

H. B. ROBINSON STEAM ELECTRIC PLANT  
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT

July 1, 1978 thru December 31, 1978

# EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT

## Supplemental Information

Facility: H. B. Robinson SEG Plant

License: DPR-23

### 1. Regulatory Limits

- A. Fission and Activation Gases: 15,000 uCi/Sec based on Xe-133.
- B. Iodines: 7.15E-03 uCi/sec based on I-131.
- C. Particulates, Half-Lives >8 days: 7.15E-03 uCi/sec.
- D. Liquid Effluent: Tritium not to exceed annual daily average of 10.5 curies. All other not to exceed 10CFR20, Appendix B, Table 2, Column 2, except unidentified not to exceed annual daily limit average of 26 mCi/day.

### 2. Maximum Permissible Concentrations

- A. Gaseous Effluent: The average annual release rates of gaseous wastes is limited to  $\sum \frac{Q_i}{MPC_i} \leq 5.0E04 \text{ M}^3/\text{sec}$ .  $Q_i$  is the annual release rate (ci/sec) of any radioisotope,  $i$ , and  $(MPC)_i$ ; in units of uCi/cc as defined in Column 1, Table II of Appendix B, 10 CFR 20, except that for isotopes of iodine and particulates with half lives greater than 8 days, the values of  $(MPC)_i$  are reduced by a factor of 1/700.
- B. Liquid Effluents: 1.00 E-07 uCi/cc unidentified  
3.00 E-03 uCi/cc Tritium

### 3.0 Average Energy of Fission & Activation Gases Released

Third Quarter	.568 mev
Fourth Quarter	.252 mev

4. Measurements and Approximations of Total Radioactivity

A. Fission and Activation Gases:

Measured By: Continuous Monitors

Radionuclides Determined By: Periodic Grab Samples, Gamma Analysis

Gross Beta Count: Tri-Carb

B. Iodines:

Measured By: Continuous Monitors and Sampler

Radionuclides Determined By: Gamma Analysis

C. Particulates:

Measured By: Continuous Sampler

Radionuclides Determined By: Gamma Analysis, Gross Beta Count.

D. Liquid Effluents:

Measured By: Composite Sample Analysis

Radionuclides Determined By: Gamma Analysis, Gross Beta Count,

Liquid Scintillation

# Liquid Releases For 3rd Quarter 1978

Total No. of Releases/Wk	Total Minutes of Releases/Wk	Max. Minutes Any Release	Ave. Minutes Per Releases/Wk	Min. Minutes Any Release
3.00E00	1.39E03	6.02E02	4.62E02	3.00E02
2.00E00	1.31E03	6.60E02	6.55E02	6.50E02
7.00E00	3.14E03	8.00E02	4.49E02	1.82E02
4.00E00	2.32E03	6.50E02	5.79E02	5.20E02
4.00E00	1.77E03	7.15E02	4.42E02	1.90E02
1.00E01	2.98E03	6.05E02	2.98E02	3.50E01
5.00E00	2.21E03	7.55E02	4.43E02	2.40E02
4.00E00	2.46E03	9.00E02	6.16E02	4.64E02
3.00E00	1.52E03	6.44E02	5.06E02	3.70E02
2.00E00	1.37E03	7.27E02	6.84E02	6.41E02
4.00E00	1.87E03	5.40E02	4.68E02	4.40E02
3.00E00	8.79E02	5.48E02	2.93E02	1.65E02
1.10E01	4.18E03	1.44E03	3.80E02	1.50E01

Total:

6.20E01      2.74E04

Maximum Minutes Any Release - 1.44E03

Minimum Minutes Any Release - 1.50E01

Average Minutes - 4.42E02

Liquid Releases For 4th Quarter 1978

Total No. of Releases/Wk	Total Minutes of Releases/Wk	Max. Minutes Any Release	Avg. Minutes Per Release/Wk	Min. Minutes Any Release
9.00E00	3.63E03	7.75E02	4.03E02	1.75E02
4.00E00	1.74E03	6.20E02	4.36E02	2.05E02
6.00E00	2.46E03	7.20E02	4.09E02	1.55E02
1.00E00	5.40E02	5.40E02	5.40E02	5.40E02
5.00E00	1.68E03	5.05E02	3.36E02	1.70E02
8.00E00	2.93E03	5.05E02	3.66E02	1.55E02
3.00E00	1.48E03	5.37E02	4.93E02	4.25E02
2.00E00	1.16E03	6.00E02	5.83E02	5.65E02
3.00E00	1.46E03	1.28E03	4.89E02	6.30E01
4.00E00	1.56E03	5.75E02	3.91E02	1.67E02
6.00E00	2.87E03	5.60E02	4.78E02	4.60E02
3.00E00	1.13E03	6.65E02	3.77E02	1.70E02
2.00E00	1.11E03	5.72E02	5.56E02	5.40E02

Total:

5.60E01      2.38E04

Maximum Minutes Any Release - 1.28E03

Minimum Minutes Any Release - 6.30E01

Average Minutes - 4.24E02

Average Stream Flow During Release Periods:

3rd Quarter - 1.85E06 GPM

4th Quarter - 2.19E06 GPM

# Gaseous Batch Releases By Quarters

Total No. of Releases		Release Total Time Minutes	Max. Release Minutes	Avg. Release Minutes	Min. Release Minutes
3rd Quarter	5.90E01	3.27E04	5.76E03	5.54E02	1.00E00
4th Quarter	5.70E01	1.57E04	2.87E03	2.76E02	1.00E00

## Gaseous Waste Releases by Months - 1978

July	1.70E01	3.23E03	2.95E02	1.90E02	1.00E00
August	2.50E01	1.17E04	1.44E02	4.68E02	1.00E00
September	1.70E01	1.78E04	5.76E03	1.05E03	1.00E00
3rd Quarter	5.90E01	3.27E04	5.76E03	5.54E02	1.00E00
October	2.3E01	8.29E03	2.87E03	3.60E02	1.00E00
November	1.70E01	3.78E03	3.07E02	2.22E02	1.00E00
December	1.70E01	3.67E03	3.10E02	2.16E02	1.00E00
4th Quarter	5.70E01	1.57E04	2.87E03	2.76E02	1.00E00

Maximum Gross Gas Release Rate During Any One Hour Period For Batch and  
Continuous Releases: 3.06E06 uCi/Hr.

Abnormal Releases:

Liquid - None

Gaseous - 1

Release Number 78-189 was a planned release; however the method  
of release was improper as discussed in POE: 78-2. This  
information is found in File 2-0-1-e. The total curies  
released was:

Particulates	3.52 E-07
Iodines	≤2.04 E-07
Radiogases	1.84 E-02
Tritium	6.11 E-04

This activity was accounted for under a batch release.

# Liquid Effluents - Summation of All Releases

## A. Fission & Activation Products.

	Unit	3rd Quarter	4th Quarter	Est. Total Error - %
Total Releases (not including Tritium, Gases, Alpha)	Ci	3.07E-02	2.12E-02	5.00E00
Average Diluted Concentration During Period	uCi/ml	1.60E-10	1.08E-10	
Percent of Applicable Limit	%	1.90E-02	4.82E-04	

## B. Tritium

	Unit	3rd Quarter	4th Quarter	Est. Total Error - %
Total Release	Ci	1.88E02	1.85E02	5.00E00
Average Diluted Concentration During Period	uCi/ml	9.79E-07	9.39E-07	
Percent of Applicable Limit	%	3.26E-02	3.13E-02	

## C. Dissolved & Entrained Gases

	Unit	3rd Quarter	4th Quarter	Est. Total Error - %
Total Release	Ci	2.67E-02	1.26E-03	1.00E01
Average Diluted Concentration During Period	uCi/ml	1.39E-10	6.40E-12	
Percent of Applicable Limit	%	4.64E-03	2.13E-04	

## D. Gross Alpha Radioactivity

	Unit	3rd Quarter	4th Quarter	Est. Error - %
Total Release	Ci	0.00E00	0.00E00	0.00E00

## E. Volume of Waste Released (Prior to Dilution)

	Liters	3.09E07	2.91E07	1.00E01
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## F. Volume of Dilution Water Used During Period

	Liters	1.92E11	1.97E11	1.00E01
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Maximum Concentration of Gross Radioactivity Released to the Unrestricted Areas				
		3rd Quarter	4th Quarter	Error - %
Concentration Averaged Over Period of Release	uCi/ml	1.81E-08	1.27E-08	5.00E00



Liquid Effluents

Nuclides Released	Unit	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		3rd Qtr.	4th Qtr.	3rd Qtr.	4th Qtr.
Strontium - 89	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Strontium - 90	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Cesium - 134	Ci	1.09E-03	0.00E00	1.68E-04	0.00E00
Cesium - 137	Ci	3.19E-03	3.20E-03	8.63E-04	0.00E00
Iodine - 131	Ci	9.80E-03	0.00E00	8.76E-04	0.00E00
Cobalt - 58	Ci	3.05E-04	4.85E-03	8.70E-04	2.80E-03
Cobalt - 60	Ci	2.62E-03	1.25E-04	8.58E-03	9.86E-03
Iron - 59	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Zinc - 65	Ci	4.13E-04	0.00E00	2.77E-05	0.00E00
Manganese - 54	Ci	7.41E-05	0.00E00	4.38E-04	0.00E00
Chromium - 51	Ci	0.00E00	0.00E00	8.01E-05	0.00E00
Zirconium-Niobium-95	Ci	0.00E00	0.00E00	4.75E-05	0.00E00
Yttrium - 99	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Technetium - 99m	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Ba-Lanthanum - 140	Ci	4.30E-04	0.00E00	0.00E00	0.00E00
Cerium - 141	Ci	9.60E-04	0.00E00	0.00E00	0.00E00
Silver - 110m	Ci	2.96E-04	0.00E00	0.00E00	0.00E00
Cobalt - 57	Ci	0.00E00	0.00E00	3.30E-06	0.00E00
Antimony - 124	Ci	0.00E00	0.00E00	1.42E-05	0.00E00
Antimony - 125	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Cadmium - 109	Ci	6.98E-04	0.00E00	0.00E00	0.00E00
Cerium - 139	Ci	0.00E00	3.73E-05	0.00E00	0.00E00
Total For Period	Ci	1.98E-02	8.21E-03	1.20E-02	1.27E-02
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Xe - 133	Ci	9.31E-03	0.00E00	1.11E-03	1.26E-03
Xe - 135	Ci	1.60E-02	0.00E00	2.81E-04	0.00E00

Gaseous Effluent - Summation of All Releases

A.	Fission and Activation Gases	Unit	3rd Quarter	4th Quarter	Est. Total
					Error - %
	1. Total Release	Ci	6.53E02	1.19E02	1.00E01
	2. Ave. Release Rate For Period	uCi/sec.	8.31E01	1.51E01	
	3. Percent Tech. Spec. Limit	%	1.55E00	1.47E-01	
B.	Iodines	Unit	3rd Quarter	4th Quarter	Est. Total
					Error - %
	1. Total Release - I-131	Ci	2.16E-05	1.05E-05	5.00E00
	2. Ave. Release Rate For Period	uCi/sec.	2.75E-06	1.34E-06	
	3. Percent Tech. Spec. Limit	%	3.84E-02	1.87E-02	
C.	Particulates	Unit	3rd Quarter	4th Quarter	Est. Total
					Error - %
	1. Particulates - Half Lives >8 days	Ci	4.94E-05	7.65E-05	5.00E00
	2. Ave. Release Rate For Period	uCi/sec.	6.28E-06	9.73E-06	
	3. Percent Tech. Spec. Limit	%	2.52E-02	2.51E-02	
	4. Gross Alpha Radioactivity	Ci	0.00E00	0.00E00	
D.	Tritium	Unit	3rd Quarter	4th Quarter	Est. Total
					Error - %
	1. Total Release	Ci	3.20E01	3.33E00	1.00E01
	2. Ave. Release Rate For Period	uCi/sec.	4.07E00	4.24E-01	
	3. Percent Tech. Spec. Limit	%	4.07E-02	4.24E-03	

Gaseous Effluents - Elevated Releases

No Elevated Releases Made At H. B. Robinson Facility

Gaseous Effluents - Ground Level Releases \*

<u>Continuous Mode</u>				<u>Batch Mode</u>	
Nuclides Released	Unit	3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
Fission & Activation Gases					
Kr - 85	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Kr - 85m	Ci	5.91E-01	0.00E00	0.00E00	0.00E00
Kr - 87	Ci	3.26E00	0.00E00	8.00E-03	0.00E00
Kr - 88	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Xe - 133	Ci	4.64E02	1.09E02	8.90E00	1.22E01
Xe - 135	Ci	1.08E01	1.51E00	1.79E-03	1.09E02
Xe - 135m	Ci	1.67E00	0.00E00	3.96E-03	0.00E00
Ar - 41	Ci	1.71E02	7.89E00	2.19E00	5.25E-02
Total For Period	Ci	6.51E02	1.18E02	1.12E01	1.23E01
Iodines					
I - 131	Ci	2.16E-05	1.05E-05	6.70E-5	1.53E-05
I - 133	Ci	2.35E-05	3.27E-05	0.00E00	4.79E-05
I - 135	Ci	1.79E-05	1.26E-04	2.66E-05	8.41E-07
Total For Period	Ci	6.30E-05	1.69E-04	9.35E-05	6.40E-05

\* Continuous Mode Accountability Includes Batch Mode Accountability.

## Gaseous Effluents - Ground Level Releases \* - Continued

Nuclides Released	Unit	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		3rd Quarter	4th Quarter	3rd Quarter	4th Quarter
Particulates					
Mn - 54	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Cr - 51	Ci	4.70E-06	0.00E00	0.00E00	0.00E00
Sr - 89	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Sr - 90	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Cs - 134	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Cs - 137	Ci	3.30E-06	0.00E00	3.06E-07	0.00E00
Ba - La - 140	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Co - 58	Ci	2.15E-06	4.03E-05	1.12E-08	1.57E-06
Co - 60	Ci	2.34E-05	3.62E-05	2.98E-06	7.05E-06
Ce - 139	Ci	3.58E-06	0.00E00	8.15E-08	5.13E-08
Ce - 144	Ci	3.09E-06	0.00E00	2.76E-09	0.00E00
Ce - 141	Ci	0.00E00	0.00E00	7.72E-11	1.47E-07
Co - 57	Ci	0.00E00	0.00E00	1.74E-06	0.00E00
Cd - 109	Ci	3.12E-06	0.00E00	5.63E-10	0.00E00
Sb - 125	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Nb - 95	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Zn - 65	Ci	6.19E-06	0.00E00	3.33E-9	0.00E00
Hg - 203	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Sn - 113	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Ag - 110m	Ci	0.00E00	0.00E00	0.00E00	0.00E00
Total For Period	Ci	4.95E-05	7.65E-05	5.12E-06	8.82E-06

# Solid Waste & Irradiated Fuel Shipments

1. Type of Waste	Unit	6 Month Period	Est. Total Error - %
Evaporator Bottoms, Filter	m <sup>3</sup>	1.68E02	1.00E01
Sludges, etc.	Ci	8.05E01	1.00E01
Dry Compressible Waste	m <sup>3</sup>	6.91E01	1.00E01
Contaminated Equipment	Ci	2.72E00	1.00E01
Irradiated Components	m <sup>3</sup>	0.00E00	0.00E00
Control Rods, Etc.	Ci	0.00E00	0.00E00
Irradiated Fuel Shipments	Bundles	9.80E01	0.00E00
	Ci	2.41E07	1.00E01
Others (Describe)	m <sup>3</sup>	0.00E00	0.00E00
	Ci	0.00E00	0.00E00

## 2. Estimate of Major Nuclide Composition

See Supplement No. 1

## 3. Solid Waste Disposition

<u>No of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
1.80E01	Truck (Sole Consignee)	Barnwell, S. C.

## 4. Irradiated Fuel Shipments

<u>No of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
1.40E01	Rail	Southport, N. C.

Supplement Number 1

Solid Waste and Irradiated Fuel Shipment Table

Estimate of Major Nuclide Composition (By Type of Waste)

A. Evaporator Bottoms

<u>Isotope</u>	<u>%</u>
Co-58	2.40E01
Co-60	5.05E01
Mn-54	1.28E00
Cs-134	4.04E00
Cs-137	1.38E01
Cr-51	3.46E00
Co-57	9.20E-01
Others	2.00E00

B. Dry Waste

<u>Isotope</u>	<u>%</u>
Co-60	6.50E01
Co-58	2.70E01
Cr-51	4.00E00
Mn-54	2.00E00
Cs-134	1.00E00
Cs-137	1.00E00

Solid Waste Shipments

Total Shipments - 18

Total Activity - 83.24 Curies

Shipping Dates

7-19-78

7-28-78

8-4-78

8-8-78

8-18-78

8-28-78

9-14-78

9-23-78

10-10-78

10-12-78

10-18-78

10-19-78

10-19-78

10-25-78

11-9-78

11-20-78

12-6-78

12-21-78

Evaporator Bottoms

1.68E02 m<sup>3</sup>

8.052E01 Curies

Dry Waste

6.91E01 m<sup>3</sup>

2.72E00 Curies



Resin Shipments

No Resin Shipments Made

Irradiated Fuel Shipments

<u>Total Shipments</u>	-	14	<u>Shipping Dates</u>
<u>Total Activity</u>	-	2.47E07 Curies	7-24-78
<u>Total Quantity</u>	-	98 Fuel Bundles	8-1-78
			8-8-78
			8-17-78
			8-25-78
			9-5-78
			9-12-78
			9-20-78
			10-6-78
			10-15-78
			11-10-78
			11-29-78
			12-7-78
			12-15-78

## RADIOLOGICAL IMPACT ON MAN

The models used to calculate the dose commitment estimates presented in Tables I thru X of this report were taken from Regulatory Guide 1.109, "Calculation of Annual Doses to Man From Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance With 10 CFR Part 50, Appendix I", March 1976. The dose commitments are based on plant effluent data integrated over the six-month period from July 1, 1978 thru December 31, 1978. Eight day depleted X/Q's were utilized for all airborne pathways and all usage factors were for the maximum exposed individual.

TABLE I  
DOSE COMMITMENT FOR LAKE ROBINSON SHORELINE  
SEDIMENT MREM/6 MO.

	CHILD	TEEN	ADULT
WHOLE BODY	6.59E-08	3.15E-07	5.65E-08
SKIN	7.74E-08	3.70E-07	6.63E-08

TABLE II  
DOSE COMMITMENT FOR INGESTION OF FISH  
CAUGHT IN LAKE ROBINSON (MREM/6 MO.)

	CHILD	TEEN	ADULT
BONE	1.63E-07	1.33E-07	1.27E-07
LIVER	3.03E-07	3.63E-07	3.91E-07
WHOLE BODY	1.96E-07	2.50E-07	3.30E-07
THYROID	8.52E-07	8.48E-07	9.33E-07
KIDNEY	1.73E-07	2.09E-07	2.42E-07
LUNG	1.09E-07	1.33E-07	1.63E-07
GI-LLI	2.33E-07	5.19E-07	7.32E-07

TABLE III  
DOSE COMMITMENT FOR INGESTION OF GREEN  
LEAFY VEGETABLES FROM HIGHEST X/Q  
GARDEN MREM/6 MO.

	CHILD	TEEN	ADULT
BONE	1.19E-05	6.34E-06	7.28E-06
LIVER	3.14E-03	2.65E-03	3.99E-03
WHOLE BODY	3.13E-03	2.64E-03	3.99E-03
THYROID	4.09E-03	3.22E-03	4.78E-03
KIDNEY	3.13E-03	2.64E-03	3.98E-03
LUNG	3.12E-03	2.64E-03	3.98E-03
GI-LLI	3.14E-03	2.67E-03	4.03E-03

DOSE COMMITMENT FOR INGESTION OF  
PRODUCE FROM HIGHEST X/Q GARDEN  
MREM/6 MO.

	CHILD	TEEN	ADULT
BONE	1.34E-04	5.64E-05	3.36E-05
LIVER	4.76E-02	3.01E-02	2.46E-02
WHOLE BODY	4.76E-02	3.01E-02	2.46E-02
THYROID	4.76E-02	3.01E-02	2.46E-02
KIDNEY	4.75E-02	3.01E-02	2.46E-02
LUNG	4.75E-02	3.00E-02	2.46E-02
GI-LLI	4.77E-02	3.04E-02	2.48E-02

TABLE IV  
DOSE COMMITMENT FOR I-131 FOR  
MILK INGESTION MREM/6 MO.

	INFANT	CHILD	TEEN	ADULT
BONE	6.91E-07	3.31E-07	1.37E-07	7.52E-08
LIVER	8.14E-07	3.33E-07	1.91E-07	1.08E-07
WHOLE BODY	3.58E-07	1.89E-07	1.03E-07	6.17E-08
THYROID	2.68E-04	1.10E-04	5.58E-05	3.53E-05
KIDNEY	9.51E-07	5.47E-07	3.29E-07	1.84E-07
LUNG	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GI-LLI	2.91E-08	2.96E-08	3.78E-08	2.84E-08

TOTAL DOSE COMMITMENT FOR MILK  
INGESTION MREM/6 MO.

	INFANT	CHILD	TEEN	ADULT
BONE	3.63E-06	2.23E-06	9.58E-07	5.47E-07
LIVER	3.71E-04	2.43E-04	1.54E-04	1.18E-04
WHOLE BODY	3.67E-04	2.42E-04	1.53E-04	1.17E-04
THYROID	6.37E-04	3.53E-04	2.09E-04	1.53E-04
KIDNEY	3.68E-04	2.42E-04	1.53E-04	1.18E-04
LUNG	3.65E-04	2.41E-04	1.52E-04	1.17E-04
GI-LLI	3.67E-04	2.41E-04	1.53E-04	1.17E-04

TABLE V  
INHALATION DOSE COMMITMENT FROM  
I-131 AT HIGHEST SITE BOUNDARY  
X/Q (MREM/6 MO.)

	INFANT	CHILD	TEEN	ADULT
BONE	1.20E-06	1.52E-06	1.12E-06	7.95E-07
LIVER	1.40E-06	1.52E-06	1.55E-06	1.13E-06
WHOLE BODY	6.18E-07	8.60E-07	8.33E-07	6.46E-07
THYROID	4.66E-04	5.12E-04	4.62E-04	3.76E-04
KIDNEY	1.63E-06	2.49E-06	2.65E-06	1.93E-06
LUNG	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GI-LLI	3.34E-08	8.96E-08	2.05E-07	1.98E-07

TABLE VI  
TOTAL INHALATION DOSE COMMITMENT  
AT HIGHEST SITE BOUNDARY X/Q  
(MREM/6 MO.)

	INFANT	CHILD	TEEN	ADULT
BONE	1.41E-05	2.69E-05	1.96E-05	1.38E-05
LIVER	2.24E-02	3.90E-02	4.41E-02	4.39E-02
WHOLE BODY	2.24E-02	3.90E-02	4.41E-02	4.39E-02
THYROID	2.32E-02	3.99E-02	4.48E-02	4.44E-02
KIDNEY	2.24E-02	3.90E-02	4.41E-02	4.39E-02
LUNG	2.28E-02	3.95E-02	4.47E-02	4.43E-02
GI-LLI	2.24E-02	3.90E-02	4.41E-02	4.39E-02

TABLE VII  
DOSE COMMITMENT TO SKIN FROM SUBMERSION  
IN RADIO-NOBLE GASES  
(MREM/6 MO.)

