Pilgrim Nuclear Power Station

Radioactive Effluent and Waste Disposal Report including Radiological Impact on Humans

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July 1 through December 31, 1984

Environmental and Radiological Health and Safety Group

Date: March 1, 1985

BOSTON EDISON
ENERGY FOR TOMORROW

PILGRIM NUCLEAR POWER STATION

RADIOACTIVE EFFLUENT AND WASTE DISPOSAL REPORT

INCLUDING RADIOLOGICAL IMPACT ON HUMANS

JULY 1 THROUGH DECEMBER 31, 1984

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Date of Submittal: March 1, 1985

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1. INTRODUCTION AND SUMMARY

This report is issued for the period July - December 1984 in accordance with NRC Regulatory Guide 1.21 "Measuring, Evaluating and Reporting Radioactivity in Solid Wastes ar Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants" (Rev 1). The information supplied includes doses from liquid releases, doses from gaseous releases and direct gamma radiation doses.

2. EFFLUENT, WASTE DISPOSAL AND WIND DATA

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

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

Supplemental Information
July - December, 1984

Facility Pilgrim Nuclear Power Station License DPR-35

1. Regulatory Limits

   a. Fission and activation gases: $\frac{Qs}{0.25/\bar{E}} + \frac{Qv}{0.10/\bar{E}} \leq 1$

   b. Iodines: 2Ci/Quarter

   c. Particulates, half-lives >8 days: 13 (1.8E4Qs + 1.8E5Qv) $\leq$ 1

   d. Liquid effluents: 10Ci/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 X 10^{-5} μCi/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. ~~XXXXXXX~~

   $\bar{E}$ for Qs = 0.795 : $\bar{E}$ for Qv = 0.434

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: } Istopic
   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: 349
      2. Total time period for batch releases: 1464.73 hours
      3. Maximum time period for a batch release: – 67.33 hours
      4. Average time period for batch releases: 4.20 hours
      5. Minimum time period for a batch release: – 0.25 hour
      6. Average stream flow during periods of release of effluent into a flowing stream: 9.53E + 4 GPM

   b. Gaseous (Not Applicable)

6. Abnormal Releases

   a. NONE
   b.

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

July - December, 1984

	Unit	Quarter (3)	Quarter (4)	Est. Total Error, %
A. Fission and activation gases				
1. Total release	Ci	N/A*	<1.84E+1	4.30E+1
2. Average release rate for period	μCi/sec		<2.31E0	
3. Percent of Technical Specification limit	%		<7.33E-4	
B. Iodines				
1. Total iodine-131	Ci	N/A*	<3.09E-5	3.50E+1
2. Average release rate for period	μCi/sec		<3.89E-6	
3. Percent of Technical Specification limit	%		<1.55E-3	
C. Particulates				
1. Particulates with half-lives > 8 days	Ci	1.74E-3	<8.03E-4	3.50E+1
2. Average release rate for period	μCi/sec	2.19E-4	<1.01E-4	
3. Percent of Technical Specification limit	%	5.12E-2	<1.75E-2	
4. Gross alpha radioactivity	Ci	3.81E-7	<5.14E-7	
D. Tritium				
1. Total release	Ci	2.16E-1	8.28E-2	5.25E+1
2. Average release rate for period	μCi/sec	2.72E-2	1.04E-2	
3. Percent of Technical Specification limit	%	N/A	N/A	

* Plant shut down since 12-10-83

TABLE 1B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1984)
GASEOUS EFFLUENTS – ELEVATED RELEASE

July - December, 1984

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	Quarter (3)	Quarter (4)	Quarter	Quarter
1. Fission gases					
krypton-85	Ci		<1.00E-5		
krypton-85m	Ci		1.67E0		
krypton-87	Ci		3.10E0		
krypton-88	Ci		4.27E0		
xenon-133	Ci		9.30E-1		
xenon-135	Ci		7.18E0		
xenon-135m	Ci		7.00E-2		
xenon-138	Ci		2.90E-1		
xenon-131m	Ci		-		
xenon-137	Ci		-		
xenon-133m	Ci		-		
Total for period	Ci		1.75E+1		
2. Iodines					
iodine-131	Ci		2.39E-5		
iodine-133	Ci		1.85E-3		
iodine-135	Ci		2.84E-3		
Total for period	Ci		4.71E-3		
3. Particulates					
strontium-89	Ci		1.58E-4		
strontium-90	Ci		1.29E-6		
cesium-134	Ci		-		
cesium-137	Ci		<1.35E-5		
barium-lanthanum-140	Ci		2.21E-5		
chromium-51	Ci		-		
manganese-54	Ci		-		
cobalt-58	Ci		-		
iron-59	Ci		-		
cobalt-60	Ci		<3.55E-5		
zinc-65	Ci		-		
zirconium-niobium-95	Ci		-		
cerium-141	Ci		-		
cerium-144	Ci		-		
ruthenium-103	Ci		-		
ruthenium-106	Ci		-		

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1984)
GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

July - December, 1984

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	Quarter(3)	Quarter (4)	Quarter	Quarter
1. Fission gases					
krypton-85	Ci		< 1.00E-6		
krypton-85m	Ci		< 2.00E-2		
krypton-87	Ci		< 6.00E-2		
krypton-88	Ci		< 8.00E-2		
xenon-133	Ci		< 6.00E-2		
xenon-135	Ci		6.80E-1		
xenon-135m	Ci		-		
xenon-138	Ci		-		
Total for period	Ci		9.00E-1		
2. Iodines					
iodine-131	Ci		< 7.03E-6		
iodine-133	Ci		< 4.32E-5		
iodine-135	Ci		< 5.59E-4		
Total for period	Ci		< 6.09E-4		
3. Particulates					
strontium-89	Ci	< 5.79E-7	1.52E-4		
strontium-90	Ci	< 1.94E-7	< 4.44E-7		
cesium-134	Ci	-			
cesium-137	Ci	6.53E-5	< 6.43E-5		
barium-lanthanum-140	Ci	-	< 9.00E-6		
manganese-54	Ci	1.19E-4			
cobalt-58	Ci	-			
iron-59	Ci	-			
cobalt-60	Ci	1.55E-3	< 3.47E-4		
zinc-65	Ci	-			
zirconium-niobium-95	Ci	-			
cerium-141	Ci	-			
ruthenium-103	Ci	-			
ruthenium-106	Ci	-			

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1984)

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

July - December, 1984

	Unit	Quarter (3)	Quarter (4)	Est. Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, noble gases, or alpha)	Ci	9.80E-1	2.09E0	3.54E+1
2. Average diluted concentration during period	μCi/ml	7.42E-8	1.13E-7	
3. Percent of applicable limit	%	9.80E0	2.09E+1	
B. Tritium				
1. Total release	Ci	1.48E0	2.77E0	3.55E+1
2. Average diluted concentration during period	μCi/ml	1.12E-7	1.50E-7	
3. Percent of applicable limit	%	1.12E0	1.50E0	
C. Dissolved and entrained gases				
1. Total release	Ci	-	1.72E-3	4.24E+1
2. Average diluted concentration during period	μCi/ml	-	9.30E-11	
3. Percent of applicable limit	%	-	-	
D. Gross alpha radioactivity				
1. Total release	Ci	< 1.95E-4	< 4.09E-4	5.00E+1
E. Volume of waste released (prior to dilution)	liters	2.92E+6	8.86E+6	2.00E+1
F. Volume of dilution water used during period	liters	1.32E+10	1.85E+10	2.00E+1

TABLE 2B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1984)

LIQUID EFFLUENTS

July - December, 1984

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	Quarter	Quarter	Quarter (3)	Quarter (4)
strontium-89	Ci			< 1.13E-4	< 3.62E-4
strontium-90	Ci			< 4.60E-4	5.36E-4
cesium-134	Ci			6.33E-3	9.46E-2
cesium-137	Ci			1.19E-1	1.08E0
iodine-131	Ci			-	-
cobalt-58	Ci			6.23E-5	4.46E-5
cobalt-60	Ci			5.23E-1	6.62E-1
iron-59	Ci			7.57E-7	-
zinc-65	Ci			2.15E-3	8.91E-3
manganese-54	Ci			1.09E-2	1.04E-2
chromium-51	Ci			5.85E-4	-
zirconimum-niobium-95	Ci			9.69E-5	3.96E-6
molybdenum 99-technetium 99m	Ci			-	-
barium-lanthanum-140	Ci			-	-
cerium-141	Ci			-	-
iodine-133	Ci			-	1.28E-3
cerium-144	Ci			1.27E-4	-
silver-110m	Ci			-	-
iron-55	Ci			1.63E-1	1.61E-1
unidentified	Ci			1.54E-1	7.11E-2
Total for period (above)	Ci			9.80E-1	2.09E0
xenon-133	Ci			-	-
xenon-135	Ci			-	1.72E-3

TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1984)
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
JULY - DECEMBER 1984

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

1. TYPE OF WASTE	UNIT	6 MONTH PERIOD	EST. TOTAL ERROR %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m^3	191.54	
	Ci	1163.75420	N/A
b. Dry compressible waste, contaminated equipment, etc.	m^3	1601.72	
	Ci	35.28364	N/A
c. Irradiated components, control rods, etc.	m^3		
	Ci	N/A	N/A
d. Other (Describe) miscellaneous low-level waste	m^3		
	Ci	N/A	N/A

2. ESTIMATE OF MAJOR NUCLIDE COMPOSITION. (by type of waste)		%	E(Curies)
a. Spent Resin, Filter Sludges, Evaporator Bottoms, etc.	Co-60	52.009	605.25724
	Co-58	.273	3.17331
	Cs-137	22.001	256.03506
	Cs-134	2.910	33.86401
	Fe-55	15.231	177.24940
	Fe-59	.005	.06036
	Sr-90	.213	2.48022
	Tc-99m	.004	.04499
	Zn-65	.460	5.35956
	Mn-54	2.253	26.22129
	Nb-95	.004	.04438
	Ce-141	.004	.04438
	Ce-144	.056	.65540
	Ru-103	.044	.04438
	Pu-241	.489	5.69442
	Cm-242	.010	.11635
	C-14	.023	.26446
	I-129	.002	.02123
	H-3	.012	.13868
	Ni-63	4.024	46.83004
	Sb-124	.006	.06776
	Co-57	.007	.08727
TOTALS		100.000	1163.75420

TABLE 3 (continued)

		%	E(Curies)
b. Dry Compressible Waste Contaminated Equipment	Co-60	67.566	23.83968
	Co-58	.071	.02520
	Cs-137	25.020	8.82796
	Cs-134	1.375	.48508
	Sr-90	.373	..13155
	Tc-99m	.016	.00563
	Mn-54	2.099	.74050
	Pu-241	1.151	.40593
	Cm-242	.010	.00352
	C-14	.019	.00683
	I-129	.011	.00404
	H-3	1.345	.47461
	Ni-63	.944	.33311
	TOTAL	100.00	35.28364

c. N/A

d. N/A

3. SOLID WASTE DISPOSITION

Number of Shipments	Mode of Transportation	Destination
78	Tractor - Trailer	Barnwell, S.C.
2	Tractor - Trailer	Richland, WA.

4. IRRADIATED FUEL SHIPMENTS (Disposition)

Number of Shipments	Mode of Transportation	Destination
None	N/A	N/a

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

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 43.53

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
CALM- 3.5	13	8	14	19	26	19	5	3	7	1	2	4	2	1	7	7	138
(1)	1.6	1.0	1.7	2.4	3.2	2.4	0.6	0.4	0.9	0.1	0.2	0.5	0.2	0.1	0.9	0.9	17.2
(2)	0.7	0.4	0.8	1.0	1.4	1.0	0.3	0.2	0.4	0.1	0.1	0.2	0.1	0.1	0.4	0.4	7.5
3.6- 7.5	12	13	13	11	14	26	21	10	11	30	39	23	22	25	21	21	312
(1)	1.5	1.6	1.6	1.4	1.7	3.2	2.6	1.2	1.4	3.7	4.9	2.9	2.7	3.1	2.6	2.6	39.0
(2)	0.7	0.7	0.7	0.6	0.8	1.4	1.1	0.5	0.6	1.6	2.1	1.2	1.2	1.4	1.1	1.1	17.0
7.6-12.5	35	29	5	0	0	0	0	1	13	97	70	9	2	1	5	9	276
(1)	4.4	3.6	0.6	0.0	0.0	0.0	0.0	0.1	1.6	12.1	8.7	1.1	0.2	0.1	0.6	1.1	34.5
(2)	1.9	1.6	0.3	0.0	0.0	0.0	0.0	0.1	0.7	5.3	3.8	0.5	0.1	0.1	0.3	0.5	15.0
12.6-18.5	7	12	0	0	0	0	0	0	1	22	8	0	0	0	2	4	56
(1)	0.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.7	1.0	0.0	0.0	0.0	0.2	0.5	7.0
(2)	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.2	0.4	0.0	0.0	0.0	0.1	0.2	3.0
18.6-24.0	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	3	14
(1)	0.4	0.5	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	0.4	1.7
(2)	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8
OVER-24.0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
(1)	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
(2)	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
ALL SPEEDS	71	69	36	30	40	46	26	14	32	150	119	36	26	27	35	44	801
(1)	8.9	8.6	4.5	3.7	5.0	5.7	3.2	1.7	4.0	18.7	14.9	4.5	3.2	3.4	4.4	5.5	100.0
(2)	3.9	3.7	2.0	1.6	2.2	2.5	1.4	0.8	1.7	8.2	6.5	2.0	1.4	1.5	1.9	2.4	43.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 801

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 2.17

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	2	0	0	0	0	1	0	0	0	1	0	1	1	0	0	6
(1)	0.0	5.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.5	0.0	2.5	2.5	0.0	0.0	15.0
(2)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.3
3.6- 7.5	1	1	1	2	3	0	0	1	0	0	1	0	0	1	0	0	11
(1)	2.5	2.5	2.5	5.0	7.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	0.0	27.5
(2)	0.1	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.6
7.6-12.5	3	1	2	1	0	0	0	0	1	1	2	0	0	0	3	1	15
(1)	7.5	2.5	5.0	2.5	0.0	0.0	0.0	0.0	2.5	2.5	5.0	0.0	0.0	0.0	7.5	2.5	37.5
(2)	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.8
12.6-18.5	0	1	1	0	0	0	0	0	0	3	0	0	0	0	1	2	8
(1)	0.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	2.5	5.0	20.0
(2)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.4
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	5	4	3	3	0	1	1	1	4	4	0	1	2	4	3	40
(1)	10.0	12.5	10.0	7.5	7.5	0.0	2.5	2.5	2.5	10.0	10.0	0.0	2.5	5.0	10.0	7.5	100.0
(2)	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.2	0.2	2.2

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 40

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 2.66

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	1	0	0	1	0	0	0	0	0	0	0	0	2
(1)	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3.6- 7.5	3	0	2	1	0	1	0	0	1	3	0	4	0	2	0	1	18
(1)	6.1	0.0	4.1	2.0	0.0	2.0	0.0	0.0	2.0	6.1	0.0	8.2	0.0	4.1	0.0	2.0	36.7
(2)	0.2	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.2	0.0	0.2	0.0	0.1	0.0	0.1	1.0
7.6-12.5	0	1	5	0	0	0	0	0	0	2	2	0	0	2	1	0	13
(1)	0.0	2.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.1	0.0	0.0	4.1	2.0	0.0	26.5
(2)	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.7
12.6-18.5	0	4	3	0	0	0	0	0	0	7	0	0	0	0	0	1	15
(1)	0.0	8.2	6.1	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	2.0	30.6
(2)	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.8
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	1	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
ALL SPEEDS	3	5	10	1	1	1	0	1	1	12	2	4	0	4	1	3	49
(1)	6.1	10.2	20.4	2.0	2.0	2.0	0.0	2.0	2.0	24.5	4.1	8.2	0.0	8.2	2.0	6.1	100.0
(2)	0.2	0.3	0.5	0.1	0.1	0.1	0.0	0.1	0.1	0.7	0.1	0.2	0.0	0.2	0.1	0.2	2.7

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 49

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 18.48

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	3	4	0	3	3	4	1	1	4	1	5	2	1	4	1	39
(1)	0.6	0.9	1.2	0.0	0.9	0.9	1.2	0.3	0.3	1.2	0.3	1.5	0.6	0.3	1.2	0.3	11.5
(2)	0.1	0.2	0.2	0.0	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.2	0.1	2.1
3.6- 7.5	7	15	10	4	13	3	3	2	5	15	6	4	5	14	11	4	121
(1)	2.1	4.4	2.9	1.2	3.8	0.9	0.9	0.6	1.5	4.4	1.8	1.2	1.5	4.1	3.2	1.2	35.6
(2)	0.4	0.8	0.5	0.2	0.7	0.2	0.2	0.1	0.3	0.8	0.3	0.2	0.3	0.8	0.6	0.2	6.6
7.6-12.5	7	8	7	4	0	0	0	0	1	67	24	4	2	2	7	3	136
(1)	2.1	2.4	2.1	1.2	0.0	0.0	0.0	0.0	0.3	19.7	7.1	1.2	0.6	0.6	2.1	0.9	40.0
(2)	0.4	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.1	3.6	1.3	0.2	0.1	0.1	0.4	0.2	7.4
12.6-18.5	1	7	3	0	0	0	0	0	0	8	7	0	0	0	1	5	32
(1)	0.3	2.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.1	0.0	0.0	0.0	0.3	1.5	9.4
(2)	0.1	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.1	0.3	1.7
18.6-24.0	3	4	0	0	0	0	0	0	0	1	0	0	0	0	0	2	10
(1)	0.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.6	2.9
(2)	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.5
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
ALL SPEEDS	20	37	24	8	16	6	7	3	7	95	38	13	9	17	23	17	340
(1)	5.9	10.9	7.1	2.4	4.7	1.8	2.1	0.9	2.1	27.9	11.2	3.8	2.6	5.0	6.8	5.0	100.0
(2)	1.1	2.0	1.3	0.4	0.9	0.3	0.4	0.2	0.4	5.2	2.1	0.7	0.5	0.9	1.2	0.9	18.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 340

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 18.10

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	1	4
(1)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.3	1.2
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2
CALM- 3.5	3	1	1	2	0	1	6	4	9	6	5	6	6	2	0	3	55
(1)	0.9	0.3	0.3	0.6	0.0	0.3	1.8	1.2	2.7	1.8	1.5	1.8	1.8	0.6	0.0	0.9	16.5
(2)	0.2	0.1	0.1	0.1	0.0	0.1	0.3	0.2	0.5	0.3	0.3	0.3	0.3	0.1	0.0	0.2	3.0
3.6- 7.5	4	2	1	0	2	2	1	2	6	23	23	18	32	13	10	4	143
(1)	1.2	0.6	0.3	0.0	0.6	0.6	0.3	0.6	1.8	6.9	6.9	5.4	9.6	3.9	3.0	1.2	42.9
(2)	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.3	1.2	1.2	1.0	1.7	0.7	0.5	0.2	7.8
7.6-12.5	1	0	0	1	0	0	0	0	0	63	57	3	1	0	0	3	129
(1)	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	18.9	17.1	0.9	0.3	0.0	0.0	0.9	38.7
(2)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	3.4	3.1	0.2	0.1	0.0	0.0	0.2	7.0
12.6-18.5	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
(1)	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.6
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
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	8	3	3	4	2	3	7	6	16	93	86	27	39	15	10	11	333
(1)	2.4	0.9	0.9	1.2	0.6	0.9	2.1	1.8	4.8	27.9	25.8	8.1	11.7	4.5	3.0	3.3	100.0
(2)	0.4	0.2	0.2	0.2	0.1	0.2	0.4	0.3	0.9	5.1	4.7	1.5	2.1	0.8	0.5	0.6	18.1

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 333

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100METERS CLASS FREQUENCY (PERCENT) = 9.08

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	0	0	0	0	5	5	13	5	3	5	1	3	1	1	43
(1)	0.6	0.0	0.0	0.0	0.0	0.0	3.0	3.0	7.8	3.0	1.8	3.0	0.6	1.8	0.6	0.6	25.7
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.7	0.3	0.2	0.3	0.1	0.2	0.1	0.1	2.3
3.6- 7.5	0	0	0	0	0	0	1	1	7	10	18	16	7	2	1	2	65
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	4.2	6.0	10.8	9.6	4.2	1.2	0.6	1.2	38.9
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.5	1.0	0.9	0.4	0.1	0.1	0.1	3.5
7.6-12.5	0	0	0	0	0	0	0	0	0	12	37	6	0	0	0	2	57
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	22.2	3.6	0.0	0.0	0.0	1.2	34.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	0.3	0.0	0.0	0.0	0.1	3.1
12.6-18.5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	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	0	0	0	0	0	6	6	20	27	60	27	8	5	2	5	167
(1)	0.6	0.0	0.0	0.0	0.0	0.0	3.6	3.6	12.0	16.2	35.9	16.2	4.8	3.0	1.2	3.0	100.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.1	1.5	3.3	1.5	0.4	0.3	0.1	0.3	9.1

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 167

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 5.98

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.9
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
CALM- 3.5	0	0	0	0	0	0	2	5	12	12	17	14	2	0	1	0	65
(1)	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.5	10.9	10.9	15.5	12.7	1.8	0.0	0.9	0.0	59.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.7	0.7	0.9	0.8	0.1	0.0	0.1	0.0	3.5
3.6- 7.5	0	0	0	0	0	0	1	0	5	4	3	26	0	0	0	0	39
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	4.5	3.6	2.7	23.6	0.0	0.0	0.0	0.0	35.5
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.2	0.2	1.4	0.0	0.0	0.0	0.0	2.1
7.6-12.5	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	1.8	0.0	0.0	0.0	0.0	0.0	4.5
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.3
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	0	0	0	0	0	0	3	5	17	19	23	40	2	0	1	0	110
(1)	0.0	0.0	0.0	0.0	0.0	0.0	2.7	4.5	15.5	17.3	20.9	36.4	1.8	0.0	0.9	0.0	100.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.9	1.0	1.2	2.2	0.1	0.0	0.1	0.0	6.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 110

