08	2.140E-07	1.640E-07	9.450E-08	5.190E-08
10	5632.70	4.530E-08	3.340E-08	6.690E-08	7.640E-08	1.840E-07	1.380E-07	7.940E-08	4.310E-08
11	6437.40	4.040E-08	2.940E-08	5.960E-08	6.850E-08	1.610E-07	1.180E-07	6.000E-08	3.660E-08
12	7242.10	3.630E-08	2.610E-08	5.350E-08	6.100E-08	1.420E-07	1.030E-07	5.910E-08	3.560E-08
13	8046.80	3.280E-08	2.340E-08	4.840E-08	5.610E-08	1.260E-07	9.060E-08	5.210E-08	3.280E-08
14	12070.10	2.170E-08	1.510E-08	3.260E-08	3.780E-08	8.000E-08	5.570E-08	3.210E-08	1.900E-08
15	16093.49	1.590E-08	1.100E-08	2.430E-08	2.810E-08	6.720E-08	3.920E-08	2.260E-08	1.320E-08
16	24140.29	1.010E-08	6.910E-09	1.580E-08	2.030E-08	3.520E-08	2.370E-08	1.370E-08	7.700E-09
17	32187.00	7.290E-09	4.960E-09	1.170E-08	1.560E-08	2.490E-08	1.630E-08	1.130E-08	5.360E-09
18	40233.79	5.650E-09	3.800E-09	9.150E-09	1.360E-08	2.360E-08	1.390E-08	8.550E-09	3.900E-09
19	48280.48	4.590E-09	3.100E-09	7.510E-09	1.100E-08	1.800E-08	1.110E-08	6.840E-09	3.180E-09
20	56327.29	3.840E-09	2.600E-09	6.340E-09	9.130E-09	1.550E-08	9.200E-09	5.660E-09	2.630E-09
21	64373.99	4.060E-09	2.330E-09	5.480E-09	7.780E-09	1.310E-08	7.800E-09	4.800E-09	2.220E-09
22	72420.75	3.580E-09	1.950E-09	4.320E-09	6.760E-09	1.120E-08	6.720E-09	4.160E-09	1.900E-09
23	80467.44	3.130E-09	1.720E-09	4.290E-09	5.950E-09	9.940E-09	5.950E-09	3.600E-09	1.690E-09

Table 4.1-1

DEPLETED DISPERSION FACTOR - REACTOR BUILDING VENT - JAN - MAR 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O DEPL							
		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
1	201.20	7.100E-07	2.440E-06	1.600E-06	1.120E-06	5.120E-07	6.150E-07	7.650E-07	8.200E-07
2	402.30	1.470E-06	2.920E-06	2.750E-06	1.690E-06	6.150E-07	2.880E-07	2.230E-07	2.170E-07
3	804.70	8.970E-07	1.060E-06	9.290E-07	6.060E-07	2.270E-07	5.440E-07	1.010E-07	8.390E-08
4	1207.00	4.290E-07	5.270E-07	4.830E-07	3.290E-07	1.100E-07	3.120E-07	9.460E-08	5.670E-08
5	1609.40	2.590E-07	3.230E-07	2.910E-07	2.090E-07	7.350E-08	2.040E-07	9.040E-08	4.980E-08
6	2414.00	1.290E-07	1.600E-07	1.450E-07	1.060E-07	3.750E-08	1.100E-07	7.600E-08	4.590E-08
7	3218.70	7.970E-08	9.790E-08	8.090E-08	6.520E-08	2.310E-08	7.040E-08	6.140E-08	4.220E-08
8	4023.40	5.490E-08	6.710E-08	6.110E-08	4.480E-08	1.620E-08	5.000E-08	4.530E-08	3.790E-08
9	4828.10	4.060E-08	4.950E-08	4.510E-08	3.280E-08	1.210E-08	3.700E-08	4.120E-08	3.360E-08
10	5632.70	3.150E-08	3.840E-08	3.500E-08	2.520E-08	9.450E-09	2.990E-08	3.470E-08	2.990E-08
11	6437.40	2.540E-08	3.080E-08	2.810E-08	2.020E-08	7.650E-09	2.440E-08	2.970E-08	2.680E-08
12	7242.10	2.100E-08	2.530E-08	2.310E-08	1.660E-08	6.360E-09	2.040E-08	2.580E-08	2.420E-08
13	8046.80	1.780E-08	2.130E-08	1.950E-08	1.390E-08	4.820E-09	1.740E-08	2.720E-08	2.630E-08
14	12070.10	9.470E-09	1.110E-08	1.020E-08	7.240E-09	2.530E-09	9.420E-09	1.560E-08	1.890E-08
15	16093.49	6.060E-09	7.020E-09	6.450E-09	4.510E-09	1.600E-09	6.060E-09	8.070E-09	1.460E-08
16	24140.29	3.190E-09	3.620E-09	3.370E-09	2.260E-09	8.320E-10	3.160E-09	4.160E-09	5.520E-09
17	32187.00	2.010E-09	2.260E-09	2.100E-09	1.340E-09	5.200E-10	1.810E-09	2.350E-09	3.440E-09
18	40233.79	1.400E-09	1.560E-09	1.460E-09	8.750E-10	3.620E-10	1.140E-09	1.600E-09	2.360E-09
19	48280.48	1.050E-09	1.160E-09	1.090E-09	6.430E-10	2.700E-10	8.520E-10	1.150E-09	1.780E-09
20	56327.29	8.210E-10	9.010E-10	8.490E-10	4.940E-10	2.090E-10	6.640E-10	8.870E-10	1.380E-09
21	64373.99	6.610E-10	7.210E-10	6.810E-10	3.920E-10	1.600E-10	5.340E-10	7.090E-10	1.100E-09
22	72420.75	5.460E-10	5.940E-10	5.620E-10	3.170E-10	1.380E-10	4.410E-10	5.810E-10	9.050E-10
23	80467.44	4.590E-10	4.930E-10	4.720E-10	2.640E-10	1.160E-10	3.700E-10	4.850E-10	7.560E-10

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O DEPL							
		N - (9) 100.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	9.980E-07	1.590E-06	2.580E-06	1.940E-06	4.660E-06	3.470E-06	1.620E-06	8.520E-07
2	402.30	2.930E-07	5.720E-07	8.070E-07	6.290E-07	1.550E-06	1.450E-06	7.930E-07	4.830E-07
3	804.70	1.080E-07	1.790E-07	2.580E-07	2.040E-07	5.670E-07	5.680E-07	3.080E-07	2.120E-07
4	1207.00	7.740E-08	1.040E-07	1.600E-07	1.330E-07	4.150E-07	4.370E-07	2.450E-07	1.740E-07
5	1609.40	7.200E-08	7.950E-08	1.320E-07	1.190E-07	3.810E-07	3.830E-07	2.160E-07	1.440E-07
6	2414.00	6.610E-08	5.870E-08	1.080E-07	1.120E-07	3.330E-07	2.950E-07	1.770E-07	1.020E-07
7	3218.70	6.170E-08	4.780E-08	9.260E-08	1.020E-07	2.790E-07	2.300E-07	1.350E-07	7.620E-08
8	4023.40	5.470E-08	4.010E-08	7.970E-08	9.070E-08	2.340E-07	1.830E-07	1.060E-07	5.690E-08
9	4828.10	4.810E-08	3.400E-08	6.910E-08	8.010E-08	1.980E-07	1.490E-07	8.660E-08	4.730E-08
10	5632.70	4.260E-08	2.940E-08	6.090E-08	7.140E-08	1.700E-07	1.250E-07	7.240E-08	3.910E-08
11	6437.40	3.800E-08	2.500E-08	5.420E-08	6.400E-08	1.480E-07	1.070E-07	6.100E-08	3.300E-08
12	7242.10	3.420E-08	2.290E-08	4.870E-08	5.780E-08	1.300E-07	9.250E-08	5.340E-08	3.150E-08
13	8046.80	3.090E-08	2.050E-08	4.410E-08	5.250E-08	1.160E-07	8.130E-08	4.690E-08	2.660E-08
14	12070.10	2.040E-08	1.310E-08	2.970E-08	3.530E-08	7.200E-08	4.920E-08	2.800E-08	1.460E-08
15	16093.49	1.490E-08	9.430E-09	2.210E-08	2.620E-08	5.170E-08	3.420E-08	1.960E-08	7.270E-09
16	24140.29	9.440E-09	5.630E-09	1.440E-08	1.890E-08	3.150E-08	2.020E-08	1.150E-08	3.810E-09
17	32187.00	6.780E-09	4.120E-09	1.050E-08	1.400E-08	2.210E-08	1.340E-08	6.490E-09	2.300E-09
18	40233.79	5.230E-09	3.110E-09	8.220E-09	1.020E-08	1.430E-08	9.560E-09	4.450E-09	1.660E-09
19	48280.48	4.240E-09	2.320E-09	6.720E-09	7.820E-09	1.060E-08	7.070E-09	3.260E-09	1.240E-09
20	56327.29	3.540E-09	2.060E-09	5.650E-09	6.260E-09	8.000E-09	5.750E-09	2.560E-09	9.610E-10
21	64373.99	1.300E-09	1.010E-09	4.860E-09	5.140E-09	6.430E-09	4.700E-09	1.990E-09	7.700E-10
22	72420.75	1.190E-09	1.030E-09	4.260E-09	4.350E-09	5.350E-09	3.950E-09	1.630E-09	6.340E-10
23	80467.44	9.890E-10	1.340E-09	3.700E-09	3.740E-09	4.440E-09	3.370E-09	1.360E-09	5.310E-10