DOSE COMMITMENT TO SKIN AT WORST SITE BOUNDARY = 2.16E+00

	RADIAL DISTANCE, MILES				
	0.5	1.5	2.5	3.5	4.5
S	1.72E-01	5.83E-02	2.74E-02	1.67E-02	1.16E-02
SSW	1.96E-01	6.57E-02	2.99E-02	1.79E-02	1.22E-02
SW	1.06E-01	3.54E-02	1.55E-02	9.04E-03	6.06E-03
WSW	6.02E-02	2.00E-02	8.67E-03	5.04E-03	3.37E-03
W	4.23E-02	1.38E-02	5.92E-03	3.42E-03	2.27E-03
WNW	3.84E-02	1.25E-02	5.46E-03	3.19E-03	2.14E-03
NW	3.81E-02	1.25E-02	5.49E-03	3.22E-03	2.16E-03
NNW	7.71E-02	2.59E-02	1.16E-02	6.89E-03	4.68E-03
N	2.40E-01	8.36E-02	3.91E-02	2.38E-02	1.64E-02
NNE	2.99E-01	1.04E-01	4.80E-02	2.89E-02	1.98E-02
NE	2.14E-01	7.47E-02	3.44E-02	2.07E-02	1.42E-02
ENE	1.17E-01	3.99E-02	1.84E-02	1.11E-02	7.60E-03
E	7.16E-02	2.49E-02	1.15E-02	6.92E-03	4.75E-03
ESE	9.48E-02	3.27E-02	1.57E-02	9.71E-03	1.32E-02
SE	1.82E-01	6.38E-02	3.07E-02	1.90E-02	1.32E-02
SSE	5.61E-01	1.26E-01	6.08E-02	3.77E-02	2.63E-02

	RADIAL DISTANCE, MILES				
	7.5	15.0	25.0	35.0	45.0
S	5.60E-03	1.99E-03	8.88E-04	5.15E-04	3.39E-04
SSW	5.79E-03	2.00E-03	8.74E-04	5.02E-04	3.29E-04
SW	2.80E-03	9.31E-04	3.97E-04	2.26E-04	1.47E-04
WSW	1.55E-03	5.11E-04	2.17E-04	1.23E-04	7.98E-05
W	1.03E-03	3.36E-04	1.41E-04	7.95E-05	5.14E-05
WNW	9.90E-04	3.30E-04	1.42E-04	8.11E-05	5.29E-05
NW	1.00E-03	3.36E-04	1.44E-04	8.23E-05	5.38E-05
NNW	2.20E-03	7.52E-04	3.28E-04	1.89E-04	1.24E-04
N	7.91E-03	2.79E-03	1.23E-03	7.09E-04	4.64E-04
NNE	9.48E-03	3.30E-03	1.44E-03	8.30E-04	5.43E-04
NE	6.79E-03	2.36E-03	1.04E-03	5.96E-04	3.90E-04
ENE	3.64E-03	1.27E-03	5.64E-04	3.28E-04	2.16E-04
E	2.28E-03	8.01E-04	3.56E-04	2.07E-04	1.37E-04
ESE	3.33E-03	1.20E-03	5.44E-04	3.18E-04	4.05E-04
SE	6.47E-03	2.34E-03	1.05E-03	6.14E-04	4.05E-04
SSE	1.30E-02	4.71E-03	2.13E-03	1.25E-03	8.26E-04

TABLE VIII  
DOSE COMMITMENT TO WHOLE BODY FROM  
SUBMERSION IN RADIO-NOBLE GASES  
(MREM/6 MO.)

DOSE COMMITMENT TO WHOLE BODY AT WORST SITE BOUNDARY= 1.24E+00

	RADIAL DISTANCE, MILES				
	0.5	1.5	2.5	3.5	4.5
S	9.81E-02	3.33E-02	1.57E-02	9.55E-03	6.60E-03
SSW	1.12E-01	3.75E-02	1.71E-02	1.02E-02	6.97E-03
SW	6.07E-02	2.02E-02	8.83E-03	5.17E-03	3.46E-03
WSW	3.47E-02	1.14E-02	4.96E-03	2.88E-03	1.93E-03
W	2.42E-02	7.88E-03	3.38E-03	1.95E-03	1.30E-03
WNW	2.19E-02	7.15E-03	3.12E-03	1.82E-03	1.22E-03
NW	2.18E-02	7.14E-03	3.13E-03	1.84E-03	1.24E-03
NNW	4.41E-02	1.48E-02	6.64E-03	3.94E-03	2.67E-03
N	1.37E-01	4.78E-02	2.24E-02	1.36E-02	9.39E-03
NNE	1.71E-01	5.94E-02	2.74E-02	1.65E-02	1.13E-02
NE	1.23E-01	4.27E-02	1.97E-02	1.18E-02	8.12E-03
ENE	6.56E-02	2.28E-02	1.05E-02	6.33E-03	4.34E-03
E	4.09E-02	1.42E-02	6.55E-03	3.96E-03	2.72E-03
ESE	5.41E-02	1.87E-02	8.98E-03	5.55E-03	7.55E-03
SE	1.04E-01	3.65E-02	1.75E-02	1.08E-02	7.55E-03
SSE	2.07E-01	7.18E-02	3.47E-02	2.15E-02	1.50E-02

	RADIAL DISTANCE, MILES				
	7.5	15.0	25.0	35.0	45.0
S	3.20E-03	1.14E-03	5.07E-04	2.94E-04	1.94E-04
SSW	3.51E-03	1.14E-03	4.99E-04	2.87E-04	1.88E-04
SW	1.60E-03	5.32E-04	2.27E-04	1.29E-04	8.41E-05
WSW	8.86E-04	2.92E-04	1.24E-04	7.02E-05	4.56E-05
W	5.91E-04	1.92E-04	8.07E-05	4.55E-05	2.94E-05
WNW	5.65E-04	1.89E-04	8.11E-05	4.63E-05	3.03E-05
NW	5.73E-04	1.92E-04	8.24E-05	4.70E-05	3.07E-05
NNW	1.26E-03	4.30E-04	1.87E-04	1.08E-04	7.07E-05
N	4.52E-03	1.59E-03	7.03E-04	4.05E-04	2.65E-04
NNE	5.41E-03	1.88E-03	8.26E-04	4.74E-04	3.10E-04
NE	3.38E-03	1.35E-03	5.93E-04	3.41E-04	2.23E-04
ENE	2.08E-03	7.28E-04	3.22E-04	1.87E-04	1.23E-04
E	1.30E-03	4.58E-04	2.04E-04	1.18E-04	7.83E-05
ESE	1.90E-03	6.88E-04	3.11E-04	1.82E-04	2.32E-04
SE	3.70E-03	1.34E-03	6.02E-04	3.51E-04	2.32E-04
SSE	7.41E-03	2.69E-03	1.22E-03	7.13E-04	4.72E-04



TABLE IX  
POPULATION INTEGRATED WHOLE BODY DOSE  
COMMITMENT FROM SUBMERSION IN RADIO-  
NOBLE GASES (MREM/6 MO.)

	RADIAL DISTANCE, MILES				
	0.5	1.5	2.5	3.5	4.5
S	1.57E-03	5.33E-04	1.17E-03	9.74E-04	8.78E-04
SSW	8.94E-03	3.75E-04	1.09E-03	6.54E-04	1.34E-03
SW	5.89E-03	4.10E-03	8.57E-04	4.75E-04	8.35E-04
WSW	5.42E-03	1.46E-03	2.13E-04	4.64E-04	2.68E-04
W	1.81E-03	2.60E-04	2.91E-04	1.99E-04	2.49E-04
WNW	5.70E-04	4.58E-04	8.11E-05	1.82E-05	9.16E-05
NW	1.09E-04	4.21E-04	2.66E-04	8.82E-05	1.20E-04
NNW	0.00E+00	7.40E-05	1.73E-04	3.94E-05	0.00E+00
N	0.00E+00	4.78E-04	9.62E-04	1.32E-03	2.40E-03
NNE	0.00E+00	5.76E-03	5.26E-03	2.93E-03	8.50E-04
NE	0.00E+00	5.03E-03	1.67E-03	1.09E-03	6.50E-04
ENE	1.73E-03	1.14E-04	2.87E-03	7.47E-04	4.65E-04
E	2.05E-04	0.00E+00	1.05E-04	1.95E-03	3.68E-03
ESE	1.79E-03	1.90E-03	2.96E-04	4.44E-04	1.08E-02
SE	5.21E-04	4.30E-03	3.28E-03	7.01E-03	1.08E-02
SSE	2.07E-03	1.87E-03	1.00E-02	1.23E-02	3.78E-03

	RADIAL DISTANCE, MILES				
	7.5	15.0	25.0	35.0	45.0
S	5.75E-03	2.96E-03	2.60E-03	3.56E-03	1.81E-03
SSW	2.16E-03	6.58E-03	5.90E-03	2.53E-02	2.13E-03
SW	2.81E-03	1.07E-03	1.30E-03	2.30E-03	2.32E-03
WSW	1.56E-03	7.54E-04	2.45E-03	4.76E-04	1.85E-03
W	1.98E-04	4.98E-04	3.82E-04	2.14E-04	1.04E-04
WNW	1.46E-04	2.76E-04	4.74E-04	3.14E-04	7.46E-04
NW	4.47E-04	2.34E-04	4.17E-04	3.38E-04	3.84E-04
NNW	3.26E-04	3.88E-04	9.74E-04	5.48E-04	1.88E-03
N	2.34E-03	2.59E-03	4.03E-03	3.55E-03	1.51E-03
NNE	2.80E-03	2.70E-03	8.03E-03	4.71E-03	4.95E-03
NE	4.91E-03	3.78E-03	5.22E-03	3.73E-03	3.02E-03
ENE	2.63E-03	1.96E-03	4.70E-03	2.17E-03	2.12E-03
E	3.95E-03	1.20E-03	8.08E-04	9.48E-04	2.09E-03
ESE	2.52E-03	9.85E-03	1.09E-02	1.33E-03	2.42E-03
SE	8.80E-03	6.71E-03	1.95E-02	2.77E-03	2.42E-03
SSE	1.27E-02	1.68E-02	1.36E-02	7.23E-03	9.61E-03

TOTAL POPULATION INTEGRATED WHOLE BODY DOSE= 4.50E-01

TABLE X  
POPULATION INTEGRATED INHALATION DOSE  
COMMITMENT (MAN-REM/6 MO.)

	INFANT	CHILD	TEEN	ADULT
WHOLE BODY	1.55E-04	2.71E-03	2.45E-03	1.02E-02
TEYRCID	1.60E-04	2.76E-03	2.49E-03	1.03E-02

ENCLOSURE 1

JOINT FREQUENCY OF WIND DIRECTION AND SPEED  
THIRD QUARTER 1978  
H. B. ROBINSON STEAM ELECTRIC PLANT

The attached tables present the frequency of wind direction occurrences by wind speed class as recorded at the on-site meteorological system during the period July 1 through September 30, 1978.

The frequencies are presented as a percent of total occurrences for each stability class as well as a summary for all classes for each sensor elevation. The first eight tables are for the upper sensor elevation (60 meter); the last eight tables are for the lower (10 meter) sensor elevation.

Pertinent information available from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
25.5	4.9	3.9	24.5	25.9	11.8	3.5

2. Wind Speed

	<u>10 Meter</u>	<u>60 Meter</u>
Average Speed (mph)	4.4	7.7
Percent Calm	0.4	0.0
Percent Less than 3.5 mph	35.9	5.4

3. Wind Direction

	<u>10 Meter</u>	<u>60 Meter</u>
Prevailing Direction	SSW	SSW
Percent Occurrence	14.0	10.9

4. Data Recovery

	<u>10 Meter</u>	<u>60 Meter</u>
Percent Good Hours	99.8	99.8

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/73 TO 11:00 PM 9/30/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.1453E+01	0.6809E+00	0.4539E-01	0.0	0.0	0.2179E+01	0.7036E+01
NNE	0.0	0.0	0.1316E+01	0.5901E+00	0.4539E-01	0.4539E-01	0.0	0.1997E+01	0.7407E+01
NE	0.0	0.4539E-01	0.1271E+01	0.9986E+00	0.4085E+00	0.0	0.0	0.2724E+01	0.8491E+01
ENE	0.0	0.4539E-01	0.9986E+00	0.1407E+01	0.4539E+00	0.0	0.0	0.2905E+01	0.8924E+01
E	0.0	0.9079E-01	0.4539E+00	0.7717E+00	0.0	0.0	0.0	0.1316E+01	0.7814E+01
ESE	0.0	0.4539E-01	0.6355E+00	0.2270E+00	0.0	0.0	0.0	0.9079E+00	0.5980E+01
SE	0.0	0.9079E-01	0.1180E+01	0.4993E+00	0.1362E+00	0.0	0.0	0.1906E+01	0.6965E+01
SSE	0.0	0.0	0.8171E+00	0.9079E+00	0.2724E+00	0.0	0.0	0.1997E+01	0.8609E+01
S	0.0	0.0	0.6355E+00	0.9079E+00	0.9079E-01	0.0	0.0	0.1634E+01	0.9134E+01
SSW	0.0	0.4539E-01	0.7717E+00	0.1089E+01	0.1816E+00	0.0	0.0	0.2088E+01	0.8800E+01
SW	0.0	0.0	0.9532E+00	0.1180E+01	0.1362E+00	0.0	0.0	0.2270E+01	0.8149E+01
WSW	0.0	0.9079E-01	0.1044E+01	0.4085E+00	0.0	0.0	0.0	0.1543E+01	0.6695E+01
W	0.0	0.4539E-01	0.1362E+01	0.2270E+00	0.0	0.0	0.0	0.1634E+01	0.6253E+01
WNW	0.0	0.4539E-01	0.0	0.9079E-01	0.0	0.0	0.0	0.1362E+00	0.6753E+01
NW	0.0	0.0	0.0	0.1362E+00	0.0	0.0	0.0	0.1362E+00	0.1049E+02
NNW	0.0	0.0	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.1362E+00	0.6743E+01
TOTAL	0.0	0.5447E+00	0.1298E+02	0.1017E+02	0.1770E+01	0.4539E-01	0.0	0.2551E+02	0.7765E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 5

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS B  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.3177E+00	0.1816E+00	0.0	0.0	0.0	0.4993E+00	0.6965E+01
NNE	0.0	0.0	0.1362E+00	0.1362E+00	0.4539E-01	0.0	0.0	0.3177E+00	0.8907E+01
NE	0.0	0.4539E-01	0.9079E-01	0.9079E-01	0.9079E-01	0.0	0.0	0.3177E+00	0.8799E+01
ENE	0.0	0.0	0.1362E+00	0.1362E+00	0.0	0.0	0.0	0.2724E+00	0.6943E+01
E	0.0	0.4539E-01	0.1816E+00	0.1362E+00	0.4539E-01	0.0	0.0	0.4085E+00	0.7322E+01
ESE	0.0	0.4539E-01	0.9079E-01	0.1362E+00	0.0	0.0	0.0	0.2724E+00	0.7462E+01
SE	0.0	0.0	0.0	0.9079E-01	0.0	0.0	0.0	0.9079E-01	0.9965E+01
SSE	0.0	0.0	0.2270E+00	0.1816E+00	0.0	0.0	0.0	0.4085E+00	0.6517E+01
S	0.0	0.0	0.1816E+00	0.1362E+00	0.0	0.0	0.0	0.3177E+00	0.8090E+01
SSW	0.0	0.0	0.1816E+00	0.1816E+00	0.4539E-01	0.0	0.0	0.4085E+00	0.7643E+01
SW	0.0	0.0	0.3631E+00	0.1816E+00	0.0	0.0	0.0	0.5447E+00	0.6772E+01
WSW	0.0	0.4539E-01	0.2724E+00	0.9079E-01	0.0	0.0	0.0	0.4085E+00	0.5989E+01
W	0.0	0.0	0.2724E+00	0.4539E-01	0.0	0.0	0.0	0.3177E+00	0.5394E+01
WNW	0.0	0.0	0.1362E+00	0.0	0.0	0.0	0.0	0.1362E+00	0.4470E+01
NW	0.0	0.0	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.9079E-01	0.8000E+01
NNW	0.0	0.0	0.9079E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.6065E+01
TOTAL	0.0	0.1816E+00	0.2724E+01	0.1770E+01	0.2270E+00	0.0	0.0	0.4902E+01	0.7204E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/79 TO 11:00 PM 9/30/78STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4539E-01	0.1816E+00	0.9079E-01	0.0	0.0	0.0	0.3177E+00	0.6526E+01
NNE	0.0	0.0	0.1362E+00	0.4539E-01	0.1362E+00	0.0	0.0	0.3177E+00	0.9847E+01
NE	0.0	0.0	0.1362E+00	0.2270E+00	0.3177E+00	0.0	0.0	0.6809E+00	0.1114E+02
ENE	0.0	0.0	0.4539E-01	0.9079E-01	0.4539E-01	0.0	0.0	0.1816E+00	0.9502E+01
E	0.0	0.0	0.2270E+00	0.0	0.0	0.0	0.0	0.2270E+00	0.5690E+01
ESE	0.0	0.4539E-01	0.1362E+00	0.9079E-01	0.4539E-01	0.0	0.0	0.3177E+00	0.7804E+01
SE	0.0	0.0	0.1362E+00	0.0	0.0	0.0	0.0	0.1362E+00	0.4970E+01
SSE	0.0	0.0	0.4539E-01	0.2270E+00	0.9079E-01	0.0	0.0	0.3631E+00	0.1116E+02
S	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.4539E-01	0.6330E+01
SSW	0.0	0.4539E-01	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.1816E+00	0.6227E+01
SW	0.0	0.0	0.4539E-01	0.3631E+00	0.0	0.0	0.0	0.4085E+00	0.8260E+01
WSW	0.0	0.0	0.1362E+00	0.0	0.0	0.0	0.0	0.1362E+00	0.5917E+01
W	0.0	0.0	0.1816E+00	0.4539E-01	0.0	0.0	0.0	0.2270E+00	0.5438E+01
WNW	0.0	0.4539E-01	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.1362E+00	0.5887E+01
NW	0.0	0.0	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.9079E-01	0.6965E+01
NNW	0.0	0.0	0.9079E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.4355E+01
TOTAL	0.0	0.1816E+00	0.1725E+01	0.1316E+01	0.6355E+00	0.0	0.0	0.3858E+01	0.7251E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 2.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.3177E+00	0.4993E+00	0.0	0.0	0.0	0.8171E+00	0.7736E+01
NNE	0.0	0.0	0.7717E+00	0.1180E+01	0.5447E+00	0.0	0.0	0.2497E+01	0.9862E+01
NE	0.0	0.1362E+00	0.6609E+00	0.1316E+01	0.5447E+00	0.0	0.0	0.2678E+01	0.9562E+01
ENE	0.0	0.1316E+00	0.8625E+00	0.1135E+01	0.3177E+00	0.0	0.0	0.2497E+01	0.8627E+01
E	0.0	0.4539E-01	0.9079E+00	0.5447E+00	0.9079E-01	0.0	0.0	0.1589E+01	0.7462E+01
ESE	0.0	0.9079E-01	0.1226E+01	0.5901E+00	0.4539E-01	0.0	0.0	0.1952E+01	0.6932E+01
SE	0.0	0.9079E-01	0.7263E+00	0.7263E+00	0.0	0.0	0.0	0.1543E+01	0.6994E+01
SSE	0.0	0.1816E+00	0.1044E+01	0.9986E+00	0.9079E-01	0.0	0.0	0.2315E+01	0.7464E+01
S	0.0	0.4539E-01	0.1180E+01	0.1407E+01	0.1816E+00	0.0	0.0	0.2814E+01	0.8149E+01
SSW	0.0	0.9079E-01	0.5447E+00	0.1226E+01	0.9079E-01	0.0	0.0	0.1952E+01	0.8253E+01
SW	0.0	0.9079E-01	0.5447E+00	0.5447E+00	0.0	0.0	0.0	0.1180E+01	0.6899E+01
WSW	0.0	0.0	0.5447E+00	0.4085E+00	0.0	0.0	0.0	0.9532E+00	0.7410E+01
W	0.0	0.4539E-01	0.4993E+00	0.9079E-01	0.0	0.0	0.0	0.6355E+00	0.5734E+01
WNW	0.0	0.0	0.2270E+00	0.4539E-01	0.4539E-01	0.0	0.0	0.3177E+00	0.7647E+01
NW	0.0	0.0	0.1362E+00	0.9079E-01	0.0	0.4539E-01	0.0	0.2724E+00	0.9507E+01
NNW	0.0	0.1362E+00	0.2724E+00	0.4539E-01	0.0	0.0	0.0	0.4539E+00	0.5187E+01
TOTAL	0.0	0.1135E+01	0.1049E+02	0.1085E+02	0.1952E+01	0.4539E-01	0.0	0.2447E+02	0.7714E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/73 TO 11:00 PM 9/30/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4539E-01	0.7263E+00	0.1316E+01	0.1816E+00	0.0	0.0	0.2270E+01	0.8687E+01
NNE	0.0	0.1816E+00	0.8625E+00	0.4539E+00	0.4539E-01	0.0	0.0	0.1543E+01	0.6977E+01
NE	0.0	0.4539E-01	0.3177E+00	0.9079E+00	0.3177E+00	0.0	0.0	0.1589E+01	0.9561E+01
ENE	0.0	0.1362E+00	0.8171E+00	0.3171E+00	0.9079E-01	0.0	0.0	0.1861E+01	0.7707E+01
E	0.0	0.4539E-01	0.4539E+00	0.5447E+00	0.1816E+00	0.0	0.0	0.1226E+01	0.8519E+01
ESE	0.0	0.9079E-01	0.3177E+00	0.1816E+00	0.9079E-01	0.0	0.0	0.6809E+00	0.7168E+01
SE	0.0	0.4539E-01	0.4993E+00	0.2270E+00	0.0	0.0	0.0	0.7717E+00	0.6252E+01
SSE	0.0	0.1362E+00	0.9986E+00	0.6809E+00	0.4539E-01	0.0	0.0	0.1861E+01	0.7061E+01
S	0.0	0.1816E+00	0.1770E+01	0.1180E+01	0.1816E+00	0.0	0.0	0.3314E+01	0.7350E+01
SSW	0.0	0.4539E-01	0.9532E+00	0.2814E+01	0.4085E+00	0.0	0.0	0.4222E+01	0.8820E+01
SW	0.0	0.1816E+00	0.5901E+00	0.2043E+01	0.0	0.0	0.0	0.2814E+01	0.8344E+01
WSW	0.0	0.0	0.6809E+00	0.7717E+00	0.9079E-01	0.0	0.0	0.1543E+01	0.8275E+01
W	0.0	0.1362E+00	0.2270E+00	0.1816E+00	0.0	0.0	0.0	0.5447E+00	0.6215E+01
WNW	0.0	0.1816E+00	0.3177E+00	0.4539E-01	0.0	0.0	0.0	0.5447E+00	0.4838E+01
NW	0.0	0.0	0.3177E+00	0.1362E+00	0.0	0.0	0.0	0.4539E+00	0.7051E+01
NNW	0.0	0.4539E-01	0.2724E+00	0.3177E+00	0.4539E-01	0.0	0.0	0.6809E+00	0.7177E+01
TOTAL	0.0	0.1498E+01	0.1012E+02	0.1262E+02	0.1680E+01	0.0	0.0	0.2592E+02	0.7500E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER		SPEED CLASS (MPH)							AVG.	
WIND									WIND	SPEED
DIRECTION	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL		
N	0.0	0.9079E-01	0.4539E+00	0.4539E+00	0.4539E-01	0.0	0.0	0.1044E+01	0.7041E+01	
NNE	0.0	0.1362E+00	0.4539E+00	0.2270E+00	0.0	0.0	0.0	0.8171E+00	0.5486E+01	
NE	0.0	0.9079E-01	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.2270E+00	0.4688E+01	
ENE	0.0	0.4539E-01	0.1362E+00	0.2270E+00	0.4539E-01	0.0	0.0	0.4539E+00	0.8296E+01	
E	0.0	0.2270E+00	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.3631E+00	0.4129E+01	
ESE	0.0	0.1362E+00	0.1816E+00	0.4539E-01	0.0	0.0	0.0	0.3631E+00	0.4236E+01	
SE	0.0	0.0	0.2724E+00	0.4539E-01	0.0	0.0	0.0	0.3177E+00	0.6149E+01	
SSE	0.0	0.0	0.3177E+00	0.9079E-01	0.0	0.0	0.0	0.4085E+00	0.7083E+01	
S	0.0	0.4539E-01	0.5447E+00	0.4993E+00	0.0	0.0	0.0	0.1089E+01	0.7119E+01	
SSW	0.0	0.1816E+00	0.4993E+00	0.1089E+01	0.4539E-01	0.0	0.0	0.1816E+01	0.7641E+01	
SW	0.0	0.0	0.7717E+00	0.7717E+00	0.1362E+00	0.0	0.0	0.1680E+01	0.8113E+01	
WSW	0.0	0.9079E-01	0.6355E+00	0.4539E+00	0.0	0.0	0.0	0.1180E+01	0.7318E+01	
W	0.0	0.9079E-01	0.5447E+00	0.9079E-01	0.0	0.0	0.0	0.7263E+00	0.5292E+01	
WNW	0.0	0.9079E-01	0.1362E+00	0.1816E+00	0.0	0.0	0.0	0.4085E+00	0.5636E+01	
NW	0.0	0.9079E-01	0.2270E+00	0.0	0.0	0.0	0.0	0.3177E+00	0.4560E+01	
NNW	0.0	0.0	0.2724E+00	0.3631E+00	0.0	0.0	0.0	0.6355E+00	0.7918E+01	
TOTAL	0.0	0.1316E+01	0.5629E+01	0.4630E+01	0.2724E+00	0.0	0.0	0.1185E+02	0.6294E+01	