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS ALL-- ALL STABILITIES COMBINED CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	1	6
(1)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
(2)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.3
CALM- 3.5	19	14	19	21	30	23	23	19	42	28	29	34	14	8	13	12	348
(1)	1.0	0.8	1.0	1.1	1.6	1.2	1.2	1.0	2.3	1.5	1.6	1.8	0.8	0.4	0.7	0.7	18.9
(2)	1.0	0.8	1.0	1.1	1.6	1.2	1.2	1.0	2.3	1.5	1.6	1.8	0.8	0.4	0.7	0.7	18.9
3.6- 7.5	27	31	27	18	32	32	27	16	35	85	90	91	66	57	43	32	709
(1)	1.5	1.7	1.5	1.0	1.7	1.7	1.5	0.9	1.9	4.6	4.9	4.9	3.6	3.1	2.3	1.7	38.5
(2)	1.5	1.7	1.5	1.0	1.7	1.7	1.5	0.9	1.9	4.6	4.9	4.9	3.6	3.1	2.3	1.7	38.5
7.6-12.5	46	39	19	6	0	0	0	1	15	245	194	22	5	5	16	18	631
(1)	2.5	2.1	1.0	0.3	0.0	0.0	0.0	0.1	0.8	13.3	10.5	1.2	0.3	0.3	0.9	1.0	34.3
(2)	2.5	2.1	1.0	0.3	0.0	0.0	0.0	0.1	0.8	13.3	10.5	1.2	0.3	0.3	0.9	1.0	34.3
12.6-18.5	8	24	8	0	0	0	0	0	1	40	18	0	0	0	4	12	115
(1)	0.4	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.1	2.2	1.0	0.0	0.0	0.0	0.2	0.7	6.3
(2)	0.4	1.3	0.4	0.0	0.0	0.0	0.0	0.0	0.1	2.2	1.0	0.0	0.0	0.0	0.2	0.7	6.3
18.6-24.0	6	8	4	0	0	0	0	0	0	1	0	0	0	0	0	5	24
(1)	0.3	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.3
(2)	0.3	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	1.3
OVER-24.0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7
(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	0.0	0.0	0.2	0.4
(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	0.0	0.0	0.2	0.4
ALL SPEEDS	107	119	77	46	62	56	50	36	94	400	332	147	85	70	76	83	1840
(1)	5.8	6.5	4.2	2.5	3.4	3.0	2.7	2.0	5.1	21.7	18.0	8.0	4.6	3.8	4.1	4.5	100.0
(2)	5.8	6.5	4.2	2.5	3.4	3.0	2.7	2.0	5.1	21.7	18.0	8.0	4.6	3.8	4.1	4.5	100.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=1840 83.3 PERCENT DATA RECOVERY
NUMBER OF HOURS IN THIS PERIOD= 2208

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 43.33

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	0	4	10	5	2	1	3	2	2	1	0	0	1	2	35
(1)	0.3	0.0	0.0	0.6	1.5	0.7	0.3	0.1	0.4	0.3	0.3	0.1	0.0	0.0	0.1	0.3	5.2
(2)	0.1	0.0	0.0	0.3	0.6	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	2.3
3.6- 7.5	10	8	13	7	10	22	17	17	7	5	7	10	7	13	13	12	178
(1)	1.5	1.2	1.9	1.0	1.5	3.3	2.5	2.5	1.0	0.7	1.0	1.5	1.0	1.9	1.9	1.8	26.5
(2)	0.6	0.5	0.8	0.5	0.6	1.4	1.1	1.1	0.5	0.3	0.5	0.6	0.5	0.8	0.8	0.8	11.5
7.6-12.5	3	5	13	5	1	5	6	14	17	41	44	24	19	18	16	5	236
(1)	0.4	0.7	1.9	0.7	0.1	0.7	0.9	2.1	2.5	6.1	6.5	3.6	2.8	2.7	2.4	0.7	35.1
(2)	0.2	0.3	0.8	0.3	0.1	0.3	0.4	0.9	1.1	2.6	2.8	1.5	1.2	1.2	1.0	0.3	15.2
12.6-18.5	7	11	17	7	0	0	0	1	12	72	43	4	1	0	3	4	182
(1)	1.0	1.6	2.5	1.0	0.0	0.0	0.0	0.1	1.8	10.7	6.4	0.6	0.1	0.0	0.4	0.6	27.1
(2)	0.5	0.7	1.1	0.5	0.0	0.0	0.0	0.1	0.8	4.6	2.8	0.3	0.1	0.0	0.2	0.3	11.7
18.6-24.0	2	0	2	0	1	0	0	0	0	15	4	0	0	0	0	1	25
(1)	0.3	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	2.2	0.6	0.0	0.0	0.0	0.0	0.1	3.7
(2)	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	1.0	0.3	0.0	0.0	0.0	0.0	0.1	1.6
OVER-24.0	3	2	4	6	0	0	0	0	0	0	0	0	0	0	0	1	16
(1)	0.4	0.3	0.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.4
(2)	0.2	0.1	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0
ALL SPEEDS	27	26	49	29	22	32	25	33	39	135	100	39	27	31	33	25	672
(1)	4.0	3.9	7.3	4.3	3.3	4.8	3.7	4.9	5.8	20.1	14.9	5.8	4.0	4.6	4.9	3.7	100.0
(2)	1.7	1.7	3.2	1.9	1.4	2.1	1.6	2.1	2.5	8.7	6.4	2.5	1.7	2.0	2.1	1.6	43.3

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 672

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 2.00

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	1	1	3	0	0	0	0	0	0	0	0	0	0	5
(1)	0.0	0.0	0.0	3.2	3.2	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1
(2)	0.0	0.0	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	0.3
7.6-12.5	1	0	0	0	3	2	0	0	0	0	1	0	0	0	0	1	8
(1)	3.2	0.0	0.0	0.0	9.7	6.5	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	3.2	25.8
(2)	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.5
12.6-18.5	1	1	2	0	1	0	0	0	1	1	2	0	0	1	2	4	16
(1)	3.2	3.2	6.5	0.0	3.2	0.0	0.0	0.0	3.2	3.2	6.5	0.0	0.0	3.2	6.5	12.9	51.6
(2)	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	1.0
18.6-24.0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
(1)	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	6.5
(2)	0.0	0.0	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	0.1
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	2	1	3	1	5	5	0	0	1	2	3	0	0	1	2	5	31
(1)	6.5	3.2	9.7	3.2	16.1	16.1	0.0	0.0	3.2	6.5	9.7	0.0	0.0	3.2	6.5	16.1	100.0
(2)	0.1	0.1	0.2	0.1	0.3	0.3	0.0	0.0	0.1	0.1	0.2	0.0	0.0	0.1	0.1	0.3	2.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 31

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 2.64

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	0	2	0	0	0	0	0	0	1	0	0	0	0	3
(1)	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	7.3
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
7.6-12.5	1	1	0	0	3	1	1	0	1	2	0	2	0	1	1	0	14
(1)	2.4	2.4	0.0	0.0	7.3	2.4	2.4	0.0	2.4	4.9	0.0	4.9	0.0	2.4	2.4	0.0	34.1
(2)	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.9
12.6-18.5	0	0	3	6	1	0	0	0	0	3	1	0	0	1	2	0	17
(1)	0.0	0.0	7.3	14.6	2.4	0.0	0.0	0.0	0.0	7.3	2.4	0.0	0.0	2.4	4.9	0.0	41.5
(2)	0.0	0.0	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.1	0.0	1.1
18.6-24.0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	6
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	12.2	0.0	0.0	0.0	0.0	0.0	0.0	14.6
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4
OVER-24.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
(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	2	1	3	6	6	1	1	0	2	10	1	3	0	2	3	0	41
(1)	4.9	2.4	7.3	14.6	14.6	2.4	2.4	0.0	4.9	24.4	2.4	7.3	0.0	4.9	7.3	0.0	100.0
(2)	0.1	0.1	0.2	0.4	0.4	0.1	0.1	0.0	0.1	0.6	0.1	0.2	0.0	0.1	0.2	0.0	2.6

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 41

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 18.96

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	1	2	2	1	0	0	0	0	2	1	1	0	0	1	12
(1)	0.0	0.3	0.3	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.7	0.3	0.3	0.0	0.0	0.3	4.1
(2)	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.8
3.6- 7.5	1	0	3	1	5	1	0	2	2	2	2	4	5	3	4	2	37
(1)	0.3	0.0	1.0	0.3	1.7	0.3	0.0	0.7	0.7	0.7	0.7	1.4	1.7	1.0	1.4	0.7	12.6
(2)	0.1	0.0	0.2	0.1	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.3	0.1	2.4
7.6-12.5	3	3	12	4	16	6	1	4	2	13	6	1	2	6	6	3	88
(1)	1.0	1.0	4.1	1.4	5.4	2.0	0.3	1.4	0.7	4.4	2.0	0.3	0.7	2.0	2.0	1.0	29.9
(2)	0.2	0.2	0.8	0.3	1.0	0.4	0.1	0.3	0.1	0.8	0.4	0.1	0.1	0.4	0.4	0.2	5.7
12.6-18.5	1	7	9	0	1	0	0	0	5	57	22	3	2	3	7	3	120
(1)	0.3	2.4	3.1	0.0	0.3	0.0	0.0	0.0	1.7	19.4	7.5	1.0	0.7	1.0	2.4	1.0	40.8
(2)	0.1	0.5	0.6	0.0	0.1	0.0	0.0	0.0	0.3	3.7	1.4	0.2	0.1	0.2	0.5	0.2	7.7
18.6-24.0	0	3	5	0	0	0	0	0	0	11	7	0	0	0	0	5	31
(1)	0.0	1.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	3.7	2.4	0.0	0.0	0.0	0.0	1.7	10.5
(2)	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.0	0.0	0.0	0.0	0.3	2.0
OVER-24.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6
(1)	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	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	0.0	0.0	0.0	0.3	0.4
ALL SPEEDS	6	14	30	7	24	8	1	6	9	83	39	9	10	12	17	19	294
(1)	2.0	4.8	10.2	2.4	8.2	2.7	0.3	2.0	3.1	28.2	13.3	3.1	3.4	4.1	5.8	6.5	100.0
(2)	0.4	0.9	1.9	0.5	1.5	0.5	0.1	0.4	0.6	5.4	2.5	0.6	0.6	0.8	1.1	1.2	19.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 294

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 18.50

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	2	0	0	0	1	2	0	2	1	1	3	1	0	0	13
(1)	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.7	0.0	0.7	0.3	0.3	1.0	0.3	0.0	0.0	4.5
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.8
3.6- 7.5	0	2	0	1	2	1	2	1	5	3	3	4	4	4	4	2	38
(1)	0.0	0.7	0.0	0.3	0.7	0.3	0.7	0.3	1.7	1.0	1.0	1.4	1.4	1.4	1.4	0.7	13.2
(2)	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.1	2.5
7.6-12.5	4	2	2	2	0	2	0	1	8	5	14	12	13	9	3	7	84
(1)	1.4	0.7	0.7	0.7	0.0	0.7	0.0	0.3	2.8	1.7	4.9	4.2	4.5	3.1	1.0	2.4	29.3
(2)	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.5	0.3	0.9	0.8	0.8	0.6	0.2	0.5	5.4
12.6-18.5	0	1	0	1	1	0	0	0	0	36	67	11	8	7	2	2	136
(1)	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	12.5	23.3	3.8	2.8	2.4	0.7	0.7	47.4
(2)	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	2.3	4.3	0.7	0.5	0.5	0.1	0.1	8.8
18.6-24.0	0	0	0	0	0	0	0	0	0	1	15	0	0	0	0	0	16
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.2	0.0	0.0	0.0	0.0	0.0	5.6
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.0	0.0	0.0	0.0	0.0	1.0
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	5	4	4	3	3	3	4	13	47	100	28	28	21	9	11	287
(1)	1.4	1.7	1.4	1.4	1.0	1.0	1.0	1.4	4.5	16.4	34.8	9.8	9.8	7.3	3.1	3.8	100.0
(2)	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.8	3.0	6.4	1.8	1.8	1.4	0.6	0.7	18.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 287

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100METERS CLASS FREQUENCY (PERCENT) = 8.64

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	0	0	2	1	1	1	2	1	1	0	0	1	1	0	12
(1)	0.7	0.0	0.0	0.0	1.5	0.7	0.7	0.7	1.5	0.7	0.7	0.0	0.0	0.7	0.7	0.0	9.0
(2)	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.8
3.6- 7.5	0	0	1	0	2	0	1	1	6	2	1	3	1	2	1	1	22
(1)	0.0	0.0	0.7	0.0	1.5	0.0	0.7	0.7	4.5	1.5	0.7	2.2	0.7	1.5	0.7	0.7	16.4
(2)	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.1	1.4
7.6-12.5	2	1	0	0	0	0	1	1	2	2	3	5	7	1	0	1	26
(1)	1.5	0.7	0.0	0.0	0.0	0.0	0.7	0.7	1.5	1.5	2.2	3.7	5.2	0.7	0.0	0.7	19.4
(2)	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.5	0.1	0.0	0.1	1.7
12.6-18.5	1	0	0	0	0	0	0	0	0	9	28	22	7	1	0	0	68
(1)	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	20.9	16.4	5.2	0.7	0.0	0.0	50.7
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	1.4	0.5	0.1	0.0	0.0	4.4
18.6-24.0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	0.0	0.0	0.0	0.0	4.5
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.4
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	4	1	1	0	4	1	3	3	10	14	37	32	15	5	2	2	134
(1)	3.0	0.7	0.7	0.0	3.0	0.7	2.2	2.2	7.5	10.4	27.6	23.9	11.2	3.7	1.5	1.5	100.0
(2)	0.3	0.1	0.1	0.0	0.3	0.1	0.2	0.2	0.6	0.9	2.4	2.1	1.0	0.3	0.1	0.1	8.6

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 134

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 5.93

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	1	0	2	1	2	1	2	2	2	0	0	1	15
(1)	0.0	0.0	0.0	1.1	1.1	0.0	2.2	1.1	2.2	1.1	2.2	2.2	2.2	0.0	0.0	1.1	16.3
(2)	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	1.0
3.6- 7.5	0	0	0	0	1	0	3	2	3	1	6	6	8	8	6	3	47
(1)	0.0	0.0	0.0	0.0	1.1	0.0	3.3	2.2	3.3	1.1	6.5	6.5	8.7	8.7	6.5	3.3	51.1
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.2	0.1	0.4	0.4	0.5	0.5	0.4	0.2	3.0
7.6-12.5	0	0	0	0	0	0	0	0	3	1	0	5	11	0	2	0	22
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.1	0.0	5.4	12.0	0.0	2.2	0.0	23.9
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	0.7	0.0	0.1	0.0	1.4
12.6-18.5	0	0	0	0	0	0	0	0	0	4	2	1	0	0	0	0	7
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	2.2	1.1	0.0	0.0	0.0	0.0	7.6
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.5
18.6-24.0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	1.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	1	2	0	5	3	8	7	10	15	21	8	8	4	92
(1)	0.0	0.0	0.0	1.1	2.2	0.0	5.4	3.3	8.7	7.6	10.9	16.3	22.8	8.7	8.7	4.3	100.0
(2)	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.2	0.5	0.5	0.6	1.0	1.4	0.5	0.5	0.3	5.9

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 92

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-1 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 7/1/84 - 9/30/84

STABILITY CLASS ALL-- ALL STABILITIES COMBINED CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CALM- 3.5	3	1	3	7	15	7	6	5	7	6	8	5	6	2	2	4	87
(1)	0.2	0.1	0.2	0.5	1.0	0.5	0.4	0.3	0.5	0.4	0.5	0.3	0.4	0.1	0.1	0.3	5.6
(2)	0.2	0.1	0.2	0.5	1.0	0.5	0.4	0.3	0.5	0.4	0.5	0.3	0.4	0.1	0.1	0.3	5.6
3.6- 7.5	11	10	17	10	23	27	23	23	23	13	19	28	25	30	28	20	330
(1)	0.7	0.6	1.1	0.6	1.5	1.7	1.5	1.5	1.5	0.8	1.2	1.8	1.6	1.9	1.8	1.3	21.3
(2)	0.7	0.6	1.1	0.6	1.5	1.7	1.5	1.5	1.5	0.8	1.2	1.8	1.6	1.9	1.8	1.3	21.3
7.6-12.5	14	12	27	11	23	16	9	20	33	64	68	49	52	35	28	17	478
(1)	0.9	0.8	1.7	0.7	1.5	1.0	0.6	1.3	2.1	4.1	4.4	3.2	3.4	2.3	1.8	1.1	30.8
(2)	0.9	0.8	1.7	0.7	1.5	1.0	0.6	1.3	2.1	4.1	4.4	3.2	3.4	2.3	1.8	1.1	30.8
12.6-18.5	10	20	31	14	4	0	0	1	18	182	165	41	18	13	16	13	546
(1)	0.6	1.3	2.0	0.9	0.3	0.0	0.0	0.1	1.2	11.7	10.6	2.6	1.2	0.8	1.0	0.8	35.2
(2)	0.6	1.3	2.0	0.9	0.3	0.0	0.0	0.1	1.2	11.7	10.6	2.6	1.2	0.8	1.0	0.8	35.2
18.6-24.0	2	3	8	0	1	0	0	0	1	33	30	3	0	0	0	6	87
(1)	0.1	0.2	0.5	0.0	0.1	0.0	0.0	0.0	0.1	2.1	1.9	0.2	0.0	0.0	0.0	0.4	5.6
(2)	0.1	0.2	0.5	0.0	0.1	0.0	0.0	0.0	0.1	2.1	1.9	0.2	0.0	0.0	0.0	0.4	5.6
OVER-24.0	5	2	4	6	0	0	0	0	0	0	0	0	0	0	0	6	23
(1)	0.3	0.1	0.3	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	1.5
(2)	0.3	0.1	0.3	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	1.5
ALL SPEEDS	45	48	90	48	66	50	38	49	82	298	290	126	101	80	74	66	1551
(1)	2.9	3.1	5.8	3.1	4.3	3.2	2.5	3.2	5.3	19.2	18.7	8.1	6.5	5.2	4.8	4.3	100.0
(2)	2.9	3.1	5.8	3.1	4.3	3.2	2.5	3.2	5.3	19.2	18.7	8.1	6.5	5.2	4.8	4.3	100.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=1551 70.2 PERCENT DATA RECOVERY
NUMBER OF HOURS IN THIS PERIOD= 2208

CALM=WIND SPEED LESS THAN 1.00MPH

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

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 30.28

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	3	2	0	2	1	3	0	0	0	0	0	1	0	1	0	0	13
(1)	0.5	0.4	0.0	0.4	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	2.3
(2)	0.2	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.7
CALM- 3.5	5	5	9	10	5	7	5	3	1	1	1	0	2	3	4	9	70
(1)	0.9	0.9	1.6	1.8	0.9	1.3	0.9	0.5	0.2	0.2	0.2	0.0	0.4	0.5	0.7	1.6	12.5
(2)	0.3	0.3	0.5	0.5	0.3	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.5	3.8
3.6- 7.5	10	12	4	4	14	10	6	10	3	17	11	12	19	15	10	9	166
(1)	1.8	2.2	0.7	0.7	2.5	1.8	1.1	1.8	0.5	3.0	2.0	2.2	3.4	2.7	1.8	1.6	29.7
(2)	0.5	0.7	0.2	0.2	0.8	0.5	0.3	0.5	0.2	0.9	0.6	0.7	1.0	0.8	0.5	0.5	9.0
7.6-12.5	10	7	11	2	0	0	2	1	5	11	24	23	33	10	8	5	152
(1)	1.8	1.3	2.0	0.4	0.0	0.0	0.4	0.2	0.9	2.0	4.3	4.1	5.9	1.8	1.4	0.9	27.2
(2)	0.5	0.4	0.6	0.1	0.0	0.0	0.1	0.1	0.3	0.6	1.3	1.2	1.8	0.5	0.4	0.3	8.2
12.6-18.5	13	5	12	2	0	1	1	0	1	8	4	7	5	20	16	11	106
(1)	2.3	0.9	2.2	0.4	0.0	0.2	0.2	0.0	0.2	1.4	0.7	1.3	0.9	3.6	2.9	2.0	19.0
(2)	0.7	0.3	0.7	0.1	0.0	0.1	0.1	0.0	0.1	0.4	0.2	0.4	0.3	1.1	0.9	0.6	5.8
18.6-24.0	10	1	5	0	0	0	0	0	0	0	0	0	0	1	8	12	37
(1)	1.8	0.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.4	2.2	6.6
(2)	0.5	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.7	2.0
OVER-24.0	1	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	14
(1)	0.2	1.4	0.9	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	2.5
(2)	0.1	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
ALL SPEEDS	52	40	46	20	20	21	14	14	10	37	40	43	59	50	46	46	558
(1)	9.3	7.2	8.2	3.6	3.6	3.8	2.5	2.5	1.8	6.6	7.2	7.7	10.6	9.0	8.2	8.2	100.0
(2)	2.8	2.2	2.5	1.1	1.1	1.1	0.8	0.8	0.5	2.0	2.2	2.3	3.2	2.7	2.5	2.5	30.3