Table 4.1-2

DEPOSITION FACTOR - REACTOR BUILDING VENT - JAN - MAR 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		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
1	201.20	1.880E-08	7.460E-08	4.610E-08	2.960E-08	1.360E-08	1.450E-08	8.370E-09	8.550E-09
2	402.30	2.630E-08	5.040E-08	3.190E-08	2.540E-08	9.370E-09	7.350E-09	3.250E-09	3.360E-09
3	804.70	1.800E-08	2.610E-08	1.870E-08	9.85E-09	3.180E-09	3.370E-09	1.300E-09	1.380E-09
4	1207.00	5.300E-09	9.930E-09	5.570E-09	4.610E-09	1.550E-09	1.680E-09	7.660E-10	8.640E-10
5	1609.40	3.160E-09	5.940E-09	3.380E-09	2.850E-09	9.260E-10	1.030E-09	5.110E-10	6.120E-10
6	2414.00	1.520E-09	2.850E-09	1.620E-09	1.370E-09	4.500E-10	5.360E-10	2.720E-10	3.490E-10
7	3218.70	9.050E-10	1.700E-09	9.670E-10	8.180E-10	2.610E-10	3.670E-10	1.720E-10	2.300E-10
8	4023.40	6.130E-10	1.150E-09	6.520E-10	5.520E-10	1.790E-10	2.730E-10	1.200E-10	1.630E-10
9	4828.10	4.500E-10	8.450E-10	4.810E-10	4.040E-10	1.280E-10	1.900E-10	8.810E-11	1.220E-10
10	5632.70	3.440E-10	6.470E-10	3.680E-10	3.090E-10	9.700E-11	1.430E-10	6.760E-11	9.750E-11
11	6437.40	2.710E-10	5.100E-10	2.900E-10	2.430E-10	7.640E-11	1.130E-10	5.350E-11	7.550E-11
12	7242.10	2.180E-10	4.100E-10	2.330E-10	1.950E-10	6.170E-11	9.150E-11	4.300E-11	6.150E-11
13	8046.00	1.790E-10	3.360E-10	1.910E-10	1.610E-10	5.820E-11	7.710E-11	5.040E-11	5.140E-11
14	12070.10	8.230E-11	1.550E-10	8.800E-11	7.640E-11	2.680E-11	6.200E-11	7.500E-11	2.490E-11
15	16093.49	4.730E-11	8.800E-11	5.050E-11	4.580E-11	1.540E-11	5.430E-11	6.440E-11	3.890E-11
16	24140.29	2.180E-11	4.100E-11	2.330E-11	2.100E-11	7.160E-12	2.150E-11	2.590E-11	1.800E-11
17	32187.00	1.270E-11	2.390E-11	1.360E-11	1.200E-11	4.180E-12	8.710E-12	9.750E-12	1.050E-11
18	40233.79	8.350E-12	1.570E-11	8.920E-12	7.750E-12	2.760E-12	4.650E-12	6.050E-12	6.870E-12
19	48280.48	5.930E-12	1.110E-11	6.340E-12	5.510E-12	1.960E-12	3.270E-12	4.190E-12	4.800E-12
20	56327.29	4.430E-12	8.320E-12	4.730E-12	4.120E-12	1.450E-12	2.440E-12	2.440E-12	3.650E-12
21	64373.99	3.430E-12	6.450E-12	3.670E-12	3.190E-12	1.120E-12	1.890E-12	2.430E-12	2.830E-12
22	72420.75	2.770E-12	5.200E-12	2.960E-12	2.580E-12	9.080E-13	1.530E-12	1.960E-12	2.280E-12
23	80467.44	2.270E-12	4.260E-12	2.420E-12	2.110E-12	7.440E-13	1.250E-12	1.600E-12	1.870E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	1.690E-08	3.960E-08	3.220E-08	1.910E-08	8.290E-08	9.050E-08	3.590E-08	1.790E-08
2	402.30	6.450E-09	1.830E-08	1.40E-08	8.630E-09	3.650E-08	5.140E-08	2.450E-08	1.250E-08
3	804.70	2.430E-09	7.300E-09	5.600E-09	3.640E-09	1.580E-08	2.280E-08	1.100E-08	6.240E-09
4	1207.00	1.370E-09	3.870E-09	3.050E-09	2.050E-09	9.510E-09	1.270E-08	6.050E-09	3.520E-09
5	1609.40	8.980E-10	2.420E-09	1.930E-09	1.340E-09	6.410E-09	8.170E-09	3.840E-09	2.200E-09
6	2414.00	4.760E-10	1.230E-09	9.910E-10	7.120E-10	3.460E-09	4.190E-09	1.980E-09	1.100E-09
7	3218.70	3.020E-10	7.680E-10	6.210E-10	4.540E-10	2.220E-09	2.620E-09	1.220E-09	6.800E-10
8	4023.40	2.110E-10	5.300E-10	4.280E-10	3.160E-10	1.550E-09	1.800E-09	8.380E-10	4.630E-10
9	4828.10	1.560E-10	3.870E-10	3.130E-10	2.320E-10	1.140E-09	1.320E-09	6.100E-10	3.350E-10
10	5632.70	1.200E-10	2.960E-10	2.400E-10	1.780E-10	8.770E-10	1.000E-09	4.650E-10	2.550E-10
11	6437.40	9.530E-11	2.350E-10	1.900E-10	1.420E-10	6.950E-10	7.930E-10	3.670E-10	2.010E-10
12	7242.10	7.720E-11	1.910E-10	1.540E-10	1.160E-10	5.620E-10	6.420E-10	2.900E-10	1.650E-10
13	8046.00	6.390E-11	1.590E-10	1.280E-10	9.620E-11	4.650E-10	5.310E-10	2.470E-10	1.520E-10
14	12070.10	3.080E-11	7.700E-11	6.170E-11	4.700E-11	2.260E-10	2.560E-10	1.190E-10	1.140E-10
15	16093.49	1.840E-11	4.640E-11	3.700E-11	2.840E-11	1.360E-10	1.550E-10	7.180E-11	5.720E-11
16	24140.29	8.920E-12	2.340E-11	1.840E-11	1.410E-11	6.700E-11	7.740E-11	3.600E-11	2.670E-11
17	32187.00	5.410E-12	1.400E-11	1.150E-11	9.190E-12	4.110E-11	5.610E-11	4.400E-11	1.570E-11
18	40233.79	3.690E-12	1.030E-11	8.010E-12	1.450E-11	7.320E-11	4.000E-11	2.710E-11	1.840E-11
19	48280.48	2.710E-12	7.630E-12	6.000E-12	1.240E-11	4.990E-11	3.180E-11	1.800E-11	7.440E-12
20	56327.29	2.130E-12	5.200E-12	4.750E-12	1.070E-11	3.610E-11	2.540E-11	1.370E-11	5.590E-12
21	64373.99	3.840E-12	4.720E-12	3.920E-12	9.320E-12	2.720E-11	2.000E-11	1.040E-11	4.350E-12
22	72420.75	3.150E-12	3.000E-12	3.330E-12	8.040E-12	2.130E-11	1.710E-11	8.220E-12	3.520E-12
23	80467.44	2.580E-12	3.250E-12	2.830E-12	6.960E-12	1.700E-11	1.430E-11	6.620E-12	2.800E-12

Table 4.1-3

UNDEPLETED DISPERSION FACTOR - REACTOR BUILDING VENT - APR - JUN 1988

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q							
		S - (1) 8.0	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
1	201.20	1.100E-06	1.260E-06	1.570E-06	5.130E-07	1.490E-06	1.220E-06	1.130E-06	1.300E-06
2	402.30	3.950E-06	1.840E-06	5.420E-06	2.270E-06	5.060E-06	7.690E-07	3.950E-07	4.100E-07
3	804.70	2.390E-06	1.120E-06	1.820E-06	1.250E-06	2.590E-06	1.700E-06	2.450E-07	1.610E-07
4	1207.00	1.200E-06	5.740E-07	9.950E-07	8.040E-07	1.430E-06	9.520E-07	2.500E-07	1.150E-07
5	1609.40	7.520E-07	3.620E-07	6.320E-07	5.690E-07	9.170E-07	6.280E-07	2.390E-07	1.090E-07
6	2414.00	3.800E-07	1.890E-07	3.270E-07	3.000E-07	5.220E-07	3.350E-07	1.920E-07	1.050E-07
7	3218.70	2.460E-07	1.210E-07	2.070E-07	1.920E-07	3.450E-07	2.150E-07	1.490E-07	9.340E-08
8	4023.40	1.750E-07	0.640E-08	1.470E-07	1.360E-07	2.500E-07	1.530E-07	1.180E-07	8.090E-08
9	4828.10	1.340E-07	6.650E-08	1.120E-07	1.030E-07	1.930E-07	1.170E-07	9.680E-08	6.900E-08
10	5632.70	1.070E-07	5.340E-08	8.940E-08	8.200E-08	1.550E-07	9.270E-08	8.110E-08	6.000E-08
11	6437.40	8.020E-08	4.430E-08	7.350E-08	6.710E-08	1.200E-07	7.600E-08	6.920E-08	5.340E-08
12	7242.10	7.420E-08	3.740E-08	6.100E-08	5.600E-08	1.000E-07	6.360E-08	5.990E-08	4.740E-08
13	8046.80	6.370E-08	3.230E-08	5.300E-08	4.700E-08	9.630E-08	5.440E-08	6.740E-08	4.740E-08
14	12070.10	3.620E-08	1.870E-08	3.000E-08	2.660E-08	5.300E-08	3.050E-08	3.800E-08	3.120E-08
15	16093.49	2.460E-08	1.200E-08	2.020E-08	1.760E-08	3.590E-08	2.030E-08	2.790E-08	2.520E-08
16	24140.29	1.440E-08	7.600E-09	1.160E-08	9.920E-09	2.050E-08	1.150E-08	1.610E-08	1.440E-08
17	32187.00	9.800E-09	5.200E-09	7.930E-09	6.600E-09	1.390E-08	7.830E-09	1.110E-08	9.770E-09
18	40233.79	7.430E-09	4.000E-09	5.930E-09	4.950E-09	1.030E-08	5.830E-09	8.290E-09	7.270E-09
19	48280.48	5.930E-09	3.210E-09	4.710E-09	3.900E-09	8.160E-09	4.600E-09	6.590E-09	5.750E-09
20	56327.29	4.900E-09	2.660E-09	3.800E-09	3.100E-09	6.700E-09	3.770E-09	5.420E-09	4.720E-09
21	64373.99	4.150E-09	2.260E-09	3.270E-09	2.670E-09	5.640E-09	3.100E-09	4.580E-09	3.970E-09
22	72420.75	3.590E-09	1.960E-09	2.830E-09	2.300E-09	4.870E-09	2.740E-09	3.950E-09	3.430E-09
23	80467.44	3.150E-09	1.730E-09	2.400E-09	2.010E-09	4.260E-09	2.400E-09	3.460E-09	2.990E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	1.240E-06	2.060E-06	3.070E-06	2.670E-06	1.470E-06	1.060E-06	7.720E-07	7.300E-07
2	402.30	3.560E-07	6.660E-07	9.520E-07	8.350E-07	4.900E-07	5.040E-07	3.570E-07	3.290E-07
3	804.70	1.390E-07	2.730E-07	3.470E-07	2.730E-07	1.810E-07	2.100E-07	1.750E-07	2.150E-07
4	1207.00	1.050E-07	1.990E-07	2.400E-07	1.690E-07	1.260E-07	1.790E-07	1.830E-07	2.720E-07
5	1609.40	1.010E-07	1.700E-07	2.060E-07	1.360E-07	1.190E-07	1.750E-07	1.870E-07	2.290E-07
6	2414.00	9.360E-08	1.520E-07	1.690E-07	1.170E-07	1.190E-07	1.550E-07	1.850E-07	1.860E-07
7	3218.70	8.030E-08	1.270E-07	1.410E-07	1.090E-07	1.160E-07	1.320E-07	1.520E-07	1.540E-07
8	4023.40	6.760E-08	1.060E-07	1.190E-07	1.050E-07	1.080E-07	1.110E-07	1.170E-07	1.100E-07
9	4828.10	5.730E-08	8.940E-08	1.010E-07	9.100E-08	9.870E-08	9.370E-08	1.040E-07	9.020E-08
10	5632.70	4.920E-08	7.650E-08	8.770E-08	8.290E-08	9.010E-08	8.060E-08	8.850E-08	8.150E-08
11	6437.40	4.200E-08	6.650E-08	7.690E-08	7.570E-08	8.230E-08	7.020E-08	7.640E-08	6.910E-08
12	7242.10	3.760E-08	5.040E-08	6.020E-08	6.940E-08	7.540E-08	6.100E-08	6.600E-08	6.700E-08
13	8046.80	3.340E-08	5.190E-08	6.100E-08	6.360E-08	6.900E-08	5.560E-08	5.900E-08	6.130E-08
14	12070.10	2.070E-08	3.200E-08	3.930E-08	4.490E-08	4.830E-08	3.470E-08	3.650E-08	3.400E-08
15	16093.49	1.460E-08	2.700E-08	2.850E-08	3.430E-08	3.660E-08	2.400E-08	2.500E-08	2.410E-08
16	24140.29	0.850E-08	1.800E-08	1.790E-08	2.630E-08	2.430E-08	1.540E-08	1.570E-08	1.390E-08
17	32187.00	6.100E-09	9.700E-09	1.200E-08	2.000E-08	1.790E-08	1.210E-08	1.260E-08	9.470E-09
18	40233.79	4.680E-09	7.470E-09	9.090E-09	1.090E-08	2.050E-08	9.190E-09	9.450E-09	7.070E-09
19	48280.48	3.750E-09	5.900E-09	8.020E-09	1.530E-08	1.650E-08	7.370E-09	7.530E-09	5.610E-09
20	56327.29	3.100E-09	4.900E-09	6.710E-09	1.200E-08	1.370E-08	6.110E-09	5.210E-09	4.610E-09
21	64373.99	2.970E-09	4.000E-09	5.750E-09	1.090E-08	1.160E-08	5.100E-09	5.250E-09	3.000E-09
22	72420.75	2.500E-09	3.600E-09	5.020E-09	9.470E-09	1.000E-08	4.490E-09	4.530E-09	3.360E-09
23	80467.44	2.190E-09	3.100E-09	4.440E-09	8.350E-09	8.020E-09	3.950E-09	3.900E-09	2.910E-09