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0



JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS G  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER		SPEED CLASS(MPH)							AVG.	
WIND	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	WIND SPEED	
DIRECTION										
N	0.0	0.9079E-01	0.2270E+00	0.4539E-01	0.0	0.0	0.0	0.3631E+00	0.5826E+01	
NNE	0.0	0.4539E-01	0.4539E-01	0.9079E-01	0.0	0.0	0.0	0.1816E+00	0.6640E+01	
NE	0.0	0.4539E-01	0.2270E+00	0.0	0.0	0.0	0.0	0.2724E+00	0.3978E+01	
ENE	0.0	0.9079E-01	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.1816E+00	0.5420E+01	
E	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.0	0.4539E-01	0.2830E+01	
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SE	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.4539E-01	0.5580E+01	
SSE	0.0	0.4539E-01	0.0	0.4539E-01	0.0	0.0	0.0	0.9079E-01	0.6415E+01	
S	0.0	0.4539E-01	0.3177E+00	0.1816E+00	0.0	0.0	0.0	0.5447E+00	0.6669E+01	
SSW	0.0	0.0	0.4539E-01	0.1362E+00	0.0	0.0	0.0	0.1816E+00	0.7857E+01	
SW	0.0	0.0	0.4539E-01	0.1816E+00	0.0	0.0	0.0	0.2270E+00	0.8942E+01	
WSW	0.0	0.0	0.4539E-01	0.1816E+00	0.0	0.0	0.0	0.2270E+00	0.8076E+01	
W	0.0	0.4539E-01	0.9079E-01	0.9079E-01	0.0	0.0	0.0	0.2270E+00	0.6212E+01	
WNW	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.4539E-01	0.6780E+01	
NW	0.0	0.9079E-01	0.1362E+00	0.4539E-01	0.0	0.0	0.0	0.2724E+00	0.5427E+01	
NNW	0.0	0.4539E-01	0.3631E+00	0.1816E+00	0.0	0.0	0.0	0.5901E+00	0.6156E+01	
TOTAL	0.0	0.5901E+00	0.1680E+01	0.1226E+01	0.0	0.0	0.0	0.3495E+01	0.6187E+01	

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78

## SUMMARY

STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.2724E+00	0.3677E+01	0.3268E+01	0.2724E+00	0.0	0.0	0.7490E+01	0.7528E+01
NNE	0.0	0.3631E+00	0.3722E+01	0.2724E+01	0.8171E+00	0.4539E-01	0.0	0.7671E+01	0.8062E+01
NE	0.0	0.4085E+00	0.2814E+01	0.3586E+01	0.1680E+01	0.0	0.0	0.8488E+01	0.9007E+01
ENE	0.0	0.4993E+00	0.3041E+01	0.3858E+01	0.9532E+00	0.0	0.0	0.8352E+01	0.8402E+01
E	0.0	0.4993E+00	0.2315E+01	0.2043E+01	0.3177E+00	0.0	0.0	0.5175E+01	0.7439E+01
ESE	0.0	0.4539E+00	0.2587E+01	0.1271E+01	0.1816E+00	0.0	0.0	0.4494E+01	0.6651E+01
SE	0.0	0.2270E+00	0.2860E+01	0.1589E+01	0.1362E+00	0.0	0.0	0.4812E+01	0.6793E+01
SSE	0.0	0.3631E+00	0.3450E+01	0.3132E+01	0.4993E+00	0.0	0.0	0.7444E+01	0.7765E+01
S	0.0	0.3177E+00	0.4675E+01	0.4312E+01	0.4539E+00	0.0	0.0	0.9759E+01	0.7835E+01
SSW	0.0	0.4085E+00	0.3087E+01	0.6582E+01	0.7717E+00	0.0	0.0	0.1085E+02	0.8413E+01
SW	0.0	0.2724E+00	0.3314E+01	0.5266E+01	0.2724E+00	0.0	0.0	0.9124E+01	0.7983E+01
WSW	0.0	0.2270E+00	0.3359E+01	0.2315E+01	0.9079E-01	0.0	0.0	0.5992E+01	0.7325E+01
W	0.0	0.3631E+00	0.3177E+01	0.7717E+00	0.0	0.0	0.0	0.4312E+01	0.5901E+01
WNW	0.0	0.3631E+00	0.9079E+00	0.4085E+00	0.4539E-01	0.0	0.0	0.1725E+01	0.5801E+01
NW	0.0	0.1816E+00	0.9079E+00	0.4993E+00	0.0	0.4539E-01	0.0	0.1634E+01	0.7040E+01
NNW	0.0	0.2270E+00	0.1452E+01	0.9532E+00	0.4539E-01	0.0	0.0	0.2678E+01	0.6635E+01
TOTAL	0.0	0.5447E+01	0.4535E+02	0.4258E+02	0.6537E+01	0.9079E-01	0.0	0.1000E+03	0.7729E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 5

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4539E-01	0.1498E+01	0.4539E-01	0.0	0.0	0.0	0.1589E+01	0.5210E+01
NNE	0.0	0.4539E-01	0.1634E+01	0.1816E+00	0.0	0.0	0.0	0.1861E+01	0.5509E+01
NE	0.0	0.1362E+00	0.2360E+01	0.4085E+00	0.0	0.0	0.0	0.2905E+01	0.5522E+01
ENE	0.0	0.9079E-01	0.2451E+01	0.6355E+00	0.0	0.0	0.0	0.3177E+01	0.6191E+01
E	0.0	0.4539E-01	0.1316E+01	0.4539E-01	0.0	0.0	0.0	0.1407E+01	0.5614E+01
ESE	0.0	0.2270E+00	0.7717E+00	0.9079E-01	0.0	0.0	0.0	0.1089E+01	0.4537E+01
SE	0.0	0.2270E+00	0.1952E+01	0.1816E+00	0.0	0.0	0.0	0.2360E+01	0.5259E+01
SSE	0.0	0.4539E-01	0.9986E+00	0.7263E+00	0.0	0.0	0.0	0.1770E+01	0.6756E+01
S	0.0	0.0	0.9079E+00	0.5901E+00	0.0	0.0	0.0	0.1498E+01	0.6639E+01
SSW	0.0	0.0	0.1453E+01	0.5901E+00	0.0	0.0	0.0	0.2043E+01	0.6643E+01
SW	0.0	0.9079E-01	0.2088E+01	0.2270E+00	0.0	0.0	0.0	0.2406E+01	0.5630E+01
WSW	0.0	0.1362E+00	0.1407E+01	0.0	0.0	0.0	0.0	0.1543E+01	0.4806E+01
W	0.0	0.1816E+00	0.1135E+01	0.0	0.0	0.0	0.0	0.1316E+01	0.4569E+01
WNW	0.0	0.4539E-01	0.1816E+00	0.0	0.0	0.0	0.0	0.2270E+00	0.4742E+01
NW	0.0	0.0	0.1816E+00	0.0	0.0	0.0	0.0	0.1816E+00	0.5872E+01
NNW	0.0	0.0	0.1362E+00	0.0	0.0	0.0	0.0	0.1362E+00	0.4700E+01
TOTAL	0.0	0.1316E+01	0.2047E+02	0.3722E+01	0.0	0.0	0.0	0.2551E+02	0.5510E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 5

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS B  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.2724E+00	0.0	0.0	0.0	0.0	0.2724E+00	0.4790E+01
NNF	0.0	0.0	0.3631E+00	0.0	0.0	0.0	0.0	0.3631E+00	0.5086E+01
NE	0.0	0.4539E-01	0.2724E+00	0.1362E+00	0.0	0.0	0.0	0.4539E+00	0.6122E+01
ENE	0.0	0.9079E-01	0.1362E+00	0.4539E-01	0.0	0.0	0.0	0.2724E+00	0.4523E+01
E	0.0	0.0	0.3177E+00	0.4539E-01	0.0	0.0	0.0	0.3631E+00	0.5780E+01
ESE	0.0	0.9079E-01	0.2270E+00	0.0	0.0	0.0	0.0	0.3177E+00	0.4883E+01
SE	0.0	0.4539E-01	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.1816E+00	0.5315E+01
SSE	0.0	0.4539E-01	0.3177E+00	0.0	0.0	0.0	0.0	0.3631E+00	0.4792E+01
S	0.0	0.4539E-01	0.2270E+00	0.9079E-01	0.0	0.0	0.0	0.3631E+00	0.5675E+01
SSW	0.0	0.0	0.3177E+00	0.4539E-01	0.0	0.0	0.0	0.3631E+00	0.5682E+01
SW	0.0	0.9079E-01	0.6509E+00	0.0	0.0	0.0	0.0	0.7717E+00	0.4665E+01
WSW	0.0	0.9079E-01	0.1816E+00	0.0	0.0	0.0	0.0	0.2724E+00	0.4305E+01
W	0.0	0.1362E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.1816E+00	0.3457E+01
WNW	0.0	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.0	0.1362E+00	0.3520E+01
NW	0.0	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.4465E+01
NNW	0.0	0.4539E-01	0.9079E-01	0.0	0.0	0.0	0.0	0.1362E+00	0.4317E+01
TOTAL	0.0	0.8625E+00	0.3631E+01	0.4085E+00	0.0	0.0	0.0	0.4902E+01	0.4836E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4539E-01	0.1816E+00	0.0	0.0	0.0	0.0	0.2270E+00	0.4502E+01
NNE	0.0	0.9079E-01	0.2724E+00	0.4539E-01	0.0	0.0	0.0	0.4085E+00	0.4890E+01
NE	0.0	0.4539E-01	0.1816E+00	0.4085E+00	0.0	0.0	0.0	0.6355E+00	0.7160E+01
ENE	0.0	0.0	0.1816E+00	0.1362E+00	0.0	0.0	0.0	0.3177E+00	0.6441E+01
E	0.0	0.1362E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.1816E+00	0.3272E+01
ESE	0.0	0.4539E-01	0.1816E+00	0.4539E-01	0.0	0.0	0.0	0.2724E+00	0.5849E+01
SE	0.0	0.0	0.9079E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.4815E+01
SSE	0.0	0.4539E-01	0.1816E+00	0.1816E+00	0.0	0.0	0.0	0.4085E+00	0.6957E+01
S	0.0	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.3465E+01
SSW	0.0	0.0	0.1816E+00	0.0	0.0	0.0	0.0	0.1816E+00	0.5145E+01
SW	0.0	0.0	0.3631E+00	0.0	0.0	0.0	0.0	0.3631E+00	0.5389E+01
WSW	0.0	0.0	0.1816E+00	0.0	0.0	0.0	0.0	0.1816E+00	0.4080E+01
W	0.0	0.9079E-01	0.1362E+00	0.0	0.0	0.0	0.0	0.2270E+00	0.3882E+01
WNW	0.0	0.1362E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.1816E+00	0.3740E+01
NW	0.0	0.0	0.9079E-01	0.0	0.0	0.0	0.0	0.9079E-01	0.4725E+01
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.6809E+00	0.2360E+01	0.3171E+00	0.0	0.0	0.0	0.3858E+01	0.4947E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.3177E+00	0.6509E+00	0.0	0.0	0.0	0.0	0.9986E+00	0.4190E+01
NNE	0.0	0.3631E+00	0.1725E+01	0.2631E+00	0.0	0.0	0.0	0.2451E+01	0.5568E+01
NE	0.0	0.3177E+00	0.1906E+01	0.4993E+00	0.0	0.0	0.0	0.2724E+01	0.5839E+01
ENE	0.0	0.5901E+00	0.1216E+01	0.4993E+00	0.0	0.0	0.0	0.2406E+01	0.5422E+01
E	0.0	0.4993E+00	0.1226E+01	0.4539E+01	0.0	0.0	0.0	0.1770E+01	0.4626E+01
ESE	0.0	0.3177E+00	0.1089E+01	0.9079E+01	0.0	0.0	0.0	0.1498E+01	0.4585E+01
SE	0.0	0.2724E+00	0.1180E+01	0.0	0.0	0.0	0.0	0.1453E+01	0.4548E+01
SSE	0.0	0.5901E+00	0.2043E+01	0.4539E+01	0.0	0.0	0.0	0.2678E+01	0.4703E+01
S	0.0	0.3631E+00	0.1816E+01	0.1816E+00	0.0	0.0	0.0	0.2360E+01	0.4963E+01
SSW	0.0	0.6809E+00	0.1725E+01	0.1362E+00	0.0	0.0	0.0	0.2542E+01	0.4715E+01
SW	0.0	0.6809E+00	0.6355E+00	0.0	0.0	0.0	0.0	0.1316E+01	0.3626E+01
WSW	0.0	0.7717E+00	0.2724E+00	0.0	0.0	0.0	0.0	0.1044E+01	0.3094E+01
W	0.0	0.1816E+00	0.1816E+00	0.0	0.0	0.0	0.0	0.3631E+00	0.3714E+01
WNW	0.0	0.4539E+01	0.1816E+00	0.0	0.0	0.0	0.0	0.2270E+00	0.4152E+01
NW	0.0	0.9079E+01	0.9079E+01	0.9079E+01	0.0	0.0	0.0	0.2724E+00	0.5380E+01
NNW	0.0	0.2270E+00	0.1362E+00	0.0	0.0	0.0	0.0	0.3631E+00	0.3581E+01
TOTAL	0.0	0.6310E+01	0.1621E+02	0.1952E+01	0.0	0.0	0.0	0.2447E+02	0.4544E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS E  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 2.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4539E+00	0.5401E+00	0.4539E-01	0.0	0.0	0.0	0.1089E+01	0.3946E+01
NNE	0.0	0.4993E+00	0.6625E+00	0.0	0.0	0.0	0.0	0.1362E+01	0.4009E+01
NE	0.0	0.4085E+00	0.1044E+01	0.4539E-01	0.0	0.0	0.0	0.1498E+01	0.4447E+01
ENE	0.0	0.4993E+00	0.1044E+01	0.0	0.0	0.0	0.0	0.1543E+01	0.4220E+01
E	0.0	0.3631E+00	0.2724E+00	0.9079E-01	0.0	0.0	0.0	0.7263E+00	0.4019E+01
ESE	0.0	0.1362E+00	0.1816E+00	0.0	0.0	0.0	0.0	0.3177E+00	0.4350E+01
SE	0.0	0.2724E+00	0.1816E+00	0.0	0.0	0.0	0.0	0.4539E+00	0.3335E+01
SSE	0.0	0.4085E+00	0.9079E+00	0.0	0.0	0.0	0.0	0.1316E+01	0.4087E+01
S	0.4539E-01	0.1725E+01	0.1453E+01	0.4539E-01	0.0	0.0	0.0	0.3268E+01	0.3679E+01
SSW	0.4539E-01	0.3768E+01	0.2224E+01	0.4539E-01	0.0	0.0	0.0	0.6083E+01	0.3459E+01
SW	0.4539E-01	0.2360E+01	0.6809E+00	0.4539E-01	0.0	0.0	0.0	0.3132E+01	0.2927E+01
WSW	0.0	0.9986E+00	0.9079E-01	0.0	0.0	0.0	0.0	0.1089E+01	0.2451E+01
W	0.0	0.4993E+00	0.1362E+00	0.0	0.0	0.0	0.0	0.6355E+00	0.2577E+01
WNW	0.0	0.2724E+00	0.9079E-01	0.0	0.0	0.0	0.0	0.3631E+00	0.2864E+01
NW	0.0	0.4993E+00	0.1362E+00	0.0	0.0	0.0	0.0	0.6355E+00	0.2814E+01
NNW	0.0	0.9079E+00	0.1453E+01	0.4539E-01	0.0	0.0	0.0	0.2406E+01	0.3893E+01
TOTAL	0.1362E+00	0.1407E+02	0.1135E+02	0.3631E+00	0.0	0.0	0.0	0.2592E+02	0.3567E+01

NUMBER OF CALMS - 3

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 9/30/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

WIND DIRECTION	CALM	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
		0.75- 2.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.2270E+00	0.9079E-01	0.0	0.0	0.0	0.0	0.3177E+00	0.2316E+01
NNE	0.0	0.1362E+00	0.0	0.0	0.0	0.0	0.0	0.1362E+00	0.1610E+01
NE	0.0	0.1816E+00	0.9079E-01	0.0	0.0	0.0	0.0	0.2724E+00	0.3338E+01
ENE	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.4539E-01	0.4880E+01
E	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.4539E-01	0.3950E+01
ESE	0.0	0.9079E-01	0.0	0.0	0.0	0.0	0.0	0.9079E-01	0.1230E+01
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.9079E-01	0.4539E-01	0.0	0.0	0.0	0.0	0.1362E+00	0.3053E+01
S	0.4539E-01	0.1044E+01	0.9079E-01	0.0	0.0	0.0	0.0	0.1180E+01	0.2300E+01
SSW	0.4539E-01	0.2088E+01	0.2724E+00	0.0	0.0	0.0	0.0	0.2406E+01	0.2511E+01
SW	0.4539E-01	0.1816E+01	0.3631E+00	0.0	0.0	0.0	0.0	0.2224E+01	0.2412E+01
WSW	0.0	0.7263E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.7717E+00	0.2020E+01
W	0.0	0.6355E+00	0.0	0.0	0.0	0.0	0.0	0.6355E+00	0.1707E+01
WNW	0.0	0.5901E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.6355E+00	0.2035E+01
NW	0.4539E-01	0.9532E+00	0.3631E+00	0.0	0.0	0.0	0.0	0.1362E+01	0.2908E+01
NNW	0.0	0.7717E+00	0.8171E+00	0.0	0.0	0.0	0.0	0.1589E+01	0.3170E+01
TOTAL	0.1816E+00	0.9351E+01	0.2315E+01	0.0	0.0	0.0	0.0	0.1185E+02	0.2629E+01

NUMBER OF CALMS - 4

NUMBER OF BAD HOURS - 0



STABILITY CLASS G  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

LOWER WIND DIRECTION		CALM	SPEED CLASS (MPH)						AVG. WIND SPEED	
			0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	
N	0.0	0.2724E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.2724E+00	0.1543E+01
NNF	0.0	0.1816E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.1816E+00	0.1112E+01
NE	0.0	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.0	0.4539E-01	0.3730E+01
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.4539E-01	0.2700E+01
S	0.0	0.3177E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.3177E+00	0.2000E+01
SSW	0.0	0.3631E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.3631E+00	0.2640E+01
SW	0.0	0.2270E+00	0.4539E-01	0.4539E-01	0.0	0.0	0.0	0.0	0.3177E+00	0.3517E+01
WSW	0.0	0.1816E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.1816E+00	0.1915E+01
W	0.0	0.4539E-01	0.0	0.0	0.0	0.0	0.0	0.0	0.4539E-01	0.1830E+01
WNW	0.4539E-01	0.4085E+00	0.4079E-01	0.0	0.0	0.0	0.0	0.0	0.5447E+00	0.2134E+01
NW	0.0	0.2724E+00	0.0	0.0	0.0	0.0	0.0	0.0	0.2724E+00	0.2552E+01
NNW	0.4539E-01	0.6355E+00	0.2270E+00	0.0	0.0	0.0	0.0	0.0	0.9079E+00	0.3007E+01
TOTAL	0.9079E-01	0.2951E+01	0.4085E+00	0.4539E-01	0.0	0.0	0.0	0.0	0.3495E+01	0.2390E+01

NUMBER OF CALMS - 2  
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/79 TO 11:00 PM 9/30/78SUMMARY  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	0.75- 3.5	3.5- 7.5	SPEED CLASS (MPH)		18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
				7.5-12.5	12.5-18.5				
N	0.0	0.1362E+01	0.3314E+01	0.9079E-01	0.0	0.0	0.0	0.4766E+01	0.4247E+01
NNE	0.0	0.1316E+01	0.4F57E+01	0.5901E+00	0.0	0.0	0.0	0.6763E+01	0.4972E+01
NE	0.0	0.1135E+01	0.5401E+01	0.1498E+01	0.0	0.0	0.0	0.8534E+01	0.5509E+01
ENE	0.0	0.1271E+01	0.5175E+01	0.1316E+01	0.0	0.0	0.0	0.7762E+01	0.5489E+01
E	0.0	0.1044E+01	0.3223E+01	0.2270E+00	0.0	0.0	0.0	0.4494E+01	0.4869E+01
ESE	0.0	0.9079E+00	0.2451E+01	0.2270E+00	0.0	0.0	0.0	0.3586E+01	0.4587E+01
SE	0.0	0.8171E+00	0.3495E+01	0.2270E+00	0.0	0.0	0.0	0.4539E+01	0.4833E+01
SSE	0.0	0.1271E+01	0.4494E+01	0.9532E+00	0.0	0.0	0.0	0.6718E+01	0.5212E+01
S	0.9079E-01	0.3541E+01	0.4539E+01	0.9079E+00	0.0	0.0	0.0	0.9079E+01	0.4355E+01
SSW	0.9079E-01	0.6900E+01	0.6173E+01	0.8171E+00	0.0	0.0	0.0	0.1398E+02	0.4055E+01
SW	0.9079E-01	0.5266E+01	0.4857E+01	0.3177E+00	0.0	0.0	0.0	0.1053E+02	0.3763E+01
WSW	0.0	0.2905E+01	0.2179E+01	0.0	0.0	0.0	0.0	0.5084E+01	0.3371E+01
W	0.0	0.1770E+01	0.1634E+01	0.0	0.0	0.0	0.0	0.3404E+01	0.3430E+01
WNW	0.4539E-01	0.1584E+01	0.6809E+00	0.0	0.0	0.0	0.0	0.2315E+01	0.2897E+01
NW	0.4539E-01	0.1861E+01	0.9079E+00	0.9079E-01	0.0	0.0	0.0	0.2905E+01	0.3384E+01
NNW	0.4539E-01	0.2587E+01	0.2360E+01	0.4539E-01	0.0	0.0	0.0	0.5538E+01	0.3554E+01
TOTAL	0.4085E+00	0.3554E+02	0.5674E+02	0.7308E+01	0.0	0.0	0.0	0.1000E+03	0.4399E+01

NUMBER OF CALMS - 9  
NUMBER OF BAD HOURS - 5

ENCLOSURE 2

JOINT FREQUENCY OF WIND DIRECTION AND SPEED  
FOURTH QUARTER 1978  
H. B. ROBINSON STEAM ELECTRIC PLANT

The attached tables present the frequency of wind direction occurrences by speed class as recorded at the on-site meteorological system during the period September 1 through December 31, 1978.