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 558

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 4.83

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
(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
CALM- 3.5	0	0	0	0	0	1	1	1	2	0	0	0	2	1	2	0	10
(1)	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	2.2	0.0	0.0	0.0	2.2	1.1	2.2	0.0	11.2
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.5
3.6- 7.5	0	0	0	0	1	0	0	2	2	1	0	2	4	1	0	2	15
(1)	0.0	0.0	0.0	0.0	1.1	0.0	0.0	2.2	2.2	1.1	0.0	2.2	4.5	1.1	0.0	2.2	16.9
(2)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.0	0.1	0.8
7.6-12.5	0	0	2	2	0	1	1	0	0	0	4	2	9	4	0	0	25
(1)	0.0	0.0	2.2	2.2	0.0	1.1	1.1	0.0	0.0	0.0	4.5	2.2	10.1	4.5	0.0	0.0	28.1
(2)	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.5	0.2	0.0	0.0	1.4
12.6-18.5	2	1	4	6	0	2	0	0	0	0	3	0	0	0	2	2	22
(1)	2.2	1.1	4.5	6.7	0.0	2.2	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	2.2	2.2	24.7
(2)	0.1	0.1	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.1	1.2
18.6-24.0	1	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	11
(1)	1.1	3.4	7.9	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	12.4
(2)	0.1	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
OVER-24.0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
(1)	0.0	4.5	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	5.6
(2)	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
ALL SPEEDS	3	8	14	9	1	4	2	3	4	1	7	4	15	6	4	4	89
(1)	3.4	9.0	15.7	10.1	1.1	4.5	2.2	3.4	4.5	1.1	7.9	4.5	16.9	6.7	4.5	4.5	100.0
(2)	0.2	0.4	0.8	0.5	0.1	0.2	0.1	0.2	0.2	0.1	0.4	0.2	0.8	0.3	0.2	0.2	4.8

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 89

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 4.83

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	1	0	1	0	0	0	1	0	0	4
(1)	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	1.1	0.0	0.0	4.5
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.2
3.6- 7.5	0	0	1	0	0	0	0	2	2	2	1	2	3	2	4	0	19
(1)	0.0	0.0	1.1	0.0	0.0	0.0	0.0	2.2	2.2	2.2	1.1	2.2	3.4	2.2	4.5	0.0	21.3
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.0	1.0
7.6-12.5	0	2	5	1	0	0	0	1	0	6	0	1	4	7	4	3	34
(1)	0.0	2.2	5.6	1.1	0.0	0.0	0.0	1.1	0.0	6.7	0.0	1.1	4.5	7.9	4.5	3.4	38.2
(2)	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.1	0.2	0.4	0.2	0.2	1.8
12.6-18.5	2	1	5	0	0	0	0	0	1	2	0	0	0	1	3	1	16
(1)	2.2	1.1	5.6	0.0	0.0	0.0	0.0	0.0	1.1	2.2	0.0	0.0	0.0	1.1	3.4	1.1	18.0
(2)	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.9
18.6-24.0	1	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11
(1)	1.1	7.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
(2)	0.1	0.4	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	0.6
OVER-24.0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
(1)	0.0	3.4	2.2	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	5.6
(2)	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
ALL SPEEDS	3	13	16	2	0	0	0	4	3	11	1	3	7	11	11	4	89
(1)	3.4	14.6	18.0	2.2	0.0	0.0	0.0	4.5	3.4	12.4	1.1	3.4	7.9	12.4	12.4	4.5	100.0
(2)	0.2	0.7	0.9	0.1	0.0	0.0	0.0	0.2	0.2	0.6	0.1	0.2	0.4	0.6	0.6	0.2	4.8

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 89

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 29.68

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	1	2	1	1	2	0	0	0	0	0	0	7
(1)	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.3
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
CALM- 3.5	0	1	1	4	4	2	8	6	5	3	3	1	2	1	4	1	46
(1)	0.0	0.2	0.2	0.7	0.7	0.4	1.5	1.1	0.9	0.5	0.5	0.2	0.4	0.2	0.7	0.2	8.4
(2)	0.0	0.1	0.1	0.2	0.2	0.1	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	2.5
3.6- 7.5	2	3	6	5	1	4	16	10	3	21	16	30	10	8	4	2	141
(1)	0.4	0.5	1.1	0.9	0.2	0.7	2.9	1.8	0.5	3.8	2.9	5.5	1.8	1.5	0.7	0.4	25.8
(2)	0.1	0.2	0.3	0.3	0.1	0.2	0.9	0.5	0.2	1.1	0.9	1.6	0.5	0.4	0.2	0.1	7.7
7.6-12.5	7	12	11	7	0	0	12	12	9	51	19	39	38	25	16	5	263
(1)	1.3	2.2	2.0	1.3	0.0	0.0	2.2	2.2	1.6	9.3	3.5	7.1	6.9	4.6	2.9	0.9	48.1
(2)	0.4	0.7	0.6	0.4	0.0	0.0	0.7	0.7	0.5	2.8	1.0	2.1	2.1	1.4	0.9	0.3	14.3
12.6-18.5	3	8	13	0	0	0	4	0	0	7	5	0	6	5	11	5	67
(1)	0.5	1.5	2.4	0.0	0.0	0.0	0.7	0.0	0.0	1.3	0.9	0.0	1.1	0.9	2.0	0.9	12.2
(2)	0.2	0.4	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.3	0.0	0.3	0.3	0.6	0.3	3.6
18.6-24.0	1	11	6	0	0	0	0	0	0	0	0	0	0	0	1	1	20
(1)	0.2	2.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	3.7
(2)	0.1	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.1
OVER-24.0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
(1)	0.0	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	0.0	0.0	0.5
(2)	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	0.2
ALL SPEEDS	13	38	37	16	5	7	42	29	18	84	43	70	56	39	36	14	547
(1)	2.4	6.9	6.8	2.9	0.9	1.3	7.7	5.3	3.3	15.4	7.9	12.8	10.2	7.1	6.6	2.6	100.0
(2)	0.7	2.1	2.0	0.9	0.3	0.4	2.3	1.6	1.0	4.6	2.3	3.8	3.0	2.1	2.0	0.8	29.7

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 547

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 19.15

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	3
(1)	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.8
(2)	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
CALM- 3.5	1	2	0	1	2	2	3	7	5	5	4	6	12	5	0	1	56
(1)	0.3	0.6	0.0	0.3	0.6	0.6	0.8	2.0	1.4	1.4	1.1	1.7	3.4	1.4	0.0	0.3	15.9
(2)	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.4	0.3	0.3	0.2	0.3	0.7	0.3	0.0	0.1	3.0
3.6- 7.5	1	2	0	2	3	2	2	28	13	30	33	23	13	9	11	0	172
(1)	0.3	0.6	0.0	0.6	0.8	0.6	0.6	7.9	3.7	8.5	9.3	6.5	3.7	2.5	3.1	0.0	48.7
(2)	0.1	0.1	0.0	0.1	0.2	0.1	0.1	1.5	0.7	1.6	1.8	1.2	0.7	0.5	0.6	0.0	9.3
7.6-12.5	3	4	0	1	0	0	3	8	5	31	28	21	2	1	0	4	111
(1)	0.8	1.1	0.0	0.3	0.0	0.0	0.8	2.3	1.4	8.8	7.9	5.9	0.6	0.3	0.0	1.1	31.4
(2)	0.2	0.2	0.0	0.1	0.0	0.0	0.2	0.4	0.3	1.7	1.5	1.1	0.1	0.1	0.0	0.2	6.0
12.6-18.5	0	0	0	0	0	0	0	0	0	1	6	0	1	0	0	0	8
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.7	0.0	0.3	0.0	0.0	0.0	2.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.4
18.6-24.0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
(1)	0.3	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	0.0	0.0	0.8
(2)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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	6	10	1	4	6	4	8	43	23	67	71	50	29	15	11	5	353
(1)	1.7	2.8	0.3	1.1	1.7	1.1	2.3	12.2	6.5	19.0	20.1	14.2	8.2	4.2	3.1	1.4	100.0
(2)	0.3	0.5	0.1	0.2	0.3	0.2	0.4	2.3	1.2	3.6	3.9	2.7	1.6	0.8	0.6	0.3	19.2

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 353

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100METERS CLASS FREQUENCY (PERCENT) = 6.46

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	4
(1)	0.0	0.0	0.0	0.8	0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	3.4
(2)	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
CALM- 3.5	0	0	0	0	0	0	2	5	3	3	4	7	6	0	0	0	30
(1)	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.2	2.5	2.5	3.4	5.9	5.0	0.0	0.0	0.0	25.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2	0.2	0.4	0.3	0.0	0.0	0.0	1.6
3.6- 7.5	0	0	0	0	0	1	1	3	3	9	18	17	7	1	0	0	60
(1)	0.0	0.0	0.0	0.0	0.0	0.8	0.8	2.5	2.5	7.6	15.1	14.3	5.9	0.8	0.0	0.0	50.4
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.5	1.0	0.9	0.4	0.1	0.0	0.0	3.3
7.6-12.5	0	0	0	0	0	0	0	0	1	4	16	1	0	0	1	0	23
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.4	13.4	0.8	0.0	0.0	0.8	0.0	19.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.9	0.1	0.0	0.0	0.1	0.0	1.2
12.6-18.5	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	0.8	0.0	0.8
(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
18.6-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
(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	0.1	0.1
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	0	0	0	1	1	1	4	8	7	16	38	26	13	1	2	1	119
(1)	0.0	0.0	0.0	0.8	0.8	0.8	3.4	6.7	5.9	13.4	31.9	21.8	10.9	0.8	1.7	0.8	100.0
(2)	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4	0.4	0.9	2.1	1.4	0.7	0.1	0.1	0.1	6.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 119

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 4.77

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.5	0.0	0.0	0.0	0.0	0.0	5.7
(2)	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	0.3
CALM- 3.5	0	0	0	0	0	0	0	12	16	7	6	8	1	0	0	0	50
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	18.2	8.0	6.8	9.1	1.1	0.0	0.0	0.0	56.8
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.9	0.4	0.3	0.4	0.1	0.0	0.0	0.0	2.7
3.6- 7.5	0	0	0	0	0	0	0	2	5	3	2	10	5	0	0	0	27
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	5.7	3.4	2.3	11.4	5.7	0.0	0.0	0.0	30.7
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.1	0.5	0.3	0.0	0.0	0.0	1.5
7.6-12.5	1	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	5
(1)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0	5.7
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.3
12.6-18.5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	1.1
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
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	14	21	11	15	20	6	0	0	0	88
(1)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	15.9	23.9	12.5	17.0	22.7	6.8	0.0	0.0	0.0	100.0
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.1	0.6	0.8	1.1	0.3	0.0	0.0	0.0	4.8

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 88

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 33 FT EL

33.0 FT WIND DATA

10/1/84 - 12/31/84

STABILITY CLASS ALL-- ALL STABILITIES COMBINED

CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	3	2	1	4	3	4	3	1	1	3	4	2	1	1	0	0	33
(1)	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	1.8
(2)	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	1.8
CALM- 3.5	6	8	10	16	11	12	19	35	32	20	18	22	25	11	10	11	266
(1)	0.3	0.4	0.5	0.9	0.6	0.7	1.0	1.9	1.7	1.1	1.0	1.2	1.4	0.6	0.5	0.6	14.4
(2)	0.3	0.4	0.5	0.9	0.6	0.7	1.0	1.9	1.7	1.1	1.0	1.2	1.4	0.6	0.5	0.6	14.4
3.6- 7.5	13	17	11	11	19	17	25	57	31	83	81	96	61	36	29	13	600
(1)	0.7	0.9	0.6	0.6	1.0	0.9	1.4	3.1	1.7	4.5	4.4	5.2	3.3	2.0	1.6	0.7	32.6
(2)	0.7	0.9	0.6	0.6	1.0	0.9	1.4	3.1	1.7	4.5	4.4	5.2	3.3	2.0	1.6	0.7	32.6
7.6-12.5	21	25	29	13	0	1	18	22	20	103	93	89	86	47	29	17	613
(1)	1.1	1.4	1.6	0.7	0.0	0.1	1.0	1.2	1.1	5.6	5.0	4.8	4.7	2.6	1.6	0.9	33.3
(2)	1.1	1.4	1.6	0.7	0.0	0.1	1.0	1.2	1.1	5.6	5.0	4.8	4.7	2.6	1.6	0.9	33.3
12.6-18.5	20	15	34	8	0	3	5	0	2	18	19	7	12	26	33	19	221
(1)	1.1	0.8	1.8	0.4	0.0	0.2	0.3	0.0	0.1	1.0	1.0	0.4	0.7	1.4	1.8	1.0	12.0
(2)	1.1	0.8	1.8	0.4	0.0	0.2	0.3	0.0	0.1	1.0	1.0	0.4	0.7	1.4	1.8	1.0	12.0
18.6-24.0	14	24	21	0	0	0	0	0	0	0	0	0	0	1	9	14	83
(1)	0.8	1.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.8	4.5
(2)	0.8	1.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.8	4.5
OVER-24.0	1	18	8	0	0	0	0	0	0	0	0	0	0	0	0	0	27
(1)	0.1	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
(2)	0.1	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
ALL SPEEDS	78	109	114	52	33	37	70	115	86	227	215	216	185	122	110	74	1843
(1)	4.2	5.9	6.2	2.8	1.8	2.0	3.8	6.2	4.7	12.3	11.7	11.7	10.0	6.6	6.0	4.0	100.0
(2)	4.2	5.9	6.2	2.8	1.8	2.0	3.8	6.2	4.7	12.3	11.7	11.7	10.0	6.6	6.0	4.0	100.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=1843
NUMBER OF HOURS IN THIS PERIOD= 2208

83.5 PERCENT DATA RECOVERY

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS A-- DELTA T LESS THAN -1.9 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 31.51

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
(1)	0.2	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	0.4
(2)	0.1	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
CALM- 3.5	8	2	3	7	9	8	4	1	1	1	1	0	1	2	2	4	54
(1)	1.4	0.4	0.5	1.3	1.6	1.4	0.7	0.2	0.2	0.2	0.2	0.0	0.2	0.4	0.4	0.7	9.8
(2)	0.5	0.1	0.2	0.4	0.5	0.5	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	3.1
3.6- 7.5	9	7	4	7	2	8	9	5	2	4	3	5	6	18	7	5	101
(1)	1.6	1.3	0.7	1.3	0.4	1.4	1.6	0.9	0.4	0.7	0.5	0.9	1.1	3.3	1.3	0.9	18.3
(2)	0.5	0.4	0.2	0.4	0.1	0.5	0.5	0.3	0.1	0.2	0.2	0.3	0.3	1.0	0.4	0.3	5.8
7.6-12.5	5	4	7	7	7	12	18	10	7	15	15	13	21	13	7	3	164
(1)	0.9	0.7	1.3	1.3	1.3	2.2	3.3	1.8	1.3	2.7	2.7	2.4	3.8	2.4	1.3	0.5	29.7
(2)	0.3	0.2	0.4	0.4	0.4	0.7	1.0	0.6	0.4	0.9	0.9	0.7	1.2	0.7	0.4	0.2	9.3
12.6-18.5	8	3	5	13	7	3	2	3	3	9	20	10	18	7	2	10	123
(1)	1.4	0.5	0.9	2.4	1.3	0.5	0.4	0.5	0.5	1.6	3.6	1.8	3.3	1.3	0.4	1.8	22.2
(2)	0.5	0.2	0.3	0.7	0.4	0.2	0.1	0.2	0.2	0.5	1.1	0.6	1.0	0.4	0.1	0.6	7.0
18.6-24.0	9	3	0	5	4	0	0	0	1	8	6	1	10	4	6	7	64
(1)	1.6	0.5	0.0	0.9	0.7	0.0	0.0	0.0	0.2	1.4	1.1	0.2	1.8	0.7	1.1	1.3	11.6
(2)	0.5	0.2	0.0	0.3	0.2	0.0	0.0	0.0	0.1	0.5	0.3	0.1	0.6	0.2	0.3	0.4	3.6
OVER-24.0	4	4	13	11	1	2	0	0	0	0	0	0	0	0	4	6	45
(1)	0.7	0.7	2.4	2.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.1	8.1
(2)	0.2	0.2	0.7	0.6	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	2.6
ALL SPEEDS	44	23	32	50	31	33	33	19	14	37	45	29	56	44	28	35	553
(1)	8.0	4.2	5.8	9.0	5.6	6.0	6.0	3.4	2.5	6.7	8.1	5.2	10.1	8.0	5.1	6.3	100.0
(2)	2.5	1.3	1.8	2.8	1.8	1.9	1.9	1.1	0.8	2.1	2.6	1.7	3.2	2.5	1.6	2.0	31.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 553

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS B-- DELTA T -1.9 TO -1.7 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 5.36

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3
(1)	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	3.2
(2)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2
3.6- 7.5	0	0	0	0	0	1	2	4	2	0	0	0	1	2	2	1	15
(1)	0.0	0.0	0.0	0.0	0.0	1.1	2.1	4.3	2.1	0.0	0.0	0.0	1.1	2.1	2.1	1.1	16.0
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.9
7.6-12.5	0	0	0	1	2	4	1	2	1	2	0	0	2	2	1	0	18
(1)	0.0	0.0	0.0	1.1	2.1	4.3	1.1	2.1	1.1	2.1	0.0	0.0	2.1	2.1	1.1	0.0	19.1
(2)	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	1.0
12.6-18.5	0	0	1	0	9	0	0	0	0	1	4	1	9	4	0	0	29
(1)	0.0	0.0	1.1	0.0	9.6	0.0	0.0	0.0	0.0	1.1	4.3	1.1	9.6	4.3	0.0	0.0	30.9
(2)	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.5	0.2	0.0	0.0	1.7
18.6-24.0	1	1	1	4	4	0	1	0	0	0	2	0	0	0	0	1	15
(1)	1.1	1.1	1.1	4.3	4.3	0.0	1.1	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	1.1	16.0
(2)	0.1	0.1	0.1	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.9
OVER-24.0	0	0	5	4	0	2	1	0	0	0	0	0	0	0	1	1	14
(1)	0.0	0.0	5.3	4.3	0.0	2.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	14.9
(2)	0.0	0.0	0.3	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.8
ALL SPEEDS	2	1	7	10	15	7	5	6	3	3	6	1	12	9	4	3	94
(1)	2.1	1.1	7.4	10.6	16.0	7.4	5.3	6.4	3.2	3.2	6.4	1.1	12.8	9.6	4.3	3.2	100.0
(2)	0.1	0.1	0.4	0.6	0.9	0.4	0.3	0.3	0.2	0.2	0.3	0.1	0.7	0.5	0.2	0.2	5.4

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 94

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS C-- DELTA T -1.6 TO -1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 4.73

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-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	1	0	0	0	0	0	0	2
(1)	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	2.4
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
3.6- 7.5	0	0	0	2	0	0	0	0	1	0	0	0	1	3	1	0	8
(1)	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.2	3.6	1.2	0.0	9.6
(2)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.5
7.6-12.5	0	0	0	2	5	0	0	4	1	0	0	1	3	3	3	1	23
(1)	0.0	0.0	0.0	2.4	6.0	0.0	0.0	4.8	1.2	0.0	0.0	1.2	3.6	3.6	3.6	1.2	27.7
(2)	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.1	1.3
12.6-18.5	1	1	0	0	3	0	1	1	1	7	1	0	1	4	2	2	25
(1)	1.2	1.2	0.0	0.0	3.6	0.0	1.2	1.2	1.2	8.4	1.2	0.0	1.2	4.8	2.4	2.4	30.1
(2)	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.1	0.1	0.4	0.1	0.0	0.1	0.2	0.1	0.1	1.4
18.6-24.0	0	0	0	3	3	0	0	0	1	1	0	0	0	1	0	1	10
(1)	0.0	0.0	0.0	3.6	3.6	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	12.0
(2)	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.6
OVER-24.0	0	1	6	6	1	0	0	0	0	0	0	0	0	0	1	0	15
(1)	0.0	1.2	7.2	7.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	18.1
(2)	0.0	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9
ALL SPEEDS	1	2	6	14	12	0	1	5	4	9	1	1	5	11	7	4	83
(1)	1.2	2.4	7.2	16.9	14.5	0.0	1.2	6.0	4.8	10.8	1.2	1.2	6.0	13.3	8.4	4.8	100.0
(2)	0.1	0.1	0.3	0.8	0.7	0.0	0.1	0.3	0.2	0.5	0.1	0.1	0.3	0.6	0.4	0.2	4.7

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 83

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS D-- DELTA T -1.4 TO -0.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 29.52