Table 4.1-4

DEPLETED DISPERSION FACTOR - REACTOR BUILDING VENT - APR - JUN 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q DEPL							
		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
1	201.20	1.030E-06	1.190E-06	1.480E-06	4.820E-07	1.410E-06	1.160E-06	1.050E-06	1.220E-06
2	402.30	3.720E-06	1.700E-06	4.930E-06	2.160E-06	4.770E-06	7.190E-07	3.570E-07	3.680E-07
3	804.70	2.050E-06	9.680E-07	1.600E-06	1.170E-06	2.420E-06	1.580E-06	2.240E-07	1.490E-07
4	1207.00	9.910E-07	4.730E-07	8.250E-07	7.320E-07	1.330E-06	8.730E-07	2.350E-07	1.010E-07
5	1609.40	6.010E-07	2.800E-07	5.070E-07	4.900E-07	8.590E-07	5.590E-07	2.270E-07	9.850E-08
6	2414.00	2.970E-07	1.440E-07	2.520E-07	2.500E-07	4.820E-07	2.910E-07	1.830E-07	9.780E-08
7	3218.70	1.810E-07	0.870E-08	1.540E-07	1.560E-07	3.150E-07	1.830E-07	1.420E-07	8.770E-08
8	4023.40	1.240E-07	6.130E-08	1.060E-07	1.000E-07	2.260E-07	1.280E-07	1.130E-07	7.690E-08
9	4828.10	9.230E-08	4.570E-08	7.800E-08	8.000E-08	1.720E-07	9.570E-08	9.170E-08	6.550E-08
10	5632.70	7.170E-08	3.570E-08	6.050E-08	6.210E-08	1.370E-07	7.490E-08	7.650E-08	5.700E-08
11	6437.40	5.760E-08	2.800E-08	4.850E-08	4.990E-08	1.120E-07	6.050E-08	6.510E-08	5.000E-08
12	7242.10	4.750E-08	2.390E-08	3.990E-08	4.100E-08	9.330E-08	5.010E-08	5.620E-08	4.430E-08
13	8046.00	4.000E-08	2.020E-08	3.360E-08	3.450E-08	6.000E-08	4.230E-08	6.040E-08	4.440E-08
14	12070.10	2.100E-08	1.000E-08	1.760E-08	1.800E-08	3.140E-08	2.240E-08	3.340E-08	2.870E-08
15	16093.49	1.340E-08	6.940E-09	1.110E-08	1.130E-08	1.970E-08	1.410E-08	1.880E-08	1.390E-08
16	24140.29	7.010E-09	3.690E-09	5.740E-09	5.710E-09	1.010E-08	7.200E-09	9.690E-09	7.170E-09
17	32187.00	4.390E-09	2.330E-09	3.570E-09	3.250E-09	6.220E-09	4.060E-09	5.300E-09	4.440E-09
18	40233.79	3.060E-09	1.640E-09	2.470E-09	2.040E-09	4.290E-09	2.390E-09	3.550E-09	3.060E-09
19	48280.48	2.200E-09	1.230E-09	1.840E-09	1.500E-09	3.170E-09	1.760E-09	2.520E-09	2.270E-09
20	56327.29	1.700E-09	9.590E-10	1.430E-09	1.160E-09	2.410E-09	1.360E-09	1.950E-09	1.760E-09
21	64373.99	1.430E-09	7.720E-10	1.140E-09	9.220E-10	1.930E-09	1.000E-09	1.560E-09	1.400E-09
22	72420.75	1.100E-09	6.390E-10	9.420E-10	7.490E-10	1.580E-09	8.910E-10	1.290E-09	1.150E-09
23	80467.44	9.870E-10	5.370E-10	7.900E-10	6.250E-10	1.320E-09	7.450E-10	1.000E-09	9.640E-10

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q DEPL							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	1.160E-06	1.920E-06	2.870E-06	2.490E-06	1.380E-06	9.960E-07	7.230E-07	6.840E-07
2	402.30	3.170E-07	5.990E-07	8.530E-07	7.490E-07	4.510E-07	4.690E-07	3.310E-07	3.050E-07
	804.70	1.200E-07	2.400E-07	3.010E-07	2.370E-07	1.580E-07	1.920E-07	1.620E-07	2.020E-07
	1207.00	9.150E-08	1.750E-07	2.090E-07	1.450E-07	1.110E-07	1.670E-07	1.740E-07	2.610E-07
5	1609.40	9.060E-08	1.600E-07	1.020E-07	1.170E-07	1.070E-07	1.650E-07	1.800E-07	2.200E-07
6	2414.00	8.710E-08	1.400E-07	1.530E-07	1.040E-07	1.110E-07	1.480E-07	1.790E-07	1.800E-07
7	3218.70	7.540E-08	1.180E-07	1.290E-07	9.910E-08	1.100E-07	1.260E-07	1.470E-07	1.490E-07
8	4023.40	6.370E-08	9.850E-08	1.090E-07	9.230E-08	1.030E-07	1.060E-07	1.130E-07	1.050E-07
9	4828.10	5.390E-08	8.290E-08	9.250E-08	8.430E-08	9.430E-08	8.950E-08	1.010E-07	8.650E-08
10	5632.70	4.630E-08	7.090E-08	8.000E-08	7.700E-08	8.620E-08	7.690E-08	8.530E-08	7.800E-08
11	6437.40	4.020E-08	6.150E-08	7.020E-08	7.050E-08	7.000E-08	6.690E-08	7.350E-08	6.600E-08
12	7242.10	3.540E-08	5.400E-08	6.220E-08	6.470E-08	7.230E-08	5.000E-08	6.410E-08	6.310E-08
13	8046.00	3.140E-08	4.790E-08	5.560E-08	5.970E-08	6.650E-08	5.230E-08	5.600E-08	5.340E-08
14	12070.10	1.940E-08	2.960E-08	3.570E-08	4.210E-08	4.640E-08	3.200E-08	3.460E-08	2.890E-08
15	16093.49	1.360E-08	2.000E-08	2.570E-08	3.210E-08	3.510E-08	2.330E-08	2.410E-08	1.390E-08
16	24140.29	8.190E-09	1.250E-08	1.600E-08	2.460E-08	2.320E-08	1.420E-08	1.430E-08	6.900E-09
17	32187.00	5.600E-09	8.650E-09	1.140E-08	1.800E-08	1.710E-08	9.340E-09	7.600E-09	4.200E-09
18	40233.79	4.200E-09	6.530E-09	8.770E-09	1.410E-08	1.300E-08	6.670E-09	5.170E-09	2.960E-09
19	48280.48	3.420E-09	5.000E-09	7.000E-09	1.000E-08	9.600E-09	5.070E-09	3.760E-09	2.190E-09
20	56327.29	2.000E-09	2.000E-09	5.990E-09	8.680E-09	7.410E-09	2.010E-09	2.060E-09	1.700E-09
21	64373.99	1.700E-09	3.000E-09	5.030E-09	7.150E-09	5.920E-09	3.270E-09	2.260E-09	1.360E-09
22	72420.75	0.230E-09	3.000E-09	4.300E-09	6.050E-09	4.870E-09	2.750E-09	1.830E-09	1.120E-09
23	80467.44	6.070E-10	2.200E-09	3.060E-09	5.190E-09	4.000E-09	2.340E-09	1.530E-09	9.350E-10