The frequencies are presented as a percent of total occurrences for each stability class as well as a summary for all classes for each sensor elevation. The first eight tables are for the upper sensor elevation (60 meter); the last eight tables are for the lower (10 meter) sensor elevation.

Pertinent information available from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
9.9	2.6	3.1	31.1	24.7	13.0	15.6

2. Wind Speed

Average Speed (mph)  
Percent Calm  
Percent Less than 3.5 mph

<u>10 Meter</u>	<u>60 Meter</u>
4.9	9.3
1.2	0.0
35.2	7.0

3. Wind Direction

Prevailing Direction  
Percent Occurrence

<u>10 Meter</u>	<u>60 Meter</u>
NNE 17.6	NNE 19.0

4. Data Recovery

Percent Good Hours

<u>10 Meter</u>	<u>60 Meter</u>
99.3	97.4

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.4651E+00	0.1163E+01	0.5116E+00	0.9302E-01	0.0	0.2233E+01	0.1076E+02
NNE	0.0	0.0	0.3721E+00	0.3721E+00	0.2326E+00	0.2326E+00	0.0	0.1209E+01	0.1179E+02
NE	0.0	0.0	0.9302E-01	0.7907E+00	0.1395E+00	0.1395E+00	0.0	0.1163E+01	0.1134E+02
ENE	0.0	0.0	0.2326E+00	0.4651E+00	0.0	0.0	0.0	0.6977E+00	0.7841E+01
E	0.0	0.0	0.1860E+00	0.9302E-01	0.0	0.0	0.0	0.2791E+00	0.5828E+01
ESE	0.0	0.4651E-01	0.4186E+00	0.0	0.0	0.0	0.0	0.4651E+00	0.4790E+01
SE	0.0	0.0	0.1860E+00	0.0	0.0	0.0	0.0	0.1860E+00	0.4745E+01
SSE	0.0	0.0	0.2326E+00	0.4651E-01	0.0	0.0	0.0	0.2791E+00	0.5625E+01
S	0.0	0.0	0.1395E+00	0.4651E-01	0.4651E-01	0.0	0.0	0.2326E+00	0.7880E+01
SSW	0.0	0.0	0.9302E-01	0.4651E+00	0.9302E-01	0.0	0.0	0.6512E+00	0.1061E+02
SW	0.0	0.0	0.4651E-01	0.2791E+00	0.0	0.0	0.0	0.2256E+00	0.9537E+01
WSW	0.0	0.0	0.2326E+00	0.3721E+00	0.9302E-01	0.0	0.0	0.6977E+00	0.8668E+01
W	0.0	0.0	0.1395E+00	0.2326E+00	0.9302E-01	0.0	0.0	0.4651E+00	0.9474E+01
WNW	0.0	0.0	0.0	0.1860E+00	0.0	0.0	0.0	0.1860E+00	0.5515E+01
NW	0.0	0.0	0.4651E-01	0.9302E-01	0.1395E+00	0.4651E-01	0.0	0.3256E+00	0.1452E+02
NNW	0.0	0.0	0.9302E-01	0.3721E+00	0.1860E+00	0.4651E-01	0.0	0.6977E+00	0.1119E+02
TOTAL	0.0	0.4651E-01	0.2977E+01	0.4977E+01	0.1535E+01	0.5581E+00	0.0	0.1009E+02	0.8971E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 15

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS B  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.0	0.0	0.1395E+00	0.9302E-01	0.4651E-01	0.0	0.2791E+00	0.1522E+02
NNE	0.0	0.9302E-01	0.1860E+00	0.4651E-01	0.4651E-01	0.4651E-01	0.0	0.4186E+00	0.3093E+01
NE	0.0	0.0	0.4651E-01	0.1860E+00	0.4651E-01	0.4651E-01	0.0	0.3256E+00	0.1145E+02
ENE	0.0	0.0	0.1395E+00	0.4651E-01	0.0	0.0	0.0	0.1860E+00	0.6077E+01
E	0.0	0.0	0.4651E-01	0.4651E-01	0.0	0.0	0.0	0.9302E-01	0.6775E+01
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.4651E-01	0.4651E-01	0.0	0.0	0.0	0.0	0.9302E-01	0.4055E+01
SSE	0.0	0.0	0.9302E-01	0.0	0.0	0.0	0.0	0.9302E-01	0.4975E+01
S	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.0	0.4651E-01	0.4480E+01
SSW	0.0	0.0	0.4651E-01	0.1860E+00	0.0	0.0	0.0	0.2326E+00	0.9212E+01
SW	0.0	0.0	0.4651E-01	0.4651E-01	0.4651E-01	0.0	0.0	0.1395E+00	0.6837E+01
WSW	0.0	0.0	0.4651E-01	0.4651E-01	0.0	0.0	0.0	0.9302E-01	0.7930E+01
W	0.0	0.0	0.4651E-01	0.9302E-01	0.4651E-01	0.0	0.0	0.1860E+00	0.1110E+02
WNW	0.0	0.0	0.9302E-01	0.4651E-01	0.4651E-01	0.0	0.0	0.1860E+00	0.8985E+01
NW	0.0	0.0	0.0	0.4651E-01	0.4651E-01	0.0	0.0	0.9302E-01	0.1360E+02
NNW	0.0	0.4651E-01	0.0	0.9302E-01	0.0	0.0	0.0	0.1395E+00	0.6403E+01
TOTAL	0.0	0.1860E+00	0.8837E+00	0.1023E+01	0.3721E+00	0.1395E+00	0.0	0.2605E+01	0.8346E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 2

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4651E-01	0.9302E-01	0.2791E+00	0.4651E-01	0.0	0.0	0.4651E+00	0.8511E+01
NNE	0.0	0.0	0.0	0.2791E+00	0.2791E+00	0.0	0.0	0.5581E+00	0.1216E+02
NE	0.0	0.4651E-01	0.9302E-01	0.4186E+00	0.4651E-01	0.4651E-01	0.0	0.6512E+00	0.1014E+02
ENE	0.0	0.4651E-01	0.0	0.9302E-01	0.0	0.0	0.0	0.1395E+00	0.6877E+01
E	0.0	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.4651E-01	0.8550E+01
ESE	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.0	0.4651E-01	0.5600E+01
SE	0.0	0.9302E-01	0.0	0.0	0.0	0.0	0.0	0.9302E-01	0.3280E+01
SSE	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.0	0.4651E-01	0.4150E+01
S	0.0	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.4651E-01	0.7650E+01
SSW	0.0	0.0	0.4651E-01	0.0	0.0	0.0	0.0	0.4651E-01	0.6850E+01
SW	0.0	0.0	0.9302E-01	0.1395E+00	0.4651E-01	0.0	0.0	0.2791E+00	0.8943E+01
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.9302E-01	0.0	0.4651E-01	0.0	0.1395E+00	0.1288E+02
WNW	0.0	0.0	0.4651E-01	0.4651E-01	0.4651E-01	0.0	0.0	0.1395E+00	0.1056E+02
NW	0.0	0.0	0.4651E-01	0.1860E+00	0.4651E-01	0.0	0.0	0.2791E+00	0.1061E+02
NNW	0.0	0.0	0.4651E-01	0.9302E-01	0.0	0.0	0.0	0.1395E+00	0.9903E+01
TOTAL	0.0	0.2326E+00	0.5581E+00	0.1721E+01	0.5116E+00	0.9302E-01	0.0	0.3116E+01	0.8446E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 2

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.1395E+00	0.5116E+00	0.1256E+01	0.1349E+01	0.3256E+00	0.0	0.3581E+01	0.1205E+02
NNE	0.0	0.2326E+00	0.9302E+00	0.5628E+01	0.2791E+01	0.4651E-01	0.0	0.9628E+01	0.1080E+02
NE	0.0	0.2791E+00	0.1442E+01	0.2372E+01	0.2791E+00	0.0	0.0	0.4372E+01	0.8214E+01
ENE	0.0	0.1395E+00	0.4651E+00	0.3721E+00	0.0	0.0	0.0	0.9767E+00	0.6517E+01
E	0.0	0.1860E+00	0.3256E+00	0.4651E+00	0.0	0.0	0.0	0.9767E+00	0.6598E+01
ESE	0.0	0.2326E+00	0.3721E+00	0.5116E+00	0.0	0.0	0.0	0.1116E+01	0.6694E+01
SE	0.0	0.1860E+00	0.3721E+00	0.0	0.0	0.0	0.0	0.5581E+00	0.4394E+01
SSE	0.0	0.2326E+00	0.1395E+00	0.3256E+00	0.9302E-01	0.0	0.0	0.7907E+00	0.7685E+01
S	0.0	0.9302E-01	0.5116E+00	0.3721E+00	0.3256E+00	0.0	0.0	0.1302E+01	0.8902E+01
SSW	0.0	0.4651E-01	0.3256E+00	0.4186E+00	0.4186E+00	0.2791E+00	0.2326E+00	0.1721E+01	0.1455E+02
SW	0.0	0.4651E-01	0.2326E+00	0.5116E+00	0.5581E+00	0.4651E-01	0.4651E-01	0.1442E+01	0.1166E+02
WSW	0.0	0.4651E-01	0.1860E+00	0.9302E+00	0.2791E+00	0.0	0.0	0.1442E+01	0.1032E+02
W	0.0	0.0	0.1860E+00	0.3256E+00	0.2791E+00	0.9302E-01	0.0	0.8837E+00	0.1176E+02
WNW	0.0	0.9302E-01	0.9302E-01	0.1395E+00	0.9302E-01	0.0	0.0	0.4186E+00	0.3856E+01
NW	0.0	0.4651E-01	0.9302E-01	0.2326E+00	0.1395E+00	0.0	0.0	0.5116E+00	0.8427E+01
NNW	0.0	0.0	0.1395E+00	0.6047E+00	0.4186E+00	0.0	0.0	0.1163E+01	0.1114E+02
TOTAL	0.0	0.2000E+01	0.6326E+01	0.1447E+02	0.7023E+01	0.7907E+00	0.2791E+00	0.3088E+02	0.9342E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 17

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS E  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4651E-01	0.3721E+00	0.1488E+01	0.9302E+00	0.0	0.0	0.2837E+01	0.1084E+02
NNE	0.0	0.1395E+00	0.6047E+00	0.2000E+01	0.1674E+01	0.4651E-01	0.0	0.4465E+01	0.1097E+02
NE	0.0	0.1395E+00	0.6047E+00	0.1163E+01	0.2791E+00	0.0	0.0	0.2186E+01	0.3662E+01
ENE	0.0	0.9302E-01	0.5116E+00	0.3256E+00	0.0	0.0	0.0	0.9302E+00	0.7113E+01
E	0.0	0.4651E-01	0.4186E+00	0.1395E+00	0.2326E+00	0.0	0.0	0.8372E+00	0.8794E+01
ESE	0.0	0.9302E-01	0.1860E+00	0.1395E+00	0.0	0.0	0.0	0.4186E+00	0.5934E+01
SE	0.0	0.1395E+00	0.1395E+00	0.4651E-01	0.0	0.0	0.0	0.3256E+00	0.4946E+01
SSE	0.0	0.2326E+00	0.3721E+00	0.4651E+00	0.0	0.0	0.0	0.1070E+01	0.6803E+01
S	0.0	0.1395E+00	0.4186E+00	0.6047E+00	0.6047E+00	0.0	0.0	0.1767E+01	0.9845E+01
SSW	0.0	0.0	0.2326E+00	0.1116E+01	0.5591E+00	0.6047E+00	0.0	0.2512E+01	0.1350E+02
SW	0.0	0.1395E+00	0.2791E+00	0.9767E+00	0.2791E+00	0.9302E-01	0.0	0.1767E+01	0.9402E+01
WSW	0.0	0.0	0.1860E+00	0.7442E+00	0.1395E+00	0.1860E+00	0.0	0.1256E+01	0.1155E+02
W	0.0	0.9302E-01	0.1860E+00	0.4651E+00	0.1860E+00	0.0	0.0	0.9302E+00	0.9108E+01
WNW	0.0	0.0	0.1860E+00	0.1395E+00	0.3256E+00	0.0	0.0	0.6512E+00	0.1073E+02
NW	0.0	0.9302E-01	0.9302E-01	0.3721E+00	0.5977E+00	0.9302E-01	0.0	0.1349E+01	0.1225E+02
NNW	0.0	0.0	0.2326E+00	0.5116E+00	0.7907E+00	0.4651E-01	0.0	0.1581E+01	0.1204E+02
TOTAL	0.0	0.1395E+01	0.5023E+01	0.1070E+02	0.5693E+01	0.1070E+01	0.0	0.2468E+02	0.9547E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 6



JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.4651E-01	0.6047E+00	0.6977E+00	0.3256E+00	0.0	0.0	0.1674E+01	0.9095E+01
NNE	0.0	0.9302E-01	0.9302E+00	0.4186E+00	0.0	0.0	0.0	0.1442E+01	0.6434E+01
NE	0.0	0.4651E-01	0.4651E+00	0.2326E+00	0.0	0.0	0.0	0.7442E+00	0.6650E+01
ENE	0.0	0.9302E-01	0.3256E+00	0.4186E+00	0.4651E-01	0.0	0.0	0.8837E+00	0.7255E+01
E	0.0	0.0	0.4186E+00	0.3721E+00	0.0	0.0	0.0	0.7907E+00	0.7051E+01
ESE	0.0	0.9302E-01	0.2791E+00	0.4651E-01	0.0	0.0	0.0	0.4186E+00	0.6036E+01
SE	0.0	0.4651E-01	0.1395E+00	0.2326E+00	0.0	0.0	0.0	0.4186E+00	0.7658E+01
SSE	0.0	0.9302E-01	0.2326E+00	0.4186E+00	0.4651E-01	0.0	0.0	0.7907E+00	0.8066E+01
S	0.4651E-01	0.1395E+00	0.3721E+00	0.6977E+00	0.4651E-01	0.0	0.0	0.1302E+01	0.7614E+01
SSW	0.0	0.0	0.2791E+00	0.6977E+00	0.0	0.0	0.0	0.9707E+00	0.8343E+01
SW	0.0	0.4651E-01	0.1860E+00	0.2791E+00	0.4651E-01	0.0	0.0	0.5581E+00	0.8342E+01
WSW	0.0	0.0	0.1395E+00	0.1860E+00	0.1395E+00	0.0	0.0	0.4651E+00	0.1048E+02
W	0.0	0.0	0.9302E-01	0.9302E-01	0.4651E-01	0.0	0.0	0.2326E+00	0.8742E+01
WNW	0.0	0.4651E-01	0.1860E+00	0.2326E+00	0.2326E+00	0.0	0.0	0.6977E+00	0.9721E+01
NW	0.0	0.0	0.1395E+00	0.4651E+00	0.4186E+00	0.0	0.0	0.1023E+01	0.1163E+02
NNW	0.0	0.0	0.1395E+00	0.3721E+00	0.1395E+00	0.0	0.0	0.6512E+00	0.1010E+02
TOTAL	0.4651E-01	0.7442E+00	0.4930E+01	0.5860E+01	0.1438E+01	0.0	0.0	0.1307E+02	0.8326E+01

NUMBER OF CALMS - 1  
NUMBER OF BAD HOURS - 3

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS G  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4651E-01	0.5581E+00	0.4186E+00	0.0	0.0	0.0	0.1023E+01	0.6986E+01
NNE	0.0	0.9302E-01	0.6977E+00	0.4651E+00	0.0	0.0	0.0	0.1256E+01	0.6639E+01
NE	0.0	0.1395E+00	0.8372E+00	0.1395E+00	0.0	0.0	0.0	0.1116E+01	0.5454E+01
ENE	0.0	0.4651E-01	0.5116E+00	0.1860E+00	0.4651E-01	0.0	0.0	0.7907E+00	0.6575E+01
E	0.0	0.2791E+00	0.6047E+00	0.4651E-01	0.0	0.0	0.0	0.9302E+00	0.4564E+01
ESE	0.0	0.3256E+00	0.4186E+00	0.9302E-01	0.0	0.0	0.0	0.8372E+00	0.4317E+01
SE	0.0	0.1860E+00	0.3721E+00	0.0	0.0	0.0	0.0	0.5581E+00	0.4247E+01
SSE	0.0	0.1395E+00	0.6047E+00	0.3256E+00	0.0	0.0	0.0	0.1070E+01	0.6146E+01
S	0.0	0.1860E+00	0.3256E+00	0.3721E+00	0.4651E-01	0.0	0.0	0.9302E+00	0.5902E+01
SSW	0.0	0.1395E+00	0.6977E+00	0.6512E+00	0.0	0.0	0.0	0.1486E+01	0.6789E+01
SW	0.0	0.4651E-01	0.5116E+00	0.4651E+00	0.4651E-01	0.0	0.0	0.1070E+01	0.7737E+01
WSW	0.0	0.1860E+00	0.3256E+00	0.6047E+00	0.3721E+00	0.0	0.0	0.1488E+01	0.9177E+01
W	0.0	0.2326E+00	0.5116E+00	0.2791E+00	0.0	0.0	0.0	0.1023E+01	0.6204E+01
WNW	0.0	0.1395E+00	0.1860E+00	0.9302E-01	0.9302E-01	0.0	0.0	0.5116E+00	0.7188E+01
NW	0.0	0.4651E-01	0.2326E+00	0.1860E+00	0.0	0.0	0.0	0.4651E+00	0.7541E+01
NNW	0.0	0.9302E-01	0.3721E+00	0.3256E+00	0.0	0.0	0.0	0.7907E+00	0.6765E+01
TOTAL	0.0	0.2326E+01	0.7767E+01	0.4651E+01	0.6047E+00	0.0	0.0	0.1535E+02	0.6452E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 13

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78SUMMARY  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.3256E+00	0.2605E+01	0.5442E+01	0.3256E+01	0.4651E+00	0.0	0.1209E+02	0.1059E+02
NNE	0.0	0.6512E+00	0.3721E+01	0.9209E+01	0.5023E+01	0.3721E+00	0.0	0.1898E+02	0.1628E+02
NE	0.0	0.6512E+00	0.3581E+01	0.5302E+01	0.7907E+00	0.2326E+00	0.0	0.1056E+02	0.8509E+01
ENE	0.0	0.4186E+00	0.2186E+01	0.1907E+01	0.9302E-01	0.0	0.0	0.4605E+01	0.3983E+01
E	0.0	0.5116E+00	0.2006E+01	0.1209E+01	0.2326E+00	0.0	0.0	0.3953E+01	0.6747E+01
ESE	0.0	0.7907E+00	0.1721E+01	0.7907E+00	0.0	0.0	0.0	0.3302E+01	0.5623E+01
SE	0.0	0.6977E+00	0.1256E+01	0.2791E+00	0.0	0.0	0.0	0.2233E+01	0.5018E+01
SSE	0.0	0.6977E+00	0.1721E+01	0.1581E+01	0.1395E+00	0.0	0.0	0.4140E+01	0.6930E+01
S	0.4651E-01	0.5581E+00	0.1814E+01	0.2140E+01	0.1070E+01	0.0	0.0	0.5628E+01	0.8488E+01
SSW	0.0	0.1860E+00	0.1721E+01	0.3535E+01	0.1070E+01	0.8837E+00	0.2326E+00	0.7626E+01	0.1155E+02
SW	0.0	0.2791E+00	0.1395E+01	0.2698E+01	0.1023E+01	0.1395E+00	0.4651E-01	0.5581E+01	0.9551E+01
WSW	0.0	0.2326E+00	0.1116E+01	0.2894E+01	0.1023E+01	0.1860E+00	0.0	0.5442E+01	0.1008E+02
W	0.0	0.3256E+00	0.1163E+01	0.1581E+01	0.6512E+00	0.1395E+00	0.0	0.3860E+01	0.9200E+01
WNW	0.0	0.2791E+00	0.7907E+00	0.9837E+00	0.8372E+00	0.0	0.0	0.2791E+01	0.9276E+01
NW	0.0	0.1860E+00	0.6512E+00	0.1581E+01	0.1488E+01	0.1395E+00	0.0	0.4047E+01	0.1123E+02
NNW	0.0	0.1395E+00	0.1023E+01	0.2372E+01	0.1535E+01	0.9302E-01	0.0	0.5163E+01	0.1040E+02
TOTAL	0.4651E-01	0.6930E+01	0.2846E+02	0.4339E+02	0.1823E+02	0.2651E+01	0.2791E+00	0.1000E+03	0.9335E+01