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
(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	0.4	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	0.1	0.0	0.0	0.2
CALM- 3.5	1	1	1	0	3	0	1	2	3	0	2	0	0	6	1	0	21
(1)	0.2	0.2	0.2	0.0	0.6	0.0	0.2	0.4	0.6	0.0	0.4	0.0	0.0	1.2	0.2	0.0	4.1
(2)	0.1	0.1	0.1	0.0	0.2	0.0	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.3	0.1	0.0	1.2
3.6- 7.5	1	1	4	4	4	4	2	11	4	6	5	3	4	5	4	1	63
(1)	0.2	0.2	0.8	0.8	0.8	0.8	0.4	2.1	0.8	1.2	1.0	0.6	0.8	1.0	0.8	0.2	12.2
(2)	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.6	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.1	3.6
7.6-12.5	3	1	3	4	14	6	8	20	8	13	14	16	11	7	9	2	139
(1)	0.6	0.2	0.6	0.8	2.7	1.2	1.5	3.9	1.5	2.5	2.7	3.1	2.1	1.4	1.7	0.4	26.8
(2)	0.2	0.1	0.2	0.2	0.8	0.3	0.5	1.1	0.5	0.7	0.8	0.9	0.6	0.4	0.5	0.1	7.9
12.6-18.5	6	2	9	7	6	2	11	10	8	43	23	21	29	18	18	8	221
(1)	1.2	0.4	1.7	1.4	1.2	0.4	2.1	1.9	1.5	8.3	4.4	4.1	5.6	3.5	3.5	1.5	42.7
(2)	0.3	0.1	0.5	0.4	0.3	0.1	0.6	0.6	0.5	2.5	1.3	1.2	1.7	1.0	1.0	0.5	12.6
18.6-24.0	0	3	2	6	4	0	2	2	1	5	2	0	5	7	5	2	46
(1)	0.0	0.6	0.4	1.2	0.8	0.0	0.4	0.4	0.2	1.0	0.4	0.0	1.0	1.4	1.0	0.4	8.9
(2)	0.0	0.2	0.1	0.3	0.2	0.0	0.1	0.1	0.1	0.3	0.1	0.0	0.3	0.4	0.3	0.1	2.6
OVER-24.0	0	0	12	4	0	1	0	2	0	0	0	0	0	0	4	2	25
(1)	0.0	0.0	2.3	0.8	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	4.8
(2)	0.0	0.0	0.7	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	1.4
ALL SPEEDS	11	8	31	25	32	13	24	47	24	67	46	40	49	45	41	15	518
(1)	2.1	1.5	6.0	4.8	6.2	2.5	4.6	9.1	4.6	12.9	8.9	7.7	9.5	8.7	7.9	2.9	100.0
(2)	0.6	0.5	1.8	1.4	1.8	0.7	1.4	2.7	1.4	3.8	2.6	2.3	2.8	2.6	2.3	0.9	29.5

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 518

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS E-- DELTA T -0.4 TO +1.5 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 17.61

WIND DISTRIBUTION SUMMARY

SPEED(MPH)	DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(1)	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
(2)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
CALM- 3.5	0	0	0	0	0	0	0	0	2	0	5	0	0	0	0	0	7
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	2.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4
3.6- 7.5	1	2	1	1	1	8	1	6	9	4	5	2	2	6	7	2	58
(1)	0.3	0.6	0.3	0.3	0.3	2.6	0.3	1.9	2.9	1.3	1.6	0.6	0.6	1.9	2.3	0.6	18.8
(2)	0.1	0.1	0.1	0.1	0.1	0.5	0.1	0.3	0.5	0.2	0.3	0.1	0.1	0.3	0.4	0.1	3.3
7.6-12.5	1	2	1	0	0	3	5	19	18	17	24	10	11	10	7	1	129
(1)	0.3	0.6	0.3	0.0	0.0	1.0	1.6	6.1	5.8	5.5	7.8	3.2	3.6	3.2	2.3	0.3	41.7
(2)	0.1	0.1	0.1	0.0	0.0	0.2	0.3	1.1	1.0	1.0	1.4	0.6	0.6	0.6	0.4	0.1	7.4
12.6-18.5	1	0	2	1	0	0	3	8	3	22	31	21	4	5	1	2	104
(1)	0.3	0.0	0.6	0.3	0.0	0.0	1.0	2.6	1.0	7.1	10.0	6.8	1.3	1.6	0.3	0.6	33.7
(2)	0.1	0.0	0.1	0.1	0.0	0.0	0.2	0.5	0.2	1.3	1.8	1.2	0.2	0.3	0.1	0.1	5.9
18.6-24.0	0	0	0	0	0	0	1	0	0	1	6	1	0	0	0	[illegible]	10
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	1.9	0.3	0.0	0.0	0.0	0.[illegible]	3.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.1	0.6
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	4	5	2	1	11	10	33	32	44	71	34	17	21	15	6	309
(1)	1.0	1.3	1.6	0.6	0.3	3.6	3.2	10.7	10.4	14.2	23.0	11.0	5.5	6.8	4.9	1.9	100.0
(2)	0.2	0.2	0.3	0.1	0.1	0.6	0.6	1.9	1.8	2.5	4.0	1.9	1.0	1.2	0.9	0.3	17.6

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 309

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS F-- DELTA T 1.6 TO 4.0 DEG C PER 100METERS CLASS FREQUENCY (PERCENT) = 6.21

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
(1)	0.9	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	0.9	0.0	1.8
(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	0.1	0.0	0.1
CALM- 3.5	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	1	8
(1)	0.0	0.0	0.9	0.0	0.0	0.9	0.9	0.0	0.9	0.9	0.0	0.9	0.9	0.0	0.0	0.9	7.3
(2)	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.5
3.6- 7.5	0	0	0	0	0	1	1	2	0	2	3	3	1	1	0	1	15
(1)	0.0	0.0	0.0	0.0	0.0	0.9	0.9	1.8	0.0	1.8	2.8	2.8	0.9	0.9	0.0	0.9	13.8
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.9
7.6-12.5	0	0	0	0	0	1	2	4	4	3	10	9	13	6	2	1	55
(1)	0.0	0.0	0.0	0.0	0.0	0.9	1.8	3.7	3.7	2.8	9.2	8.3	11.9	5.5	1.8	0.9	50.5
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.6	0.5	0.7	0.3	0.1	0.1	3.1
12.6-18.5	0	0	0	0	0	0	0	0	0	4	9	6	1	0	0	0	20
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	8.3	5.5	0.9	0.0	0.0	0.0	18.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.3	0.1	0.0	0.0	0.0	1.1
18.6-24.0	0	0	0	0	0	0	0	0	0	1	6	2	0	0	0	0	9
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.5	1.8	0.0	0.0	0.0	0.0	8.3
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.5
OVER-24.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(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	1	0	0	3	4	6	5	11	28	21	16	7	3	3	109
(1)	0.9	0.0	0.9	0.0	0.0	2.8	3.7	5.5	4.6	10.1	25.7	19.3	14.7	6.4	2.8	2.8	100.0
(2)	0.1	0.0	0.1	0.0	0.0	0.2	0.2	0.3	0.3	0.6	1.6	1.2	0.9	0.4	0.2	0.2	6.2

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 109

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS G-- DELTA T GREATER THAN 4.0 DEG C PER 100 METERS CLASS FREQUENCY (PERCENT) = 5.07

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1
(2)	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	0.1
CALM- 3.5	0	0	0	3	3	0	0	1	0	0	0	2	0	0	0	0	9
(1)	0.0	0.0	0.0	3.4	3.4	0.0	0.0	1.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	10.1
(2)	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5
3.6- 7.5	0	0	0	0	0	2	2	6	8	8	4	1	7	0	1	0	39
(1)	0.0	0.0	0.0	0.0	0.0	2.2	2.2	6.7	9.0	9.0	4.5	1.1	7.9	0.0	1.1	0.0	43.8
(2)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.5	0.2	0.1	0.4	0.0	0.1	0.0	2.2
7.6-12.5	0	0	0	0	0	0	0	6	8	2	1	0	6	9	2	0	34
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	9.0	2.2	1.1	0.0	6.7	10.1	2.2	0.0	38.2
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.1	0.1	0.0	0.3	0.5	0.1	0.0	1.9
12.6-18.5	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	3.4
(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
18.6-24.0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3
(1)	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.0	3.4
(2)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.2
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	0	0	3	3	2	2	13	16	11	6	7	13	9	3	0	89
(1)	1.1	0.0	0.0	3.4	3.4	2.2	2.2	14.6	18.0	12.4	6.7	7.9	14.6	10.1	3.4	0.0	100.0
(2)	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.7	0.9	0.6	0.3	0.4	0.7	0.5	0.2	0.0	5.1

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE= 89

CALM=WIND SPEED LESS THAN 1.00MPH

TABLE 4A-2 (Continued)

160 FT TOWER - 160 FT EL

160.0 FT WIND DATA 10/1/84 - 12/31/84

STABILITY CLASS ALL-- ALL STABILITIES COMBINED CLASS FREQUENCY (PERCENT) = 100.00

WIND DISTRIBUTION SUMMARY

	DIRECTION																
SPEED(MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
-CALM	2	0	1	0	2	0	0	0	0	1	0	0	0	2	1	0	9
(1)	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.5
(2)	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.5
CALM- 3.5	10	3	5	12	15	9	6	4	7	3	8	3	2	9	3	5	104
(1)	0.6	0.2	0.3	0.7	0.9	0.5	0.3	0.2	0.4	0.2	0.5	0.2	0.1	0.5	0.2	0.3	5.9
(2)	0.6	0.2	0.3	0.7	0.9	0.5	0.3	0.2	0.4	0.2	0.5	0.2	0.1	0.5	0.2	0.3	5.9
3.6- 7.5	11	10	9	14	7	24	17	34	26	24	20	14	22	35	22	10	299
(1)	0.6	0.6	0.5	0.8	0.4	1.4	1.0	1.9	1.5	1.4	1.1	0.8	1.3	2.0	1.3	0.6	17.0
(2)	0.6	0.6	0.5	0.8	0.4	1.4	1.0	1.9	1.5	1.4	1.1	0.8	1.3	2.0	1.3	0.6	17.0
7.6-12.5	9	7	11	14	28	26	34	65	47	52	64	49	67	50	31	8	562
(1)	0.5	0.4	0.6	0.8	1.6	1.5	1.9	3.7	2.7	3.0	3.6	2.8	3.8	2.8	1.8	0.5	32.0
(2)	0.5	0.4	0.6	0.8	1.6	1.5	1.9	3.7	2.7	3.0	3.6	2.8	3.8	2.8	1.8	0.5	32.0
12.6-18.5	16	6	17	21	25	5	17	22	15	86	88	62	62	38	23	22	525
(1)	0.9	0.3	1.0	1.2	1.4	0.3	1.0	1.3	0.9	4.9	5.0	3.5	3.5	2.2	1.3	1.3	29.9
(2)	0.9	0.3	1.0	1.2	1.4	0.3	1.0	1.3	0.9	4.9	5.0	3.5	3.5	2.2	1.3	1.3	29.9
18.6-24.0	11	7	3	18	15	0	4	2	3	16	23	5	15	12	11	12	157
(1)	0.6	0.4	0.2	1.0	0.9	0.0	0.2	0.1	0.2	0.9	1.3	0.3	0.9	0.7	0.6	0.7	8.9
(2)	0.6	0.4	0.2	1.0	0.9	0.0	0.2	0.1	0.2	0.9	1.3	0.3	0.9	0.7	0.6	0.7	8.9
OVER-24.0	4	5	36	25	2	5	1	2	0	0	0	0	0	0	10	9	99
(1)	0.2	0.3	2.1	1.4	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	5.6
(2)	0.2	0.3	2.1	1.4	0.1	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.5	5.6
ALL SPEEDS	63	38	82	104	94	69	79	129	98	182	203	133	168	146	101	66	1755
(1)	3.6	2.2	4.7	5.9	5.4	3.9	4.5	7.4	5.6	10.4	11.6	7.6	9.6	8.3	5.8	3.8	100.0
(2)	3.6	2.2	4.7	5.9	5.4	3.9	4.5	7.4	5.6	10.4	11.6	7.6	9.6	8.3	5.8	3.8	100.0

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

NUMBER OF GOOD OBSERVATIONS ON THIS PAGE=1755 79.5 PERCENT DATA RECOVERY
NUMBER OF HOURS IN THIS PERIOD= 2208

CALM=WIND SPEED LESS THAN 1.00MPH

3. OFF-SITE DOSES RESULTING FROM RADIOACTIVE LIQUID EFFLUENTS

3.1 General Dose Assessment

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

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

3.2 Maximum Individual Doses

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

3.3 Population Doses

The population doses are shown in Table 3.3-1.

1 See References #1 pg. 68
3 See Reference #3 pg. 68

Table 3.2-1

July - December 1984 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	0.5	0.6	0.01	0.1	0.1	0.4	0.0	0.3
Salt Water Shell Fish	0.7	0.8	0.01	0.2	0.2	1.7	0.0	0.4
Discharge Canal Shoreline	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ocean Shoreline Deposits	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Swimming	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Boating	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total	1.3	1.5	0.1	0.5	0.4	2.25	1.4	0.9

Table 3.2-2

July - December 1984 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	0.5	0.6	0.01	0.2	0.1	0.3	0.0	0.2
Salt Water Shell Fish	0.6	0.7	0.01	0.2	0.2	1.0	0.0	0.3
Discharge Canal Shoreline	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5
Ocean Shoreline Deposits	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Swimming	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Boating	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total	1.7	1.9	0.7	1.0	1.0	2.0	0.8	1.2

Table 3.2-3

July - December 1984 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	0.6	0.5	0.01	0.1	0.1	0.1	0.0	0.1
Salt Water Shell Fish	0.9	0.7	0.01	0.1	0.2	0.4	0	0.4
Discharge Canal Shoreline	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ocean Shoreline Deposits	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Swimming	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Boating	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	1.6	1.4	0.1	0.4	0.5	0.7	0.2	0.7

Table 3.3-1
Population Doses Resulting From The
July - December 1984 Liquid Effluents

Pathway	Thyroid	Total Body (MAN-REM)
Salt Water Fish	< .01	5.0
Salt Water Shell Fish	< .01	4.3
Salt Water Plants	< .01	.05
Ocean Shoreline Deposits	9.3	9.3
Swimming	.05	.05
Total	9.4	19.0

NOTE: These are the major pathways for liquid effluents.

4. OFF-SITE DOSES RESULTING FROM RADIOACTIVE GASEOUS EFFLUENTS

4.1 General Dose Assessment

The methods and parameters used to calculate the off-site doses are presented in the Appendix I analysis for Unit #1[1]. The gaseous releases for both reactor building vent and the main stack, for the period July - December 1984, are elsewhere in this report. Meteorological information for calculating dispersion of these releases are shown in Tables 4.1-1 through 4.1-12. For each quarter year, values of X/Q, X/Q depleted and D/Q are tabulated for twenty-three radial distances at sixteen compass directions using the AEOLUS program which was provided to Boston Edison by Yankee Atomic Electric Company.

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

4.2 Maximum Individual Doses

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

4.3 Population Doses

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

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

1 See References #1 pg. 68
3 See Reference #3 pg. 68

UNDEPLETED X/Q FOR THE REACTOR BUILDING VENT FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	1.010E-05	9.280E-06	7.860E-06	7.850E-06	8.150E-06	7.390E-06	1.760E-05	1.620E-05
2	402.30	2.720E-06	2.700E-06	2.260E-06	2.060E-06	2.180E-06	1.870E-06	5.020E-06	4.660E-06
3	804.70	7.710E-07	8.120E-07	6.750E-07	5.950E-07	5.740E-07	4.470E-07	1.530E-06	1.390E-06
4	1207.00	3.970E-07	4.120E-07	3.440E-07	3.060E-07	2.840E-07	2.160E-07	8.230E-07	7.270E-07
5	1609.40	2.600E-07	2.620E-07	2.210E-07	2.010E-07	1.850E-07	1.440E-07	5.390E-07	4.670E-07
6	2414.00	1.430E-07	1.390E-07	1.180E-07	1.100E-07	1.020E-07	8.130E-08	3.020E-07	2.690E-07
7	3218.70	9.410E-08	9.010E-08	7.630E-08	7.290E-08	6.740E-08	5.500E-08	2.010E-07	1.820E-07
8	4023.40	6.850E-08	6.470E-08	5.470E-08	5.340E-08	4.920E-08	4.080E-08	1.470E-07	1.350E-07
9	4828.10	5.320E-08	4.940E-08	4.170E-08	4.170E-08	3.820E-08	3.210E-08	1.140E-07	1.060E-07
10	5632.70	4.300E-08	3.950E-08	3.330E-08	3.390E-08	3.090E-08	2.630E-08	9.250E-08	8.590E-08
11	6437.40	3.590E-08	3.260E-08	2.750E-08	2.830E-08	2.580E-08	2.220E-08	7.710E-08	7.190E-08
12	7242.10	3.050E-08	2.760E-08	2.320E-08	2.410E-08	2.210E-08	1.910E-08	6.570E-08	6.160E-08
13	8046.80	2.650E-08	2.380E-08	2.000E-08	2.090E-08	1.920E-08	1.680E-08	5.710E-08	5.370E-08
14	12070.10	1.570E-08	1.380E-08	1.160E-08	1.240E-08	1.150E-08	1.030E-08	3.360E-08	3.190E-08
15	16093.49	1.090E-08	9.410E-09	7.920E-09	8.620E-09	8.030E-09	7.280E-09	2.320E-08	2.220E-08
16	24140.29	6.560E-09	5.470E-09	4.630E-09	5.220E-09	4.850E-09	4.520E-09	1.370E-08	1.330E-08
17	32187.00	4.620E-09	3.790E-09	3.220E-09	3.690E-09	3.440E-09	3.250E-09	9.660E-09	9.460E-09
18	40233.79	3.540E-09	2.870E-09	2.440E-09	2.830E-09	2.650E-09	2.530E-09	7.340E-09	7.230E-09
19	48280.48	2.860E-09	2.300E-09	1.960E-09	2.290E-09	2.150E-09	2.070E-09	5.900E-09	5.850E-09
20	56327.29	2.390E-09	1.910E-09	1.630E-09	1.920E-09	1.810E-09	1.750E-09	4.910E-09	4.880E-09
21	64373.99	2.050E-09	1.630E-09	1.390E-09	1.650E-09	1.550E-09	1.510E-09	4.180E-09	4.170E-09
22	72420.75	1.790E-09	1.420E-09	1.210E-09	1.440E-09	1.360E-09	1.330E-09	3.630E-09	3.630E-09
23	80467.44	1.590E-09	1.250E-09	1.070E-09	1.280E-09	1.210E-09	1.180E-09	3.190E-09	3.210E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	4.040E-05	6.000E-05	7.050E-05	5.440E-05	1.780E-05	1.240E-05	1.150E-05	1.090E-05
2	402.30	1.160E-05	1.730E-05	2.020E-05	1.570E-05	5.070E-06	3.610E-06	3.340E-06	3.000E-06
3	804.70	3.530E-06	5.520E-06	6.100E-06	4.740E-06	1.680E-06	1.150E-06	1.040E-06	9.400E-07
4	1207.00	1.880E-06	2.920E-06	3.190E-06	2.460E-06	9.080E-07	6.270E-07	5.460E-07	5.050E-07
5	1609.40	1.220E-06	1.880E-06	2.050E-06	1.570E-06	5.900E-07	4.120E-07	3.540E-07	3.330E-07
6	2414.00	6.950E-07	1.050E-06	1.170E-06	9.050E-07	3.260E-07	2.250E-07	1.940E-07	1.820E-07
7	3218.70	4.700E-07	6.980E-07	7.970E-07	6.180E-07	2.150E-07	1.460E-07	1.280E-07	1.190E-07
8	4023.40	3.470E-07	5.100E-07	5.900E-07	4.600E-07	1.560E-07	1.060E-07	9.260E-08	8.650E-08
9	4828.10	2.710E-07	3.950E-07	4.620E-07	3.600E-07	1.210E-07	8.140E-08	7.130E-08	6.710E-08
10	5632.70	2.200E-07	3.190E-07	3.760E-07	2.930E-07	9.760E-08	6.540E-08	5.730E-08	5.410E-08
11	6437.40	1.840E-07	2.660E-07	3.140E-07	2.450E-07	8.110E-08	5.420E-08	4.750E-08	4.500E-08
12	7242.10	1.580E-07	2.260E-07	2.690E-07	2.100E-07	6.870E-08	4.590E-08	4.030E-08	3.810E-08
13	8046.80	1.370E-07	1.960E-07	2.340E-07	1.830E-07	5.940E-08	3.960E-08	3.490E-08	3.300E-08
14	12070.10	8.120E-08	1.140E-07	1.390E-07	1.090E-07	3.440E-08	2.300E-08	2.030E-08	1.920E-08
15	16093.49	5.650E-08	7.850E-08	9.660E-08	7.570E-08	2.350E-08	1.570E-08	1.390E-08	1.320E-08
16	24140.29	3.410E-08	4.670E-08	5.860E-08	4.600E-08	1.390E-08	9.220E-09	8.160E-09	7.810E-09
17	32187.00	2.380E-08	3.250E-08	4.110E-08	3.230E-08	9.650E-09	6.360E-09	5.650E-09	5.450E-09
18	40233.79	1.820E-08	2.460E-08	3.130E-08	2.470E-08	7.270E-09	4.800E-09	4.270E-09	4.140E-09
19	48280.48	1.470E-08	1.980E-08	2.530E-08	2.000E-08	5.840E-09	3.840E-09	3.430E-09	3.320E-09
20	56327.29	1.220E-08	1.650E-08	2.120E-08	1.670E-08	4.840E-09	3.170E-09	2.840E-09	2.760E-09
21	64373.99	1.040E-08	1.400E-08	1.810E-08	1.430E-08	4.120E-09	2.690E-09	2.420E-09	2.350E-09
22	72420.75	9.070E-09	1.220E-08	1.570E-08	1.240E-08	3.570E-09	2.330E-09	2.100E-09	2.040E-09
23	80467.44	7.990E-09	1.070E-08	1.390E-08	1.100E-08	3.140E-09	2.040E-09	1.850E-09	1.800E-09