Table 4.1-5

DEPOSITION FACTOR - REACTOR BUILDING VENT - APR - JUN 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/O							
		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
1	201.20	2.060E-08	3.250E-08	3.290E-08	9.960E-09	2.720E-08	2.720E-08	1.600E-08	1.800E-08
2	402.30	2.710E-08	3.410E-08	4.480E-08	1.450E-08	2.960E-08	2.290E-08	8.290E-09	7.440E-09
3	804.70	1.770E-08	1.290E-08	1.600E-08	6.290E-09	1.120E-08	1.300E-08	3.630E-09	2.950E-09
4	1207.00	8.690E-09	6.480E-09	8.870E-09	3.540E-09	5.310E-09	6.380E-09	2.190E-09	1.730E-09
5	1609.40	5.220E-09	3.860E-09	5.320E-09	2.710E-09	3.140E-09	3.790E-09	1.480E-09	1.180E-09
6	2414.00	2.510E-09	1.850E-09	2.550E-09	1.370E-09	1.620E-09	1.850E-09	7.920E-10	6.510E-10
7	3218.70	1.500E-09	1.110E-09	1.520E-09	8.800E-10	1.110E-09	1.160E-09	5.060E-10	4.230E-10
8	4023.40	1.010E-09	7.460E-10	1.030E-09	6.180E-10	8.320E-10	8.230E-10	3.520E-10	2.990E-10
9	4828.10	7.450E-10	5.500E-10	7.540E-10	4.360E-10	5.690E-10	5.750E-10	2.590E-10	2.230E-10
10	5632.70	5.700E-10	4.210E-10	5.770E-10	3.280E-10	4.250E-10	4.310E-10	1.980E-10	1.730E-10
11	6437.40	4.490E-10	3.320E-10	4.550E-10	2.570E-10	3.350E-10	3.390E-10	1.570E-10	1.380E-10
12	7242.10	3.610E-10	2.670E-10	3.650E-10	2.080E-10	2.720E-10	2.750E-10	1.260E-10	1.120E-10
13	8046.80	2.960E-10	2.190E-10	3.000E-10	1.730E-10	4.000E-10	2.300E-10	1.210E-10	9.390E-11
14	12070.10	1.360E-10	1.010E-10	1.330E-10	1.050E-10	1.840E-10	1.700E-10	1.320E-10	4.550E-11
15	16093.49	7.830E-11	5.790E-11	7.920E-11	7.370E-11	1.050E-10	1.550E-10	1.770E-10	7.260E-11
16	24140.29	3.520E-11	2.670E-11	3.660E-11	3.140E-11	4.880E-11	6.270E-11	6.820E-11	3.350E-11
17	32187.00	2.110E-11	1.560E-11	2.130E-11	1.450E-11	2.840E-11	2.810E-11	2.440E-11	1.950E-11
18	40233.79	1.390E-11	1.020E-11	1.400E-11	9.410E-12	1.870E-11	1.440E-11	1.380E-11	1.280E-11
19	48280.48	9.850E-12	7.260E-12	9.940E-12	6.700E-12	1.330E-11	1.030E-11	9.310E-12	9.110E-12
20	56327.29	7.360E-12	5.420E-12	7.430E-12	5.010E-12	1.000E-11	7.670E-12	6.950E-12	6.810E-12
21	64373.99	5.710E-12	4.200E-12	5.760E-12	3.800E-12	7.760E-12	5.940E-12	5.390E-12	5.280E-12
22	72420.75	4.610E-12	3.390E-12	4.640E-12	3.130E-12	6.270E-12	4.800E-12	4.350E-12	4.260E-12
23	80467.44	3.770E-12	2.780E-12	3.800E-12	2.570E-12	5.130E-12	3.930E-12	3.560E-12	3.400E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/O							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	1.570E-08	3.540E-08	3.770E-08	2.160E-08	1.480E-08	1.760E-08	1.230E-08	1.230E-08
2	402.30	5.250E-09	1.530E-08	1.500E-08	9.060E-09	6.770E-09	1.190E-08	7.660E-09	7.900E-09
3	804.70	1.780E-09	6.210E-09	5.960E-09	3.550E-09	2.880E-09	5.510E-09	3.560E-09	4.060E-09
4	1207.00	9.930E-10	3.560E-09	3.450E-09	1.970E-09	1.670E-09	3.020E-09	2.020E-09	2.370E-09
5	1609.40	6.520E-10	2.350E-09	2.290E-09	1.270E-09	1.110E-09	1.910E-09	1.300E-09	1.470E-09
6	2414.00	3.460E-10	1.240E-09	1.220E-09	6.600E-10	6.000E-10	9.820E-10	6.860E-10	7.590E-10
7	3218.70	2.190E-10	7.930E-10	7.760E-10	4.160E-10	3.860E-10	6.200E-10	4.310E-10	4.700E-10
8	4023.40	1.520E-10	5.520E-10	5.410E-10	2.890E-10	2.700E-10	4.290E-10	2.960E-10	3.260E-10
9	4828.10	1.130E-10	4.060E-10	3.990E-10	2.120E-10	1.990E-10	3.120E-10	2.170E-10	2.370E-10
10	5632.70	8.740E-11	3.120E-10	3.060E-10	1.630E-10	1.530E-10	2.380E-10	1.660E-10	1.810E-10
11	6437.40	6.930E-11	2.470E-10	2.430E-10	1.290E-10	1.220E-10	1.890E-10	1.310E-10	1.430E-10
12	7242.10	5.590E-11	2.000E-10	1.960E-10	1.050E-10	9.970E-11	1.540E-10	1.060E-10	1.190E-10
13	8046.80	4.610E-11	1.660E-10	1.620E-10	8.720E-11	8.310E-11	1.290E-10	8.820E-11	1.240E-10
14	12070.10	2.200E-11	8.040E-11	7.830E-11	4.220E-11	4.000E-11	6.290E-11	4.270E-11	1.450E-10
15	16093.49	1.300E-11	4.830E-11	4.690E-11	2.530E-11	2.470E-11	3.830E-11	2.580E-11	6.660E-11
16	24140.29	6.110E-12	2.300E-11	2.290E-11	1.250E-11	1.230E-11	1.930E-11	1.310E-11	3.000E-11
17	32187.00	3.610E-12	1.470E-11	1.390E-11	8.340E-12	7.700E-12	1.940E-11	3.910E-11	1.790E-11
18	40233.79	2.440E-12	1.000E-11	9.480E-12	1.770E-11	3.470E-11	1.530E-11	2.260E-11	1.100E-11
19	48280.48	1.810E-12	7.320E-12	6.940E-12	1.510E-11	2.310E-11	1.250E-11	1.480E-11	8.400E-12
20	56327.29	1.460E-12	5.600E-12	5.410E-12	1.290E-11	1.640E-11	1.070E-11	1.000E-11	6.200E-12
21	64373.99	6.550E-12	4.500E-12	4.420E-12	1.110E-11	1.220E-11	8.630E-12	7.690E-12	4.000E-12
22	72420.75	3.350E-12	3.770E-12	3.720E-12	9.460E-12	9.460E-12	7.270E-12	5.960E-12	3.910E-12
23	80467.44	2.740E-12	3.190E-12	3.200E-12	8.120E-12	7.490E-12	6.160E-12	4.720E-12	3.200E-12

Table 4.1-6

UNDEPLETED DISPERSION FACTOR - MAIN STACK - JAN - MAR 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O							
		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
1	201.20	5.500E-09	6.360E-09	4.710E-09	2.120E-09	2.690E-10	6.660E-10	4.640E-10	9.420E-11
2	402.30	1.510E-07	1.810E-07	7.170E-08	3.380E-08	5.040E-09	2.050E-08	8.610E-09	2.620E-09
3	804.70	1.260E-07	1.050E-07	4.540E-08	3.390E-08	1.380E-08	1.310E-08	4.760E-09	1.330E-09
4	1207.00	1.120E-07	1.690E-07	4.520E-08	7.500E-08	1.030E-08	1.070E-08	3.210E-09	1.750E-09
5	1609.40	1.470E-07	2.070E-07	4.770E-08	8.540E-08	1.950E-08	1.020E-08	3.950E-09	3.130E-09
6	2414.00	1.100E-07	1.110E-07	3.630E-08	6.130E-08	1.780E-08	9.260E-09	6.420E-09	5.780E-09
7	3218.70	7.600E-08	7.170E-08	2.750E-08	4.520E-08	1.490E-08	8.180E-09	7.570E-09	6.900E-09
8	4023.40	5.500E-08	5.140E-08	2.150E-08	3.470E-08	1.240E-08	7.000E-09	7.600E-09	7.110E-09
9	4828.10	4.250E-08	3.950E-08	1.730E-08	2.760E-08	1.030E-08	6.050E-09	7.280E-09	6.870E-09
10	5632.70	3.410E-08	3.170E-08	1.440E-08	2.260E-08	8.810E-09	5.310E-09	6.800E-09	6.520E-09
11	6437.40	2.830E-08	2.620E-08	1.220E-08	1.900E-08	7.620E-09	4.700E-09	6.310E-09	6.140E-09
12	7242.10	2.390E-08	2.220E-08	1.050E-08	1.620E-08	6.680E-09	4.210E-09	5.870E-09	5.700E-09
13	8046.80	2.060E-08	1.920E-08	9.160E-09	1.410E-08	8.660E-09	4.120E-09	8.070E-09	5.440E-09
14	12070.10	1.190E-08	1.110E-08	5.470E-09	8.250E-09	5.110E-09	2.670E-09	5.230E-09	4.040E-09
15	16093.40	8.100E-09	7.590E-09	3.790E-09	5.590E-09	3.520E-09	1.940E-09	4.270E-09	7.930E-09
16	24140.20	4.730E-09	4.450E-09	2.240E-09	3.100E-09	2.060E-09	1.230E-09	2.500E-09	4.600E-09
17	32187.00	3.260E-09	3.080E-09	1.560E-09	2.100E-09	1.430E-09	9.730E-10	1.870E-09	3.240E-09
18	40233.70	2.460E-09	2.320E-09	1.180E-09	1.720E-09	1.080E-09	8.350E-10	1.440E-09	2.440E-09
19	48280.40	1.960E-09	1.860E-09	9.420E-10	1.350E-09	8.620E-10	6.980E-10	1.270E-09	1.950E-09
20	56327.20	1.620E-09	1.540E-09	7.940E-10	1.100E-09	7.090E-10	5.760E-10	1.010E-09	1.610E-09
21	64373.90	1.370E-09	1.300E-09	6.730E-10	9.230E-10	6.670E-10	4.870E-10	8.790E-10	1.360E-09
22	72420.75	1.190E-09	1.130E-09	5.830E-10	7.990E-10	5.760E-10	4.210E-10	7.500E-10	1.180E-09
23	80467.44	1.040E-09	9.890E-10	5.120E-10	6.950E-10	5.050E-10	3.690E-10	6.630E-10	1.030E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	2.550E-10	2.080E-09	1.490E-09	1.400E-09	2.950E-09	6.250E-09	5.230E-09	2.730E-09
2	402.30	7.020E-09	5.620E-08	4.620E-08	4.690E-08	8.430E-08	1.570E-07	1.500E-07	1.410E-07
3	804.70	4.540E-09	2.510E-08	1.660E-08	2.160E-08	3.340E-08	5.960E-08	5.120E-08	7.700E-08
4	1207.00	3.370E-09	1.320E-08	8.240E-09	1.130E-08	1.990E-08	3.500E-08	2.660E-08	8.430E-08
5	1609.40	3.500E-09	1.000E-08	8.030E-09	9.270E-09	2.080E-08	3.730E-08	2.760E-08	8.280E-08
6	2414.00	4.610E-09	9.020E-09	9.760E-09	9.520E-09	2.500E-08	4.610E-08	3.330E-08	7.050E-08
7	3218.70	5.230E-09	9.510E-09	1.070E-08	1.030E-08	2.610E-08	4.880E-08	3.620E-08	5.800E-08
8	4023.40	5.300E-09	8.800E-09	1.080E-08	1.040E-08	2.520E-08	4.760E-08	3.680E-08	4.780E-08
9	4828.10	5.080E-09	8.170E-09	1.020E-08	9.910E-09	2.330E-08	4.460E-08	3.580E-08	4.010E-08
10	5632.70	4.810E-09	7.410E-09	9.640E-09	9.380E-09	2.130E-08	4.170E-08	3.450E-08	3.420E-08
11	6437.40	4.530E-09	6.790E-09	9.040E-09	8.850E-09	1.960E-08	3.890E-08	3.320E-08	2.970E-08
12	7242.10	4.270E-09	6.260E-09	8.490E-09	8.350E-09	1.800E-08	3.630E-08	3.100E-08	2.610E-08
13	8046.80	4.020E-09	5.780E-09	7.960E-09	7.860E-09	1.660E-08	3.390E-08	3.030E-08	2.310E-08
14	12070.10	2.990E-09	4.090E-09	5.870E-09	5.840E-09	1.160E-08	2.470E-08	2.330E-08	1.450E-08
15	16093.40	2.340E-09	3.120E-09	4.570E-09	4.570E-09	8.720E-09	1.910E-08	1.840E-08	1.150E-08
16	24140.20	1.610E-09	2.000E-09	3.130E-09	3.140E-09	5.690E-09	1.200E-08	1.250E-08	6.920E-09
17	32187.00	1.220E-09	1.560E-09	2.380E-09	2.390E-09	4.190E-09	1.090E-08	1.130E-08	4.800E-09
18	40233.70	9.830E-10	1.200E-09	1.900E-09	2.320E-09	4.200E-09	8.500E-09	6.710E-09	3.700E-09
19	48280.40	8.170E-10	1.000E-09	1.580E-09	1.920E-09	3.420E-09	6.920E-09	7.030E-09	2.900E-09
20	56327.20	6.990E-10	8.760E-10	1.350E-09	1.630E-09	2.870E-09	5.820E-09	5.860E-09	2.470E-09
21	64373.90	8.420E-10	7.600E-10	1.180E-09	1.410E-09	2.470E-09	5.010E-09	5.000E-09	2.110E-09
22	72420.75	8.760E-10	6.000E-10	1.050E-09	1.250E-09	2.160E-09	4.390E-09	4.350E-09	1.830E-09
23	80467.44	7.720E-10	6.000E-10	9.420E-10	1.120E-09	1.920E-09	3.900E-09	3.840E-09	1.610E-09