NUMBER OF CALMS - 1  
NUMBER OF BAD HOURS - 58

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-19.5	18.5-25.0		
N	0.0	0.4560E-01	0.1322E+01	0.5928E+00	0.0	0.0	0.1961E+01	0.6961E+01
NNE	0.0	0.0	0.7296E+00	0.5928E+00	0.0	0.0	0.1322E+01	0.7462E+01
NE	0.0	0.4560E-01	0.6840E+00	0.5016E+00	0.9120E-01	0.0	0.1322E+01	0.7747E+01
ENE	0.0	0.0	0.5472E+00	0.4560E-01	0.0	0.0	0.5928E+00	0.5765E+01
E	0.0	0.4560E-01	0.3192E+00	0.0	0.0	0.0	0.3648E+00	0.5289E+01
ESE	0.0	0.9120E-01	0.5016E+00	0.0	0.0	0.0	0.5928E+00	0.3959E+01
SE	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.1368E+00	0.3900E+01
SSE	0.0	0.9120E-01	0.2736E+00	0.0	0.0	0.0	0.3648E+00	0.4192E+01
S	0.0	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.1368E+00	0.7333E+01
SSW	0.0	0.0	0.3648E+00	0.3192E+00	0.0	0.0	0.6840E+00	0.7306E+01
SW	0.0	0.0	0.1824E+00	0.1368E+00	0.0	0.0	0.3192E+00	0.6634E+01
WSW	0.0	0.0	0.5928E+00	0.9120E-01	0.0	0.0	0.6840E+00	0.6217E+01
W	0.0	0.0	0.3648E+00	0.9120E-01	0.0	0.0	0.4560E+00	0.5756E+01
WNW	0.0	0.0	0.9120E-01	0.4560E-01	0.0	0.0	0.1368E+00	0.6703E+01
NW	0.0	0.0	0.2280E+00	0.1824E+00	0.0	0.0	0.4104E+00	0.7838E+01
NNW	0.0	0.0	0.3192E+00	0.9120E-01	0.0	0.0	0.4104E+00	0.7124E+01
TOTAL	0.0	0.3648E+00	0.6658E+01	0.2782E+01	0.9120E-01	0.0	0.9895E+01	0.5262E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 15

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS B  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.4560E-01	0.2280E+00	0.1824E+00	0.0	0.0	0.0	0.4560E+00	0.7250E+01
NNE	0.0	0.0	0.2280E+00	0.9120E-01	0.4560E-01	0.0	0.0	0.3648E+00	0.6776E+01
NE	0.0	0.0	0.2280E+00	0.4560E-01	0.4560E-01	0.0	0.0	0.3192E+00	0.7824E+01
ENE	0.0	0.4560E-01	0.1368E+00	0.0	0.0	0.0	0.0	0.1624E+00	0.4462E+01
E	0.0	0.4560E-01	0.4560E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.5940E+01
ESE	0.0	0.0	0.9120E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.3755E+01
SE	0.0	0.0	0.9120E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.4305E+01
SSE	0.0	0.0	0.4560E-01	0.0	0.0	0.0	0.0	0.4560E-01	0.3700E+01
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.4560E-01	0.9120E-01	0.1368E+00	0.0	0.0	0.0	0.2736E+00	0.6540E+01
SW	0.0	0.0	0.9120E-01	0.4560E-01	0.0	0.0	0.0	0.1368E+00	0.5327E+01
WSW	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.0	0.1368E+00	0.4560E+01
W	0.0	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.1368E+00	0.7743E+01
WNW	0.0	0.0	0.9120E-01	0.4560E-01	0.0	0.0	0.0	0.1368E+00	0.6167E+01
NW	0.0	0.4560E-01	0.4560E-01	0.4560E-01	0.0	0.0	0.0	0.1368E+00	0.5327E+01
NNW	0.0	0.0	0.4560E-01	0.0	0.0	0.0	0.0	0.4560E-01	0.5400E+01
TOTAL	0.0	0.2736E+00	0.1596E+01	0.6840E+00	0.9120E-01	0.0	0.0	0.2645E+01	0.5605E+01

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 0

STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION		SPEED CLASS(MPH)						AVG. WIND SPEED	
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	WIND SPEED
N	0.0	0.4560E-01	0.3192E+00	0.1368E+00	0.0	0.0	0.0	0.5016E+00	0.6645E+01
NNE	0.0	0.0	0.1824E+00	0.3648E+00	0.0	0.0	0.0	0.5472E+00	0.7627E+01
NE	0.0	0.4560E-01	0.3648E+00	0.2280E+00	0.0	0.0	0.0	0.6384E+00	0.7000E+01
ENE	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.0	0.1368E+00	0.4633E+01
E	0.0	0.4560E-01	0.4560E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.4280E+01
ESE	0.0	0.4560E-01	0.4560E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.3530E+01
SE	0.0	0.4560E-01	0.4560E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.3305E+01
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.9120E-01	0.0	0.0	0.0	0.0	0.9120E-01	0.5340E+01
SSW	0.0	0.0	0.4560E-01	0.0	0.0	0.0	0.0	0.4560E-01	0.7030E+01
SW	0.0	0.4560E-01	0.9120E-01	0.9120E-01	0.0	0.0	0.0	0.2280E+00	0.5182E+01
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.1368E+00	0.0	0.0	0.0	0.0	0.1368E+00	0.5610E+01
WNW	0.0	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.1368E+00	0.6337E+01
NW	0.0	0.0	0.2280E+00	0.4560E-01	0.0	0.0	0.0	0.2736E+00	0.6370E+01
NNW	0.0	0.4560E-01	0.9120E-01	0.0	0.0	0.0	0.0	0.1368E+00	0.4830E+01
TOTAL	0.0	0.3648E+00	0.1824E+01	0.9576E+00	0.0	0.0	0.0	0.3146E+01	0.5783E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.3648E+00	0.2462E+01	0.9576E+00	0.0	0.0	0.0	0.3785E+01	0.6311E+01
NNE	0.0	0.3648E+00	0.7250E+01	0.1505E+01	0.0	0.0	0.0	0.9120E+01	0.6261E+01
NE	0.0	0.4560E+00	0.3648E+01	0.5472E+00	0.0	0.0	0.0	0.4651E+01	0.5513E+01
ENE	0.0	0.3192E+00	0.7296E+00	0.0	0.0	0.0	0.0	0.1049E+01	0.4467E+01
E	0.0	0.2736E+00	0.8208E+00	0.4560E+01	0.0	0.0	0.0	0.1140E+01	0.4792E+01
ESE	0.0	0.4560E+00	0.5928E+00	0.0	0.0	0.0	0.0	0.1049E+01	0.4260E+01
SE	0.0	0.4104E+00	0.4104E+00	0.0	0.0	0.0	0.0	0.8208E+00	0.3452E+01
SSE	0.0	0.2736E+00	0.3192E+00	0.1368E+00	0.0	0.0	0.0	0.7296E+00	0.4724E+01
S	0.0	0.9120E-01	0.5472E+00	0.4104E+00	0.0	0.0	0.0	0.1049E+01	0.6481E+01
SSW	0.0	0.1368E+00	0.8208E+00	0.4560E+00	0.4560E+00	0.4560E-01	0.0	0.1915E+01	0.9015E+01
SW	0.0	0.1824E+00	0.8208E+00	0.5472E+00	0.9120E-01	0.0	0.0	0.1642E+01	0.6721E+01
WSW	0.0	0.2280E+00	0.8664E+00	0.1824E+00	0.0	0.0	0.0	0.1277E+01	0.5696E+01
W	0.0	0.1368E+00	0.3648E+00	0.2280E+00	0.0	0.0	0.0	0.7296E+00	0.6177E+01
WNW	0.0	0.1368E+00	0.1368E+00	0.1368E+00	0.0	0.0	0.0	0.4104E+00	0.5230E+01
NW	0.0	0.0	0.3648E+00	0.1368E+00	0.0	0.0	0.0	0.5016E+00	0.5815E+01
NNW	0.0	0.1368E+00	0.7752E+00	0.2736E+00	0.0	0.0	0.0	0.1186E+01	0.5959E+01
TOTAL	0.0	0.3967E+01	0.2093E+02	0.5563E+01	0.5472E+00	0.4560E-01	0.0	0.3105E+02	0.5680E+01

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS E  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
		0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.0	0.5016E+00	0.1505E+01	0.1368E+00	0.0	0.0	0.0	0.2143E+01	0.4741E+01
NNE	0.0	0.2280E+00	0.3511E+01	0.4560E+00	0.0	0.0	0.0	0.4195E+01	0.5800E+01
NE	0.0	0.5928E+00	0.1140E+01	0.4560E+01	0.0	0.0	0.0	0.1778E+01	0.4552E+01
ENE	0.0	0.4104E+00	0.3192E+00	0.0	0.0	0.0	0.0	0.7296E+00	0.3740E+01
E	0.0	0.9120E-01	0.2280E+00	0.0	0.0	0.0	0.0	0.3192E+00	0.4516E+01
ESE	0.0	0.0	0.2736E+00	0.0	0.0	0.0	0.0	0.2736E+00	0.4112E+01
SE	0.0	0.2280E+00	0.0	0.0	0.0	0.0	0.0	0.2280E+00	0.2112E+01
SSE	0.0	0.3192E+00	0.5928E+00	0.0	0.0	0.0	0.0	0.9120E+00	0.3703E+01
S	0.0	0.5928E+00	0.7296E+00	0.5472E+00	0.0	0.0	0.0	0.1870E+01	0.5684E+01
SSW	0.4560E-01	0.9120E+00	0.1094E+01	0.8208E+00	0.2736E+00	0.0	0.0	0.3146E+01	0.6442E+01
SW	0.0	0.7752E+00	0.7296E+00	0.9120E-01	0.4560E-01	0.0	0.0	0.1642E+01	0.4092E+01
WSW	0.0	0.5016E+00	0.6840E+00	0.1368E+00	0.0	0.0	0.0	0.1322E+01	0.4694E+01
W	0.0	0.3648E+00	0.3648E+00	0.0	0.0	0.0	0.0	0.7296E+00	0.3471E+01
WNW	0.0	0.1824E+00	0.5016E+00	0.0	0.0	0.0	0.0	0.6840E+00	0.4401E+01
NW	0.0	0.4560E+00	0.8208E+00	0.1824E+00	0.0	0.0	0.0	0.1459E+01	0.4711E+01
NNW	0.0	0.4104E+00	0.2508E+01	0.3192E+00	0.0	0.0	0.0	0.3238E+01	0.5317E+01
TOTAL	0.4560E-01	0.6566E+01	0.1500E+02	0.2736E+01	0.3192E+00	0.0	0.0	0.2467E+02	0.4505E+01

NUMBER OF CALMS - 1  
NUMBER OF BAD HOURS - 0



JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.4560E-01	0.8664E+00	0.9120E-01	0.0	0.0	0.0	0.0	0.1003E+01	0.2219E+01
NNE	0.0	0.6840E+00	0.1368E+00	0.0	0.0	0.0	0.0	0.8208E+00	0.2624E+01
NE	0.0	0.3648E+00	0.9120E-01	0.0	1.0	0.0	0.0	0.4560E+00	0.2550E+01
ENE	0.0	0.4560E-01	0.0	0.0	1.0	0.0	0.0	0.4560E-01	0.2550E+01
E	0.0	0.9120E-01	0.0	0.0	1.0	0.0	0.0	0.9120E-01	0.1465E+01
ESE	0.0	0.9120E-01	0.0	0.0	1.0	0.0	0.0	0.9120E-01	0.1740E+01
SE	0.0	0.9120E-01	0.0	0.0	1.0	0.0	0.0	0.9120E-01	0.1465E+01
SSE	0.0	0.2736E+00	0.1368E+00	0.0	1.0	0.0	0.0	0.4104E+00	0.2643E+01
S	0.4560E-01	0.1505E+01	0.3648E+00	0.0	1.0	0.0	0.0	0.1915E+01	0.2729E+01
SSW	0.0	0.7296E+00	0.2736E+00	0.0	0.0	0.0	0.0	0.1003E+01	0.2721E+01
SW	0.0	0.5472E+00	0.9120E-01	0.0	1.0	0.0	0.0	0.6384E+00	0.2844E+01
WSW	0.0	0.2280E+00	0.4560E-01	0.0	1.0	0.0	0.0	0.2736E+00	0.2553E+01
W	0.0	0.5016E+00	0.4560E-01	0.0	0.0	0.0	0.0	0.5472E+00	0.2363E+01
WNW	0.0	0.3192E+00	0.1368E+00	0.0	0.0	0.0	0.0	0.4560E+00	0.2930E+01
NW	0.4560E-01	0.1094E+01	0.7752E+00	0.0	0.0	0.0	0.0	0.1915E+01	0.3147E+01
NNW	0.9120E-01	0.1870E+01	0.1231E+01	0.0	0.0	0.0	0.0	0.3192E+01	0.3389E+01
TOTAL	0.2280E+00	0.9302E+01	0.3420E+01	0.0	0.0	0.0	0.0	0.1295E+02	0.2490E+01

NUMBER OF CALMS - 5

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS G  
STABILITY CALCULATE: FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.9120E-01	0.1277E+01	0.4560E-01	0.0	0.0	0.0	0.0	0.1414E+01	0.1804E+01
NNE	0.9120E-01	0.1094E+01	0.0	0.0	0.0	0.0	0.0	0.1186E+01	0.1489E+01
NE	0.0	0.1368E+00	0.9120E-01	0.0	0.0	0.0	0.0	0.2280E+00	0.2212E+01
ENE	0.0	0.9120E-01	0.0	0.0	0.0	0.0	0.0	0.9120E-01	0.1140E+01
E	0.0	0.4560E-01	0.0	0.0	0.0	0.0	0.0	0.4560E-01	0.1060E+01
ESE	0.0	0.1368E+00	0.0	0.0	0.0	0.0	0.0	0.1368E+00	0.1437E+01
SE	0.0	0.1368E+00	0.0	0.0	0.0	0.0	0.0	0.1368E+00	0.1007E+01
SSE	0.0	0.3648E+00	0.4560E-01	0.0	0.0	0.0	0.0	0.4104E+00	0.1749E+01
S	0.9120E-01	0.1186E+01	0.4560E-01	0.0	0.0	0.0	0.0	0.1322E+01	0.1602E+01
SSW	0.9120E-01	0.1094E+01	0.4560E-01	0.0	0.0	0.0	0.0	0.1231E+01	0.1945E+01
SW	0.9120E-01	0.7752E+00	0.0	0.0	0.0	0.0	0.0	0.8664E+00	0.1762E+01
WSW	0.4560E-01	0.6840E+00	0.2280E+00	0.0	0.0	0.0	0.0	0.9576E+00	0.2353E+01
W	0.0	0.3648E+00	0.0	0.0	0.0	0.0	0.0	0.3648E+00	0.1775E+01
WNW	0.0	0.6384E+00	0.0	0.0	0.0	0.0	0.0	0.6384E+00	0.1571E+01
NW	0.1368E+00	0.1550E+01	0.1368E+00	0.0	0.0	0.0	0.0	0.1824E+01	0.2147E+01
NNW	0.2736E+00	0.3602E+01	0.9120E+00	0.0	0.0	0.0	0.0	0.4788E+01	0.2573E+01
TOTAL	0.9120E+00	0.1318E+02	0.1550E+01	0.0	0.0	0.0	0.0	0.1564E+02	0.1744E+01

NUMBER OF CALMS - 20

NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 10/ 1/78 TO 11:00 PM 12/31/78SUMMARY  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.1368E+00	0.3146E+01	0.5974E+01	0.2006E+01	0.0	0.0	0.0	0.1126E+02	0.5269E+01
NNE	0.9120E-01	0.2371E+01	0.1204E+02	0.3010E+01	0.4560E-01	0.0	0.0	0.1756E+02	0.5225E+01
NE	0.0	0.1642E+01	0.6247E+01	0.1368E+01	0.1368E+00	0.0	0.0	0.9394E+01	0.5601E+01
ENE	0.0	0.9576E+00	0.1824E+01	0.4560E-01	0.0	0.0	0.0	0.2827E+01	0.4433E+01
E	0.0	0.6384E+00	0.1459E+01	0.4560E-01	0.0	0.0	0.0	0.2143E+01	0.4600E+01
ESE	0.0	0.8208E+00	0.1505E+01	0.0	0.0	0.0	0.0	0.2326E+01	0.3653E+01
SE	0.0	0.9576E+00	0.6384E+00	0.0	0.0	0.0	0.0	0.1596E+01	0.3021E+01
SSE	0.0	0.1322E+01	0.1414E+01	0.1368E+00	0.0	0.0	0.0	0.2873E+01	0.3594E+01
S	0.1368E+00	0.3374E+01	0.1824E+01	0.1049E+01	0.0	0.0	0.0	0.6384E+01	0.4199E+01
SSW	0.1368E+00	0.2918E+01	0.2736E+01	0.1733E+01	0.7296E+00	0.4560E-01	0.0	0.8299E+01	0.6040E+01
SW	0.9120E-01	0.2326E+01	0.2006E+01	0.9120E+00	0.1368E+00	0.0	0.0	0.5472E+01	0.4681E+01
WSW	0.4560E-01	0.1687E+01	0.2508E+01	0.4104E+00	0.0	0.0	0.0	0.4651E+01	0.4603E+01
W	0.0	0.1368E+01	0.1322E+01	0.4104E+00	0.0	0.0	0.0	0.3101E+01	0.4332E+01
WNW	0.0	0.1277E+01	0.1003E+01	0.3192E+00	0.0	0.0	0.0	0.2599E+01	0.4000E+01
NW	0.1824E+00	0.3146E+01	0.2599E+01	0.5928E+00	0.0	0.0	0.0	0.6521E+01	0.3942E+01
NNW	0.3648E+00	0.6065E+01	0.5882E+01	0.6840E+00	0.0	0.0	0.0	0.1300E+02	0.3977E+01
TOTAL	0.1186E+01	0.3402E+02	0.5098E+02	0.1272E+02	0.1049E+01	0.4560E-01	0.0	0.1000E+03	0.4864E+01

NUMBER OF CALMS - 26  
NUMBER OF BAD HOURS - 15

### ENCLOSURE 3

DIFFUSION ANALYSIS  
GROUND LEVEL RELEASE  
JULY 1 - DECEMBER 31, 1978  
H. B. ROBINSON STEAM ELECTRIC PLANT

#### Description of Attachments

The attached tables provide estimates of relative ground-level concentration (X/Q) and deposition (D/Q) for the period July 1 through December 31, 1978, for a ground-level release.

A description of the tables is as follows:

Table 1 - Undecayed, undepleted X/Q for standard distances

Table 2 - 2.26-Day decay, undepleted X/Q for standard distances

Table 3 - 8.0-Day decay, depleted X/Q for standard distances

Table 4 - Deposition estimates for standard distances

Table 5 - X/Q and D/Q estimates for site boundary locations and special points of interest

#### Method of Calculation

The ground-level release calculations represent sector averaged concentrations at the given distances from the center of the reactor building. The computer code used (XOQDOQ) was received from the U. S. Nuclear Regulatory Commission (NRC), Hydrology Meteorology Branch.<sup>(1)</sup>

Input variables included:

1. Wake correction factor from RG 1.111
2. Building height for wake correction = 45.4 meters
3. Joint wind frequency from the ten-meter level on-site meteorological tower
4. Sigma Z limited to 1,000 meters
5. Calm winds included with joint frequency and distributed according to the occurrence in the lowest non-calm speed class

The adjustment factors to account for the straight-line flow model limitations (RG 1.111, Section C.1.c) were not applied. The code was modified to incorporate the revised curves for estimating plume depletion and ground deposition (XOQDOQ - ERRATA, November 8, 1976).

#### Relative Concentration Estimates

The site boundary distances used for the calculations are as prepared for the June 4, 1976, Appendix I submittal to the NRC.

The maximum undepleted, undecayed X/Q value at the site boundary is  $3.3\text{E}-05$  in the SSE sector. This value is compared with values for other semiannual periods as follows:

JAN - JUN 1977	$4.0\text{E}-05$
JUL - DEC 1977	$2.8\text{E}-05$
JAN - JUN 1978	$2.6\text{E}-05$

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- (1) Program for the Meteorological Evaluation of Routine Effluent Release at Nuclear Power Stations, J. F. Sagendorf and J. T. Goll, August 29, 1976

EXIT ONE-GROUND LEVEL RELEASES GAS DECAY TANK 7/1/78-12/31/78  
NO DECAY, UNDEPLETED

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES					
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500					
S	1.651E-05	5.103E-06	2.615E-06	1.672E-06	9.637E-07	6.528E-07	4.834E-07	3.786E-07	3.083E-07	2.582E-07	2.210E-07					
SSW	1.767E-05	5.752E-06	2.999E-06	1.919E-06	1.079E-06	7.185E-07	5.253E-07	4.073E-07	3.289E-07	2.735E-07	2.326E-07					
SW	9.167E-06	3.076E-06	1.642E-06	1.057E-06	5.768E-07	3.763E-07	2.708E-07	2.073E-07	1.655E-07	1.364E-07	1.150E-07					
WSW	5.221E-06	1.759E-06	9.391E-07	6.006E-07	3.257E-07	2.116E-07	1.518E-07	1.159E-07	9.239E-08	7.597E-08	6.398E-08					
W	3.631E-06	1.233E-06	6.529E-07	4.163E-07	2.244E-07	1.450E-07	1.035E-07	7.874E-08	6.256E-08	5.130E-08	4.309E-08					
WNW	3.478E-06	1.131E-06	5.884E-07	3.746E-07	2.040E-07	1.330E-07	9.562E-08	7.316E-08	5.842E-08	4.812E-08	4.059E-08					
NW	3.430E-06	1.122E-06	5.853E-07	3.730E-07	2.040E-07	1.334E-07	9.613E-08	7.369E-08	5.893E-08	4.860E-08	4.104E-08					
NNW	6.809E-06	2.244E-06	1.187E-06	7.634E-07	4.242E-07	2.803E-07	2.037E-07	1.572E-07	1.264E-07	1.047E-07	8.879E-08					
N	2.220E-05	6.952E-06	3.688E-06	2.401E-06	1.382E-06	9.345E-07	6.910E-07	5.406E-07	4.397E-07	3.679E-07	3.145E-07					
NNE	2.659E-05	8.580E-06	4.616E-06	3.314E-06	1.713E-06	1.150E-06	8.450E-07	6.579E-07	5.330E-07	4.445E-07	3.789E-07					
NE	1.935E-05	6.157E-06	3.311E-06	2.165E-06	1.230E-06	8.246E-07	6.059E-07	4.717E-07	3.920E-07	3.185E-07	2.715E-07					
ENE	1.061E-05	3.395E-06	1.793E-06	1.159E-06	6.569E-07	4.401E-07	3.232E-07	2.515E-07	2.036E-07	1.697E-07	1.447E-07					
E	6.642E-06	2.064E-06	1.103E-06	7.202E-07	4.090E-07	2.743E-07	2.015E-07	1.569E-07	1.271E-07	1.060E-07	9.036E-08					
ESE	9.424E-06	2.825E-06	1.438E-06	9.233E-07	5.421E-07	3.718E-07	2.778E-07	2.192E-07	1.795E-07	1.510E-07	1.298E-07					
SE	1.791E-05	5.363E-06	2.779E-06	1.803E-06	1.059E-06	7.261E-07	5.423E-07	4.276E-07	3.500E-07	2.944E-07	2.529E-07					
SSE	3.577E-05	1.074E-05	5.492E-06	3.537E-06	2.087E-06	1.436E-06	1.075E-06	8.490E-07	6.961E-07	5.863E-07	5.042E-07					