TABLE 4.1-1
UNDEPLETED RELATIVE CONCENTRATIONS PER UNIT
EMISSION FOR REACTOR BUILDING VENT FOR
JULY - SEPTEMBER 1984

DEPLETED X/Q FOR THE REACTOR BUILDING VENT FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	9.760E-06	9.050E-06	7.670E-06	7.630E-06	7.980E-06	7.250E-06	1.650E-05	1.500E-05
2	402.30	2.610E-06	2.600E-06	2.180E-06	1.980E-06	2.120E-06	1.810E-06	4.620E-06	4.180E-06
3	804.70	7.240E-07	7.700E-07	6.400E-07	5.590E-07	5.460E-07	4.260E-07	1.380E-06	1.210E-06
4	1207.00	3.670E-07	3.860E-07	3.220E-07	2.830E-07	2.670E-07	2.030E-07	7.260E-07	6.200E-07
5	1609.40	2.380E-07	2.430E-07	2.050E-07	1.840E-07	1.730E-07	1.350E-07	4.680E-07	3.940E-07
6	2414.00	1.290E-07	1.270E-07	1.080E-07	9.950E-08	9.390E-08	7.540E-08	2.550E-07	2.190E-07
7	3218.70	8.40[illegible]E-08	8.170E-08	6.940E-08	6.520E-08	6.190E-08	5.070E-08	1.660E-07	1.440E-07
8	4023.40	6.05[illegible]-08	5.820E-08	4.930E-08	4.730E-08	4.500E-08	3.750E-08	1.190E-07	1.040E-07
9	4828.10	4.660E-08	4.420E-08	3.740E-08	3.660E-08	3.470E-08	2.740E-08	9.070E-08	7.920E-08
10	5632.70	3.740E-08	3.510E-08	2.970E-08	2.960E-08	2.800E-08	2.400E-08	7.220E-08	6.290E-08
11	6437.40	3.100E-08	2.890E-08	2.440E-08	2.450E-08	2.330E-08	2.020E-08	5.920E-08	5.160E-08
12	7242.10	2.620E-08	2.430E-08	2.050E-08	2.080E-08	1.990E-08	1.730E-08	4.960E-08	4.320E-08
13	8046.80	2.260E-08	2.090E-08	1.760E-08	1.800E-08	1.730E-08	1.520E-08	4.240E-08	3.690E-08
14	12070.10	1.300E-08	1.190E-08	1.000E-08	1.040E-08	1.020E-08	9.180E-09	2.330E-08	2.000E-08
15	16093.49	8.880E-09	7.990E-09	6.750E-09	7.090E-09	7.060E-09	6.460E-09	1.520E-08	1.290E-08
16	24140.29	5.170E-09	4.550E-09	3.860E-09	4.160E-09	4.210E-09	3.960E-09	8.140E-09	6.730E-09
17	32187.00	3.540E-09	3.100E-09	2.640E-09	2.860E-09	2.950E-09	2.810E-09	5.180E-09	4.160E-09
18	40233.79	2.650E-09	2.310E-09	1.980E-09	2.140E-09	2.250E-09	2.160E-09	3.630E-09	2.830E-09
19	48280.48	2.090E-09	1.820E-09	1.560E-09	1.700E-09	1.810E-09	1.750E-09	2.710E-09	2.050E-09
20	56327.29	1.710E-09	1.490E-09	1.280E-09	1.390E-09	1.500E-09	1.460E-09	2.100E-09	1.550E-09
21	64373.99	1.440E-09	1.260E-09	1.080E-09	1.170E-09	1.270E-09	1.250E-09	1.680E-09	1.210E-09
22	72420.75	1.240E-09	1.080E-09	9.300E-10	1.000E-09	1.110E-09	1.080E-09	1.380E-09	9.650E-10
23	80467.44	1.080E-09	9.410E-10	8.120E-10	8.740E-10	9.730E-10	9.570E-10	1.150E-09	7.880E-10

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.740E-05	5.620E-05	6.510E-05	4.990E-05	1.690E-05	1.190E-05	1.100E-05	1.050E-05
2	402.30	1.050E-05	1.590E-05	1.810E-05	1.400E-05	4.700E-06	3.390E-06	3.130E-06	2.850E-06
3	804.70	3.090E-06	4.940E-06	5.310E-06	4.080E-06	1.520E-06	1.060E-06	9.520E-07	8.720E-07
4	1207.00	1.610E-06	2.570E-06	2.720E-06	2.070E-06	8.100E-07	5.680E-07	4.940E-07	4.610E-07
5	1609.40	1.030E-06	1.630E-06	1.720E-06	1.300E-06	5.200E-07	3.680E-07	3.160E-07	3.000E-07
6	2414.00	5.670E-07	8.840E-07	9.540E-07	7.250E-07	2.790E-07	1.960E-07	1.690E-07	1.610E-07
7	3218.70	3.720E-07	5.740E-07	6.290E-07	4.800E-07	1.800E-07	1.260E-07	1.090E-07	1.040E-07
8	4023.40	2.680E-07	4.100E-07	4.540E-07	3.460E-07	1.280E-07	8.910E-08	7.800E-08	7.440E-08
9	4828.10	2.040E-07	3.120E-07	3.470E-07	2.640E-07	9.780E-08	6.770E-08	5.920E-08	5.690E-08
10	5632.70	1.620E-07	2.470E-07	2.760E-07	2.100E-07	7.770E-08	5.370E-08	4.690E-08	4.540E-08
11	6437.40	1.330E-07	2.020E-07	2.260E-07	1.710E-07	6.350E-08	4.390E-08	3.840E-08	3.740E-08
12	7242.10	1.110E-07	1.690E-07	1.890E-07	1.430E-07	5.300E-08	3.670E-08	3.220E-08	3.140E-08
13	8046.80	9.500E-08	1.440E-07	1.620E-07	1.220E-07	4.520E-08	3.140E-08	2.750E-08	2.690E-08
14	12070.10	5.140E-08	7.800E-08	8.740E-08	6.560E-08	2.460E-08	1.730E-08	1.520E-08	1.510E-08
15	16093.49	3.290E-08	5.030E-08	5.610E-08	4.170E-08	1.570E-08	1.130E-08	9.980E-09	1.000E-08
16	24140.29	1.720E-08	2.670E-08	2.930E-08	2.140E-08	8.560E-09	6.150E-09	5.440E-09	5.620E-09
17	32187.00	1.050E-08	1.680E-08	1.810E-08	1.300E-08	5.450E-09	3.980E-09	3.540E-09	3.730E-09
18	40233.79	7.140E-09	1.160E-08	1.230E-08	8.640E-09	3.820E-09	2.830E-09	2.530E-09	2.710E-09
19	48280.48	5.160E-09	8.630E-09	8.910E-09	6.160E-09	2.850E-09	2.150E-09	1.930E-09	2.090E-09
20	56327.29	3.880E-09	6.660E-09	6.730E-09	4.560E-09	2.220E-09	1.690E-09	1.530E-09	1.680E-09
21	64373.99	3.010E-09	5.300E-09	5.250E-09	3.490E-09	1.780E-09	1.370E-09	1.250E-09	1.380E-09
22	72420.75	2.390E-09	4.320E-09	4.200E-09	2.740E-09	1.460E-09	1.140E-09	1.050E-09	1.170E-09
23	80467.44	1.940E-09	3.600E-09	3.430E-09	2.190E-09	1.220E-09	9.610E-10	8.950E-10	9.990E-10

TABLE 4.1-2
DEPLETED RELATIVE CONCENTRATION PER UNIT
EMISSION FOR REACTOR BUILDING VENT FOR
JULY - SEPTEMBER 1984

DEPOSITION FACTORS FOR THE REACTOR BUILDING VENT FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W- (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5
1	201.20	3.160E-08	3.600E-08	2.430E-08	1.350E-08	1.770E-08	1.430E-08	2.370E-08	2.230E-08
2	402.30	8.490E-09	1.030E-08	7.090E-09	3.640E-09	4.860E-09	3.600E-09	6.520E-09	6.190E-09
3	804.70	2.320E-09	2.970E-09	2.110E-09	9.950E-10	1.340E-09	8.550E-10	1.870E-09	1.780E-09
4	1207.00	1.150E-09	1.480E-09	1.060E-09	4.900E-10	6.620E-10	4.100E-10	9.700E-10	9.210E-10
5	1609.40	7.450E-10	9.310E-10	6.690E-10	3.120E-10	4.250E-10	2.710E-10	6.270E-10	5.880E-10
6	2414.00	4.010E-10	4.860E-10	3.470E-10	1.660E-10	2.270E-10	1.510E-10	3.440E-10	3.250E-10
7	3218.70	2.620E-10	3.140E-10	2.210E-10	1.090E-10	1.480E-10	1.010E-10	2.250E-10	2.140E-10
8	4023.40	1.890E-10	2.240E-10	1.560E-10	7.870E-11	1.070E-10	7.480E-11	1.620E-10	1.540E-10
9	4828.10	1.460E-10	1.700E-10	1.180E-10	6.070E-11	8.170E-11	5.860E-11	1.240E-10	1.180E-10
10	5632.70	1.170E-10	1.350E-10	9.320E-11	4.890E-11	6.550E-11	4.780E-11	9.900E-11	9.360E-11
11	6437.40	9.700E-11	1.110E-10	7.620E-11	4.060E-11	5.420E-11	4.020E-11	8.140E-11	7.680E-11
12	7242.10	8.220E-11	9.390E-11	6.390E-11	3.440E-11	4.590E-11	3.450E-11	6.850E-11	6.450E-11
13	8046.80	7.110E-11	8.080E-11	5.470E-11	2.980E-11	3.970E-11	3.010E-11	5.870E-11	5.520E-11
14	12070.10	4.140E-11	4.640E-11	3.090E-11	1.740E-11	2.310E-11	1.820E-11	3.270E-11	3.020E-11
15	16093.49	2.830E-11	3.130E-11	2.070E-11	1.190E-11	1.580E-11	1.280E-11	2.150E-11	1.960E-11
16	24140.29	1.660E-11	1.800E-11	1.190E-11	7.040E-12	9.200E-12	7.810E-12	1.180E-11	1.040E-11
17	32187.00	1.150E-11	1.240E-11	8.110E-12	4.890E-12	6.370E-12	5.550E-12	7.630E-12	6.580E-12
18	40233.79	8.650E-12	9.280E-12	6.070E-12	3.690E-12	4.810E-12	4.260E-12	5.430E-12	4.560E-12
19	48280.48	6.880E-12	7.370E-12	4.800E-12	2.940E-12	3.840E-12	3.440E-12	4.110E-12	3.370E-12
20	56327.29	5.670E-12	6.060E-12	3.940E-12	2.430E-12	3.170E-12	2.870E-12	3.240E-12	2.590E-12
21	64373.99	4.790E-12	5.110E-12	3.320E-12	2.060E-12	2.680E-12	2.450E-12	2.630E-12	2.060E-12
22	72420.75	4.130E-12	4.410E-12	2.860E-12	1.780E-12	2.320E-12	2.130E-12	2.190E-12	1.670E-12
23	80467.44	3.610E-12	3.850E-12	2.500E-12	1.560E-12	2.030E-12	1.880E-12	1.850E-12	1.390E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 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	6.680E-08	1.970E-07	2.030E-07	1.230E-07	4.510E-08	2.930E-08	2.870E-08	3.020E-08
2	402.30	1.860E-08	5.580E-08	5.670E-08	3.430E-08	1.250E-08	8.360E-09	8.170E-09	8.390E-09
3	804.70	5.380E-09	1.750E-08	1.710E-08	9.970E-09	4.110E-09	2.640E-09	2.510E-09	2.470E-09
4	1207.00	2.780E-09	9.120E-09	9.020E-09	5.100E-09	2.210E-09	1.390E-09	1.290E-09	1.280E-09
5	1609.40	1.770E-09	5.820E-09	5.810E-09	3.210E-09	1.430E-09	8.980E-10	8.270E-10	8.300E-10
6	2414.00	9.840E-10	3.120E-09	3.170E-09	1.790E-09	7.650E-10	4.750E-10	4.380E-10	4.410E-10
7	3218.70	6.470E-10	2.010E-09	2.060E-09	1.180E-09	4.910E-10	3.040E-10	2.820E-10	2.860E-10
8	4023.40	4.660E-10	1.430E-09	1.480E-09	8.520E-10	3.500E-10	2.150E-10	2.010E-10	2.050E-10
9	4828.10	3.560E-10	1.090E-09	1.130E-09	6.500E-10	2.660E-10	1.630E-10	1.520E-10	1.560E-10
10	5632.70	2.830E-10	8.620E-10	8.960E-10	5.160E-10	2.120E-10	1.290E-10	1.210E-10	1.240E-10
11	6437.40	2.320E-10	7.050E-10	7.340E-10	4.220E-10	1.730E-10	1.060E-10	9.900E-11	1.020E-10
12	7242.10	1.950E-10	5.900E-10	6.150E-10	3.540E-10	1.450E-10	8.840E-11	8.300E-11	8.610E-11
13	8046.80	1.670E-10	5.030E-10	5.260E-10	3.020E-10	1.230E-10	7.540E-11	7.100E-11	7.390E-11
14	12070.10	9.070E-11	2.760E-10	2.870E-10	1.630E-10	6.720E-11	4.170E-11	3.970E-11	4.170E-11
15	16093.49	5.840E-11	1.790E-10	1.860E-10	1.040E-10	4.370E-11	2.740E-11	2.620E-11	2.780E-11
16	24140.29	3.080E-11	9.700E-11	9.960E-11	5.380E-11	2.370E-11	1.510E-11	1.450E-11	1.570E-11
17	32187.00	1.910E-11	6.240E-11	6.290E-11	3.290E-11	1.520E-11	9.900E-12	9.640E-12	1.050E-11
18	40233.79	1.300E-11	4.430E-11	4.380E-11	2.210E-11	1.070E-11	7.140E-12	7.020E-12	7.710E-12
19	48280.48	9.520E-12	3.350E-11	3.250E-11	1.590E-11	8.080E-12	5.480E-12	5.430E-12	6.000E-12
20	56327.29	7.230E-12	2.630E-11	2.510E-11	1.190E-11	6.320E-12	4.370E-12	4.370E-12	4.840E-12
21	64373.99	5.660E-12	2.130E-11	2.000E-11	9.160E-12	5.090E-12	3.580E-12	3.610E-12	4.020E-12
22	72420.75	4.550E-12	1.770E-11	1.630E-11	7.250E-12	4.200E-12	3.010E-12	3.060E-12	3.410E-12
23	80467.44	3.730E-12	1.490E-11	1.350E-11	5.860E-12	3.530E-12	2.570E-12	2.630E-12	2.940E-12

TABLE 4.1-3
RELATIVE DEPOSITION CONCENTRATIONS PER UNIT
EMISSION FOR REACTOR BUILDING VENT
JULY - SEPTEMBER 1984

UNDEPLETED X/Q FOR THE MAIN STACK FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	1.900E-08	1.850E-08	7.490E-08	5.900E-08	4.990E-08	4.470E-08	2.260E-08	1.150E-08
2	402.30	3.150E-07	2.400E-07	3.840E-07	3.100E-07	4.290E-07	4.530E-07	2.020E-07	1.940E-07
3	804.70	1.120E-07	1.200E-07	1.870E-07	9.310E-08	1.460E-07	1.200E-07	5.440E-08	5.700E-08
4	1207.00	7.220E-08	1.490E-07	1.410E-07	7.610E-08	1.050E-07	5.940E-08	2.290E-08	2.410E-08
5	1609.40	8.690E-08	1.520E-07	1.230E-07	6.770E-08	8.970E-08	4.630E-08	1.790E-08	1.990E-08
6	2414.00	6.040E-08	7.940E-08	7.990E-08	4.320E-08	6.610E-08	3.290E-08	1.340E-08	1.640E-08
7	3218.70	4.070E-08	5.130E-08	5.660E-08	3.080E-08	5.120E-08	2.580E-08	1.110E-08	1.430E-08
8	4023.40	2.950E-08	3.670E-08	4.270E-08	2.360E-08	4.130E-08	2.090E-08	9.610E-09	1.260E-08
9	4828.10	2.290E-08	2.800E-08	3.370E-08	1.910E-08	3.420E-08	1.750E-08	8.430E-09	1.110E-08
10	5632.70	1.850E-08	2.240E-08	2.750E-08	1.590E-08	2.910E-08	1.500E-08	7.530E-09	9.930E-09
11	6437.40	1.550E-08	1.850E-08	2.300E-08	1.360E-08	2.520E-08	1.300E-08	6.820E-09	8.950E-09
12	7242.10	1.320E-08	1.560E-08	1.970E-08	1.180E-08	2.210E-08	1.150E-08	6.230E-09	8.140E-09
13	8046.80	1.150E-08	1.350E-08	1.710E-08	1.040E-08	3.040E-08	1.080E-08	8.450E-09	7.450E-09
14	12070.10	6.840E-09	7.780E-09	1.010E-08	6.530E-09	1.840E-08	7.030E-09	6.200E-09	5.170E-09
15	16093.49	4.780E-09	5.320E-09	6.990E-09	4.670E-09	1.290E-08	5.180E-09	6.860E-09	9.760E-09
16	24140.29	2.880E-09	3.140E-09	4.110E-09	2.900E-09	7.760E-09	3.340E-09	4.670E-09	6.000E-09
17	32187.00	2.040E-09	2.180E-09	2.870E-09	2.140E-09	5.480E-09	2.700E-09	3.960E-09	4.280E-09
18	40233.79	1.560E-09	1.660E-09	2.180E-09	1.900E-09	4.190E-09	2.430E-09	3.300E-09	3.290E-09
19	48280.48	1.260E-09	1.330E-09	1.750E-09	1.540E-09	3.390E-09	2.060E-09	3.840E-09	2.670E-09
20	56327.29	1.050E-09	1.110E-09	1.460E-09	1.290E-09	3.030E-09	1.730E-09	3.210E-09	2.240E-09
21	64373.99	9.020E-10	9.460E-10	1.250E-09	1.110E-09	2.580E-09	1.490E-09	2.760E-09	1.920E-09
22	72420.75	7.860E-10	8.240E-10	1.080E-09	9.800E-10	2.240E-09	1.300E-09	2.400E-09	1.680E-09
23	80467.44	6.940E-10	7.270E-10	9.540E-10	8.690E-10	1.980E-09	1.160E-09	2.130E-09	1.490E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	1.230E-08	2.450E-08	2.210E-08	1.170E-08	7.630E-09	1.000E-08	1.050E-08	1.030E-08
2	402.30	2.090E-07	4.210E-07	3.770E-07	1.980E-07	1.310E-07	1.710E-07	1.790E-07	2.320E-07
3	804.70	6.560E-08	1.410E-07	1.180E-07	6.230E-08	4.170E-08	5.410E-08	5.970E-08	9.560E-08
4	1207.00	2.950E-08	7.120E-08	5.400E-08	3.060E-08	1.960E-08	2.580E-08	3.040E-08	8.150E-08
5	1609.40	2.410E-08	6.460E-08	4.870E-08	2.730E-08	1.820E-08	2.330E-08	2.760E-08	7.000E-08
6	2414.00	2.020E-08	6.180E-08	4.980E-08	2.600E-08	2.020E-08	2.260E-08	2.480E-08	5.080E-08
7	3218.70	1.800E-08	5.700E-08	4.930E-08	2.480E-08	2.090E-08	2.150E-08	2.160E-08	3.870E-08
8	4023.40	1.620E-08	5.100E-08	4.650E-08	2.300E-08	2.020E-08	1.960E-08	1.870E-08	3.100E-08
9	4828.10	1.460E-08	4.520E-08	4.250E-08	2.100E-08	1.870E-08	1.770E-08	1.610E-08	2.590E-08
10	5632.70	1.320E-08	4.020E-08	3.890E-08	1.920E-08	1.730E-08	1.600E-08	1.410E-08	2.230E-08
11	6437.40	1.210E-08	3.590E-08	3.560E-08	1.770E-08	1.600E-08	1.450E-08	1.250E-08	1.950E-08
12	7242.10	1.120E-08	3.240E-08	3.280E-08	1.640E-08	1.480E-08	1.320E-08	1.120E-08	1.730E-08
13	8046.80	1.030E-08	2.950E-08	3.030E-08	1.520E-08	1.370E-08	1.210E-08	1.010E-08	1.550E-08
14	12070.10	7.450E-09	1.970E-08	2.130E-08	1.090E-08	9.790E-09	8.400E-09	6.710E-09	1.020E-08
15	16093.49	5.810E-09	1.450E-08	1.610E-08	8.430E-09	7.500E-09	6.350E-09	4.980E-09	9.190E-09
16	24140.29	4.020E-09	9.260E-09	1.060E-08	5.770E-09	5.050E-09	4.190E-09	3.250E-09	5.760E-09
17	32187.00	3.100E-09	6.750E-09	7.920E-09	4.400E-09	3.820E-09	3.730E-09	4.040E-09	4.160E-09
18	40233.79	2.510E-09	5.270E-09	6.270E-09	4.450E-09	4.720E-09	2.960E-09	3.220E-09	3.230E-09
19	48280.48	2.110E-09	4.310E-09	5.170E-09	3.700E-09	3.910E-09	2.440E-09	2.660E-09	2.630E-09
20	56327.29	1.820E-09	3.640E-09	4.390E-09	3.160E-09	3.340E-09	2.070E-09	2.270E-09	2.210E-09
21	64373.99	2.450E-09	3.140E-09	3.810E-09	2.760E-09	2.910E-09	1.800E-09	1.970E-09	1.910E-09
22	72420.75	2.830E-09	2.760E-09	3.360E-09	2.450E-09	2.580E-09	1.590E-09	1.750E-09	1.690E-09
23	80467.44	2.510E-09	2.460E-09	3.010E-09	2.200E-09	2.310E-09	1.430E-09	1.570E-09	1.490E-09