Table 4.1-7

DEPLETED DISPERSION FACTOR - MAIN STACK - JAN - MAR 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q DEPL							
		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
1	201.20	5.500E-09	6.360E-09	4.710E-09	2.120E-09	2.690E-10	6.660E-10	4.640E-10	9.420E-11
2	402.30	1.460E-07	1.760E-07	7.060E-08	3.340E-08	4.970E-09	2.030E-08	8.520E-09	2.590E-09
3	804.70	1.220E-07	1.010E-07	4.400E-08	3.340E-08	1.340E-08	1.260E-08	4.610E-09	1.290E-09
4	1207.00	1.090E-07	1.590E-07	4.380E-08	7.310E-08	1.700E-08	1.030E-08	3.090E-09	1.690E-09
5	1609.40	1.400E-07	1.760E-07	4.610E-08	8.140E-08	1.890E-08	9.740E-09	3.830E-09	3.050E-09
6	2414.00	1.010E-07	9.190E-08	3.470E-08	5.730E-08	1.720E-08	8.870E-09	6.260E-09	6.650E-09
7	3218.70	6.710E-08	5.790E-08	2.610E-08	4.160E-08	1.420E-08	7.720E-09	7.350E-09	6.650E-09
8	4023.40	4.790E-08	4.070E-08	2.030E-08	3.150E-08	1.170E-08	6.650E-09	7.430E-09	6.820E-09
9	4828.10	3.650E-08	3.060E-08	1.630E-08	2.700E-08	9.720E-09	5.740E-09	7.040E-09	6.570E-09
10	5632.70	2.900E-08	2.410E-08	1.340E-08	2.080E-08	8.240E-09	5.020E-09	6.560E-09	6.220E-09
11	6437.40	2.370E-08	1.960E-08	1.130E-08	1.660E-08	7.100E-09	4.430E-09	6.080E-09	5.850E-09
12	7242.10	1.990E-08	1.640E-08	9.700E-09	1.410E-08	6.200E-09	3.960E-09	5.640E-09	5.510E-09
13	8046.80	1.700E-08	1.400E-08	8.440E-09	1.210E-08	7.830E-09	3.870E-09	7.760E-09	5.170E-09
14	12070.10	9.270E-09	7.590E-09	4.940E-09	6.890E-09	4.510E-09	2.490E-09	4.990E-09	3.800E-09
15	16093.49	5.970E-09	4.890E-09	3.350E-09	4.570E-09	3.010E-09	1.790E-09	4.040E-09	6.910E-09
16	24140.29	3.110E-09	2.560E-09	1.990E-09	2.490E-09	1.670E-09	1.120E-09	2.420E-09	3.710E-09
17	32187.00	1.920E-09	1.590E-09	1.200E-09	1.620E-09	1.090E-09	8.630E-10	1.690E-09	2.350E-09
18	40233.79	1.310E-09	1.090E-09	9.380E-10	9.310E-10	7.800E-10	5.330E-10	1.250E-09	1.640E-09
19	48280.48	9.500E-10	8.040E-10	7.290E-10	6.820E-10	5.950E-10	2.670E-10	4.860E-10	1.220E-09
20	56327.29	7.330E-10	6.180E-10	5.280E-10	5.230E-10	2.890E-10	2.080E-10	3.760E-10	9.450E-10
21	64373.99	5.800E-10	4.910E-10	4.320E-10	4.150E-10	2.280E-10	1.660E-10	3.000E-10	7.590E-10
22	72420.75	4.750E-10	4.020E-10	3.640E-10	2.710E-10	1.870E-10	1.370E-10	2.470E-10	6.290E-10
23	80467.44	3.950E-10	3.340E-10	3.110E-10	2.260E-10	1.570E-10	1.150E-10	2.060E-10	5.300E-10

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/Q DEPL							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	2.550E-10	2.080E-09	1.490E-09	1.400E-09	2.950E-09	6.250E-09	5.230E-09	2.730E-09
2	402.30	6.950E-09	5.560E-08	4.570E-08	4.640E-08	8.340E-08	1.560E-07	1.490E-07	1.390E-07
3	804.70	4.400E-09	2.430E-08	1.610E-08	2.090E-08	3.230E-08	5.770E-08	4.950E-08	7.440E-08
4	1207.00	3.210E-09	1.250E-08	7.840E-09	1.070E-08	1.900E-08	3.340E-08	2.540E-08	8.150E-08
5	1609.40	3.340E-09	1.010E-08	7.660E-09	8.710E-09	1.980E-08	3.560E-08	2.630E-08	7.990E-08
6	2414.00	4.430E-09	9.220E-09	9.310E-09	9.010E-09	2.390E-08	4.410E-08	3.180E-08	6.760E-08
7	3218.70	5.010E-09	8.800E-09	1.020E-08	9.770E-09	2.480E-08	4.650E-08	3.460E-08	5.530E-08
8	4023.40	5.030E-09	8.270E-09	1.030E-08	9.840E-09	2.370E-08	4.520E-08	3.510E-08	4.540E-08
9	4828.10	4.070E-09	7.540E-09	9.750E-09	9.420E-09	2.190E-08	4.240E-08	3.410E-08	3.790E-08
10	5632.70	4.600E-09	6.870E-09	9.170E-09	8.910E-09	2.000E-08	3.940E-08	3.290E-08	3.220E-08
11	6437.40	4.330E-09	6.270E-09	8.590E-09	8.400E-09	1.830E-08	3.660E-08	3.150E-08	2.780E-08
12	7242.10	4.080E-09	5.760E-09	8.060E-09	7.920E-09	1.680E-08	3.410E-08	3.010E-08	2.440E-08
13	8046.80	3.030E-09	5.300E-09	7.550E-09	7.440E-09	1.540E-08	3.180E-08	2.860E-08	2.160E-08
14	12070.10	2.030E-09	3.690E-09	5.520E-09	5.500E-09	1.060E-08	2.280E-08	2.160E-08	1.340E-08
15	16093.49	2.200E-09	2.730E-09	4.280E-09	4.270E-09	7.800E-09	1.730E-08	1.630E-08	1.020E-08
16	24140.29	1.510E-09	1.820E-09	2.900E-09	2.910E-09	5.040E-09	1.140E-08	1.110E-08	5.900E-09
17	32187.00	1.140E-09	1.340E-09	2.190E-09	2.190E-09	3.600E-09	9.600E-09	9.970E-09	3.900E-09
18	40233.79	9.140E-10	1.050E-09	1.740E-09	2.150E-09	3.720E-09	7.400E-09	7.550E-09	2.930E-09
19	48280.48	7.570E-10	8.530E-10	1.440E-09	1.760E-09	3.000E-09	5.970E-09	6.010E-09	2.290E-09
20	56327.29	5.460E-10	7.170E-10	1.220E-09	1.490E-09	2.500E-09	4.970E-09	4.950E-09	1.850E-09
21	64373.99	7.900E-10	6.170E-10	1.060E-09	1.290E-09	2.130E-09	4.240E-09	4.180E-09	1.530E-09
22	72420.75	7.590E-10	5.400E-10	9.390E-10	1.130E-09	1.860E-09	3.690E-09	3.610E-09	1.310E-09
23	80467.44	6.100E-10	4.000E-10	8.400E-10	1.010E-09	1.640E-09	3.250E-09	3.160E-09	1.110E-09