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										DISTANCE IN MILES					
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000					
S	1.924E-07	1.133E-07	7.815E-08	4.656E-08	3.238E-08	2.448E-08	1.950E-08	1.611E-08	1.366E-08	1.181E-08	1.038E-08					
SSW	2.013E-07	1.161E-07	7.894E-08	4.612E-08	3.165E-08	2.369E-08	1.872E-08	1.536E-08	1.295E-08	1.115E-08	9.752E-09					
SW	9.883E-08	5.545E-08	3.697E-08	2.102E-08	1.417E-08	1.045E-08	8.168E-09	6.636E-09	5.548E-09	4.740E-09	4.119E-09					
WSW	5.491E-08	3.069E-08	2.040E-08	1.155E-08	7.762E-09	5.715E-09	4.456E-09	3.615E-09	3.018E-09	2.576E-09	2.236E-09					
W	3.690E-08	2.045E-08	1.351E-08	7.590E-09	5.075E-09	3.723E-09	2.895E-09	2.342E-09	1.952E-09	1.662E-09	1.441E-09					
WNW	3.488E-08	1.962E-08	1.311E-08	7.488E-09	5.067E-09	3.752E-09	2.941E-09	2.397E-09	2.009E-09	1.720E-09	1.498E-09					
NW	3.531E-08	1.991E-08	1.332E-08	7.621E-09	5.157E-09	3.819E-09	2.993E-09	2.439E-09	2.044E-09	1.751E-09	1.525E-09					
NNW	7.666E-08	4.378E-08	2.955E-08	1.710E-08	1.165E-08	8.676E-09	6.827E-09	5.581E-09	4.690E-09	4.025E-09	3.512E-09					
N	2.735E-07	1.604E-07	1.102E-07	6.529E-08	4.519E-08	3.403E-08	2.703E-08	2.226E-08	1.932E-08	1.624E-08	1.424E-08					
NNE	3.286E-07	1.909E-07	1.303E-07	7.650E-08	5.261E-08	3.942E-08	3.118E-08	2.559E-08	2.158E-08	1.858E-08	1.625E-08					
NE	2.355E-07	1.368E-07	9.341E-08	5.485E-08	3.775E-08	2.830E-08	2.239E-08	1.838E-08	1.551E-08	1.335E-08	1.168E-08					
ENE	1.255E-07	7.288E-08	4.977E-08	2.925E-08	2.014E-08	1.511E-08	1.196E-08	9.826E-09	8.293E-09	7.144E-09	6.254E-09					
E	7.839E-08	4.562E-08	3.117E-08	1.834E-08	1.264E-08	9.494E-09	7.522E-09	6.183E-09	5.220E-09	4.498E-09	3.939E-09					
ESE	1.134E-07	6.766E-08	4.706E-08	2.835E-08	1.986E-08	1.510E-08	1.209E-08	1.001E-08	8.508E-09	7.376E-09	6.494E-09					
SE	2.208E-07	1.315E-07	9.132E-08	5.487E-08	3.835E-08	2.909E-08	2.324E-08	1.923E-08	1.633E-08	1.414E-08	1.244E-08					
SSE	4.407E-07	2.634E-07	1.833E-07	1.105E-07	7.741E-08	5.882E-08	4.705E-08	3.898E-08	3.314E-08	2.873E-08	2.529E-08					

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.749E-06	9.831E-07	4.866E-07	3.093E-07	2.214E-07	1.153E-07	4.728E-08	2.460E-08	1.614E-08	1.183E-08
SSW	3.131E-06	1.105E-06	5.297E-07	3.302E-07	2.331E-07	1.185E-07	4.698E-08	2.333E-08	1.540E-08	1.117E-08
SW	1.701E-06	5.943E-07	2.735E-07	1.663E-07	1.153E-07	5.688E-08	2.152E-08	1.053E-08	6.659E-09	4.749E-09
WSW	9.730E-07	3.361E-07	1.534E-07	9.285E-08	6.417E-08	3.150E-08	1.183E-08	5.757E-09	3.628E-09	2.581E-09
W	6.768E-07	2.318E-07	1.047E-07	6.289E-08	4.323E-08	2.102E-08	7.788E-09	3.752E-09	2.351E-09	1.666E-09
WNW	6.139E-07	2.103E-07	9.659E-08	5.871E-08	4.070E-08	2.012E-08	7.661E-09	3.778E-09	2.404E-09	1.724E-09
NW	6.101E-07	2.102E-07	9.708E-08	5.921E-08	4.116E-08	2.040E-08	7.793E-09	3.846E-09	2.447E-09	1.754E-09
NNW	1.234E-06	4.356E-07	2.055E-07	1.269E-07	8.902E-08	4.476E-08	1.745E-08	8.730E-09	5.598E-09	4.032E-09
N	3.841E-06	1.409E-06	6.958E-07	4.411E-07	3.151E-07	1.632E-07	6.634E-08	3.421E-08	2.231E-08	1.627E-08
NNE	4.785E-06	1.752E-06	8.514E-07	5.350E-07	3.797E-07	1.946E-07	7.784E-08	3.964E-08	2.566E-08	1.861E-08
NE	3.434E-06	1.257E-06	6.105E-07	3.835E-07	2.721E-07	1.394E-07	5.582E-08	2.846E-08	1.843E-08	1.337E-08
ENE	1.867E-06	6.721E-07	3.257E-07	2.044E-07	1.450E-07	7.429E-08	2.976E-08	1.519E-08	9.852E-09	7.155E-09
E	1.146E-06	4.183E-07	2.031E-07	1.276E-07	9.056E-08	4.647E-08	1.866E-08	9.545E-09	6.199E-09	4.505E-09
ESE	1.518E-06	5.511E-07	2.794E-07	1.800E-07	1.300E-07	6.867E-08	2.874E-08	1.516E-08	1.003E-08	7.385E-09
SE	2.919E-06	1.076E-06	5.454E-07	3.510E-07	2.533E-07	1.335E-07	5.563E-08	2.922E-08	1.927E-08	1.416E-08
SSE	5.789E-06	2.120E-06	1.081E-06	6.980E-07	5.050E-07	2.672E-07	1.120E-07	5.907E-08	3.906E-08	2.876E-08

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT (METERS)	0.0	REP. WIND HEIGHT (METERS)	10.0
DIAMETER (METERS)	0.0	BUILDING HEIGHT (METERS)	45.0
EXIT VELOCITY (METERS)	0.0	BLDG. MIN. CRS. SEC. AREA (SQ. METERS)	1370.0
		HEAT EMISSION RATE (CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED	LESS THAN	0.0	
MIXED	BETWEEN	0.0 AND 0.0	
GROUND LEVEL	ABOVE	0.0	

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED	LESS THAN	0.0	
MIXED	BETWEEN	0.0 AND 0.0	
GROUND LEVEL	ABOVE	0.0	

WIND SPEED (METERS/SEC)

UNSTABLE/NEUTRAL CONDITIONS	
LESS THAN	0.0
BETWEEN	0.0 AND 0.0
ABOVE	0.0

EXIT ONE-GROUND LEVEL RELEASES GAS DECAY TANK 7/1/78-12/31/78  
2:260 DAY DECAY, UNDEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.647E-05	5.079E-06	2.597E-06	1.658E-06	9.504E-07	6.406E-07	4.720E-07	3.679E-07	2.981E-07	2.484E-07	2.115E-07
SSW	1.764E-05	5.733E-06	2.984E-06	1.907E-06	1.068E-06	7.087E-07	5.162E-07	3.998E-07	3.207E-07	2.657E-07	2.251E-07
SW	9.158E-06	3.070E-06	1.637E-06	1.053E-06	5.733E-07	3.733E-07	2.681E-07	2.049E-07	1.632E-07	1.341E-07	1.129E-07
WSW	5.215E-06	1.765E-06	9.350E-07	5.980E-07	3.236E-07	2.097E-07	1.501E-07	1.144E-07	9.095E-08	7.463E-08	6.271E-08
W	3.627E-06	1.230E-06	6.506E-07	4.149E-07	2.229E-07	1.437E-07	1.024E-07	7.768E-08	6.158E-08	5.038E-08	4.222E-08
WNW	3.474E-06	1.128E-06	5.364E-07	3.729E-07	2.026E-07	1.317E-07	9.450E-08	7.214E-08	5.746E-08	4.721E-08	3.972E-08
NW	3.426E-06	1.119E-06	5.832E-07	3.711E-07	2.025E-07	1.321E-07	9.494E-08	7.260E-08	5.791E-08	4.764E-08	4.013E-08
NNW	6.801E-06	2.239E-06	1.183E-06	7.599E-07	4.212E-07	2.777E-07	2.013E-07	1.550E-07	1.243E-07	1.028E-07	8.691E-08
N	2.215E-05	6.916E-06	3.658E-06	2.377E-06	1.360E-06	9.152E-07	6.732E-07	5.238E-07	4.238E-07	3.526E-07	2.999E-07
NNE	2.653E-05	8.543E-06	4.587E-06	2.989E-06	1.691E-06	1.130E-06	8.269E-07	6.410E-07	5.170E-07	4.292E-07	3.643E-07
NE	1.931E-05	6.130E-06	3.289E-06	2.146E-06	1.213E-06	8.101E-07	5.925E-07	4.592E-07	3.702E-07	3.073E-07	2.607E-07
ENE	1.059E-05	3.384E-06	1.784E-06	1.151E-06	6.505E-07	4.344E-07	3.180E-07	2.466E-07	1.990E-07	1.654E-07	1.405E-07
E	6.633E-06	2.059E-06	1.098E-06	7.162E-07	4.056E-07	2.712E-07	1.987E-07	1.543E-07	1.246E-07	1.036E-07	8.810E-08
ESE	9.398E-06	2.810E-06	1.427E-06	9.139E-07	5.337E-07	3.640E-07	2.705E-07	2.122E-07	1.728E-07	1.447E-07	1.236E-07
SE	1.786E-05	5.335E-06	2.758E-06	1.785E-06	1.043E-06	7.113E-07	5.285E-07	4.145E-07	3.375E-07	2.825E-07	2.413E-07
SSE	3.568E-05	1.069E-05	5.451E-06	3.592E-06	2.056E-06	1.407E-06	1.048E-06	8.235E-07	6.717E-07	5.629E-07	4.816E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.832E-07	1.052E-07	7.080E-08	4.020E-08	2.670E-08	1.931E-08	1.474E-08	1.169E-08	9.531E-09	7.938E-09	6.724E-09
SSW	1.941E-07	1.092E-07	7.319E-08	4.115E-08	2.721E-08	1.965E-08	1.500E-08	1.190E-08	9.712E-09	8.099E-09	6.871E-09
SW	9.682E-08	5.376E-08	3.546E-08	1.975E-08	1.303E-08	9.416E-09	7.204E-09	5.732E-09	4.693E-09	3.927E-09	3.343E-09
WSW	5.370E-08	2.968E-08	1.951E-08	1.081E-08	7.100E-09	5.114E-09	3.902E-09	3.097E-09	2.530E-09	2.113E-09	1.795E-09
W	3.609E-08	1.976E-08	1.291E-08	7.092E-09	4.636E-09	3.325E-09	2.528E-09	2.000E-09	1.630E-09	1.358E-09	1.151E-09
WNW	3.407E-08	1.893E-08	1.250E-08	6.966E-09	4.600E-09	3.325E-09	2.544E-09	2.023E-09	1.655E-09	1.384E-09	1.176E-09
NW	3.443E-08	1.917E-08	1.267E-08	7.066E-09	4.662E-09	3.367E-09	2.573E-09	2.044E-09	1.671E-09	1.396E-09	1.186E-09
NNW	7.485E-08	4.223E-08	2.916E-08	1.590E-08	1.058E-08	7.683E-09	5.900E-09	4.706E-09	3.860E-09	3.233E-09	2.753E-09
N	2.594E-07	1.481E-07	9.921E-08	5.590E-08	3.688E-08	2.653E-08	2.016E-08	1.592E-08	1.293E-08	1.073E-08	9.058E-09
NNE	3.146E-07	1.787E-07	1.194E-07	6.721E-08	4.438E-08	3.198E-08	2.435E-08	1.927E-08	1.568E-08	1.304E-08	1.103E-08
NE	2.251E-07	1.279E-07	8.545E-08	4.810E-08	3.177E-08	2.290E-08	1.745E-08	1.381E-08	1.124E-08	9.348E-09	7.908E-09
ENE	1.215E-07	6.946E-08	4.670E-08	2.662E-08	1.778E-08	1.295E-08	9.959E-09	7.949E-09	6.520E-09	5.460E-09	4.647E-09
E	7.622E-08	4.371E-08	2.946E-08	1.685E-08	1.129E-08	8.243E-09	6.349E-09	5.073E-09	4.164E-09	3.489E-09	2.970E-09
ESE	1.074E-07	6.240E-08	4.227E-08	2.419E-08	1.613E-08	1.170E-08	8.948E-09	7.102E-09	5.792E-09	4.825E-09	4.087E-09
SE	2.097E-07	1.217E-07	8.238E-08	4.714E-08	3.144E-08	2.281E-08	1.746E-08	1.387E-08	1.132E-08	9.438E-09	8.001E-09
SSE	4.188E-07	2.441E-07	1.658E-07	9.530E-08	6.380E-08	4.643E-08	3.564E-08	2.838E-08	2.323E-08	1.941E-08	1.650E-08

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT.

DIRECTION FROM SITE	1-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.731E-06	9.700E-07	4.753E-07	2.991E-07	2.119E-07	1.073E-07	4.100E-08	1.945E-08	1.174E-08	7.960E-09
SSW	3.116E-06	1.095E-06	5.206E-07	3.220E-07	2.256E-07	1.122E-07	4.208E-08	1.981E-08	1.195E-08	8.122E-09
SW	1.696E-06	5.909E-07	2.705E-07	1.640E-07	1.132E-07	5.520E-08	2.025E-08	9.495E-09	5.757E-09	3.938E-09
WSW	9.699E-07	3.340E-07	1.517E-07	9.143E-08	6.290E-08	3.050E-08	1.109E-08	5.159E-09	3.111E-09	2.119E-09
W	6.747E-07	2.303E-07	1.035E-07	6.191E-08	4.236E-08	2.034E-08	7.293E-09	3.355E-09	2.010E-09	1.362E-09
WNW	6.119E-07	2.089E-07	9.548E-08	5.775E-08	3.985E-08	1.944E-08	7.144E-09	3.353E-09	2.032E-09	1.387E-09
NW	6.080E-07	2.087E-07	9.590E-08	5.820E-08	4.025E-08	1.967E-08	7.242E-09	3.395E-09	2.053E-09	1.400E-09
NNW	1.230E-06	4.327E-07	2.031E-07	1.249E-07	8.714E-08	4.323E-08	1.626E-08	7.741E-09	4.725E-09	3.241E-09
N	3.812E-06	1.388E-06	6.780E-07	4.253E-07	3.005E-07	1.511E-07	5.707E-08	2.674E-08	1.599E-08	1.076E-08
NNE	4.756E-06	1.730E-06	8.233E-07	5.190E-07	3.651E-07	1.826E-07	6.867E-08	3.224E-08	1.936E-08	1.308E-08
NE	3.412E-06	1.241E-06	5.972E-07	3.716E-07	2.613E-07	1.306E-07	4.914E-08	2.309E-08	1.387E-08	9.375E-09
ENE	1.858E-06	6.657E-07	3.205E-07	1.998E-07	1.408E-07	7.090E-08	2.715E-08	1.304E-08	7.979E-09	5.473E-09
E	1.142E-06	4.149E-07	2.003E-07	1.251E-07	8.831E-08	4.460E-08	1.718E-08	8.299E-09	5.092E-09	3.497E-09
ESE	1.506E-06	5.428E-07	2.721E-07	1.734E-07	1.239E-07	6.346E-08	2.463E-08	1.178E-08	7.130E-09	4.838E-09
SE	2.898E-06	1.060E-06	5.316E-07	3.385E-07	2.418E-07	1.238E-07	4.800E-08	2.297E-08	1.392E-08	9.464E-09
SSE	5.748E-06	2.089E-06	1.054E-06	6.736E-07	4.824E-07	2.481E-07	9.696E-08	4.675E-08	2.849E-08	1.946E-08

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT (METERS)	0.0	REP. WIND HEIGHT (METERS)	10.0
DIAMETER (METERS)	0.0	BUILDING HEIGHT (METERS)	45.0
EXIT VELOCITY (METERS)	0.0	BLDG. MIN. CRS. SEC. AREA (SQ. METERS)	1370.0
		HEAT EMISSION RATE (CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED	LESS THAN 0.0
MIXED	BETWEEN 0.0 AND 0.0
GROUND LEVEL	ABOVE 0.0

AT THE MEASURED WIND HEIGHT ( 10.0 METERS):

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED	LESS THAN 0.0
MIXED	BETWEEN 0.0 AND 0.0
GROUND LEVEL	ABOVE 0.0

WIND SPEED (METERS/SEC)

UNSTABLE/NEUTRAL CONDITIONS
LESS THAN 0.0
BETWEEN 0.0 AND 0.0
ABOVE 0.0

EXIT ONE-GROUND LEVEL RELEASES GAS DECAY TANK 7/1/78-12/31/78  
3.000 DAY DECAY, DEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)			DISTANCE IN MILES									
SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	1.561E-05	4.654E-06	2.326E-06	1.461E-06	8.152E-07	5.376E-07	3.889E-07	2.983E-07	2.383E-07	1.960E-07	1.650E-07	
SSW	1.672E-05	5.248E-06	2.668E-06	1.677E-06	9.136E-07	5.926E-07	4.234E-07	3.216E-07	2.548E-07	2.082E-07	1.742E-07	
SW	8.674E-06	2.808E-06	1.462E-06	9.239E-07	4.890E-07	3.109E-07	2.187E-07	1.641E-07	1.287E-07	1.042E-07	8.650E-08	
WSW	4.940E-06	1.614E-06	8.361E-07	5.251E-07	2.761E-07	1.743E-07	1.226E-07	9.172E-08	7.177E-08	5.803E-08	4.810E-08	
W	3.435E-06	1.125E-06	5.812E-07	3.643E-07	1.902E-07	1.197E-07	8.358E-08	6.231E-08	4.800E-08	3.918E-08	3.239E-08	
WNW	3.290E-06	1.032E-06	5.238E-07	3.275E-07	1.729E-07	1.098E-07	7.720E-08	5.788E-08	4.537E-08	3.674E-08	3.050E-08	
NW	3.245E-06	1.024E-06	5.211E-07	3.260E-07	1.729E-07	1.101E-07	7.760E-08	5.829E-08	4.576E-08	3.710E-08	3.083E-08	
NNW	6.442E-06	2.048E-06	1.057E-06	6.674E-07	3.596E-07	2.315E-07	1.645E-07	1.244E-07	9.817E-08	7.997E-08	6.673E-08	
N	2.100E-05	6.339E-06	3.277E-06	2.096E-06	1.168E-06	7.692E-07	5.556E-07	4.255E-07	3.395E-07	2.790E-07	2.345E-07	
NNE	2.515E-05	7.826E-06	4.106E-06	2.632E-06	1.450E-06	9.472E-07	6.802E-07	5.197E-07	4.123E-07	3.378E-07	2.832E-07	
NE	1.830E-05	5.616E-06	2.945E-06	1.890E-06	1.040E-06	6.794E-07	4.877E-07	3.718E-07	2.954E-07	2.420E-07	2.029E-07	
ENE	1.003E-05	3.097E-06	1.595E-06	1.012E-06	5.564E-07	3.631E-07	2.606E-07	1.986E-07	1.579E-07	1.293E-07	1.085E-07	
E	6.283E-06	1.884E-06	9.814E-07	6.294E-07	3.465E-07	2.264E-07	1.626E-07	1.240E-07	9.863E-08	8.085E-08	6.783E-08	
ESE	8.912E-06	2.576E-06	1.279E-06	8.059E-07	4.584E-07	3.060E-07	2.233E-07	1.725E-07	1.385E-07	1.145E-07	9.677E-08	
SE	1.693E-05	4.890E-06	2.471E-06	1.574E-06	8.955E-07	5.977E-07	4.361E-07	3.366E-07	2.703E-07	2.233E-07	1.887E-07	
SSE	3.383E-05	9.795E-06	4.883E-06	3.087E-06	1.765E-06	1.182E-06	8.643E-07	6.695E-07	5.376E-07	4.448E-07	3.762E-07	

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)			DISTANCE IN MILES									
BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	1.414E-07	7.918E-08	5.100E-08	2.771E-08	1.783E-08	1.253E-08	9.414E-09	7.336E-09	5.888E-09	4.835E-09	4.042E-09	
SSW	1.485E-07	8.053E-08	5.187E-08	2.772E-08	1.765E-08	1.237E-08	9.208E-09	7.147E-09	5.720E-09	4.686E-09	3.910E-09	
SW	7.324E-08	3.875E-08	2.454E-08	1.284E-08	8.079E-09	5.615E-09	4.157E-09	3.214E-09	2.565E-09	2.097E-09	1.748E-09	
WSW	4.068E-08	2.143E-08	1.353E-08	7.050E-09	4.420E-09	3.064E-09	2.263E-09	1.747E-09	1.392E-09	1.137E-09	9.463E-10	
W	2.733E-08	1.428E-08	8.961E-09	4.630E-09	2.889E-09	1.995E-09	1.469E-09	1.131E-09	8.990E-10	7.327E-10	6.089E-10	
WNW	2.583E-08	1.366E-08	8.669E-09	4.562E-09	2.879E-09	2.006E-09	1.488E-09	1.153E-09	9.218E-10	7.550E-10	6.302E-10	
NW	2.613E-08	1.389E-08	8.824E-09	4.639E-09	2.927E-09	2.039E-09	1.512E-09	1.171E-09	9.361E-10	7.664E-10	6.396E-10	
NNW	5.676E-08	3.055E-08	1.959E-08	1.042E-08	6.621E-09	4.639E-09	3.455E-09	2.684E-09	2.152E-09	1.766E-09	1.477E-09	
N	2.008E-07	1.105E-07	7.179E-08	3.875E-08	2.480E-08	1.743E-08	1.299E-08	1.009E-08	8.074E-09	6.612E-09	5.514E-09	
NNE	2.419E-07	1.320E-07	8.534E-08	4.577E-08	2.918E-08	2.046E-08	1.523E-08	1.182E-08	9.452E-09	7.739E-09	6.454E-09	
NE	1.733E-07	9.457E-08	6.114E-08	3.280E-08	2.093E-08	1.468E-08	1.093E-08	8.484E-09	6.789E-09	5.560E-09	4.639E-09	
ENE	9.266E-08	5.067E-08	3.284E-08	1.770E-08	1.134E-08	7.993E-09	5.979E-09	4.662E-09	3.747E-09	3.081E-09	2.581E-09	
E	5.797E-08	3.176E-08	2.061E-08	1.113E-08	7.152E-09	5.048E-09	3.781E-09	2.952E-09	2.374E-09	1.955E-09	1.638E-09	
ESE	8.321E-08	4.659E-08	3.064E-08	1.681E-08	1.089E-08	7.718E-09	5.795E-09	4.527E-09	3.641E-09	2.995E-09	2.507E-09	
SE	1.622E-07	9.063E-08	5.952E-08	3.260E-08	2.108E-08	1.493E-08	1.120E-08	8.745E-09	7.031E-09	5.781E-09	4.839E-09	
SSE	3.237E-07	1.816E-07	1.196E-07	6.573E-08	4.261E-08	3.024E-08	2.273E-08	1.777E-08	1.431E-08	1.178E-08	9.875E-09	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.459E-06	8.353E-07	3.923E-07	2.393E-07	1.654E-07	8.015E-08	2.849E-08	1.271E-08	7.378E-09	4.853E-09
SSW	2.801E-06	9.406E-07	4.278E-07	2.561E-07	1.747E-07	8.289E-08	2.661E-08	1.251E-08	7.192E-09	4.705E-09
SW	1.522E-06	5.065E-07	2.214E-07	1.295E-07	8.683E-08	4.010E-08	1.333E-08	5.689E-09	3.236E-09	2.107E-09
WSW	9.708E-07	2.864E-07	1.242E-07	7.224E-08	4.924E-08	2.220E-08	7.322E-09	3.105E-09	1.759E-09	1.142E-09
W	6.057E-07	1.976E-07	8.471E-08	4.893E-08	3.253E-08	1.482E-08	4.818E-09	2.023E-09	1.139E-09	7.361E-10
WNW	5.495E-07	1.792E-07	7.817E-08	4.566E-08	3.062E-08	1.417E-08	4.731E-09	2.032E-09	1.161E-09	7.582E-10
NW	5.460E-07	1.790E-07	7.855E-08	4.604E-08	3.095E-08	1.436E-08	4.808E-09	2.065E-09	1.179E-09	7.697E-10
NNW	1.104E-06	3.710E-07	1.663E-07	9.872E-08	6.696E-08	3.150E-08	1.077E-08	4.693E-09	2.701E-09	1.773E-09
N	3.433E-06	1.197E-06	5.605E-07	3.410E-07	2.352E-07	1.133E-07	3.989E-08	1.762E-08	1.015E-08	6.339E-09
NNE	4.277E-06	1.489E-06	6.869E-07	4.143E-07	2.941E-07	1.357E-07	4.719E-08	2.069E-08	1.189E-08	7.770E-09
NE	3.070E-06	1.069E-06	4.925E-07	2.969E-07	2.035E-07	9.720E-08	3.392E-08	1.485E-08	8.537E-09	5.583E-09
ENE	1.670E-06	5.718E-07	2.631E-07	1.587E-07	1.088E-07	5.208E-08	1.824E-08	8.081E-09	4.690E-09	3.093E-09
E	1.025E-06	3.560E-07	1.642E-07	9.912E-08	6.804E-08	3.263E-08	1.147E-08	5.102E-09	2.969E-09	1.962E-09
ESE	1.357E-06	4.679E-07	2.250E-07	1.391E-07	9.701E-08	4.764E-08	1.725E-08	7.794E-09	4.551E-09	3.005E-09
SE	2.610E-06	9.139E-07	4.394E-07	2.714E-07	1.891E-07	9.270E-08	3.346E-08	1.508E-08	8.793E-09	5.803E-09
SSE	5.176E-06	1.900E-06	8.707E-07	5.397E-07	3.771E-07	1.856E-07	6.742E-08	3.053E-08	1.787E-08	1.183E-08