TABLE 4.1-4

UNDEPLETED RELATIVE CONCENTRATION PER UNIT EMISSION FOR MAIN STACK FOR JULY - SEPTEMBER 1984

DEPLETED X/Q FOR THE MAIN STACK FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	1.900E-08	1.850E-08	7.490E-08	5.900E-08	4.990E-08	4.470E-08	2.260E-08	1.150E-08
2	402.30	3.140E-07	2.390E-07	3.830E-07	3.100E-07	4.290E-07	4.520E-07	2.020E-07	1.940E-07
3	804.70	1.120E-07	1.200E-07	1.870E-07	9.290E-08	1.460E-07	1.190E-07	5.430E-08	5.690E-08
4	1207.00	7.200E-08	1.490E-07	1.410E-07	7.590E-08	1.050E-07	5.920E-08	2.280E-08	2.410E-08
5	1609.40	8.660E-08	1.520E-07	1.220E-07	6.750E-08	8.940E-08	4.620E-08	1.780E-08	1.980E-08
6	2414.00	6.000E-08	7.860E-08	7.930E-08	4.290E-08	6.560E-08	3.280E-08	1.330E-08	1.640E-08
7	3218.70	4.020E-08	5.040E-08	5.590E-08	3.040E-08	5.070E-08	2.560E-08	1.110E-08	1.430E-08
8	4023.40	2.900E-08	3.590E-08	4.190E-08	2.320E-08	4.070E-08	2.070E-08	9.540E-09	1.250E-08
9	4828.10	2.230E-08	2.720E-08	3.290E-08	1.870E-08	3.360E-08	1.730E-08	8.360E-09	1.100E-08
10	5632.70	1.800E-08	2.160E-08	2.670E-08	1.550E-08	2.850E-08	1.470E-08	7.460E-09	9.810E-09
11	6437.40	1.490E-08	1.780E-08	2.230E-08	1.320E-08	2.460E-08	1.280E-08	6.730E-09	8.820E-09
12	7242.10	1.270E-08	1.490E-08	1.900E-08	1.150E-08	2.150E-08	1.130E-08	6.140E-09	8.000E-09
13	8046.80	1.090E-08	1.280E-08	1.640E-08	1.010E-08	2.930E-08	1.050E-08	8.290E-09	7.310E-09
14	12070.10	6.350E-09	7.200E-09	9.520E-09	6.220E-09	1.740E-08	6.780E-09	6.010E-09	5.000E-09
15	16093.49	4.310E-09	4.800E-09	6.430E-09	4.390E-09	1.190E-08	4.940E-09	6.570E-09	7.090E-09
16	24140.29	2.470E-09	2.690E-09	3.660E-09	2.660E-09	6.870E-09	3.120E-09	4.350E-09	5.340E-09
17	32187.00	1.670E-09	1.790E-09	2.480E-09	1.910E-09	4.650E-09	2.450E-09	3.550E-09	3.640E-09
18	40233.79	1.230E-09	1.300E-09	1.830E-09	1.580E-09	3.410E-09	2.080E-09	2.850E-09	2.680E-09
19	48280.48	9.560E-10	1.000E-09	1.430E-09	1.240E-09	2.640E-09	1.500E-09	1.590E-09	2.080E-09
20	56327.29	7.700E-10	7.990E-10	1.160E-09	1.000E-09	1.970E-09	1.180E-09	1.210E-09	1.660E-09
21	64373.99	6.370E-10	6.550E-10	9.650E-10	8.300E-10	1.440E-09	9.810E-10	9.470E-10	1.370E-09
22	72420.75	5.380E-10	5.480E-10	8.210E-10	6.660E-10	1.160E-09	8.340E-10	7.630E-10	1.140E-09
23	80467.44	4.620E-10	4.670E-10	7.090E-10	5.700E-10	9.800E-10	7.210E-10	6.280E-10	9.690E-10

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	1.230E-08	2.450E-08	2.210E-08	1.170E-08	7.630E-09	1.000E-08	1.050E-08	1.030E-08
2	402.30	2.090E-07	4.200E-07	3.770E-07	1.980E-07	1.310E-07	1.710E-07	1.790E-07	2.320E-07
3	804.70	6.540E-08	1.400E-07	1.170E-07	6.210E-08	4.160E-08	5.390E-08	5.960E-08	9.540E-08
4	1207.00	2.940E-08	7.090E-08	5.380E-08	3.050E-08	1.950E-08	2.570E-08	3.030E-08	8.130E-08
5	1609.40	2.410E-08	6.430E-08	4.850E-08	2.720E-08	1.820E-08	2.320E-08	2.750E-08	6.980E-08
6	2414.00	2.010E-08	6.150E-08	4.960E-08	2.590E-08	2.010E-08	2.250E-08	2.470E-08	5.050E-08
7	3218.70	1.790E-08	5.660E-08	4.910E-08	2.470E-08	2.080E-08	2.130E-08	2.150E-08	3.830E-08
8	4023.40	1.610E-08	5.060E-08	4.610E-08	2.290E-08	2.010E-08	1.950E-08	1.850E-08	3.050E-08
9	4828.10	1.440E-08	4.470E-08	4.210E-08	2.080E-08	1.860E-08	1.750E-08	1.590E-08	2.540E-08
10	5632.70	1.310E-08	3.960E-08	3.840E-08	1.900E-08	1.710E-08	1.570E-08	1.390E-08	2.180E-08
11	6437.40	1.190E-08	3.530E-08	3.500E-08	1.740E-08	1.570E-08	1.420E-08	1.230E-08	1.900E-08
12	7242.10	1.100E-08	3.170E-08	3.220E-08	1.610E-08	1.450E-08	1.300E-08	1.090E-08	1.680E-08
13	8046.80	1.010E-08	2.870E-08	2.960E-08	1.480E-08	1.340E-08	1.190E-08	9.830E-09	1.500E-08
14	12070.10	7.210E-09	1.890E-08	2.040E-08	1.050E-08	9.390E-09	8.070E-09	6.440E-09	9.790E-09
15	16093.49	5.540E-09	1.370E-08	1.520E-08	7.990E-09	7.070E-09	5.990E-09	4.720E-09	8.650E-09
16	24140.29	3.740E-09	8.480E-09	9.710E-09	5.290E-09	4.600E-09	3.830E-09	3.000E-09	5.240E-09
17	32187.00	2.800E-09	6.010E-09	6.990E-09	3.920E-09	3.370E-09	3.280E-09	3.640E-09	3.650E-09
18	40233.79	2.210E-09	4.570E-09	5.360E-09	3.800E-09	4.010E-09	2.520E-09	2.820E-09	2.730E-09
19	48280.48	1.800E-09	3.640E-09	4.280E-09	3.050E-09	3.210E-09	2.020E-09	2.270E-09	2.140E-09
20	56327.29	1.510E-09	2.990E-09	3.520E-09	2.530E-09	2.650E-09	1.670E-09	1.880E-09	1.730E-09
21	64373.99	1.880E-09	2.520E-09	2.970E-09	2.140E-09	2.240E-09	1.410E-09	1.590E-09	1.440E-09
22	72420.75	1.940E-09	2.160E-09	2.550E-09	1.840E-09	1.920E-09	1.210E-09	1.370E-09	1.210E-09
23	80467.44	1.650E-09	1.880E-09	2.210E-09	1.600E-09	1.670E-09	1.050E-09	1.190E-09	1.040E-09

TABLE 4.1-5
DEPLETED RELATIVE CONCENTRATIONS PER UNIT
EMISSION FOR MAIN STACK FOR
JULY - SEPTEMBER 1984

DEPOSITION FACTORS FOR THE MAIN STACK FOR 7/1/84 TO 9/30/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W- (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5
1	201.20	8.300E-11	1.030E-10	4.390E-10	2.380E-10	1.190E-10	1.190E-10	7.680E-11	4.770E-11
2	402.30	1.480E-09	1.390E-09	2.350E-09	1.380E-09	1.190E-09	1.300E-09	6.860E-10	8.060E-10
3	804.70	6.570E-10	7.240E-10	1.150E-09	4.720E-10	5.460E-10	3.960E-10	1.870E-10	2.360E-10
4	1207.00	4.220E-10	8.340E-10	8.160E-10	3.540E-10	4.330E-10	2.140E-10	8.300E-11	1.000E-10
5	1609.40	4.540E-10	7.410E-10	6.760E-10	2.980E-10	3.690E-10	1.680E-10	6.510E-11	8.290E-11
6	2414.00	2.980E-10	3.820E-10	4.230E-10	1.830E-10	2.640E-10	1.200E-10	4.770E-11	6.750E-11
7	3218.70	1.970E-10	2.440E-10	2.930E-10	1.270E-10	1.980E-10	9.360E-11	3.850E-11	5.730E-11
8	4023.40	1.410E-10	1.730E-10	2.180E-10	9.520E-11	1.540E-10	7.530E-11	3.240E-11	4.930E-11
9	4828.10	1.090E-10	1.310E-10	1.700E-10	7.530E-11	1.240E-10	6.210E-11	2.800E-11	4.280E-11
10	5632.70	8.700E-11	1.040E-10	1.370E-10	6.170E-11	1.030E-10	5.250E-11	2.460E-11	3.760E-11
11	6437.40	7.190E-11	8.510E-11	1.140E-10	5.200E-11	8.680E-11	4.530E-11	2.200E-11	3.340E-11
12	7242.10	6.080E-11	7.150E-11	9.680E-11	4.460E-11	7.480E-11	3.960E-11	1.990E-11	3.010E-11
13	8046.80	5.240E-11	6.130E-11	8.370E-11	3.890E-11	8.700E-11	3.630E-11	2.500E-11	2.720E-11
14	12070.10	3.010E-11	3.450E-11	4.850E-11	2.340E-11	5.010E-11	2.270E-11	1.760E-11	1.820E-11
15	16093.49	2.040E-11	2.290E-11	3.280E-11	1.630E-11	3.370E-11	1.620E-11	1.780E-11	2.620E-11
16	24140.29	1.160E-11	1.280E-11	1.870E-11	9.840E-12	1.910E-11	9.900E-12	1.170E-11	1.540E-11
17	32187.00	7.860E-12	8.580E-12	1.270E-11	7.000E-12	1.280E-11	7.400E-12	9.330E-12	1.060E-11
18	40233.79	5.780E-12	6.270E-12	9.470E-12	5.520E-12	9.360E-12	5.980E-12	7.420E-12	7.850E-12
19	48280.48	4.500E-12	4.860E-12	7.460E-12	4.370E-12	7.250E-12	4.440E-12	4.360E-12	6.130E-12
20	56327.29	3.630E-12	3.910E-12	6.080E-12	3.580E-12	5.530E-12	3.540E-12	3.370E-12	4.950E-12
21	64373.99	3.010E-12	3.220E-12	5.100E-12	3.000E-12	4.180E-12	2.960E-12	2.690E-12	4.100E-12
22	72420.75	2.550E-12	2.720E-12	4.360E-12	2.500E-12	3.440E-12	2.530E-12	2.200E-12	3.460E-12
23	80467.44	2.190E-12	2.340E-12	3.790E-12	2.170E-12	2.930E-12	2.190E-12	1.840E-12	2.960E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 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	5.490E-11	1.860E-10	1.430E-10	5.630E-11	3.760E-11	4.480E-11	4.770E-11	4.210E-11
2	402.30	9.400E-10	3.200E-09	2.440E-09	9.540E-10	6.410E-10	7.640E-10	8.190E-10	1.020E-09
3	804.70	3.120E-10	1.100E-09	7.690E-10	3.000E-10	2.000E-10	2.540E-10	2.950E-10	5.750E-10
4	1207.00	1.470E-10	5.750E-10	3.560E-10	1.440E-10	9.100E-11	1.280E-10	1.610E-10	5.310E-10
5	1609.40	1.210E-10	5.270E-10	3.220E-10	1.250E-10	8.260E-11	1.170E-10	1.470E-10	4.500E-10
6	2414.00	1.010E-10	5.040E-10	3.420E-10	1.160E-10	8.930E-11	1.150E-10	1.320E-10	3.160E-10
7	3218.70	8.990E-11	4.600E-10	3.480E-10	1.110E-10	9.240E-11	1.080E-10	1.150E-10	2.340E-10
8	4023.40	7.990E-11	4.070E-10	3.330E-10	1.050E-10	8.940E-11	9.840E-11	9.890E-11	1.820E-10
9	4828.10	7.090E-11	3.570E-10	3.070E-10	9.700E-11	8.320E-11	8.780E-11	8.500E-11	1.470E-10
10	5632.70	6.360E-11	3.150E-10	2.820E-10	9.000E-11	7.710E-11	7.860E-11	7.370E-11	1.220E-10
11	6437.40	5.740E-11	2.790E-10	2.600E-10	8.380E-11	7.140E-11	7.080E-11	6.470E-11	1.040E-10
12	7242.10	5.230E-11	2.500E-10	2.390E-10	7.830E-11	6.630E-11	6.420E-11	5.740E-11	9.030E-11
13	8046.80	4.790E-11	2.250E-10	2.210E-10	7.320E-11	6.150E-11	5.840E-11	5.140E-11	7.940E-11
14	12070.10	3.310E-11	1.460E-10	1.540E-10	5.370E-11	4.380E-11	3.920E-11	3.300E-11	4.850E-11
15	16093.49	2.490E-11	1.050E-10	1.150E-10	4.190E-11	3.330E-11	2.880E-11	2.380E-11	3.810E-11
16	24140.29	1.630E-11	6.410E-11	7.330E-11	2.860E-11	2.200E-11	1.810E-11	1.480E-11	2.220E-11
17	32187.00	1.200E-11	4.510E-11	5.260E-11	2.140E-11	1.620E-11	1.490E-11	1.580E-11	1.520E-11
18	40233.79	9.340E-12	3.410E-11	4.010E-11	2.090E-11	1.880E-11	1.140E-11	1.220E-11	1.120E-11
19	48280.48	7.560E-12	2.710E-11	3.190E-11	1.670E-11	1.500E-11	9.050E-12	9.740E-12	8.720E-12
20	56327.29	6.300E-12	2.220E-11	2.620E-11	1.380E-11	1.230E-11	7.440E-12	8.040E-12	7.020E-12
21	64373.99	7.100E-12	1.870E-11	2.190E-11	1.160E-11	1.040E-11	6.260E-12	6.790E-12	5.800E-12
22	72420.75	7.040E-12	1.600E-11	1.870E-11	9.910E-12	8.860E-12	5.370E-12	5.830E-12	4.890E-12
23	80467.44	6.000E-12	1.390E-11	1.620E-11	8.570E-12	7.670E-12	4.660E-12	5.080E-12	4.180E-12

TABLE 4.1-6
RELATIVE DEPOSITION CONCENTRATIONS PER UNIT
EMISSION FOR MAIN STACK FOR
JULY - SEPTEMBER 1984

UNDEPLETED X/Q FOR THE REACTOR BUILDING VENT FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	6.800E-06	8.020E-06	8.590E-06	1.230E-05	1.170E-05	7.910E-06	1.870E-05	3.800E-05
2	402.30	1.810E-06	2.250E-06	2.510E-06	3.510E-06	3.310E-06	2.170E-06	5.770E-06	1.120E-05
3	804.70	4.640E-07	6.570E-07	7.820E-07	9.900E-07	1.030E-06	6.160E-07	1.950E-06	3.580E-06
4	1207.00	2.210E-07	3.320E-07	3.990E-07	5.100E-07	5.560E-07	3.130E-07	1.060E-06	1.890E-06
5	1609.40	1.400E-07	2.120E-07	2.530E-07	3.300E-07	3.670E-07	2.040E-07	6.870E-07	1.210E-06
6	2414.00	7.560E-08	1.130E-07	1.320E-07	1.790E-07	2.020E-07	1.110E-07	3.670E-07	6.700E-07
7	3218.70	5.100E-08	7.410E-08	8.560E-08	1.180E-07	1.330E-07	7.300E-08	2.370E-07	4.530E-07
8	4023.40	3.780E-08	5.360E-08	6.140E-08	8.630E-08	9.610E-08	5.300E-08	1.690E-07	3.310E-07
9	4828.10	2.980E-08	4.130E-08	4.700E-08	6.690E-08	7.450E-08	4.100E-08	1.280E-07	2.570E-07
10	5632.70	2.440E-08	3.330E-08	3.760E-08	5.420E-08	6.010E-08	3.310E-08	1.020E-07	2.070E-07
11	6437.40	2.060E-08	2.760E-08	3.100E-08	4.520E-08	4.990E-08	2.750E-08	8.380E-08	1.730E-07
12	7242.10	1.770E-08	2.340E-08	2.620E-08	3.860E-08	4.240E-08	2.340E-08	7.050E-08	1.470E-07
13	8046.80	1.550E-08	2.030E-08	2.260E-08	3.350E-08	3.670E-08	2.030E-08	6.050E-08	1.270E-07
14	12070.10	9.410E-09	1.190E-08	1.300E-08	2.000E-08	2.150E-08	1.200E-08	3.440E-08	7.420E-08
15	16093.49	6.670E-09	8.190E-09	8.870E-09	1.390E-08	1.480E-08	8.300E-09	2.310E-08	5.110E-08
16	24140.29	4.130E-09	4.880E-09	5.210E-09	8.320E-09	8.740E-09	4.940E-09	1.300E-08	3.040E-08
17	32187.00	2.960E-09	3.420E-09	3.620E-09	5.840E-09	6.060E-09	3.470E-09	8.820E-09	2.110E-08
18	40233.79	2.300E-09	2.620E-09	2.750E-09	4.470E-09	4.590E-09	2.650E-09	6.550E-09	1.600E-08
19	48280.48	1.880E-09	2.110E-09	2.210E-09	3.600E-09	3.680E-09	2.140E-09	5.170E-09	1.290E-08
20	56327.29	1.590E-09	1.760E-09	1.840E-09	3.010E-09	3.050E-09	1.780E-09	4.240E-09	1.070E-08
21	64373.99	1.370E-09	1.510E-09	1.570E-09	2.570E-09	2.590E-09	1.530E-09	3.560E-09	9.120E-09
22	72420.75	1.200E-09	1.320E-09	1.360E-09	2.230E-09	2.250E-09	1.330E-09	3.060E-09	7.920E-09
23	80467.44	1.070E-09	1.170E-09	1.210E-09	1.970E-09	1.980E-09	1.180E-09	2.670E-09	6.980E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.400E-05	4.870E-05	6.360E-05	5.550E-05	3.210E-05	1.250E-05	9.330E-06	5.150E-06
2	402.30	9.930E-06	1.440E-05	1.850E-05	1.630E-05	9.410E-06	3.620E-06	2.760E-06	1.390E-06
3	804.70	3.070E-06	4.730E-06	5.720E-06	5.130E-06	3.040E-06	1.160E-06	8.860E-07	3.890E-07
4	1207.00	1.590E-06	2.500E-06	3.000E-06	2.740E-06	1.630E-06	6.050E-07	4.620E-07	1.950E-07
5	1609.40	1.000E-06	1.600E-06	1.920E-06	1.770E-06	1.050E-06	3.880E-07	2.950E-07	1.260E-07
6	2414.00	5.720E-07	8.870E-07	1.090E-06	9.940E-07	5.750E-07	2.060E-07	1.560E-07	6.850E-08
7	3218.70	3.900E-07	5.880E-07	7.420E-07	6.640E-07	3.780E-07	1.340E-07	1.000E-07	4.520E-08
8	4023.40	2.890E-07	4.280E-07	5.480E-07	4.860E-07	2.740E-07	9.530E-08	7.170E-08	3.300E-08
9	4828.10	2.250E-07	3.300E-07	4.280E-07	3.770E-07	2.120E-07	7.340E-08	5.460E-08	2.560E-08
10	5632.70	1.830E-07	2.650E-07	3.470E-07	3.050E-07	1.710E-07	5.880E-08	4.350E-08	2.080E-08
11	6437.40	1.530E-07	2.200E-07	2.900E-07	2.540E-07	1.420E-07	4.850E-08	3.580E-08	1.730E-08
12	7242.10	1.310E-07	1.870E-07	2.480E-07	2.160E-07	1.200E-07	4.070E-08	3.010E-08	1.480E-08
13	8046.80	1.140E-07	1.610E-07	2.160E-07	1.880E-07	1.040E-07	3.520E-08	2.590E-08	1.280E-08
14	12070.10	6.710E-08	9.350E-08	1.270E-07	1.100E-07	6.020E-08	2.020E-08	1.480E-08	7.610E-09
15	16093.49	4.650E-08	6.390E-08	8.810E-08	7.580E-08	4.120E-08	1.380E-08	1.000E-08	5.300E-09
16	24140.29	2.810E-08	3.770E-08	5.310E-08	4.520E-08	2.430E-08	8.080E-09	5.800E-09	3.210E-09
17	32187.00	1.970E-08	2.600E-08	3.710E-08	3.140E-08	1.680E-08	5.600E-09	4.000E-09	2.270E-09
18	40233.79	1.500E-08	1.970E-08	2.830E-08	2.380E-08	1.270E-08	4.240E-09	3.010E-09	1.710E-09
19	48280.48	1.210E-08	1.580E-08	2.280E-08	1.910E-08	1.020E-08	3.390E-09	2.410E-09	1.410E-09
20	56327.29	1.010E-08	1.310E-08	1.900E-08	1.590E-08	8.430E-09	2.810E-09	1.990E-09	1.180E-09
21	64373.99	8.650E-09	1.110E-08	1.620E-08	1.350E-08	7.160E-09	2.390E-09	1.690E-09	1.020E-09
22	72420.75	7.540E-09	9.630E-09	1.410E-08	1.170E-08	6.210E-09	2.080E-09	1.470E-09	8.900E-10
23	80467.44	6.660E-09	8.480E-09	1.250E-08	1.030E-08	5.460E-09	1.840E-09	1.290E-09	7.910E-10