Table 4.1-8

DEPOSITION FACTOR - MAIN STACK - JAN - MAR 1980

RECPT# NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		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
1	201.20	2.370E-09	3.080E-09	8.860E-10	3.760E-10	2.730E-10	4.890E-10	2.300E-10	1.530E-10
2	402.30	1.220E-08	1.560E-08	3.060E-09	1.800E-09	9.290E-10	1.320E-09	4.060E-10	3.260E-10
3	804.70	6.890E-09	8.440E-09	2.460E-09	1.910E-09	7.240E-10	7.930E-10	3.470E-10	2.820E-10
4	1207.00	3.580E-09	5.620E-09	1.520E-09	2.070E-09	5.700E-10	4.900E-10	2.640E-10	3.040E-10
5	1609.40	2.370E-09	4.920E-09	1.040E-09	1.660E-09	4.330E-10	3.350E-10	2.150E-10	2.920E-10
6	2414.00	1.200E-09	2.490E-09	5.390E-10	8.940E-10	2.550E-10	1.860E-10	1.420E-10	2.150E-10
7	3218.70	8.070E-10	1.570E-09	3.370E-10	5.670E-10	1.710E-10	1.220E-10	9.840E-11	1.550E-10
8	4023.40	5.940E-10	1.100E-09	2.300E-10	3.900E-10	1.210E-10	8.620E-11	7.220E-11	1.170E-10
9	4828.10	4.110E-10	7.930E-10	1.660E-10	2.820E-10	8.940E-11	6.300E-11	5.460E-11	9.000E-11
10	5632.70	3.080E-10	6.030E-10	1.260E-10	2.130E-10	6.870E-11	4.840E-11	4.320E-11	7.190E-11
11	6437.40	2.440E-10	4.760E-10	9.890E-11	1.670E-10	5.450E-11	3.860E-11	3.520E-11	5.900E-11
12	7242.10	1.980E-10	3.840E-10	7.900E-11	1.320E-10	4.400E-11	3.170E-11	2.950E-11	4.940E-11
13	8046.80	1.670E-10	3.180E-10	6.590E-11	1.100E-10	3.710E-11	2.670E-11	2.600E-11	4.200E-11
14	12070.10	1.530E-10	1.720E-10	3.170E-11	5.230E-11	2.030E-11	1.330E-11	1.300E-11	2.170E-11
15	16093.49	1.580E-10	1.120E-10	1.910E-11	3.120E-11	1.710E-11	8.180E-12	7.820E-12	5.910E-11
16	24140.29	6.220E-11	4.900E-11	9.650E-12	1.510E-11	8.990E-12	4.220E-12	3.890E-12	3.150E-11
17	32187.00	3.120E-11	2.750E-11	6.330E-12	9.070E-12	5.560E-12	2.730E-12	2.560E-12	1.850E-11
18	40233.79	1.870E-11	1.770E-11	4.810E-12	9.290E-12	3.690E-12	6.770E-12	2.250E-12	1.210E-11
19	48280.48	1.260E-11	1.250E-11	3.970E-12	6.420E-12	2.920E-12	2.660E-12	3.780E-12	8.620E-12
20	56327.29	9.070E-12	9.230E-12	4.540E-12	4.690E-12	1.960E-12	1.990E-12	2.830E-12	6.410E-12
21	64373.99	6.820E-12	7.110E-12	3.840E-12	3.570E-12	1.480E-12	1.540E-12	2.190E-12	4.930E-12
22	72420.75	5.360E-12	5.700E-12	3.240E-12	2.590E-12	1.190E-12	1.240E-12	1.770E-12	3.910E-12
23	80467.44	4.290E-12	4.640E-12	2.770E-12	2.110E-12	9.780E-13	1.020E-12	1.450E-12	3.150E-12
RECPT# NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		N - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5
1	201.20	3.830E-10	2.370E-09	1.450E-09	1.450E-09	3.140E-09	7.350E-09	4.820E-09	2.370E-09
2	402.30	0.000E-10	5.000E-09	3.070E-09	3.070E-09	6.630E-09	1.550E-08	1.020E-08	6.730E-09
3	804.70	5.640E-10	3.280E-09	2.060E-09	2.920E-09	4.560E-09	1.050E-08	6.900E-09	6.200E-09
4	1207.00	4.060E-10	1.970E-09	1.330E-09	1.230E-09	3.170E-09	6.870E-09	4.480E-09	4.030E-09
5	1609.40	3.190E-10	1.340E-09	9.620E-10	8.470E-10	2.430E-09	5.030E-09	3.250E-09	2.670E-09
6	2414.00	2.050E-10	7.590E-10	5.780E-10	4.850E-10	1.530E-09	3.050E-09	1.950E-09	1.410E-09
7	3218.70	1.410E-10	4.920E-10	3.850E-10	3.160E-10	1.040E-09	2.050E-09	1.300E-09	8.930E-10
8	4023.40	1.030E-10	3.450E-10	2.750E-10	2.220E-10	7.560E-10	1.470E-09	9.320E-10	6.170E-10
9	4828.10	7.710E-11	2.510E-10	2.040E-10	1.620E-10	5.660E-10	1.090E-09	6.090E-10	4.470E-10
10	5632.70	6.070E-11	1.940E-10	1.590E-10	1.260E-10	4.450E-10	8.510E-10	5.370E-10	3.410E-10
11	6437.40	4.940E-11	1.560E-10	1.290E-10	1.010E-10	3.610E-10	6.890E-10	4.350E-10	2.690E-10
12	7242.10	4.140E-11	1.310E-10	1.000E-10	8.490E-11	3.030E-10	5.780E-10	3.640E-10	2.170E-10
13	8046.80	3.530E-11	1.120E-10	9.200E-11	7.240E-11	2.580E-10	4.920E-10	3.100E-10	1.800E-10
14	12070.10	1.820E-11	5.750E-11	4.750E-11	3.730E-11	1.330E-10	2.540E-10	1.600E-10	8.750E-11
15	16093.49	1.120E-11	3.570E-11	2.930E-11	2.310E-11	8.190E-11	1.570E-10	9.850E-11	5.160E-11
16	24140.29	5.620E-12	1.070E-11	1.750E-11	1.210E-11	4.140E-11	8.000E-11	5.050E-11	2.640E-11
17	32187.00	3.540E-12	1.240E-11	9.720E-12	7.900E-12	2.630E-11	5.150E-11	3.150E-11	1.740E-11
18	40233.79	2.450E-12	8.860E-12	6.820E-12	5.630E-12	1.790E-11	3.570E-11	2.200E-11	1.300E-11
19	48280.48	1.790E-12	6.690E-12	5.040E-12	4.170E-12	1.300E-11	2.610E-11	1.620E-11	1.060E-11
20	56327.29	1.370E-12	5.120E-12	3.870E-12	3.210E-12	9.650E-12	1.990E-11	1.260E-11	8.910E-12
21	64373.99	1.120E-12	4.070E-12	3.060E-12	2.540E-12	7.750E-12	1.560E-11	1.010E-11	7.660E-12
22	72420.75	2.520E-12	3.350E-12	2.500E-12	2.000E-12	6.200E-12	1.270E-11	8.330E-12	6.600E-12
23	80467.44	2.200E-12	2.730E-12	2.070E-12	1.720E-12	5.190E-12	1.040E-11	7.060E-12	5.750E-12

Table 4.1-9

Table 4.1-10

UNDEPLETED DISPERSION FACTOR - MAIN STACK - APR - JUN 1980

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/0							
		S - (1) SSW - (2) SW - (3) VSW - (4) SW - (5) VSW - (6) NW - (7) NNW - (8) NW - (9) NNE - (10) NE - (11) ENE - (12) E - (13) ESE - (14) SE - (15) SSE - (16) SSE							
		0.0	22.5	45.0	57.5	90.0	112.5	135.0	157.5
1	201.20	0.000E-09	1.310E-08	9.870E-09	1.970E-09	5.120E-09	2.130E-09	3.560E-09	3.000E-10
2	402.30	2.750E-07	3.260E-07	8.860E-08	6.660E-08	9.300E-08	4.840E-08	5.520E-08	8.190E-09
3	604.70	2.530E-07	1.290E-07	9.090E-08	6.490E-08	5.140E-08	3.260E-08	3.100E-08	7.300E-09
4	1207.00	2.410E-07	1.850E-07	1.180E-07	1.060E-07	6.370E-08	4.270E-08	2.460E-08	6.200E-09
5	1609.40	3.150E-07	2.210E-07	1.400E-07	1.510E-07	7.600E-08	5.260E-08	2.740E-08	7.620E-09
6	2414.00	2.270E-07	1.170E-07	1.290E-07	1.290E-07	7.800E-08	5.600E-08	3.510E-08	1.320E-08
7	3218.70	1.540E-07	7.550E-08	9.280E-08	1.030E-07	6.780E-08	5.090E-08	3.710E-08	1.680E-08
8	4023.40	1.110E-07	5.410E-08	7.400E-08	8.270E-08	5.720E-08	4.380E-08	3.570E-08	1.760E-08
9	4828.10	8.610E-08	4.150E-08	6.100E-08	6.790E-08	4.830E-08	3.750E-08	3.280E-08	1.740E-08
10	5632.70	6.920E-08	3.330E-08	5.110E-08	5.690E-08	4.140E-08	3.240E-08	3.000E-08	1.650E-08
11	6437.40	5.730E-08	2.760E-08	4.360E-08	4.860E-08	3.590E-08	2.830E-08	2.730E-08	1.560E-08
12	7242.10	4.840E-08	2.330E-08	3.780E-08	4.210E-08	3.150E-08	2.490E-08	2.500E-08	1.470E-08
13	8046.80	4.160E-08	2.010E-08	3.320E-08	3.700E-08	3.620E-08	2.360E-08	2.050E-08	1.370E-08
14	12070.10	2.390E-08	1.170E-08	2.000E-08	2.330E-08	2.090E-08	1.460E-08	1.630E-08	9.940E-09
15	16093.49	1.620E-08	8.020E-09	1.390E-08	1.540E-08	1.420E-08	1.020E-08	1.630E-08	1.310E-08
16	24140.29	9.510E-09	4.720E-09	8.050E-09	9.160E-09	8.150E-09	6.070E-09	9.780E-09	7.610E-09
17	32187.00	6.560E-09	3.290E-09	5.690E-09	6.430E-09	5.500E-09	4.480E-09	7.030E-09	5.220E-09
18	40233.79	4.940E-09	2.490E-09	4.290E-09	5.150E-09	4.170E-09	3.600E-09	5.380E-09	3.910E-09
19	48280.48	3.950E-09	2.000E-09	3.420E-09	4.000E-09	3.310E-09	2.930E-09	4.740E-09	3.100E-09
20	56327.29	3.260E-09	1.660E-09	2.900E-09	3.360E-09	2.800E-09	2.390E-09	3.890E-09	2.550E-09
21	64373.99	2.760E-09	1.410E-09	2.450E-09	2.830E-09	2.360E-09	2.010E-09	3.280E-09	2.160E-09
22	72420.75	2.390E-09	1.220E-09	2.000E-09	2.400E-09	2.030E-09	1.730E-09	2.820E-09	1.860E-09
23	80467.44	2.100E-09	1.000E-09	1.850E-09	2.170E-09	1.700E-09	1.510E-09	2.470E-09	1.630E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/0							
		N - (9) NNE - (10) NE - (11) ENE - (12) E - (13) ESE - (14) SE - (15) SSE - (16) SSE							
		100.0	202.5	225.0	247.5	270.0	292.5	315.0	337.5
1	201.20	0.050E-37	1.120E-09	5.840E-10	4.950E-10	1.130E-09	1.680E-09	1.440E-09	1.480E-09
2	402.30	2.690E-17	2.070E-08	1.650E-08	1.510E-08	4.090E-08	5.390E-08	4.840E-08	6.430E-08
3	604.70	2.090E-11	1.590E-08	1.130E-08	1.050E-08	1.710E-08	3.370E-08	2.270E-08	4.550E-08
4	1207.00	3.870E-10	1.330E-08	9.410E-09	7.430E-09	8.710E-09	2.210E-08	1.410E-08	6.950E-08
5	1609.40	1.420E-09	1.400E-08	1.040E-08	6.870E-09	7.740E-09	1.840E-08	1.360E-08	7.570E-08
6	2414.00	4.680E-09	1.630E-08	1.500E-08	7.520E-09	6.630E-09	1.690E-08	1.590E-08	7.030E-08
7	3218.70	6.980E-09	1.690E-08	1.790E-08	7.690E-09	9.530E-09	1.680E-08	1.730E-08	5.900E-08
8	4023.40	7.900E-09	1.630E-08	1.850E-08	7.710E-09	9.750E-09	1.610E-08	1.720E-08	5.050E-08
9	4828.10	7.950E-09	1.500E-08	1.790E-08	7.240E-09	9.400E-09	1.510E-08	1.640E-08	4.280E-08
10	5632.70	7.750E-09	1.370E-08	1.700E-08	6.760E-09	9.110E-09	1.410E-08	1.550E-08	3.690E-08
11	6437.40	7.430E-09	1.260E-08	1.600E-08	6.290E-09	8.700E-09	1.320E-08	1.480E-08	3.210E-08
12	7242.10	7.090E-09	1.160E-08	1.510E-08	5.800E-09	8.310E-09	1.240E-08	1.380E-08	2.830E-08
13	8046.80	6.710E-09	1.070E-08	1.410E-08	5.500E-09	7.910E-09	1.160E-08	1.300E-08	2.520E-08
14	12070.10	4.900E-09	7.360E-09	1.030E-08	4.030E-09	6.100E-09	8.100E-09	9.710E-09	1.600E-08
15	16093.49	3.840E-09	5.490E-09	7.940E-09	3.130E-09	4.800E-09	6.780E-09	7.640E-09	1.280E-08
16	24140.29	2.560E-09	3.510E-09	5.300E-09	2.140E-09	3.450E-09	4.720E-09	5.310E-09	7.710E-09
17	32187.00	1.900E-09	2.350E-09	3.940E-09	1.620E-09	2.670E-09	4.430E-09	5.940E-09	5.420E-09
18	40233.79	1.500E-09	1.900E-09	3.110E-09	1.590E-09	2.670E-09	3.520E-09	4.630E-09	4.120E-09
19	48280.48	1.230E-09	1.610E-09	2.560E-09	1.340E-09	2.560E-09	2.910E-09	3.780E-09	3.310E-09
20	56327.29	1.040E-09	1.300E-09	2.160E-09	1.100E-09	2.170E-09	2.400E-09	3.170E-09	2.750E-09
21	64373.99	1.020E-09	1.160E-09	1.870E-09	1.000E-09	1.800E-09	2.150E-09	2.730E-09	2.340E-09
22	72420.75	1.350E-09	1.070E-09	1.650E-09	8.530E-10	1.660E-09	1.960E-09	2.390E-09	2.030E-09
23	80467.44	1.200E-09	9.010E-10	1.470E-09	7.520E-10	1.400E-09	1.700E-09	2.120E-09	1.700E-09