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT (METERS) 0.0  
DIAMETER (METERS) 0.0  
EXIT VELOCITY (METERS) 0.0

REP. WIND HEIGHT (METERS) 10.0  
BUILDING HEIGHT (METERS) 45.0  
BLDG. MIN. CRS. SEC. AREA (SQ. METERS) 1370.0  
HEAT EMISSION RATE (CAL/SEC) 0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED LESS THAN 0.0  
MIXED BETWEEN 0.0 AND 0.0  
GROUND LEVEL ABOVE 0.0

AT THE MEASURED WIND HEIGHT ( 10.0 METERS):

VENT RELEASE MODE WIND SPEED (METERS/SEC)

STABLE CONDITIONS  
ELEVATED LESS THAN 0.0  
MIXED BETWEEN 0.0 AND 0.0  
GROUND LEVEL ABOVE 0.0

WIND SPEED (METERS/SEC)  
UNSTABLE/NEUTRAL CONDITIONS  
LESS THAN 0.0  
BETWEEN 0.0 AND 0.0  
ABOVE 0.0



EXIT ONE-GROUND LEVEL RELEASES GAS DECAY TANK 7/1/78-12/31/78

\*\*\*\*\* RELATIVE DEPOSITION PER UNIT AREA (M\*\*2) AT FIXED POINTS BY DOWNWIND SECTORS \*\*\*\*\*

DIRECTION FROM SITE	DISTANCES IN MILES									
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00
S	4.636E-08	1.558E-08	8.050E-09	4.943E-09	2.464E-09	1.495E-09	1.010E-09	7.322E-10	5.562E-10	4.386E-10
SSW	7.033E-08	2.378E-08	1.221E-08	7.499E-09	3.738E-09	2.267E-09	1.533E-09	1.111E-09	8.447E-10	6.655E-10
SW	5.189E-08	1.755E-08	9.010E-09	5.533E-09	2.759E-09	1.673E-09	1.131E-09	8.196E-10	6.232E-10	4.910E-10
WSW	3.069E-08	1.038E-08	5.328E-09	3.272E-09	1.631E-09	9.893E-10	6.689E-10	4.847E-10	3.666E-10	2.904E-10
W	1.923E-08	6.503E-09	3.329E-09	2.050E-09	1.022E-09	6.199E-10	4.191E-10	3.037E-10	2.309E-10	1.819E-10
WNW	1.712E-08	5.790E-09	2.973E-09	1.826E-09	9.101E-10	5.520E-10	3.732E-10	2.704E-10	2.056E-10	1.620E-10
NW	1.778E-08	6.013E-09	3.037E-09	1.896E-09	9.451E-10	5.732E-10	3.875E-10	2.808E-10	2.135E-10	1.682E-10
NNW	2.779E-08	9.398E-09	4.825E-09	2.963E-09	1.477E-09	8.959E-10	6.057E-10	4.389E-10	3.338E-10	2.629E-10
N	4.491E-08	1.519E-08	7.798E-09	4.788E-09	2.387E-09	1.448E-09	9.789E-10	7.094E-10	5.394E-10	4.249E-10
NNE	6.454E-08	2.182E-08	1.121E-08	6.881E-09	3.430E-09	2.080E-09	1.407E-09	1.019E-09	7.751E-10	6.106E-10
NE	4.636E-08	1.568E-08	8.050E-09	4.943E-09	2.464E-09	1.495E-09	1.010E-09	7.322E-10	5.562E-10	4.386E-10
ENE	2.819E-08	9.531E-09	4.594E-09	3.005E-09	1.498E-09	9.086E-10	6.143E-10	4.452E-10	3.385E-10	2.667E-10
E	1.883E-08	6.369E-09	3.270E-09	2.008E-09	1.001E-09	6.072E-10	4.105E-10	2.975E-10	2.262E-10	1.782E-10
ESE	1.436E-08	4.855E-09	2.493E-09	1.531E-09	7.631E-10	4.628E-10	3.129E-10	2.267E-10	1.724E-10	1.358E-10
SE	2.713E-08	9.175E-09	4.711E-09	2.893E-09	1.442E-09	8.747E-10	5.914E-10	4.295E-10	3.258E-10	2.567E-10
SSE	5.348E-08	1.808E-08	9.285E-09	5.701E-09	2.842E-09	1.724E-09	1.166E-09	8.446E-10	6.422E-10	5.059E-10

DIRECTION FROM SITE	DISTANCES IN MILES									
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00
S	2.937E-10	1.440E-10	9.032E-11	4.565E-11	2.763E-11	1.853E-11	1.328E-11	9.968E-12	7.750E-12	6.191E-12
SSW	4.456E-10	2.184E-10	1.370E-10	6.926E-11	4.192E-11	2.811E-11	2.014E-11	1.512E-11	1.176E-11	9.392E-12
SW	3.288E-10	1.511E-10	1.011E-10	5.110E-11	3.093E-11	2.074E-11	1.486E-11	1.116E-11	8.675E-12	6.930E-12
WSW	1.944E-10	9.529E-11	5.979E-11	3.022E-11	1.829E-11	1.226E-11	8.787E-12	6.598E-12	5.130E-12	4.098E-12
W	1.218E-10	5.971E-11	3.746E-11	1.894E-11	1.146E-11	7.684E-12	5.506E-12	4.135E-12	3.215E-12	2.568E-12
WNW	1.035E-10	5.316E-11	3.336E-11	1.686E-11	1.020E-11	6.842E-12	4.903E-12	3.631E-12	2.862E-12	2.287E-12
NW	1.127E-10	5.521E-11	3.464E-11	1.751E-11	1.060E-11	7.105E-12	5.091E-12	3.823E-12	2.972E-12	2.374E-12
NNW	1.761E-10	8.629E-11	5.414E-11	2.737E-11	1.656E-11	1.111E-11	7.957E-12	5.975E-12	4.646E-12	3.711E-12
N	2.846E-10	1.395E-10	8.750E-11	4.423E-11	2.677E-11	1.795E-11	1.286E-11	9.657E-12	7.508E-12	5.998E-12
NNE	4.089E-10	2.004E-10	1.257E-10	6.355E-11	3.846E-11	2.579E-11	1.848E-11	1.383E-11	1.079E-11	8.618E-12
NE	2.937E-10	1.440E-10	9.032E-11	4.565E-11	2.763E-11	1.853E-11	1.328E-11	9.968E-12	7.750E-12	6.191E-12
ENE	1.766E-10	8.752E-11	5.491E-11	2.775E-11	1.680E-11	1.126E-11	8.071E-12	6.060E-12	4.712E-12	3.764E-12
E	1.193E-10	5.848E-11	3.669E-11	1.855E-11	1.123E-11	7.526E-12	5.393E-12	4.050E-12	3.149E-12	2.515E-12
ESE	9.096E-11	4.458E-11	2.797E-11	1.414E-11	8.556E-12	5.737E-12	4.111E-12	3.037E-12	2.400E-12	1.917E-12
SE	1.719E-10	8.424E-11	5.286E-11	2.672E-11	1.617E-11	1.084E-11	7.769E-12	5.834E-12	4.536E-12	3.623E-12
SSE	3.388E-10	1.660E-10	1.042E-10	5.266E-11	3.187E-11	2.137E-11	1.531E-11	1.150E-11	8.939E-12	7.141E-12

\*\*\*\*\* RELATIVE DEPOSITION PER UNIT AREA (M\*\*2) BY DOWNWIND SECTORS \*\*\*\*\*

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	8.364E-09	2.584E-09	1.028E-09	5.619E-10	3.571E-10	1.534E-10	4.757E-11	1.885E-11	1.007E-11	6.232E-12
SSW	1.269E-08	3.920E-09	1.560E-09	8.524E-10	5.418E-10	2.327E-10	7.217E-11	2.860E-11	1.527E-11	9.454E-12
SW	9.362E-09	2.892E-09	1.151E-09	6.290E-10	3.997E-10	1.717E-10	5.325E-11	2.110E-11	1.127E-11	6.975E-12
WSW	5.536E-09	1.710E-09	6.806E-10	3.719E-10	2.364E-10	1.015E-10	3.149E-11	1.248E-11	6.664E-12	4.125E-12
W	3.469E-09	1.072E-09	4.265E-10	2.331E-10	1.481E-10	6.363E-11	1.973E-11	7.820E-12	4.176E-12	2.585E-12
WNW	3.089E-09	9.543E-10	3.798E-10	2.075E-10	1.319E-10	5.665E-11	1.757E-11	6.963E-12	3.718E-12	2.301E-12
NW	3.208E-09	9.911E-10	3.944E-10	2.155E-10	1.370E-10	5.893E-11	1.824E-11	7.231E-12	3.861E-12	2.390E-12
NNW	5.014E-09	1.549E-09	6.164E-10	3.365E-10	2.141E-10	9.196E-11	2.851E-11	1.130E-11	6.035E-12	3.736E-12
N	8.103E-09	2.503E-09	9.961E-10	5.443E-10	3.460E-10	1.486E-10	4.608E-11	1.826E-11	9.753E-12	6.037E-12
NNE	1.164E-08	3.597E-09	1.431E-09	7.822E-10	4.971E-10	2.135E-10	6.622E-11	2.625E-11	1.402E-11	8.675E-12
NE	8.364E-09	2.584E-09	1.028E-09	5.619E-10	3.571E-10	1.534E-10	4.757E-11	1.885E-11	1.007E-11	6.232E-12
ENE	5.085E-09	1.571E-09	6.251E-10	3.416E-10	2.171E-10	9.326E-11	2.892E-11	1.146E-11	6.121E-12	3.789E-12
E	3.395E-09	1.050E-09	4.177E-10	2.283E-10	1.451E-10	6.232E-11	1.933E-11	7.659E-12	4.090E-12	2.532E-12
ESE	2.590E-09	8.002E-10	3.184E-10	1.740E-10	1.106E-10	4.750E-11	1.473E-11	5.838E-12	3.118E-12	1.930E-12
SE	4.895E-09	1.512E-09	6.019E-10	3.288E-10	2.090E-10	8.978E-11	2.784E-11	1.103E-11	5.892E-12	3.647E-12
SSE	9.647E-09	2.991E-09	1.186E-09	6.481E-10	4.119E-10	1.769E-10	5.497E-11	2.175E-11	1.161E-11	7.188E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT (METERS) 0.0  
DIAMETER (METERS) 0.0  
EXIT VELOCITY (METERS) 0.0

REP. WIND HEIGHT (METERS) 10.0  
BUILDING HEIGHT (METERS) 45.0  
BLDG. MIN. CRS. SEC. AREA (SQ. METERS) 1370.0  
HEAT EMISSION RATE (CAL/SEC) 0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED LESS THAN 0.0  
MIXED BETWEEN 0.0 AND 0.0  
GROUND LEVEL ABOVE 0.0

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE WIND SPEED (METERS/SEC)

STABLE CONDITIONS  
ELEVATED LESS THAN 0.0  
MIXED BETWEEN 0.0 AND 0.0  
GROUND LEVEL ABOVE 0.0

WIND SPEED (METERS/SEC)

UNSTABLE/NEUTRAL CONDITIONS  
LESS THAN 0.0  
BETWEEN 0.0 AND 0.0  
ABOVE 0.0

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE (MILES)	DISTANCE (METERS)	X/Q (SEC/CUB.METER) UNDEPLETED	X/Q (SEC/CUB.METER) UNDEPLETED	X/Q (SEC/CUB.METER) DEPLETED	D/Q (PER SQ.METER)
NO DECAY 2.260 DAY DECAY 8.000 DAY DECAY								
A	SITE BOUNDARY	S	0.28	451.	1.3E-05	1.3E-05	1.3E-05	3.9E-08
A	SITE BOUNDARY	SSW	0.29	467.	1.4E-05	1.4E-05	1.3E-05	5.6E-08
A	SITE BOUNDARY	SW	0.36	579.	5.1E-06	5.1E-06	4.7E-06	3.0E-08
A	SITE BOUNDARY	WSW	0.36	579.	2.9E-06	2.9E-06	2.7E-06	1.8E-08
A	SITE BOUNDARY	W	0.50	805.	1.2E-06	1.2E-06	1.1E-06	6.5E-09
A	SITE BOUNDARY	WNW	0.55	885.	9.6E-07	9.6E-07	8.7E-07	5.0E-09
A	SITE BOUNDARY	NW	1.23	1979.	2.7E-07	2.7E-07	2.4E-07	1.3E-09
A	SITE BOUNDARY	NNW	1.69	3042.	3.0E-07	3.0E-07	2.5E-07	9.9E-10
A	SITE BOUNDARY	N	1.94	3122.	9.7E-07	9.5E-07	8.0E-07	1.5E-09
A	SITE BOUNDARY	NNE	1.26	2028.	2.2E-06	2.2E-06	1.9E-06	4.6E-09
A	SITE BOUNDARY	NE	1.01	1625.	2.1E-06	2.1E-06	1.9E-06	4.9E-09
A	SITE BOUNDARY	ENE	0.86	1384.	1.5E-06	1.4E-06	1.3E-06	3.9E-09
A	SITE BOUNDARY	E	0.61	982.	1.5E-06	1.5E-06	1.4E-06	4.6E-09
A	SITE BOUNDARY	ESE	0.50	805.	2.8E-06	2.8E-06	2.6E-06	4.9E-09
A	SITE BOUNDARY	SE	0.29	467.	1.4E-05	1.4E-05	1.3E-05	2.2E-08
A	SITE BOUNDARY	SSE	0.26	418.	3.3E-05	3.3E-05	3.1E-05	5.0E-08
A	MILK COW	SSW	4.54	7306.	2.3E-07	2.2E-07	1.7E-07	5.3E-10
A	MEAT ANIMAL	S	2.32	3734.	5.3E-07	5.2E-07	4.3E-07	1.2E-09
A	MEAT ANIMAL	SSW	2.08	3347.	6.8E-07	6.7E-07	5.6E-07	2.1E-09
A	MEAT ANIMAL	SW	2.27	3653.	3.1E-07	3.1E-07	2.5E-07	1.3E-09
A	MEAT ANIMAL	WSW	2.69	4329.	1.4E-07	1.3E-07	1.1E-07	5.9E-10
A	MEAT ANIMAL	W	3.97	6389.	5.2E-08	5.1E-08	4.0E-08	1.8E-10
A	MEAT ANIMAL	WNW	4.07	6550.	4.7E-08	4.6E-08	3.6E-08	1.6E-10
A	MEAT ANIMAL	NW	1.60	2575.	1.9E-07	1.8E-07	1.6E-07	8.5E-10
A	MEAT ANIMAL	NNW	2.84	4571.	1.7E-07	1.7E-07	1.4E-07	4.8E-10
A	MEAT ANIMAL	N	2.93	4715.	5.6E-07	5.4E-07	4.4E-07	7.4E-10
A	MEAT ANIMAL	NNE	1.65	2655.	1.5E-06	1.5E-06	1.3E-06	2.9E-09
A	MEAT ANIMAL	NE	1.16	1867.	1.8E-06	1.7E-06	1.5E-06	3.8E-09
A	MEAT ANIMAL	ENE	2.41	3879.	3.4E-07	3.3E-07	2.8E-07	6.6E-10
A	MEAT ANIMAL	E	3.12	5021.	1.5E-07	1.5E-07	1.2E-07	2.8E-10
A	MEAT ANIMAL	ESE	1.99	3203.	3.7E-07	3.7E-07	3.1E-07	4.7E-10
A	RESIDENCE	S	0.28	451.	1.3E-05	1.3E-05	1.3E-05	3.9E-08
A	RESIDENCE	SSW	0.29	467.	1.4E-05	1.4E-05	1.3E-05	5.6E-08
A	RESIDENCE	SW	0.49	789.	3.2E-06	3.2E-06	2.9E-06	1.8E-08
A	RESIDENCE	WSW	0.37	595.	2.8E-06	2.8E-06	2.6E-06	1.7E-08
A	RESIDENCE	W	0.49	789.	1.3E-06	1.3E-06	1.2E-06	6.7E-09
A	RESIDENCE	WNW	0.66	1062.	7.2E-07	7.2E-07	6.4E-07	3.7E-09
A	RESIDENCE	NW	1.33	2140.	2.4E-07	2.4E-07	2.1E-07	1.2E-09
A	RESIDENCE	NNW	2.89	4651.	1.7E-07	1.6E-07	1.3E-07	4.7E-10
A	RESIDENCE	N	2.56	4120.	6.7E-07	6.5E-07	5.4E-07	9.4E-10
A	RESIDENCE	NNE	1.51	2430.	1.7E-06	1.7E-06	1.4E-06	3.4E-09
A	RESIDENCE	NE	1.13	1819.	1.8E-06	1.8E-06	1.6E-06	4.0E-09
A	RESIDENCE	ENE	0.85	1368.	1.5E-06	1.5E-06	1.3E-06	4.0E-09
A	RESIDENCE	E	0.94	1513.	7.9E-07	7.8E-07	6.9E-07	2.2E-09
A	RESIDENCE	ESE	0.66	1062.	1.8E-06	1.8E-06	1.6E-06	3.1E-09
A	RESIDENCE	SE	0.20	483.	1.3E-05	1.3E-05	1.2E-05	2.1E-08
A	RESIDENCE	SSE	0.34	547.	2.1E-05	2.1E-05	1.9E-05	3.3E-08
A	GARDEN	S	0.26	418.	1.5E-05	1.5E-05	1.4E-05	4.4E-08
A	GARDEN	SSW	0.39	628.	8.6E-06	8.5E-06	7.9E-06	3.5E-08
A	GARDEN	SW	0.53	853.	2.8E-06	2.8E-06	2.5E-06	1.6E-08
A	GARDEN	WSW	0.47	756.	1.9E-06	1.9E-06	1.8E-06	1.1E-08
A	GARDEN	W	0.49	789.	1.3E-06	1.3E-06	1.2E-06	6.7E-09
A	GARDEN	WNW	0.59	950.	8.6E-07	8.6E-07	7.8E-07	4.4E-09
A	GARDEN	NW	2.00	3219.	1.3E-07	1.3E-07	1.1E-07	5.7E-10
A	GARDEN	NNW	2.99	4812.	1.6E-07	1.6E-07	1.2E-07	4.4E-10
A	GARDEN	N	2.89	4651.	5.7E-07	5.5E-07	4.5E-07	7.6E-10
A	GARDEN	NNE	1.43	2301.	1.8E-06	1.8E-06	1.6E-06	3.7E-09
A	GARDEN	NE	1.11	1786.	1.9E-06	1.9E-06	1.6E-06	4.1E-09
A	GARDEN	ENE	1.11	1786.	1.0E-06	9.9E-07	8.7E-07	2.5E-09
A	GARDEN	E	3.08	4957.	1.5E-07	1.5E-07	1.2E-07	2.8E-10
A	GARDEN	ESE	0.64	1030.	1.9E-06	1.8E-06	1.7E-06	3.3E-09
A	GARDEN	SE	1.93	3106.	7.6E-07	7.5E-07	6.3E-07	9.3E-10
A	GARDEN	SSE	0.79	1271.	5.1E-06	5.0E-06	4.5E-06	8.5E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT (METERS) 0.0  
DIAMETER (METERS) 0.0  
EXIT VELOCITY (METERS) 0.0

REP. WIND HEIGHT (METERS) 10.0  
BUILDING HEIGHT (METERS) 45.0  
BLDG. MIN. CRS. SEC. AREA (SQ. METERS) 1370.0  
HEAT EMISSION RATE (CAL/SEC) 0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED LESS THAN 0.0  
MIXED BETWEEN 0.0 AND 0.0

AT THE MEASURED WIND HEIGHT (10.0 METERS):

VENT RELEASE MODE WIND SPEED (METERS/SEC)

ELEVATED STABLE CONDITIONS  
MIXED LESS THAN 0.0  
BETWEEN 0.0 AND 0.0

WIND SPEED (METERS/SEC)

UNSTABLE/NEUTRAL CONDITIONS  
LESS THAN 0.0  
BETWEEN 0.0 AND 0.0

ENCLOSURE 4

METEOROLOGICAL DATA FOR  
DIFFUSION ANALYSIS  
JULY 1 - DECEMBER 31, 1978  
H. B. ROBINSON STEAM ELECTRIC PLANT

The wind frequency tables present the number of hourly combinations of wind direction, wind speed, and stability for the upper (60 meter) and lower (10 meter) sensor elevations.