TABLE 4.1-7

UNDEPLETED RELATIVE CONCENTRATIONS PER UNIT
EMISSION FOR REACTOR BUILDING VENT FOR
OCTOBER - DECEMBER 1984

DEPLETED X/Q FOR THE REACTOR BUILDING VENT FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	6.630E-06	7.810E-06	8.340E-06	1.190E-05	1.120E-05	7.710E-06	1.790E-05	3.540E-05
2	402.30	1.750E-06	2.170E-06	2.410E-06	3.330E-06	3.120E-06	2.090E-06	5.450E-06	1.010E-05
3	804.70	4.390E-07	6.220E-07	7.380E-07	9.210E-07	9.450E-07	5.820E-07	1.810E-06	3.180E-06
4	1207.00	2.060E-07	3.100E-07	3.720E-07	4.660E-07	5.030E-07	2.920E-07	9.670E-07	1.650E-06
5	1609.40	1.300E-07	1.970E-07	2.330E-07	2.980E-07	3.280E-07	1.880E-07	6.190E-07	1.040E-06
6	2414.00	6.900E-08	1.030E-07	1.200E-07	1.580E-07	1.770E-07	1.010E-07	3.240E-07	5.650E-07
7	3218.70	4.610E-08	6.700E-08	7.690E-08	1.030E-07	1.140E-07	6.580E-08	2.050E-07	3.670E-07
8	4023.40	3.400E-08	4.810E-08	5.460E-08	7.410E-08	8.130E-08	4.750E-08	1.440E-07	2.620E-07
9	4828.10	2.660E-08	3.680E-08	4.150E-08	5.690E-08	6.210E-08	3.650E-08	1.080E-07	1.990E-07
10	5632.70	2.170E-08	2.940E-08	3.290E-08	4.560E-08	4.950E-08	2.920E-08	8.480E-08	1.570E-07
11	6437.40	1.820E-08	2.430E-08	2.700E-08	3.760E-08	4.060E-08	2.420E-08	6.880E-08	1.280E-07
12	7242.10	1.560E-08	2.050E-08	2.260E-08	3.180E-08	3.410E-08	2.050E-08	5.720E-08	1.070E-07
13	8046.80	1.360E-08	1.770E-08	1.940E-08	2.740E-08	2.920E-08	1.770E-08	4.860E-08	9.090E-08
14	12070.10	8.120E-09	1.020E-08	1.090E-08	1.570E-08	1.630E-08	1.030E-08	2.630E-08	4.880E-08
15	16093.49	5.670E-09	6.900E-09	7.300E-09	1.060E-08	1.070E-08	6.970E-09	1.690E-08	3.110E-08
16	24140.29	3.440E-09	4.010E-09	4.160E-09	6.030E-09	5.930E-09	4.050E-09	8.830E-09	1.620E-08
17	32187.00	2.420E-09	2.760E-09	2.820E-09	4.050E-09	3.880E-09	2.780E-09	5.590E-09	9.980E-09
18	40233.79	1.850E-09	2.070E-09	2.090E-09	2.980E-09	2.790E-09	2.090E-09	3.920E-09	6.790E-09
19	48280.48	1.480E-09	1.640E-09	1.640E-09	2.330E-09	2.130E-09	1.650E-09	2.930E-09	4.940E-09
20	56327.29	1.230E-09	1.350E-09	1.340E-09	1.880E-09	1.690E-09	1.360E-09	2.280E-09	3.740E-09
21	64373.99	1.050E-09	1.140E-09	1.120E-09	1.570E-09	1.380E-09	1.140E-09	1.830E-09	2.930E-09
22	72420.75	9.100E-10	9.790E-10	9.600E-10	1.330E-09	1.150E-09	9.850E-10	1.510E-09	2.350E-09
23	80467.44	8.010E-10	8.550E-10	8.340E-10	1.150E-09	9.780E-10	8.600E-10	1.270E-09	1.920E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.120E-05	4.550E-05	5.850E-05	5.160E-05	3.040E-05	1.210E-05	9.050E-06	5.020E-06
2	402.30	8.860E-06	1.320E-05	1.650E-05	1.480E-05	8.750E-06	3.470E-06	2.650E-06	1.350E-06
3	804.70	2.660E-06	4.240E-06	4.980E-06	4.550E-06	2.770E-06	1.090E-06	8.340E-07	3.670E-07
4	1207.00	1.350E-06	2.210E-06	2.560E-06	2.380E-06	1.460E-06	5.590E-07	4.290E-07	1.820E-07
5	1609.40	8.380E-07	1.390E-06	1.610E-06	1.520E-06	9.290E-07	3.550E-07	2.720E-07	1.170E-07
6	2414.00	4.620E-07	7.490E-07	8.890E-07	8.250E-07	4.940E-07	1.860E-07	1.410E-07	6.250E-08
7	3218.70	3.040E-07	4.830E-07	5.840E-07	5.360E-07	3.180E-07	1.190E-07	8.980E-08	4.090E-08
8	4023.40	2.190E-07	3.440E-07	4.200E-07	3.830E-07	2.260E-07	8.420E-08	6.340E-08	2.960E-08
9	4828.10	1.670E-07	2.600E-07	3.200E-07	2.910E-07	1.720E-07	6.390E-08	4.780E-08	2.280E-08
10	5632.70	1.320E-07	2.050E-07	2.530E-07	2.300E-07	1.360E-07	5.070E-08	3.780E-08	1.840E-08
11	6437.40	1.080E-07	1.670E-07	2.070E-07	1.880E-07	1.110E-07	4.150E-08	3.080E-08	1.530E-08
12	7242.10	9.000E-08	1.390E-07	1.730E-07	1.570E-07	9.280E-08	3.470E-08	2.580E-08	1.290E-08
13	8046.80	7.660E-08	1.180E-07	1.470E-07	1.330E-07	7.910E-08	2.970E-08	2.200E-08	1.120E-08
14	12070.10	4.090E-08	6.320E-08	7.890E-08	7.190E-08	4.310E-08	1.660E-08	1.220E-08	6.520E-09
15	16093.49	2.590E-08	4.030E-08	5.020E-08	4.590E-08	2.790E-08	1.100E-08	8.080E-09	4.470E-09
16	24140.29	1.330E-08	2.090E-08	2.580E-08	2.380E-08	1.500E-08	6.190E-09	4.510E-09	2.640E-09
17	32187.00	8.000E-09	1.300E-08	1.570E-08	1.460E-08	9.520E-09	4.140E-09	3.010E-09	1.830E-09
18	40233.79	5.330E-09	8.880E-09	1.050E-08	9.940E-09	6.680E-09	3.040E-09	2.210E-09	1.380E-09
19	48280.48	3.800E-09	6.500E-09	7.510E-09	7.210E-09	5.000E-09	2.370E-09	1.720E-09	1.100E-09
20	56327.29	2.820E-09	4.950E-09	5.590E-09	5.440E-09	3.890E-09	1.920E-09	1.390E-09	9.070E-10
21	64373.99	2.150E-09	3.890E-09	4.290E-09	4.230E-09	3.120E-09	1.590E-09	1.160E-09	7.670E-10
22	72420.75	1.690E-09	3.140E-09	3.380E-09	3.380E-09	2.570E-09	1.350E-09	9.850E-10	6.620E-10
23	80467.44	1.360E-09	2.590E-09	2.720E-09	2.750E-09	2.150E-09	1.170E-09	8.510E-10	5.790E-10

TABLE 4.1-8

DEPLETED RELATIVE CONCENTRATIONS PER UNIT
EMISSION FOR MAIN STACK FOR
OCTOBER - DECEMBER 1984

DEPOSITION FACTORS FOR THE REACTOR BUILDING VENT FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W- (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5
1	201.20	2.430E-08	3.860E-08	3.650E-08	1.820E-08	1.150E-08	1.220E-08	3.150E-08	7.510E-08
2	402.30	6.690E-09	1.160E-08	1.120E-08	5.380E-09	3.120E-09	3.360E-09	9.710E-09	2.160E-08
3	804.70	1.830E-09	3.670E-09	3.330E-09	1.630E-09	9.160E-10	9.560E-10	3.280E-09	7.020E-09
4	1207.00	8.890E-10	1.850E-09	1.620E-09	8.140E-10	4.700E-10	4.790E-10	1.740E-09	3.680E-09
5	1609.40	5.560E-10	1.150E-09	9.870E-10	5.040E-10	3.030E-10	3.040E-10	1.100E-09	2.330E-09
6	2414.00	2.920E-10	5.850E-10	4.940E-10	2.570E-10	1.620E-10	1.610E-10	5.710E-10	1.250E-09
7	3218.70	1.920E-10	3.700E-10	3.130E-10	1.650E-10	1.050E-10	1.050E-10	3.610E-10	8.040E-10
8	4023.40	1.390E-10	2.610E-10	2.210E-10	1.170E-10	7.550E-11	7.540E-11	2.530E-10	5.720E-10
9	4828.10	1.070E-10	1.960E-10	1.670E-10	8.880E-11	5.800E-11	5.790E-11	1.890E-10	4.330E-10
10	5632.70	8.600E-11	1.550E-10	1.320E-10	7.050E-11	4.650E-11	4.650E-11	1.480E-10	3.420E-10
11	6437.40	7.130E-11	1.260E-10	1.080E-10	5.790E-11	3.840E-11	3.840E-11	1.200E-10	2.790E-10
12	7242.10	6.050E-11	1.050E-10	9.020E-11	4.860E-11	3.240E-11	3.250E-11	9.960E-11	2.320E-10
13	8046.80	5.230E-11	8.980E-11	7.730E-11	4.170E-11	2.780E-11	2.800E-11	8.450E-11	1.970E-10
14	12070.10	3.040E-11	4.990E-11	4.380E-11	2.350E-11	1.590E-11	1.610E-11	4.580E-11	1.060E-10
15	16093.49	2.080E-11	3.300E-11	2.940E-11	1.570E-11	1.070E-11	1.090E-11	2.940E-11	6.780E-11
16	24140.29	1.220E-11	1.850E-11	1.690E-11	8.860E-12	6.100E-12	6.290E-12	1.550E-11	3.550E-11
17	32187.00	8.410E-12	1.240E-11	1.160E-11	5.980E-12	4.120E-12	4.290E-12	9.900E-12	2.220E-11
18	40233.79	6.330E-12	9.180E-12	8.720E-12	4.420E-12	3.040E-12	3.190E-12	7.010E-12	1.530E-11
19	48280.48	5.030E-12	7.190E-12	6.920E-12	3.460E-12	2.380E-12	2.520E-12	5.300E-12	1.120E-11
20	56327.29	4.140E-12	5.840E-12	5.700E-12	2.820E-12	1.930E-12	2.050E-12	4.170E-12	8.610E-12
21	64373.99	3.490E-12	4.880E-12	4.810E-12	2.350E-12	1.610E-12	1.720E-12	3.380E-12	6.800E-12
22	72420.75	3.010E-12	4.170E-12	4.150E-12	2.010E-12	1.370E-12	1.470E-12	2.810E-12	5.520E-12
23	80467.44	2.630E-12	3.610E-12	3.630E-12	1.740E-12	1.190E-12	1.280E-12	2.380E-12	4.560E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 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	6.830E-08	1.250E-07	1.370E-07	1.320E-07	8.480E-08	4.390E-08	3.930E-08	2.260E-08
2	402.30	1.950E-08	3.670E-08	3.930E-08	3.820E-08	2.470E-08	1.290E-08	1.150E-08	6.260E-09
3	804.70	5.960E-09	1.220E-08	1.250E-08	1.210E-08	7.720E-09	4.050E-09	3.590E-09	1.730E-09
4	1207.00	3.040E-09	6.470E-09	6.650E-09	6.370E-09	4.000E-09	2.070E-09	1.840E-09	8.550E-10
5	1609.40	1.900E-09	4.120E-09	4.260E-09	4.050E-09	2.530E-09	1.300E-09	1.170E-09	5.410E-10
6	2414.00	1.040E-09	2.180E-09	2.290E-09	2.170E-09	1.330E-09	6.730E-10	6.070E-10	2.840E-10
7	3218.70	6.800E-10	1.390E-09	1.480E-09	1.400E-09	8.540E-10	4.280E-10	3.860E-10	1.850E-10
8	4023.40	4.880E-10	9.790E-10	1.050E-09	9.930E-10	6.070E-10	3.020E-10	2.720E-10	1.330E-10
9	4828.10	3.710E-10	7.380E-10	7.980E-10	7.510E-10	4.590E-10	2.280E-10	2.050E-10	1.020E-10
10	5632.70	2.930E-10	5.810E-10	6.320E-10	5.930E-10	3.630E-10	1.800E-10	1.620E-10	8.190E-11
11	6437.40	2.390E-10	4.720E-10	5.160E-10	4.840E-10	2.970E-10	1.470E-10	1.320E-10	6.780E-11
12	7242.10	2.000E-10	3.930E-10	4.310E-10	4.030E-10	2.480E-10	1.230E-10	1.110E-10	5.740E-11
13	8046.80	1.700E-10	3.340E-10	3.670E-10	3.430E-10	2.120E-10	1.050E-10	9.450E-11	4.950E-11
14	12070.10	9.110E-11	1.800E-10	1.990E-10	1.850E-10	1.170E-10	5.850E-11	5.260E-11	2.870E-11
15	16093.49	5.800E-11	1.150E-10	1.280E-10	1.190E-10	7.600E-11	3.880E-11	3.480E-11	1.960E-11
16	24140.29	3.000E-11	6.090E-11	6.750E-11	6.250E-11	4.120E-11	2.170E-11	1.950E-11	1.150E-11
17	32187.00	1.830E-11	3.850E-11	4.230E-11	3.910E-11	2.670E-11	1.450E-11	1.300E-11	7.940E-12
18	40233.79	1.240E-11	2.690E-11	2.930E-11	2.700E-11	1.910E-11	1.070E-11	9.580E-12	5.980E-12
19	48280.48	8.930E-12	2.010E-11	2.160E-11	2.000E-11	1.450E-11	8.340E-12	7.480E-12	4.760E-12
20	56327.29	6.710E-12	1.560E-11	1.660E-11	1.540E-11	1.150E-11	6.750E-12	6.060E-12	3.910E-12
21	64373.99	5.200E-12	1.250E-11	1.310E-11	1.220E-11	9.340E-12	5.620E-12	5.040E-12	3.310E-12
22	72420.75	4.150E-12	1.030E-11	1.070E-11	9.910E-12	7.800E-12	4.790E-12	4.290E-12	2.850E-12
23	80467.44	3.370E-12	8.580E-12	8.820E-12	8.220E-12	6.620E-12	4.140E-12	3.710E-12	2.490E-12

TABLE 4.1-9

RELATIVE DEPOSITION CONCENTRATIONS PER UNIT EMISSION FOR REACTOR BUILDING VENT FOR OCTOBER - DECEMBER 1984

TABLE 4.1-10

UNDEPLETED RELATIVE CONCENTRATIONS PER UNIT EMISSION FOR MAIN STACK FOR OCTOBER - DECEMBER 1984

UNDEPLETED X/Q FOR THE MAIN STACK FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.350E-08	1.500E-08	4.320E-08	6.480E-08	5.230E-08	3.550E-08	2.640E-08	4.400E-09
2	402.30	5.720E-07	2.010E-07	2.620E-07	5.120E-07	5.110E-07	3.710E-07	2.440E-07	8.340E-08
3	804.70	1.960E-07	8.840E-08	1.670E-07	2.030E-07	2.040E-07	1.050E-07	7.770E-08	4.810E-08
4	1207.00	1.280E-07	9.930E-08	1.400E-07	1.350E-07	1.520E-07	5.900E-08	3.890E-08	3.290E-08
5	1609.40	1.760E-07	7.730E-08	1.280E-07	1.010E-07	1.280E-07	5.100E-08	3.430E-08	3.320E-08
6	2414.00	1.300E-07	4.020E-08	8.600E-08	5.870E-08	8.930E-08	4.140E-08	3.030E-08	3.720E-08
7	3218.70	8.820E-08	2.590E-08	6.180E-08	4.170E-08	6.550E-08	3.430E-08	2.630E-08	3.650E-08
8	4023.40	6.390E-08	1.860E-08	4.690E-08	3.240E-08	5.050E-08	2.870E-08	2.250E-08	3.350E-08
9	4828.10	4.960E-08	1.430E-08	3.720E-08	2.660E-08	4.050E-08	2.430E-08	1.940E-08	2.990E-08
10	5632.70	4.010E-08	1.150E-08	3.050E-08	2.260E-08	3.360E-08	2.100E-08	1.690E-08	2.660E-08
11	6437.40	3.350E-08	9.490E-09	2.560E-08	1.960E-08	2.860E-08	1.840E-08	1.490E-08	2.380E-08
12	7242.10	2.860E-08	8.030E-09	2.190E-08	1.730E-08	2.480E-08	1.630E-08	1.330E-08	2.140E-08
13	8046.80	2.490E-08	6.930E-09	1.910E-08	1.540E-08	3.540E-08	1.570E-08	1.490E-08	1.940E-08
14	12070.10	1.490E-08	4.020E-09	1.120E-08	1.010E-08	2.160E-08	1.020E-08	9.500E-09	1.280E-08
15	16093.49	1.040E-08	2.760E-09	7.730E-09	7.420E-09	1.520E-08	7.530E-09	7.700E-09	2.110E-08
16	24140.29	6.240E-09	1.630E-09	4.540E-09	4.760E-09	9.180E-09	4.820E-09	4.740E-09	1.250E-08
17	32187.00	4.400E-09	1.140E-09	3.150E-09	3.630E-09	6.510E-09	4.060E-09	3.530E-09	8.700E-09
18	40233.79	3.360E-09	8.670E-10	2.380E-09	3.510E-09	5.000E-09	3.860E-09	2.760E-09	6.600E-09
19	48280.48	2.720E-09	6.980E-10	1.900E-09	2.860E-09	4.050E-09	3.300E-09	2.560E-09	5.300E-09
20	56327.29	2.270E-09	5.810E-10	1.600E-09	2.400E-09	3.790E-09	2.750E-09	2.130E-09	4.400E-09
21	64373.99	1.940E-09	4.960E-10	1.360E-09	2.070E-09	3.240E-09	2.350E-09	1.810E-09	3.730E-09
22	72420.75	1.680E-09	4.330E-10	1.180E-09	1.850E-09	2.820E-09	2.050E-09	1.580E-09	3.260E-09
23	80467.44	1.480E-09	3.830E-10	1.030E-09	1.640E-09	2.490E-09	1.810E-09	1.390E-09	2.870E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.570E-09	6.570E-09	7.140E-09	5.280E-09	9.240E-09	1.080E-08	6.970E-09	8.080E-09
2	402.30	6.430E-08	1.180E-07	1.270E-07	9.290E-08	1.700E-07	1.990E-07	1.230E-07	2.270E-07
3	804.70	3.010E-08	5.580E-08	5.210E-08	3.570E-08	8.280E-08	1.070E-07	5.530E-08	1.150E-07
4	1207.00	1.960E-08	3.710E-08	2.930E-08	2.020E-08	4.690E-08	7.260E-08	3.580E-08	7.500E-08
5	1609.40	2.040E-08	3.660E-08	2.990E-08	2.060E-08	3.900E-08	7.160E-08	3.510E-08	5.750E-08
6	2414.00	2.460E-08	3.910E-08	3.790E-08	2.370E-08	3.440E-08	7.210E-08	3.460E-08	3.940E-08
7	3218.70	2.560E-08	3.780E-08	4.090E-08	2.380E-08	3.100E-08	6.550E-08	3.140E-08	3.020E-08
8	4023.40	2.440E-08	3.460E-08	3.990E-08	2.240E-08	2.740E-08	5.710E-08	2.780E-08	2.410E-08
9	4828.10	2.230E-08	3.090E-08	3.710E-08	2.040E-08	2.410E-08	4.930E-08	2.440E-08	1.980E-08
10	5632.70	2.030E-08	2.760E-08	3.420E-08	1.860E-08	2.130E-08	4.290E-08	2.160E-08	1.660E-08
11	6437.40	1.850E-08	2.480E-08	3.140E-08	1.690E-08	1.900E-08	3.760E-08	1.930E-08	1.430E-08
12	7242.10	1.690E-08	2.240E-08	2.900E-08	1.550E-08	1.720E-08	3.320E-08	1.740E-08	1.250E-08
13	8046.80	1.550E-08	2.040E-08	2.680E-08	1.430E-08	1.560E-08	2.970E-08	1.580E-08	1.100E-08
14	12070.10	1.060E-08	1.370E-08	1.870E-08	1.000E-08	1.050E-08	1.880E-08	1.060E-08	6.870E-09
15	16093.49	7.900E-09	1.020E-08	1.410E-08	7.610E-09	7.860E-09	1.340E-08	7.890E-09	5.220E-09
16	24140.29	5.080E-09	6.510E-09	9.140E-09	5.050E-09	5.130E-09	8.110E-09	5.090E-09	3.180E-09
17	32187.00	3.720E-09	4.790E-09	6.710E-09	3.790E-09	3.820E-09	6.210E-09	3.810E-09	2.260E-09
18	40233.79	2.920E-09	3.770E-09	5.250E-09	3.730E-09	4.140E-09	4.740E-09	3.860E-09	1.730E-09
19	48280.48	2.390E-09	3.100E-09	4.290E-09	3.070E-09	3.400E-09	3.810E-09	3.120E-09	1.410E-09
20	56327.29	2.020E-09	2.620E-09	3.620E-09	2.610E-09	2.880E-09	3.170E-09	2.610E-09	1.180E-09
21	64373.99	2.560E-09	2.270E-09	3.120E-09	2.260E-09	2.500E-09	2.700E-09	2.230E-09	1.010E-09
22	72420.75	2.950E-09	2.010E-09	2.740E-09	2.000E-09	2.200E-09	2.350E-09	1.950E-09	8.800E-10
23	80467.44	2.610E-09	1.800E-09	2.440E-09	1.790E-09	1.970E-09	2.080E-09	1.720E-09	7.770E-10