DEPLETED DISPERSION FACTOR - MAIN STACK - APR - JUN 1988

Table 4.1-11

RECPT NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O DEPL									
		S - (1) 0.0	SSW - (2) 22.5	SV - (3) 45.0	WSV - (4) 67.5	W - (5) 90.0	VNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5		
1	201.20	0.000E-09	1.310E-08	9.070E-09	1.970E-09	5.120E-09	2.130E-09	3.560E-09	3.560E-09	3.000E-10	
2	492.30	2.600E-07	3.170E-07	8.700E-08	6.590E-08	9.260E-08	4.790E-08	5.470E-08	8.110E-09	8.110E-09	
3	304.70	2.460E-07	1.230E-07	8.830E-08	5.890E-08	4.970E-08	3.170E-08	3.000E-08	7.060E-09	7.060E-09	
4	1689.40	3.350E-07	1.750E-07	1.150E-07	1.040E-07	6.220E-08	4.180E-08	2.350E-08	5.930E-09	5.930E-09	
5	1689.40	3.350E-07	1.750E-07	1.150E-07	1.040E-07	6.220E-08	4.180E-08	2.350E-08	5.930E-09	5.930E-09	
6	2414.00	2.100E-07	9.750E-08	1.130E-07	1.250E-07	7.580E-08	5.510E-08	3.370E-08	1.290E-08	1.290E-08	
7	3218.70	1.330E-07	6.120E-08	8.890E-08	9.970E-08	6.540E-08	4.890E-08	3.550E-08	1.630E-08	1.630E-08	
8	4923.40	9.840E-08	4.230E-08	7.950E-08	7.970E-08	5.480E-08	4.170E-08	3.390E-08	1.730E-08	1.730E-08	
9	4828.10	7.510E-08	3.220E-08	5.770E-08	6.510E-08	4.660E-08	3.540E-08	2.120E-08	1.690E-08	1.690E-08	
10	5632.70	5.970E-08	2.530E-08	4.810E-08	5.440E-08	3.920E-08	3.040E-08	2.840E-08	1.600E-08	1.600E-08	
11	6437.40	4.890E-08	2.050E-08	4.890E-08	4.630E-08	3.390E-08	2.640E-08	2.580E-08	1.510E-08	1.510E-08	
12	7242.10	4.090E-08	1.710E-08	3.530E-08	4.000E-08	2.960E-08	2.320E-08	2.360E-08	1.420E-08	1.420E-08	
13	8046.00	3.490E-08	1.460E-08	3.000E-08	3.500E-08	2.300E-08	2.170E-08	3.010E-08	1.330E-08	1.330E-08	
14	12076.10	1.900E-08	7.930E-09	1.830E-08	2.000E-08	1.850E-08	1.320E-08	1.900E-08	9.550E-09	9.550E-09	
15	16093.40	1.220E-08	5.110E-09	1.250E-08	1.430E-08	1.210E-08	9.120E-09	1.490E-08	1.150E-08	1.150E-08	
16	24140.20	6.340E-09	2.690E-09	7.210E-09	8.310E-09	6.530E-09	5.300E-09	8.810E-09	6.080E-09	6.080E-09	
17	32187.00	3.900E-09	1.680E-09	4.900E-09	5.650E-09	4.190E-09	3.800E-09	6.170E-09	3.820E-09	3.820E-09	
18	40233.70	2.660E-09	1.160E-09	3.300E-09	3.130E-09	2.970E-09	2.330E-09	4.570E-09	2.650E-09	2.650E-09	
19	48280.40	1.940E-09	8.590E-10	2.850E-09	2.290E-09	2.250E-09	1.120E-09	1.810E-09	1.970E-09	1.970E-09	
20	56327.20	1.430E-09	6.630E-10	2.140E-09	1.760E-09	1.030E-09	8.620E-10	1.400E-09	1.530E-09	1.530E-09	
21	64373.90	1.170E-09	5.290E-10	1.770E-09	1.390E-09	8.050E-10	6.860E-10	1.120E-09	1.230E-09	1.230E-09	
22	72420.75	9.550E-10	4.340E-10	1.580E-09	8.900E-10	6.610E-10	5.630E-10	9.190E-10	1.020E-09	1.020E-09	
23	80467.44	7.940E-10	3.630E-10	1.290E-09	7.400E-10	5.520E-10	4.690E-10	7.670E-10	8.610E-10	8.610E-10	

RECPT NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES X/O DEPL									
		H - (9) 180.0	NNE - (10) 202.5	NE - (11) 225.0	ENE - (12) 247.5	E - (13) 270.0	ESE - (14) 292.5	SE - (15) 315.0	SSE - (16) 337.5		
1	201.20	6.050E-37	1.120E-09	5.940E-10	4.950E-10	1.130E-09	1.680E-09	1.440E-09	1.480E-09	1.480E-09	
2	492.30	2.690E-17	2.840E-08	1.630E-08	1.490E-08	4.050E-08	5.340E-08	4.790E-08	4.790E-08	6.375E-08	
3	304.70	2.990E-11	1.530E-08	1.100E-08	1.020E-08	1.650E-08	3.260E-08	2.200E-08	4.420E-08	4.420E-08	
4	1207.00	3.860E-10	1.260E-08	8.970E-09	7.060E-09	8.270E-09	2.100E-08	1.340E-08	6.820E-08	6.820E-08	
5	1689.40	1.410E-09	1.320E-08	9.960E-09	6.560E-09	7.300E-09	1.730E-08	1.290E-08	7.420E-08	7.420E-08	
6	2414.00	4.640E-09	1.350E-08	1.450E-08	7.150E-09	8.190E-09	1.590E-08	1.520E-08	6.360E-08	6.360E-08	
7	3218.70	6.900E-09	1.540E-08	1.730E-08	7.470E-09	9.050E-09	1.500E-08	1.650E-08	5.840E-08	5.840E-08	
8	4023.40	7.310E-09	1.540E-08	1.790E-08	7.290E-09	9.260E-09	1.520E-08	1.650E-08	4.900E-08	4.900E-08	
9	4828.10	7.350E-09	1.420E-08	1.730E-08	6.840E-09	9.020E-09	1.420E-08	1.580E-08	4.150E-08	4.150E-08	
10	5632.70	7.650E-09	1.300E-08	1.640E-08	6.360E-09	8.670E-09	1.330E-08	1.490E-08	3.560E-08	3.560E-08	
11	6437.40	7.330E-09	1.190E-08	1.540E-08	5.930E-09	8.200E-09	1.230E-08	1.410E-08	3.190E-08	3.190E-08	
12	7242.10	6.990E-09	1.090E-08	1.360E-08	5.490E-09	7.510E-09	1.100E-08	1.330E-08	2.730E-08	2.730E-08	
13	8046.00	6.620E-09	1.000E-08	1.360E-08	5.170E-09	7.510E-09	1.100E-08	1.290E-08	2.430E-08	2.430E-08	
14	12076.10	4.900E-09	6.330E-09	9.390E-09	3.750E-09	5.700E-09	8.120E-09	9.290E-09	1.520E-08	1.520E-08	
15	16093.40	3.770E-09	5.160E-09	7.570E-09	2.900E-09	4.590E-09	6.370E-09	7.290E-09	1.180E-08	1.180E-08	
16	24140.20	2.540E-09	3.470E-09	5.010E-09	1.960E-09	3.230E-09	4.400E-09	5.600E-09	6.010E-09	6.010E-09	
17	32187.00	1.460E-09	2.170E-09	3.710E-09	1.430E-09	2.490E-09	3.400E-09	4.400E-09	4.610E-09	4.610E-09	
18	40233.70	1.460E-09	1.430E-09	2.390E-09	1.430E-09	2.410E-09	2.690E-09	3.800E-09	3.390E-09	3.390E-09	
19	48280.40	1.020E-09	1.030E-09	2.020E-09	1.040E-09	2.040E-09	2.030E-09	3.100E-09	2.670E-09	2.670E-09	
20	56327.20	1.020E-09	9.930E-10	1.740E-09	8.750E-10	1.660E-09	1.970E-09	2.570E-09	1.780E-09	1.780E-09	
21	64373.90	1.320E-09	8.630E-10	1.530E-09	7.700E-10	1.550E-09	1.730E-09	2.240E-09	1.520E-09	1.520E-09	
22	72420.75	1.320E-09	8.630E-10	1.530E-09	7.700E-10	1.550E-09	1.730E-09	2.240E-09	1.520E-09	1.520E-09	
23	80467.44	9.760E-10	7.050E-10	1.360E-09	6.060E-10	1.370E-09	1.540E-09	1.980E-09	1.310E-09	1.310E-09	

DEPOSITION FACTOR - MAIN STACK - APR - JUN 1988

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		S - (1) 8.8	SSW - (2) 22.5	SW - (3) 45.8	WSW - (4) 67.5	W - (5) 98.8	WNW - (6) 112.5	NW - (7) 135.8	NNW - (8) 157.5
1	201.20	3.310E-09	4.150E-09	1.690E-09	7.480E-10	1.440E-09	1.070E-09	2.390E-09	7.170E-10
2	402.30	1.550E-08	1.040E-08	5.210E-09	2.190E-09	4.510E-09	3.070E-09	5.000E-09	1.520E-09
3	804.70	7.760E-09	8.540E-09	3.880E-09	1.440E-09	2.740E-09	2.240E-09	3.410E-09	1.070E-09
4	1207.00	3.930E-09	5.090E-09	2.480E-09	1.140E-09	1.840E-09	1.760E-09	2.320E-09	8.010E-10
5	1609.40	2.520E-09	3.570E-09	1.750E-09	8.630E-10	1.320E-09	1.360E-09	1.750E-09	6.430E-10
6	2414.00	1.340E-09	1.780E-09	9.330E-10	4.730E-10	7.520E-10	8.460E-10	1.000E-09	4.210E-10
7	3218.70	1.090E-09	1.130E-09	5.930E-10	3.070E-10	5.000E-10	5.780E-10	7.350E-10	2.910E-10
8	4023.40	8.900E-10	7.950E-10	4.100E-10	2.150E-10	3.560E-10	4.180E-10	5.310E-10	2.130E-10
9	4820.10	5.800E-10	5.690E-10	2.980E-10	1.570E-10	2.620E-10	3.110E-10	3.960E-10	1.610E-10
10	5632.70	4.350E-10	4.320E-10	2.270E-10	1.200E-10	2.020E-10	2.410E-10	3.110E-10	1.270E-10
11	6437.40	3.460E-10	3.410E-10	1.790E-10	9.470E-11	1.610E-10	1.930E-10	2.520E-10	1.040E-10
12	7242.10	2.840E-10	2.760E-10	1.440E-10	7.660E-11	1.310E-10	1.570E-10	2.110E-10	8.690E-11
13	8046.80	2.460E-10	2.300E-10	1.190E-10	6.350E-11	1.090E-10	1.320E-10	1.860E-10	7.400E-11
14	12070.10	3.240E-10	1.400E-10	5.790E-11	3.120E-11	5.930E-11	6.590E-11	9.320E-11	3.020E-11
15	16093.49	3.770E-10	1.010E-10	3.510E-11	1.900E-11	4.830E-11	4.040E-11	5.610E-11	1.310E-11
16	24140.29	1.430E-10	4.300E-11	1.760E-11	9.590E-12	2.840E-11	2.000E-11	2.830E-11	6.850E-12
17	32187.00	6.860E-11	2.360E-11	1.120E-11	6.260E-12	1.940E-11	1.200E-11	1.780E-11	3.970E-12
18	40233.79	3.970E-11	1.500E-11	8.050E-12	1.600E-11	1.450E-11	1.420E-11	1.300E-11	2.590E-12
19	48200.40	2.610E-11	1.060E-11	6.340E-12	1.070E-11	1.130E-11	8.210E-12	1.360E-11	1.830E-12
20	56327.29	1.840E-11	7.830E-12	6.760E-12	7.590E-12	7.140E-12	6.130E-12	1.010E-11	1.360E-12
21	64373.99	1.360E-11	6.030E-12	5.670E-12	5.650E-12	5.470E-12	4.750E-12	7.840E-12	1.040E-12
22	72420.75	1.060E-11	4.820E-12	5.090E-12	3.500E-12	4.410E-12	3.840E-12	6.330E-12	8.260E-13
23	80467.44	8.400E-12	3.920E-12	4.440E-12	2.820E-12	3.610E-12	3.140E-12	5.190E-12	6.670E-13