Pertinent information from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
17.7	3.8	3.5	27.8	25.3	12.4	9.5

2. Wind Speed

	<u>10 Meter</u>	<u>60 Meter</u>
Average Speed (mph)	4.6	8.5
Percent Calm	0.8	0.0
Percent Less than 3.5 mph	35.6	6.2

3. Wind Direction

	<u>10 Meter</u>	<u>60 Meter</u>
Prevailing Direction	NNE	NNE
Percent Occurrence	12.1	13.3

4. Data Recovery

	<u>10 Meter</u>	<u>60 Meter</u>
Percent Good Hours	99.5	98.6

JOINT OCCURRENCE PRIORITIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	0.	42.	40.	12.	2.	0.	96.	8.9
NNE	0.	0.	37.	21.	6.	6.	0.	70.	9.0
NE	0.	1.	30.	39.	12.	3.	0.	85.	9.3
ENE	0.	1.	27.	41.	10.	0.	0.	79.	8.7
E	0.	2.	14.	19.	0.	0.	0.	35.	7.5
ESE	0.	2.	23.	5.	0.	0.	0.	30.	5.6
SE	0.	2.	30.	11.	3.	0.	0.	46.	6.8
SSE	0.	0.	23.	21.	6.	0.	0.	50.	8.3
S	0.	0.	17.	21.	3.	0.	0.	41.	9.0
SSW	0.	1.	19.	34.	6.	0.	0.	60.	9.2
SW	0.	0.	22.	22.	3.	0.	0.	57.	8.3
WSW	0.	2.	28.	17.	2.	0.	0.	49.	7.4
W	0.	1.	33.	10.	2.	0.	0.	46.	7.0
WNW	0.	1.	0.	6.	0.	0.	0.	7.	7.8
NW	0.	0.	1.	5.	3.	1.	0.	10.	13.3
NNW	0.	0.	4.	9.	4.	1.	0.	18.	10.4
TOTAL	0.	13.	350.	331.	72.	13.	0.	779.	8.5

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 20

JOINT OCCURRENCE FREQUENCY OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS 8  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-16.5	16.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	7.	7.	2.	1.	0.	17.	9.2
NNE	0.	2.	7.	4.	2.	1.	0.	16.	8.4
NE	0.	1.	3.	6.	3.	1.	0.	14.	10.1
ENE	0.	0.	6.	4.	0.	0.	0.	10.	6.6
E	0.	1.	5.	4.	1.	0.	0.	11.	7.2
ESE	0.	1.	2.	3.	0.	0.	0.	6.	7.5
SE	0.	1.	1.	2.	0.	0.	0.	4.	7.0
SSE	0.	0.	7.	4.	0.	0.	0.	11.	6.2
S	0.	0.	5.	3.	0.	0.	0.	8.	7.6
SSW	0.	0.	5.	8.	1.	0.	0.	14.	8.2
SW	0.	0.	9.	5.	1.	0.	0.	15.	7.2
WSW	0.	1.	7.	3.	0.	0.	0.	11.	6.3
W	0.	0.	7.	3.	1.	0.	0.	11.	7.5
WNW	0.	0.	5.	1.	1.	0.	0.	7.	7.0
NW	0.	0.	1.	2.	1.	0.	0.	4.	10.8
NNW	0.	1.	2.	2.	0.	0.	0.	5.	6.3
TOTAL	0.	8.	79.	61.	13.	3.	0.	164.	7.7

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 2

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 11:00 AM 7/ 1/73 TO 11:00 PM 12/31/73STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE +1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	2.	6.	3.	1.	0.	0.	17.	7.7
NNE	0.	0.	3.	7.	9.	0.	0.	19.	11.3
NE	0.	1.	5.	14.	8.	1.	0.	29.	10.7
ENE	0.	1.	1.	4.	1.	0.	0.	7.	8.4
E	0.	0.	5.	1.	0.	0.	0.	6.	6.2
ESE	0.	1.	4.	2.	1.	0.	0.	8.	7.5
SE	0.	2.	3.	0.	0.	0.	0.	5.	4.3
SSE	0.	0.	2.	5.	2.	0.	0.	9.	10.4
S	0.	0.	1.	1.	0.	0.	0.	2.	7.0
SSW	0.	1.	3.	1.	0.	0.	0.	5.	6.4
SW	0.	0.	3.	11.	1.	0.	0.	15.	8.5
WSW	0.	0.	3.	0.	0.	0.	0.	3.	5.9
W	0.	0.	4.	3.	0.	1.	0.	8.	6.2
WNW	0.	1.	2.	4.	1.	0.	0.	8.	8.2
NW	0.	0.	2.	5.	1.	0.	0.	8.	9.7
NNW	0.	0.	3.	1.	0.	0.	0.	5.	7.7
TOTAL	0.	9.	50.	66.	25.	2.	0.	152.	8.0

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 2

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/1/78 TO 11:00 PM 12/31/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-STILL METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS (MPH)						TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0		
N	0.	3.	18.	26.	29.	7.	95.	11.2
NNE	0.	5.	37.	147.	72.	1.	262.	10.6
NE	0.	9.	40.	60.	13.	0.	153.	6.7
ENE	0.	7.	29.	33.	7.	0.	76.	8.0
E	0.	5.	27.	22.	2.	0.	56.	7.3
ESE	0.	7.	35.	24.	1.	0.	67.	6.8
SE	0.	6.	24.	16.	0.	0.	46.	6.3
SSE	0.	9.	26.	29.	4.	0.	68.	7.5
S	0.	3.	37.	39.	11.	0.	90.	8.4
SSW	0.	3.	19.	36.	11.	6.	80.	11.2
SW	0.	3.	17.	23.	12.	1.	57.	9.5
WSW	0.	1.	16.	29.	6.	0.	52.	9.1
W	0.	1.	15.	9.	6.	2.	33.	9.2
WNW	0.	2.	7.	4.	3.	0.	16.	8.3
NW	0.	1.	5.	7.	3.	1.	17.	9.1
NNW	0.	3.	9.	14.	9.	0.	35.	9.4
TOTAL	0.	68.	367.	550.	194.	18.	1203.	8.6

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 17

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS E  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-13.5	18.5-25.0	GREATER THAN 25.0		
N	0.	2.	24.	31.	24.	0.	0.	111.	9.9
NNE	0.	7.	32.	53.	31.	1.	0.	130.	9.9
NE	0.	4.	20.	45.	13.	0.	0.	82.	9.2
ENE	0.	5.	29.	25.	2.	0.	0.	61.	7.5
E	0.	2.	19.	15.	9.	0.	0.	45.	8.6
ESE	0.	4.	11.	7.	2.	0.	0.	24.	6.7
SE	0.	4.	14.	6.	0.	0.	0.	24.	5.9
SSE	0.	8.	30.	25.	1.	0.	0.	64.	7.0
S	0.	7.	48.	39.	17.	0.	0.	111.	8.2
SSW	0.	1.	26.	86.	21.	13.	0.	147.	10.5
SW	0.	7.	19.	66.	8.	2.	0.	100.	8.8
WSW	0.	0.	19.	33.	5.	4.	0.	61.	9.7
W	0.	5.	9.	14.	4.	0.	0.	32.	8.0
WNW	0.	4.	11.	4.	7.	0.	0.	26.	8.0
NW	0.	2.	9.	11.	15.	2.	0.	39.	10.9
NNW	0.	1.	11.	18.	18.	1.	0.	49.	10.6
TOTAL	0.	63.	331.	508.	181.	23.	0.	1106.	8.7

NUMBER OF CALMS - 0

NUMBER OF BAD HOURS - 6



JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/73 TO 11:00 PM 12/31/73STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

## ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)						TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0		
N	0.	3.	23.	25.	8.	0.	59.	8.3
NNE	0.	5.	30.	14.	0.	0.	49.	6.1
NE	0.	3.	12.	6.	0.	0.	21.	5.2
ENE	0.	3.	10.	14.	2.	0.	29.	7.6
E	0.	5.	11.	9.	0.	0.	25.	6.1
ESE	1.	5.	10.	2.	0.	0.	18.	5.2
SE	0.	1.	9.	6.	0.	0.	16.	7.0
SSE	0.	2.	12.	11.	1.	0.	26.	7.7
S	0.	4.	20.	20.	1.	0.	51.	7.4
SSW	0.	4.	17.	39.	1.	0.	61.	7.9
SW	0.	1.	21.	23.	4.	0.	49.	5.2
WSW	0.	2.	17.	14.	3.	0.	36.	6.2
W	0.	2.	14.	4.	1.	0.	21.	6.1
WNW	0.	3.	7.	9.	5.	0.	24.	8.2
NW	0.	2.	8.	10.	2.	0.	29.	9.9
NNW	0.	0.	9.	10.	3.	0.	28.	9.0
TOTAL	1.	45.	230.	228.	38.	0.	542.	7.4

NUMBER OF CALMS - 1

NUMBER OF BAD HOURS - 3

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/1/78 TO 11:00 PM 12/31/78STABILITY CLASS G  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	3.	17.	10.	0.	0.	0.	30.	6.7
NNE	0.	3.	16.	12.	0.	0.	0.	31.	6.6
NE	0.	4.	23.	0.	0.	0.	0.	30.	5.2
ENE	0.	3.	12.	5.	1.	0.	0.	21.	6.4
E	0.	7.	13.	1.	0.	0.	0.	21.	4.5
ESE	0.	7.	9.	2.	0.	0.	0.	18.	4.3
SE	0.	4.	9.	0.	0.	0.	0.	13.	4.3
SSE	0.	4.	13.	8.	0.	0.	0.	25.	6.2
S	0.	5.	14.	12.	1.	0.	0.	32.	6.8
SSW	0.	3.	15.	17.	0.	0.	0.	36.	6.9
SW	0.	1.	12.	14.	1.	0.	0.	28.	8.0
WSW	0.	4.	8.	17.	8.	0.	0.	37.	9.0
W	0.	6.	13.	6.	0.	0.	0.	27.	6.2
WNW	0.	3.	5.	2.	2.	0.	0.	12.	7.2
NW	0.	3.	8.	5.	0.	0.	0.	16.	6.7
NNW	0.	3.	16.	11.	0.	0.	0.	30.	6.5
TOTAL	0.	63.	204.	127.	12.	0.	0.	407.	6.5

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 13

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/79 TO 11:00 PM 12/31/79SUMMARY  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	13.	157.	189.	76.	10.	0.	425.	9.4
NNE	0.	22.	162.	259.	125.	9.	0.	577.	9.6
NE	0.	23.	139.	193.	54.	5.	0.	414.	6.7
ENE	0.	20.	114.	126.	23.	0.	0.	283.	7.9
E	0.	22.	94.	71.	12.	0.	0.	199.	7.1
ESE	1.	27.	94.	45.	4.	0.	0.	171.	6.2
SE	0.	20.	90.	41.	3.	0.	0.	154.	6.2
SSE	0.	23.	113.	103.	14.	0.	0.	253.	7.5
S	0.	19.	142.	141.	32.	0.	0.	335.	8.1
SSW	0.	13.	105.	221.	40.	19.	5.	403.	9.6
SW	0.	12.	103.	174.	28.	3.	1.	321.	8.6
WSW	0.	10.	98.	113.	24.	4.	0.	249.	8.0
W	0.	15.	95.	51.	14.	3.	0.	178.	7.4
WNW	0.	14.	37.	28.	19.	0.	0.	98.	7.9
NW	0.	8.	34.	45.	32.	4.	0.	123.	10.0
NNW	0.	8.	54.	72.	34.	2.	0.	170.	9.1
TOTAL	1.	269.	1611.	1871.	530.	59.	0.	4353.	8.5

NUMBER OF CALMS - 1

NUMBER OF BAD HOURS - 63

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 12/31/78STABILITY CLASS A  
STABILITY CALCULATED FROM DIFF. TEMPERATURE  $\Delta 1+2$ 

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-16.5	16.5-25.0	GREATER THAN 25.0		
N	0.	2.	62.	14.	0.	0.	0.	78.	6.2
NNE	0.	1.	52.	17.	0.	0.	0.	70.	6.3
NE	0.	4.	67.	20.	2.	0.	0.	93.	6.2
ENE	0.	2.	66.	13.	0.	0.	0.	81.	6.1
E	0.	2.	36.	1.	0.	0.	0.	39.	5.5
ESE	0.	7.	28.	2.	0.	0.	0.	37.	4.3
SE	0.	6.	45.	4.	0.	0.	0.	55.	5.2
SSE	0.	3.	28.	16.	0.	0.	0.	47.	5.3
S	0.	0.	21.	15.	0.	0.	0.	36.	6.7
SSW	0.	0.	40.	20.	0.	0.	0.	60.	6.8
SW	0.	2.	50.	8.	0.	0.	0.	60.	5.7
WSW	0.	3.	44.	2.	0.	0.	0.	49.	5.2
W	0.	4.	33.	2.	0.	0.	0.	39.	4.9
WNW	0.	1.	6.	1.	0.	0.	0.	8.	5.5
NW	0.	0.	9.	4.	0.	0.	0.	13.	7.2
NNW	0.	0.	10.	2.	0.	0.	0.	12.	6.5
TOTAL	0.	37.	597.	143.	2.	0.	0.	779.	5.9

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 20

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/17/78 TO 11:00 PM 12/31/78STABILITY CLASS B  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	1.	11.	4.	0.	0.	0.	16.	6.3
NNE	0.	0.	13.	2.	1.	0.	0.	16.	5.9
NE	0.	1.	11.	4.	1.	0.	0.	17.	6.6
ENE	0.	3.	6.	1.	0.	0.	0.	10.	4.5
E	0.	1.	8.	1.	0.	0.	0.	10.	5.0
ESE	0.	2.	7.	0.	0.	0.	0.	9.	4.6
SE	0.	1.	4.	1.	0.	0.	0.	6.	5.0
SSE	0.	1.	8.	0.	0.	0.	0.	9.	4.7
S	0.	1.	5.	2.	0.	0.	0.	8.	5.7
SSW	0.	1.	9.	4.	0.	0.	0.	14.	6.0
SW	0.	2.	17.	1.	0.	0.	0.	20.	4.8
WSW	0.	3.	6.	0.	0.	0.	0.	9.	4.4
W	0.	3.	2.	2.	0.	0.	0.	7.	5.3
WNW	0.	2.	3.	1.	0.	0.	0.	6.	4.8
NW	0.	2.	2.	1.	0.	0.	0.	5.	5.0
NNW	0.	1.	3.	0.	0.	0.	0.	4.	4.6
TOTAL	0.	25.	115.	24.	2.	0.	0.	166.	5.3

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/1/78 TO 11:00 PM 12/31/78STABILITY CLASS C  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-16.5	16.5-25.0	GREATER THAN 25.0		
N	0.	2.	11.	3.	0.	0.	0.	16.	6.0
NNE	0.	2.	10.	9.	0.	0.	0.	21.	6.5
NE	0.	2.	12.	14.	0.	0.	0.	28.	7.1
ENE	0.	1.	6.	3.	0.	0.	0.	10.	6.0
E	0.	4.	2.	0.	0.	0.	0.	6.	3.6
ESE	0.	2.	5.	1.	0.	0.	0.	8.	5.3
SE	0.	1.	3.	0.	0.	0.	0.	4.	4.1
SSE	0.	1.	4.	4.	0.	0.	0.	9.	6.9
S	0.	1.	3.	0.	0.	0.	0.	4.	4.4
SSW	0.	0.	5.	0.	0.	0.	0.	5.	5.5
SW	0.	1.	10.	2.	0.	0.	0.	13.	5.7
WSW	0.	0.	4.	0.	0.	0.	0.	4.	4.1
W	0.	2.	6.	0.	0.	0.	0.	8.	4.5
WNW	0.	3.	2.	2.	0.	0.	0.	7.	5.7
NW	0.	0.	7.	1.	0.	0.	0.	8.	6.0
NNW	0.	1.	2.	0.	0.	0.	0.	3.	4.6
TOTAL	0.	23.	92.	39.	0.	0.	0.	154.	5.4

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/75 TO 11:00 PM 12/31/78STABILITY CLASS D  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	15.	69.	21.	0.	0.	0.	105.	5.9
NNE	0.	16.	197.	41.	0.	0.	0.	254.	6.1
NE	0.	17.	122.	23.	0.	0.	0.	162.	5.6
ENE	0.	26.	45.	11.	0.	0.	0.	76.	5.1
E	0.	17.	45.	2.	0.	0.	0.	64.	4.7
ESE	0.	17.	37.	2.	0.	0.	0.	56.	4.5
SE	0.	15.	35.	0.	0.	0.	0.	50.	4.2
SSE	0.	19.	52.	4.	0.	0.	0.	75.	4.7
S	0.	10.	52.	13.	0.	0.	0.	75.	5.4
SSW	0.	18.	56.	13.	10.	1.	0.	98.	6.6
SW	0.	19.	32.	12.	2.	0.	0.	65.	5.3
WSW	0.	22.	25.	4.	0.	0.	0.	51.	4.5
W	0.	7.	12.	5.	0.	0.	0.	24.	5.4
WNW	0.	4.	7.	3.	0.	0.	0.	14.	4.8
NW	0.	2.	10.	5.	0.	0.	0.	17.	5.7
NNW	0.	8.	20.	6.	0.	0.	0.	34.	5.4
TOTAL	0.	226.	816.	165.	12.	1.	0.	1220.	5.2

NUMBER OF CALMS - 0  
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 1/1/78 TO 11:00 PM 12/31/78STABILITY CLASS E  
STABILITY CALCULATED FROM DIFF. TEMPERATURE +1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.6- 7.5	7.6-12.5	12.6-18.5	18.6-25.0	GREATER THAN 25.0		
N	0.	21.	40.	4.	0.	0.	0.	71.	4.5
NNE	0.	16.	96.	10.	0.	0.	0.	122.	5.4
NE	0.	22.	48.	2.	0.	0.	0.	72.	4.5
ENE	0.	20.	30.	5.	0.	0.	0.	50.	4.1
E	0.	10.	11.	2.	0.	0.	0.	23.	4.2
ESE	0.	3.	10.	0.	0.	0.	0.	13.	4.2
SE	0.	11.	4.	0.	0.	0.	0.	15.	2.9
SSE	0.	16.	33.	0.	0.	0.	0.	49.	3.9
S	1.	51.	48.	13.	0.	0.	0.	113.	4.4
SSW	1.	103.	73.	19.	6.	0.	0.	202.	4.5
SW	1.	69.	31.	3.	1.	0.	0.	105.	3.3
WSW	1.	33.	17.	3.	0.	0.	0.	54.	3.7
W	0.	19.	11.	0.	0.	0.	0.	30.	3.1
WNW	0.	10.	13.	0.	0.	0.	0.	23.	3.9
NW	0.	21.	21.	4.	0.	0.	0.	46.	4.1
NNW	0.	29.	87.	8.	0.	0.	0.	124.	4.7
TOTAL	4.	454.	579.	68.	7.	0.	0.	1112.	4.1

NUMBER OF CALMS - 4  
NUMBER OF BAD HOURS - 0



JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/1/78 TO 11:00 PM 12/31/78STABILITY CLASS F  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0		
N	0.	24.	4.	0.	0.	0.	0.	28.	2.2
NNE	0.	18.	3.	0.	0.	0.	0.	21.	2.5
NE	0.	12.	4.	0.	0.	0.	0.	16.	2.6
ENE	0.	1.	1.	0.	0.	0.	0.	2.	3.7
E	0.	2.	1.	0.	0.	0.	0.	3.	2.3
ESE	0.	4.	0.	0.	0.	0.	0.	4.	1.5
SE	0.	2.	0.	0.	0.	0.	0.	2.	1.5
SSE	0.	8.	4.	0.	0.	0.	0.	12.	2.7
S	2.	56.	10.	0.	0.	0.	0.	68.	2.6
SSW	2.	62.	12.	0.	0.	0.	0.	76.	2.6
SW	2.	52.	10.	0.	0.	0.	0.	64.	2.5
WSW	0.	21.	2.	0.	0.	0.	0.	23.	2.2
W	0.	25.	1.	0.	0.	0.	0.	26.	2.0
WNW	0.	20.	4.	0.	0.	0.	0.	24.	2.4
NW	1.	45.	25.	0.	0.	0.	0.	71.	3.0
NNW	2.	58.	45.	0.	0.	0.	0.	105.	3.3
TOTAL	9.	410.	126.	0.	0.	0.	0.	545.	2.5

NUMBER OF CALMS - 9

NUMBER OF BAD HOURS - 0

JOINT OCCUPANCY RELOCATES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/1/78 TO 11:00 PM 12/31/78STABILITY CLASS G  
STABILITY CALCULATED FROM SURF. TEMPERATURE 91+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-15.5	15.5-25.0	GREATER THAN 25.0		
N	3.	34.	1.	0.	0.	0.	0.	38.	1.8
NNE	2.	28.	0.	0.	0.	0.	0.	30.	1.4
NE	0.	3.	3.	0.	0.	0.	0.	6.	2.5
ENE	0.	2.	0.	0.	0.	0.	0.	2.	1.1
E	0.	1.	0.	0.	3.	0.	0.	1.	1.1
ESE	0.	3.	0.	0.	0.	0.	0.	3.	1.4
SE	0.	3.	0.	0.	0.	0.	0.	3.	1.1
SSE	0.	9.	1.	0.	0.	0.	0.	10.	1.3
S	3.	33.	1.	0.	0.	0.	0.	37.	1.5
SSW	2.	32.	1.	0.	0.	0.	0.	35.	2.1
SW	1.	22.	1.	1.	0.	0.	0.	25.	2.3
WSW	0.	19.	5.	0.	0.	0.	0.	24.	2.3
W	0.	9.	0.	0.	0.	0.	0.	9.	1.8
WNW	2.	23.	2.	0.	0.	0.	0.	27.	1.5
NW	3.	40.	3.	0.	0.	0.	0.	46.	2.2
NNW	6.	93.	25.	0.	0.	0.	0.	124.	2.6
TOTAL	22.	354.	42.	1.	0.	0.	0.	420.	1.9

NUMBER OF CALMS - 22

NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED  
FOR THE PERIOD 12:00 AM 7/ 1/78 TO 11:00 PM 12/31/78SUMMARY  
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

ROBINSON ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS (MPH)							TOTAL	AVG. WIND SPEED
	CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-17.5	17.5-25.0	GREATER THAN 25.0		
N	3.	99.	204.	48.	0.	0.	0.	352.	5.0
NNE	2.	81.	371.	79.	1.	0.	0.	534.	5.6
NE	0.	61.	267.	60.	3.	0.	0.	394.	5.0
ENE	0.	49.	154.	30.	0.	0.	0.	233.	5.2
E	0.	37.	103.	8.	0.	0.	0.	148.	4.8
ESE	0.	38.	87.	5.	0.	0.	0.	130.	4.3
SE	0.	39.	91.	5.	0.	0.	0.	135.	4.4
SSE	0.	57.	130.	24.	0.	0.	0.	211.	4.7
S	6.	152.	140.	43.	0.	0.	0.	341.	4.3
SSW	5.	216.	196.	58.	16.	1.	0.	490.	4.6
SW	4.	167.	151.	27.	3.	0.	0.	352.	4.1
WSW	1.	101.	103.	9.	0.	0.	0.	214.	4.0
W	0.	69.	65.	9.	0.	0.	0.	143.	3.9
WNW	2.	63.	37.	7.	0.	0.	0.	109.	3.5
NW	4.	110.	77.	15.	0.	0.	0.	206.	3.8
NNW	8.	190.	192.	16.	0.	0.	0.	406.	3.6
TOTAL	35.	1529.	2368.	440.	26.	1.	0.	4396.	4.0

NUMBER OF CALMS - 35  
NUMBER OF BAD HOURS - 20