DEPLETED X/Q FOR THE MAIN STACK FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.350E-08	1.500E-08	4.320E-08	6.480E-08	5.230E-08	3.550E-08	2.640E-08	4.400E-09
2	402.30	5.710E-07	2.010E-07	2.620E-07	5.120E-07	5.100E-07	3.710E-07	2.440E-07	8.340E-08
3	804.70	1.950E-07	8.830E-08	1.660E-07	2.030E-07	2.030E-07	1.040E-07	7.750E-08	4.800E-08
4	1207.00	1.280E-07	9.910E-08	1.390E-07	1.340E-07	1.520E-07	5.880E-08	3.880E-08	3.280E-08
5	1609.40	1.760E-07	7.670E-08	1.280E-07	1.000E-07	1.270E-07	5.080E-08	3.420E-08	3.310E-08
6	2414.00	1.290E-07	3.960E-08	8.540E-08	5.820E-08	8.860E-08	4.120E-08	3.020E-08	3.710E-08
7	3218.70	8.740E-08	2.530E-08	6.110E-08	4.120E-08	6.480E-08	3.400E-08	2.610E-08	3.630E-08
8	4023.40	6.300E-08	1.800E-08	4.610E-08	3.180E-08	4.970E-08	2.840E-08	2.230E-08	3.310E-08
9	4828.10	4.850E-08	1.380E-08	3.640E-08	2.610E-08	3.970E-08	2.390E-08	1.920E-08	2.950E-08
10	5632.70	3.910E-08	1.100E-08	2.970E-08	2.210E-08	3.280E-08	2.060E-08	1.670E-08	2.610E-08
11	6437.40	3.240E-08	9.030E-09	2.480E-08	1.920E-08	2.780E-08	1.800E-08	1.460E-08	2.330E-08
12	7242.10	2.750E-08	7.590E-09	2.110E-08	1.690E-08	2.400E-08	1.590E-08	1.300E-08	2.090E-08
13	8046.80	2.380E-08	6.510E-09	1.820E-08	1.500E-08	3.430E-08	1.520E-08	1.450E-08	1.880E-08
14	12070.10	1.380E-08	3.690E-09	1.050E-08	9.720E-09	2.060E-08	9.780E-09	9.060E-09	1.220E-08
15	16093.49	9.330E-09	2.480E-09	7.020E-09	7.080E-09	1.430E-08	7.070E-09	7.190E-09	1.930E-08
16	24140.29	5.300E-09	1.420E-09	3.950E-09	4.460E-09	8.380E-09	4.400E-09	4.290E-09	1.090E-08
17	32187.00	3.550E-09	9.630E-10	2.630E-09	3.320E-09	5.750E-09	3.570E-09	3.080E-09	7.260E-09
18	40233.79	2.580E-09	7.140E-10	1.920E-09	2.920E-09	4.270E-09	3.130E-09	2.330E-09	5.240E-09
19	48280.48	1.990E-09	5.610E-10	1.480E-09	2.280E-09	3.340E-09	2.120E-09	1.560E-09	4.010E-09
20	56327.29	1.590E-09	4.570E-10	1.190E-09	1.840E-09	2.510E-09	1.580E-09	1.240E-09	3.170E-09
21	64373.99	1.300E-09	3.830E-10	9.770E-10	1.520E-09	1.740E-09	1.280E-09	1.010E-09	2.570E-09
22	72420.75	1.090E-09	3.270E-10	8.220E-10	1.180E-09	1.390E-09	1.060E-09	8.500E-10	2.130E-09
23	80467.44	9.300E-10	2.840E-10	7.020E-10	1.010E-09	1.170E-09	8.930E-10	7.260E-10	1.790E-09

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES SEC/M**3 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	3.570E-09	6.570E-09	7.140E-09	5.280E-09	9.240E-09	1.080E-08	6.970E-09	8.080E-09
2	402.30	6.430E-08	1.180E-07	1.270E-07	9.280E-08	1.700E-07	1.990E-07	1.230E-07	2.270E-07
3	804.70	3.000E-08	5.570E-08	5.200E-08	3.560E-08	8.260E-08	1.070E-07	5.520E-08	1.150E-07
4	1207.00	1.960E-08	3.700E-08	2.920E-08	2.020E-08	4.680E-08	7.240E-08	3.570E-08	7.480E-08
5	1609.40	2.030E-08	3.650E-08	2.990E-08	2.050E-08	3.890E-08	7.140E-08	3.500E-08	5.720E-08
6	2414.00	2.450E-08	3.900E-08	3.780E-08	2.360E-08	3.420E-08	7.180E-08	3.440E-08	3.920E-08
7	3218.70	2.550E-08	3.760E-08	4.070E-08	2.370E-08	3.080E-08	6.500E-08	3.120E-08	3.000E-08
8	4023.40	2.420E-08	3.420E-08	3.960E-08	2.220E-08	2.710E-08	5.650E-08	2.750E-08	2.380E-08
9	4828.10	2.210E-08	3.050E-08	3.670E-08	2.020E-08	2.380E-08	4.860E-08	2.410E-08	1.940E-08
10	5632.70	2.000E-08	2.720E-08	3.370E-08	1.830E-08	2.100E-08	4.210E-08	2.120E-08	1.630E-08
11	6437.40	1.810E-08	2.430E-08	3.090E-08	1.660E-08	1.870E-08	3.670E-08	1.890E-08	1.390E-08
12	7242.10	1.650E-08	2.190E-08	2.840E-08	1.520E-08	1.680E-08	3.230E-08	1.700E-08	1.210E-08
13	8046.80	1.510E-08	1.980E-08	2.610E-08	1.390E-08	1.520E-08	2.880E-08	1.530E-08	1.070E-08
14	12070.10	1.010E-08	1.310E-08	1.790E-08	9.590E-09	1.010E-08	1.790E-08	1.020E-08	6.520E-09
15	16093.49	7.380E-09	9.520E-09	1.320E-08	7.160E-09	7.430E-09	1.250E-08	7.420E-09	4.830E-09
16	24140.29	4.560E-09	5.900E-09	8.220E-09	4.600E-09	4.720E-09	7.330E-09	4.640E-09	2.820E-09
17	32187.00	3.230E-09	4.210E-09	5.810E-09	3.340E-09	3.420E-09	5.420E-09	4.270E-09	1.930E-09
18	40233.79	2.450E-09	3.220E-09	4.380E-09	3.140E-09	3.550E-09	4.020E-09	3.150E-09	1.430E-09
19	48280.48	1.940E-09	2.570E-09	3.460E-09	2.500E-09	2.830E-09	3.150E-09	2.450E-09	1.120E-09
20	56327.29	1.590E-09	2.110E-09	2.810E-09	2.050E-09	2.320E-09	2.560E-09	1.970E-09	9.090E-10
21	64373.99	1.920E-09	1.780E-09	2.340E-09	1.720E-09	1.950E-09	2.130E-09	1.620E-09	7.550E-10
22	72420.75	2.010E-09	1.540E-09	1.990E-09	1.470E-09	1.670E-09	1.810E-09	1.360E-09	6.400E-10
23	80467.44	1.700E-09	1.340E-09	1.710E-09	1.270E-09	1.450E-09	1.560E-09	1.160E-09	5.520E-10

TABLE 4.1-11

DEPLETED RELATIVE CONCENTRATIONS PER UNIT
EMISSION FOR MAIN STACK FOR
OCTOBER - DECEMBER 1984

DEPOSITION FACTORS FOR THE MAIN STACK FOR 10/1/84 TO 12/31/84

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 S - (1) 0.0	SSW - (2) 22.5	SW - (3) 45.0	WSW - (4) 67.5	W- (5) 90.0	WNW - (6) 112.5	NW - (7) 135.0	NNW - (8) 157.5
1	201.20	1.040E-10	6.950E-11	2.130E-10	2.810E-10	1.020E-10	1.030E-10	8.470E-11	2.050E-11
2	402.30	2.060E-09	1.150E-09	1.670E-09	2.480E-09	1.760E-09	1.210E-09	8.080E-10	3.930E-10
3	804.70	8.790E-10	5.250E-10	1.140E-09	1.140E-09	9.700E-10	4.060E-10	2.980E-10	2.380E-10
4	1207.00	5.030E-10	5.020E-10	8.030E-10	8.490E-10	6.610E-10	2.420E-10	1.630E-10	1.660E-10
5	1609.40	4.440E-10	3.720E-10	6.430E-10	6.530E-10	5.020E-10	2.060E-10	1.470E-10	1.670E-10
6	2414.00	2.810E-10	1.900E-10	3.900E-10	3.720E-10	3.220E-10	1.640E-10	1.360E-10	1.880E-10
7	3218.70	1.900E-10	1.210E-10	2.680E-10	2.540E-10	2.300E-10	1.350E-10	1.220E-10	1.860E-10
8	4023.40	1.380E-10	8.630E-11	1.980E-10	1.880E-10	1.740E-10	1.110E-10	1.060E-10	1.710E-10
9	4828.10	1.060E-10	6.580E-11	1.530E-10	1.470E-10	1.370E-10	9.320E-11	9.140E-11	1.530E-10
10	5632.70	8.540E-11	5.240E-11	1.230E-10	1.200E-10	1.120E-10	7.960E-11	7.960E-11	1.360E-10
11	6437.40	7.090E-11	4.310E-11	1.020E-10	1.010E-10	9.340E-11	6.910E-11	7.000E-11	1.210E-10
12	7242.10	6.030E-11	3.630E-11	8.630E-11	8.610E-11	7.970E-11	6.070E-11	6.210E-11	1.090E-10
13	8046.80	5.220E-11	3.120E-11	7.430E-11	7.500E-11	8.480E-11	5.700E-11	6.890E-11	9.850E-11
14	12070.10	3.050E-11	1.780E-11	4.240E-11	4.490E-11	4.910E-11	3.560E-11	4.220E-11	6.400E-11
15	16093.49	2.090E-11	1.200E-11	2.840E-11	3.120E-11	3.330E-11	2.530E-11	3.220E-11	9.200E-11
16	24140.29	1.220E-11	6.910E-12	1.600E-11	1.870E-11	1.920E-11	1.530E-11	1.870E-11	5.170E-11
17	32187.00	8.430E-12	4.740E-12	1.080E-11	1.330E-11	1.320E-11	1.170E-11	1.310E-11	3.420E-11
18	40233.79	6.310E-12	3.540E-12	7.960E-12	1.060E-11	9.820E-12	9.680E-12	9.770E-12	2.470E-11
19	48280.48	4.990E-12	2.800E-12	6.230E-12	8.400E-12	7.730E-12	6.760E-12	6.610E-12	1.880E-11
20	56327.29	4.080E-12	2.290E-12	5.050E-12	6.860E-12	6.080E-12	5.160E-12	5.250E-12	1.490E-11
21	64373.99	3.430E-12	1.930E-12	4.210E-12	5.750E-12	4.730E-12	4.210E-12	4.290E-12	1.210E-11
22	72420.75	2.930E-12	1.650E-12	3.590E-12	4.750E-12	3.970E-12	3.520E-12	3.590E-12	1.000E-11
23	80467.44	2.550E-12	1.440E-12	3.110E-12	4.110E-12	3.420E-12	2.990E-12	3.060E-12	8.410E-12

RECPTR NO.	DOWNWIND DISTANCE METERS	WEIGHTED AVERAGES 1/M**2 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	1.800E-11	4.230E-11	4.880E-11	3.210E-11	6.030E-11	4.620E-11	3.460E-11	3.740E-11
2	402.30	3.200E-10	7.530E-10	8.890E-10	5.680E-10	1.130E-09	8.690E-10	6.130E-10	1.090E-09
3	804.70	1.490E-10	3.480E-10	4.000E-10	2.250E-10	5.730E-10	5.170E-10	2.960E-10	6.800E-10
4	1207.00	1.000E-10	2.390E-10	2.200E-10	1.310E-10	3.230E-10	3.290E-10	2.080E-10	4.850E-10
5	1609.40	1.020E-10	2.480E-10	2.040E-10	1.370E-10	2.670E-10	2.850E-10	2.100E-10	3.690E-10
6	2414.00	1.180E-10	2.780E-10	2.330E-10	1.640E-10	2.370E-10	2.540E-10	2.080E-10	2.410E-10
7	3218.70	1.200E-10	2.700E-10	2.430E-10	1.660E-10	2.150E-10	2.250E-10	1.850E-10	1.760E-10
8	4023.40	1.120E-10	2.470E-10	2.330E-10	1.560E-10	1.890E-10	1.950E-10	1.600E-10	1.350E-10
9	4828.10	1.020E-10	2.190E-10	2.140E-10	1.420E-10	1.660E-10	1.680E-10	1.370E-10	1.080E-10
10	5632.70	9.200E-11	1.950E-10	1.960E-10	1.280E-10	1.460E-10	1.460E-10	1.180E-10	8.890E-11
11	6437.40	8.320E-11	1.740E-10	1.790E-10	1.160E-10	1.290E-10	1.280E-10	1.030E-10	7.470E-11
12	7242.10	7.560E-11	1.560E-10	1.650E-10	1.060E-10	1.150E-10	1.140E-10	9.100E-11	6.440E-11
13	8046.80	6.880E-11	1.410E-10	1.510E-10	9.660E-11	1.040E-10	1.020E-10	8.090E-11	5.610E-11
14	12070.10	4.590E-11	9.140E-11	1.040E-10	6.540E-11	6.790E-11	6.490E-11	5.040E-11	3.340E-11
15	16093.49	3.340E-11	6.530E-11	7.660E-11	4.800E-11	4.920E-11	4.620E-11	3.530E-11	2.380E-11
16	24140.29	2.060E-11	3.930E-11	4.810E-11	3.010E-11	3.060E-11	2.800E-11	2.070E-11	1.370E-11
17	32187.00	1.450E-11	2.740E-11	3.420E-11	2.140E-11	2.180E-11	2.160E-11	1.640E-11	9.350E-12
18	40233.79	1.100E-11	2.050E-11	2.590E-11	1.870E-11	2.080E-11	1.630E-11	1.200E-11	6.930E-12
19	48280.48	8.700E-12	1.610E-11	2.050E-11	1.470E-11	1.650E-11	1.290E-11	9.370E-12	5.440E-12
20	56327.29	7.120E-12	1.310E-11	1.670E-11	1.200E-11	1.350E-11	1.050E-11	7.560E-12	4.420E-12
21	64373.99	8.450E-12	1.090E-11	1.390E-11	9.930E-12	1.130E-11	8.830E-12	6.260E-12	3.680E-12
22	72420.75	8.790E-12	9.270E-12	1.180E-11	8.410E-12	9.660E-12	7.560E-12	5.300E-12	3.110E-12
23	80467.44	7.450E-12	8.000E-12	1.020E-11	7.220E-12	8.360E-12	6.550E-12	4.550E-12	2.710E-12

TABLE 4.1-12

RELATIVE DEPOSITION CONCENTRATIONS PER UNIT EMISSION FOR MAIN STACK FOR OCTOBER - DECEMBER 1984

Table 4.2-1

Maximum Individual Locations and Pathways[1]
July - December 1984

Pathway	0.7 Miles W	0.6 Miles ESE	2.2 Miles W
Noble Gas Immersion	Yes	Yes	Yes
Inhalation	Yes	Yes	Yes
Garden	Yes	Yes	Yes
Meat	No	No	No
Cows Milk	No	No	Yes
Goats Milk	No	No	No

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

Table 4.2-2

July - December 1984 Gaseous Release Maximum Individual Doses From All Pathways for Adults (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.7 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
0.6 Miles ESE	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
2.2 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

* Maximum dose location

Table 4.2-3

July - December 1984 Gaseous Release Maximum Individual Doses From All Pathways for Teenagers (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.7 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
0.6 Miles ESE	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
2.2 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

*Maximum dose location

Table 4.2-4

July - December 1984 Gaseous Release Maximum Individual Doses From All Pathways for Children (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.7 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
0.6 Miles ESE	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
2.2 Miles W	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

*Maximum dose location

Table 4.2-5

July - December 1984 Gaseous Release Maximum Individual Doses From All Pathways for Infants (mREM)

Location	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
*0.7 Miles W	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
0.6 Miles ESE	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
2.2 Miles W	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01

*Maximum dose location

Table 4.2-6

July - December 1984 Gaseous Release Maximum Individual Doses 0.7 Miles W (mREM)

Age Group	Bone	Liver	Thyroid	Kidney	Lung	GI-LLI	Skin	Total Body
Adult	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
Teenager	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
Child	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01
Infant	< .01	< .01	< .01	< .01	< .01	< .01	< .01	< .01

TABLE 4.3-1
POPULATION DISTRIBUTION

Distance (Miles/Meters)

SECTOR	.5 804.7	1.5 2414.0	2.5 4023.4	3.5 5632.7	4.5 7242.0	7.5 12070.1	15.0 24140.2	25.0 40233.6	35.0 56327.0	45.0 72420.5
S	0.	3.90E+01	2.08E+02	5.30E+01	2.20E.01	2.39E+03	1.66E+04	2.52E+04	7.80+03	7.12+02
SSW	1.90E+01	0.	2.30E+01	0.	0.	9.98E+02	1.58E+04	7.80E+03	3.16E+02	3.59E+02
SW	0.	3.50E+01	1.23E+02	6.50E+01	3.49E+02	4.97E+02	1.28E+04	1.42E+05	4.64E+04	4.65E+04
WSW	0.	7.70E+01	2.36E+02	3.00E+00	2.17E+02	2.52E+03	1.18E+04	5.04E+04	1.37E+05	1.85E+05
W	5.80E+01	9.50E+01	4.75E+02	1.25E+03	4.52E+03	9.56E+03	1.76E+04	6.05E+04	1.42E+05	3.78E+05
WNW	1.17E+02	0.	0.	0.	7.11E+02	1.03E+04	2.83E+04	1.65E+05	1.13E+05	1.08E+05
NW	1.90E+01	0.	0.	0.	8.00E+00	5.65E+03	3.96E+04	2.07E+05	8.21E+05	6.36E+05
NNW	0.	0.	0.	0.	1.30E+01	1.55E+03	2.66E+04	2.83E+04	1.04E+05	4.14E+05
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.09E+04
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ENE	0.	0.	0.	0	0.	0.	5.30E+02	3.48E+03	0.	0.
E	0.	0.	0.	0.	0.	0.	0.	3.29E+03	3.41E+02	0.
ESE	0.	0.	1.50E+01	0.	0.	0.	0.	5.88E+03	1.31E+04	0.
SE	5.70E+02	1.76E+02	4.76E+02	0.	0.	0.	1.24E+03	4.02E+04	5.91E+03	0.
SSE	1.90E+01	2.10E+02	5.30E+02	2.03E+03	8.19E+02	1.39E+03	1.32E+04	1.95E+04	0.	7.12E+02

Table 4.3-2

Population Doses Via Major Pathways Resulting
From Gaseous Effluents During July - December 1984

Pathway	Thyroid (MAN-REM)	Total Body (MAN-REM)
Noble Gas Immersion (gamma)	.04	.04
Ground Plane Deposition	.05	.05
Inhalation	< .01	< .01

5. OFF-SITE DIRECT RADIATION

Doses due to direct radiation as measured by thermoluminiscent dosimeter for the period July - December 1984 were as follows:

	Dose Rate (uR/hr)
Near Plant (0.-0.16 Miles from the Plant)	12.1
Exclusion Area (0.25-0.68 Miles from the Plant)	5.9
Distant Neighborhood (0.7-6.5 Miles from the Plant)	6.2
Background (8-21 Miles from the Plant)	6.8

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

REFERENCES

1. "Pilgrim Station Unit 1 Appendix Evaluation" Submitted in Accordance with 10 CFR 50 Appendix I, April 1977.

2. Pilgrim Station Environmental Report, Amendment 4, April 1975, pg. 2-329/330.

3. "An Update of Population Distribution Around the Pilgrim Site," prepared for Boston Edison by HMM Associates, July 31, 1981, ppg. 2-3 and 2-7.

BOSTON EDISON COMPANY
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BOSTON, MASSACHUSETTS 02199

WILLIAM D. HARRINGTON
SENIOR VICE PRESIDENT
NUCLEAR

March 1, 1985
BECo 85-045

Dr. Thomas E. Murley
Regional Administrator
Office of Inspection and Enforcement
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

License DPR-35
Docket 50-293

Radioactive Effluent Release Report
July 1 through December 31, 1984

Dear Sir:

In accordance with Pilgrim Nuclear Power Station Technical Specification 6.9.C.1, Boston Edison Company hereby submits 2 copies of the Pilgrim Nuclear Power Station Radioactive Effluent Release Report. The reporting period is from July 1, 1984 through December 31, 1984.

The report format and content are 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, Revision 1, Tables 1A, 1B, 1C,2A, 2B, 3, 4A-1 - 4A-2 and Supplemental Information.

Very truly yours,

WD Harrington

GGW/ns

(2 copies)

cc: Mr. Domenic B. Vassallo, Chief
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