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES D/Q							
		N - (9) 188.8	NNE - (10) 202.5	NE - (11) 225.8	ENE - (12) 247.5	E - (13) 278.8	ESE - (14) 292.5	SE - (15) 315.8	SSE - (16) 337.5
1	201.20	1.690E-13	1.950E-09	1.020E-09	7.170E-10	1.130E-09	2.250E-09	1.330E-09	1.130E-09
2	402.30	1.300E-12	4.110E-09	2.160E-09	1.510E-09	2.380E-09	4.750E-09	2.810E-09	3.200E-09
3	804.70	2.660E-11	2.000E-09	1.520E-09	1.040E-09	1.580E-09	3.120E-09	1.880E-09	3.060E-09
4	1207.00	6.660E-11	1.000E-09	1.100E-09	7.180E-10	9.990E-10	1.900E-09	1.200E-09	2.010E-09
5	1609.40	7.740E-11	1.420E-09	8.720E-10	5.470E-10	7.100E-10	1.300E-09	8.560E-10	1.350E-09
6	2414.00	6.240E-11	0.820E-09	5.640E-10	3.430E-10	4.190E-10	7.440E-10	5.070E-10	7.140E-10
7	3218.70	4.640E-11	5.970E-10	3.080E-10	2.330E-10	2.770E-10	4.840E-10	3.360E-10	4.550E-10
8	4023.40	3.550E-11	4.310E-10	2.830E-10	1.690E-10	1.970E-10	3.410E-10	2.390E-10	3.150E-10
9	4820.10	2.780E-11	3.210E-10	2.130E-10	1.260E-10	1.450E-10	2.480E-10	1.760E-10	2.290E-10
10	5632.70	2.240E-11	2.520E-10	1.680E-10	9.930E-11	1.130E-10	1.920E-10	1.370E-10	1.740E-10
11	6437.40	1.840E-11	2.040E-10	1.370E-10	8.060E-11	9.120E-11	1.550E-10	1.110E-10	1.370E-10
12	7242.10	1.540E-11	1.710E-10	1.150E-10	6.760E-11	7.650E-11	1.300E-10	9.270E-11	1.110E-10
13	8046.80	1.310E-11	1.460E-10	9.770E-11	5.760E-11	6.520E-11	1.110E-10	7.900E-11	9.180E-11
14	12070.10	6.770E-12	7.540E-11	5.040E-11	2.970E-11	3.370E-11	5.710E-11	4.070E-11	4.470E-11
15	16093.49	4.110E-12	4.630E-11	3.100E-11	1.830E-11	2.080E-11	3.540E-11	2.520E-11	2.660E-11
16	24140.29	1.970E-12	2.360E-11	1.550E-11	9.250E-12	1.070E-11	1.850E-11	1.300E-11	1.420E-11
17	32187.00	1.170E-12	1.500E-11	9.780E-12	5.880E-12	6.990E-12	1.220E-11	8.240E-12	1.040E-11
18	40233.79	7.710E-13	1.050E-11	6.740E-12	4.000E-12	4.860E-12	8.610E-12	5.870E-12	8.870E-12
19	48200.40	5.480E-13	7.710E-12	4.930E-12	2.960E-12	3.580E-12	6.380E-12	4.500E-12	8.010E-12
20	56327.29	4.090E-13	5.000E-12	3.760E-12	2.250E-12	2.760E-12	4.910E-12	3.600E-12	7.350E-12
21	64373.99	5.070E-13	4.600E-12	2.960E-12	1.770E-12	2.210E-12	3.880E-12	3.140E-12	6.710E-12
22	72420.75	3.660E-13	3.700E-12	2.390E-12	1.430E-12	1.810E-12	3.170E-12	2.740E-12	6.070E-12
23	80467.44	3.460E-13	3.100E-12	1.970E-12	1.180E-12	1.510E-12	2.620E-12	2.430E-12	5.460E-12

Table 4.1-12

TABLE 4.1-13
SPECIAL PARAMETERS USED IN
FINITE CLOUD MODEL

Stack Height	100 meters (above grade)
Shielding Factor	0.7
Depth for total Body Dose	5 cm.
Human Tissue Density	1 gm./cm. ³

Table 4.2-1
Maximum Individual Locations and Pathways¹

January - June 1980

Pathway	0.6 miles ESE	0.7 miles W	2.2 miles W	2.3 miles S
Noble Gas Immersion	Yes	Yes	Yes	Yes
Inhalation	Yes	Yes	Yes	Yes
Fruit & Vegetable Garden	Yes	Yes	Yes	Yes
Cows Milk	No	No	Yes	No
Goats Milk	No	No	No	No

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

Table 4.2-2
 January - June 1980 Caseous Release Maximum Individual
 Doses from all Pathways for Adults (MREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.6 Miles ESE	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.02	0.02
0.7 Mile W	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.03	0.02
2.2 Miles W	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.01
2.3 Miles S	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02

*Maximum dose location

Table 4.2-3
 January-June 1980 Gaseous Release Maximum Individual
 Doses from all Pathways for Teenagers (MRPM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.6 Miles ESE	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	0.02
0.7 Mile	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.03	0.02
2.2 Miles W	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.01	0.01
2.3 Miles S	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.02

*Maximum dose located for infant age group.

Table 4.2-4
 January-June 1980 Gaseous Release Maximum Individual
 Doses from all Pathways for Children (MREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.6 Miles ESE	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	0.02
0.7 Mile W	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.03	0.02
2.2 Miles W	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.01	0.01
2.3 Miles S	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02

*Maximum dose location for Infant age group.

Table 4, 2-5
 January-June 1980 Gaseous Release Maximum Individual
 Doses from all Pathways for Infants (MREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-III	Skin	Total Body
*0.6 Miles ESE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02
0.7 Mile SSE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03	0.02
2.2 Miles W	< 0.01	< 0.01	0.05	< 0.01	< 0.01	< 0.01	0.01	0.01
2.3 Miles S	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.02

*Maximum dose location for infant age group.

Table 4.2-6
 January-June 1980 Gaseous Release Maximum
Individual Doses 0.6 Miles ESE

<u>Age Group</u>	<u>Bone (MREM)</u>	<u>Liver (MREM)</u>	<u>Thyroid (MREM)</u>	<u>Kidney (MREM)</u>	<u>Lung (MREM)</u>	<u>GI-LLI (MREM)</u>	<u>Skin (MREM)</u>	<u>Total Body (MREM)</u>
Adult	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	0.02
Teenager	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.03	0.02
Child	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	0.02
Infant	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02

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Note -- (1) Organ Doses are based on radioiodine and particulates only.

(2) Total body doses are from all isotopes

(3) Skin doses are from noble gases only

Table 4.3-1
Population Distribution

SECTOR	Distance (Miles/Hecters)									
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0
	804.7	2414.0	4021.4	5632.7	7242.0	12070.1	24140.2	40233.6	56327.0	72420.5
S	8.00E+00	7.44E+02	3.88E+02	6.26E+02	1.74E+02	4.81E+02	1.18E+04	2.07E+04	5.19E+03	7.20E+02
SSW	1.40E+01	5.80E+01	9.90E+01	1.12E+02	1.32E+02	1.12E+02	1.46E+04	1.62E+04	2.90E+02	2.10E+02
SW	1.00E+01	5.60E+01	1.79E+02	1.86E+02	5.04E+02	6.30E+01	1.16E+04	1.11E+05	9.00E+04	7.64E+04
WSW	8.00E+00	1.37E+02	7.02E+02	2.46E+02	3.36E+02	5.85E+02	9.89E+03	7.68E+04	9.87E+04	3.47E+05
W	8.00E+00	2.99E+02	3.39E+02	1.28E+03	3.55E+03	6.95E+03	1.61E+04	8.38E+04	1.07E+05	3.97E+05
WNW	1.44E+02	4.60E+01	0.	0.	1.39E+03	1.69E+04	3.36E+04	1.71E+05	1.33E+05	1.55E+05
NW	1.00E+00	0.	0.	0.	3.00E+00	1.58E+04	5.15E+04	1.75E+05	8.19E+05	1.01E+05
NNW	0.	0.	0.	0.	3.00E+00	5.05E+03	2.55E+04	1.43E+04	3.16E+04	4.15E+05
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.01E+04
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NE	0.	0.	0.	0.	0.	6.	0.	0.	0.	0.
ENE	0.	0.	0.	0.	0.	0.	0.	1.82E+03	0.	0.
E	0.	0.	0.	0.	0.	0.	0.	4.22E+03	3.19E+03	0.
ESE	0.	0.	0.	0.	0.	0.	0.	1.61E+04	1.70E+04	0.
SE	1.33E+02	1.79E+02	9.50E+01	0.	0.	0.	9.90E+02	3.87E+04	3.12E+03	0.
SSE	5.60E+01	3.33E+02	7.47E+02	7.77E+02	2.34E+02	4.15E+02	7.24E+03	1.64E+04	0.	0.

Table 4.3-2
Population Doses Via Major Pathways Resulting from
Gaseous Effluents during January-June 1980

Pathway	Thyroid (MAN-REM)	Total Body (MAN-REM)
Noble Gas Immersion (Gamma)	0.24	0.24
Ground Plane Deposition	0.04	0.04
Inhalation	0.04	0.005

5. OFF-SITE DOSES FROM DIRECT RADIATION

Doses due to direct radiation as measured by thermoluminescent dosimeter for the period January-June, 1980 were as follows:

	<u>Average Dose Rate * uR/hour</u>
Exclusion Area (0.25-0.68 Miles from the Plant)	16.3
Distant Neighborhood (0.7-6.5 Miles from the Plant)	14.2
Background (8-23 Miles from the Plant)	16.7

These measured values indicate a small but measurable dose contribution due to direct radiation at locations near the Pilgrim Station

*Including natural background radiation

REFERENCES

1. "Pilgrim Station Unit 1 Appendix I Evaluation" Submitted in Accordance with 10CFR 50 Appendix I, April 1977.
2. Pilgrim Station Environmental Report, Amendment 4 April 1975 pg. 2-329/330.